



ENCYCLOPEDIA OF BRITISH COLUMBIA

Introductory Teacher's Resource

Updated October 2001

Encyclopedia of British Columbia
Introductory Teacher's Resource

Revised Edition
October 2001

Harbour Publishing



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1. INTRODUCTION

The *Encyclopedia of British Columbia (EBC)*, published in fall 2000, has quickly become a fixture in the reference collections of schools throughout British Columbia. We are pleased to present this introductory teachers' resource as a guide to orient educators to this unique new encyclopedia, and to highlight recommended teaching strategies and classroom applications.

For both students and teachers, the *Encyclopedia of British Columbia* is more than a convenient reference resource on BC. Students need to learn to think critically and understand societal issues from many perspectives—to develop literacy and insight in the broadest sense. There is, therefore, a need for accessible background knowledge that will help students create in-depth reports and projects, and to come to reasoned judgements and well thought-out decisions. The *EBC* fills this need for a comprehensive reference on British Columbia, but also provides teachers with an unprecedented opportunity to integrate rich, BC-specific material into the classroom.

As a new, BC-written archive of all things British Columbian, the *EBC* occupies a unique position as an authoritative source of local knowledge. It allows students and teachers to explore the breadth and depth of contemporary British Columbia, as well as the province's rich history.

The *EBC* is published in multiple formats, allowing great flexibility in classroom use. Print (hardcover book), CD-ROM and on-line editions accommodate a variety of learning styles and environments, as well as the range of computer hardware, software and Internet connectivity currently found in the BC education system. (See below for further details on the various editions.)

As a reference book and research tool the *EBC* is easily accessible to students in the intermediate and secondary grades. It is well laid out and cross-referenced. The reading level of most articles makes them quite navigable for good readers. Teachers may have to offer assistance occasionally, where technical or content-specific language is used. Beginning on page 15 of this guide are four strategies that teachers can use to help students learn to read and comprehend reference material.

Research suggests that educators begin the learning process where the learners are in terms of both time and place; that is, where they live (here) and in the present (now). Using what learners already know and are able to do, provides a basis for comparing, contrasting, evaluating and expanding understanding, and, in the process, acquiring and using new knowledge. The *EBC* is a useful source for visiting the past in BC, and examining the present on an ongoing basis through its electronic formats and evolving links to new sources. The BC Ministry of Education has recognized the *EBC*'s importance as a learning resource through a licensing agreement that is helping to place the encyclopedia in schools throughout British Columbia.

This introductory teacher's resource has been written to assist teachers as they guide students to a deeper and richer understanding of who we are as British Columbians. By using the information contained in the *Encyclopedia of British Columbia*, students will become better equipped to tackle the issues and inquiries that are essential to an engaging, comprehensive Social Studies program.

2. SOME THEMES FOR STUDYING BRITISH COLUMBIA

1. British Columbia is a landscape of both physical contrasts and marked human diversity.
 - Physical contrasts can be seen in BC's massive and jagged mountain ranges, broad plateaus, deeply incised valleys, narrow fjords, broad river deltas and rugged coastal islands.
 - The peoples of BC are no less diverse. The bulk of the population is concentrated on the coastal southwest plain; the rest of the province, where primary resource production provides our economic life-blood, remains relatively sparsely populated.
2. BC encompasses a variety of climate/vegetation types, ranging from temperate rain forest to desert, and from grassland prairie to tundra and ice caps. All of this is the result of its latitudinal extent, and its great elevational range from sea level to lofty ice-capped mountains.
3. BC's far western location and the north-south orientation of its major valleys and mountain ranges have presented challenges to a cohesive cultural and economic relationship with the rest of Canada. Our special geography creates a significant obstacle to easy transportation and communication.
4. The natural environment of BC shapes the way people perceive and use it, and in turn, people shape the natural environment itself.
5. The BC economy has traditionally relied upon harvesting of primary resources, which it trades in international markets.
6. British Columbians live in communities that depend on local natural resources and efficient transportation systems to deliver those resources to local, national and international markets.
7. BC's varied physical geography and its unique site and situation are reflected in our history, our in lifestyle and in our various social and political institutions.
8. British Columbians' high standard of living depends heavily upon our ability to extract, process and trade in basic natural resources.
9. British Columbia is well positioned on the Pacific Rim for access to markets in Asia, the Pacific Islands, and the west coasts of the Americas.
10. British Columbia has organized and developed means for meeting our various needs and wants, such as trade, transportation, communication and a variety of social and political systems.

11. Historically, BC has made significant economic and social transitions, from aboriginal hunting and gathering societies to high-technology and service-oriented activities.
12. BC has a history of boom and bust cycles related to the vagaries of world markets, and social and political conditions beyond its borders.
13. BC is a multicultural mix of aboriginal and immigrant cultures, both European and Asian.
14. BC's First Nations people have developed some of the most rich and complex cultures in the world. Fully one-half of Canada's First Nations languages are indigenous to BC.
15. Knowledge of plant husbandry and harvesting and preserving technology, developed by First Nations people, enabled them to harvest and use natural resources on a sustainable basis.

3. USING THE *ENCYCLOPEDIA OF BRITISH COLUMBIA*

Print, CD-ROM and on-line editions

The *Encyclopedia of British Columbia* is the first-ever comprehensive reference on British Columbia. More than ten years in the making, the encyclopedia was published by BC's Harbour Publishing on September 30, 2000, in print and CD-ROM editions, which in turn were followed by an expanded on-line edition in 2001. In all of its forms, the encyclopedia is a unique British Columbian resource as well as a very effective structure for ordering and aggregating knowledge about BC.

The *EBC* contains more than 4,000 articles. Key subject areas include:

- Land and wildlife
- First Nations
- History and culture
- Business, industry and labour
- Science and technology
- Transportation and communication
- BC peoples
- Arts, entertainment and sports

The print edition of the *EBC* presents articles in alphabetical order in the traditional encyclopedic form—complete with cross-references, an index and a range of additional editorial features. The text also includes a series of overview essays that provide in-depth contextual coverage on key topics such as the history of BC, aboriginal cultures, the economy and physical geography. Additional editorial features highlight, largely through photographs and illustrations, significant elements of the province's history and culture (e.g., the boats of BC, BC's writers, illustrated timelines, etc.). The print edition is a single hardcover volume of more than 800 pages, full colour throughout and with thousands of photos, illustrations, maps and charts.

The CD-ROM edition includes all of the content from the print edition, and also provides a range of search and browsing features along with generous multimedia elements: approximately 45 minutes of video, hundreds of sound files, more than 17,000 internal hyperlinks and over 700 integrated Web links to non-*EBC* resources.

The on-line *EBC* is updated and expanded continuously by the editorial team. In addition, it features new readers' resources—including Subject Guides and Featured Updates—as well as expanded systems of links to external Web resources. The on-line edition also incorporates an increasing range of new material adapted from other sources and integrated within the encyclopedia's articles. Finally, the on-line *EBC* includes a series of interactive discussion forums that encourage a wide-ranging exchange of stories, facts and ideas BC.

All of these types of new material—whether created by the editors, provided by *EBC* users through the discussion forums or adapted from other media—will combine to enlarge and

enhance the content of the first edition of the *EBC*. This combination will further establish the on-line *EBC* as the most comprehensive, authoritative and dynamic source of BC-specific content on the Web—a “living encyclopedia” that expands in part through the contributions of its readers. In this way the *EBC* will continue to grow and change along with British Columbia itself.

Key features for educators

Page xiii in the *EBC*, “Using the Encyclopedia,” provides detailed information on the organizational criteria used in creating the encyclopedia. Following is a summary of features of the encyclopedia that will assist Social Studies students and educators in using it.

1. Subject heads are shown in **BOLDFACE CAPITAL LETTERS**, and at the end of each subject, related “See also” subjects are identified in SMALL CAPITALS.
2. The editorial content of the *EBC* is organized to assist students in connecting information, and in comparing multiple perspectives. The encyclopedia is extensively cross-referenced (as with “See also” notations, cross-references are presented in SMALL CAPITALS), includes a browseable index and many articles are complemented with images and/or comparative charts, tables and maps.
3. Many articles include archival photographs, film footage and documents that encourage the consideration of primary source materials.
4. First Nations groups are identified by their contemporary names. A list of current names, along with former names by which the groups have been known, is provided on pages 239–42 of the encyclopedia.
5. The encyclopedia contains six Feature Essays:
 - Economy of BC
 - First Nations of BC
 - History of BC
 - Literature of BC
 - Natural History of BC
 - Physical Geography of BC
6. A clear, easy-to-read map of British Columbia appears on page xvii.
7. Pages 332 through 342, in the History of BC essay, provide a fascinating and useful illustrated timeline pivotal events in BC history.

8. The *EBC* uses a variety of graphs, charts, comparison diagrams, illustrative diagrams and maps, such as:
 - Graphs
 - page 5: Agriculture in BC (bar graph)
 - page 133: Climate Data for BC (line graph)
 - page 541: BC Population by Age, 1996 (pie graph)
 - Charts
 - page 194: BC Household Income, 1996
 - Comparison Diagrams
 - page 401: BC's Largest Lakes
 - Illustrative Diagrams
 - page 555: Growth and Decay of the Cordilleran Ice Sheet
 - Maps
 - page 277: Major Fur Trade Forts
 - page 465: Operating Mines in BC, 1998
 - page 261: Forest Regions of BC.
9. The *EBC* contains a variety of historical photographs and maps, such as:
 - page 162: General Currie at Vimy Ridge
 - page 217: Eulachon Drying Racks at the Nass River, 1882
 - page 669: Map of Dionisio Alcalá-Galiano's Expedition in 1792.
10. The *EBC* contains a variety of illustrations, including portraits, landscape photographs and examples of BC art.
11. An Index, on pages 792–806, will assist in locating topics, names and places that do not have their own articles in the encyclopedia, but are referred to in various other articles.
12. Readings notes appear at the end of some articles, directing readers to longer works on particular topics, and a list of Further Readings on BC, recommended by the editors, appears on pages 790–91.

4. AN OVERVIEW OF THE BC SOCIAL STUDIES CURRICULUM

Social Studies, as defined in the BC schools curriculum, is a multidisciplinary subject that draws from the social sciences and humanities to study human interaction and social environments. The overarching goal of the BC Social Studies curriculum is to develop thoughtful, responsible and active citizens who are able to acquire the requisite information to consider multiple perspectives and to make reasoned judgements. The Social Studies K to 11 curriculum provides students with opportunities to critically reflect upon events and issues in order to examine the present, make connections with the past, and consider the future.

Through their participation in Social Studies, students are encouraged to:

- Understand and prepare to exercise their roles, rights and responsibilities within the family, the community and the world.
- Develop an appreciation of democracy and what it means to be Canadian.
- Demonstrate respect for human equality and cultural diversity.
- Think critically, evaluate information and practise effective communication.

— *Adapted from the BC curriculum guide*

The BC Social Studies curriculum emphasizes critical thinking and analysis, and urges teachers to use resources that help students view past and present issues, events and ideas from a variety of perspectives. It cites examples of resources for that purpose, such as “texts, electronic information, audio-visual material, people and mass media.” The current BC Social Studies curriculum suggests as the means for creating active citizenship, a learning environment that enables and encourages students to make logical connections between historical and contemporary events and issues, and to make judgements based upon informed knowledge and opinion. The learning outcomes focus upon both content and process, as well as upon means for developing an open-minded learning approach that encourages students to examine a variety of perspectives on issues, problems and conditions that have occurred in the past, are present in contemporary society, or may occur in the future. So if students are expected to assume the role of informed responsible citizenship, they will require a knowledge and skills foundation that enables them to gather information and organize it in a usable form that will guide their actions and help them form reasoned opinions.

In order to meet BC Social Studies curriculum goals and objectives, teachers and students need learning materials that focus upon British Columbia topics, events and conditions. The *Encyclopedia of British Columbia* is a foundation resource now available to teachers and students in both print and on-line formats that will serve as a basic information source and a ready fact-checking reference. The *Encyclopedia of British Columbia* can serve as a useful resource in a variety of areas in the current BC Social Studies basic curriculum, as well as in the Humanities and Science curricula. Some samples of these areas are provided in the Curriculum Links Chart on the following page. In addition to Social Studies, links related to the Prescribed Learning Outcomes are identified for Geography 12, History 12, First Nations Studies 12, Science 9 and 10 and Information Technology 8 and 10.

Curriculum Links —Some Samples From BC Curricula

An examination of the BC Social Studies Curriculum guides for the various grade levels suggests a variety of links between the Prescribed Learning Outcomes (PLOs) listed and the form, content and skills development opportunities the *EBC* provides. Some possible curriculum links are listed below, and teachers will encounter many other connections.

From Applications of Social Studies - Kindergarten to Grade 11

Applications of Social Studies provides students with a framework of developmental skills and processes that will be used throughout the curriculum.

- Identify and clarify a problem, issue or inquiry.
- Gather, organize and summarize a body of information from primary and secondary print and non-print sources, including electronic sources.
- Interpret and evaluate a variety of primary and secondary sources.
- Develop and assess appropriate responses or solutions to issues or problems.
- Organize information into formal presentations.
- Practise active citizenship: take a public stand on matters of personal concern.

From Social Studies 5 and 6

- Demonstrate appreciation of contributions of aboriginal peoples, the French and the British to the development of Canada.
- Demonstrate understanding of why immigrants come to Canada, the challenges they face and their contributions to Canada.
- Demonstrate awareness of the history of aboriginal people's rights.
- Analyze the development of communities and their relationships to population, resources, transportation and technology.
- Locate and describe major physical features of Canada using topographic and thematic maps.
- Describe Canada's changing economic relationship with Pacific Rim countries.
- Evaluate mass media stereotypes of cultural groups or geographic regions.
- Describe and evaluate relationships between environments, economies and resources.

From Social Studies 7 and 8

- Describe connections between ancient and contemporary cultures.
- Describe contributions of ancient systems to present-day legal systems.
- Interpret current and historical data and maps.
- Compare daily life, family structures and gender roles in a variety of civilizations.
- Demonstrate awareness of artistic expression as a reflection of the culture in which it is produced.
- Describe how societies preserve identity, transmit culture and adapt to change.
- Describe how physical geography influenced patterns of settlement, trade and exploration.
- Analyze how people interacted with and altered their environments, in terms of population, settlement patterns, resource use and cultural development.

From Social Studies 9

- Analyze the relationship between aboriginal people and Europeans and explain the role of each in the development of Canada.
- Describe the daily life in aboriginal communities, New France and British North America.
- Analyze roots of present-day regional, cultural and social issues within Canada.
- Analyze reasons for the initial exploration of North America.
- Analyze effects of colonialism on trade and conflict.
- Assess the impact of the fur trade on exploration and settlement.
- Identify factors that influenced the growth and the development of industry.
- Describe and compare North America's diverse geographical regions.
- Identify major exploration routes and historical events in the development of Canada.
- Demonstrate understanding of the ways in which the aboriginal people interact with their environment.
- Explain the role of aboriginal people in the fur trade and in the exploration of North America.
- Assess the role of geographic factors in the development of trade and settlement in Canada and other colonies.

From Social Studies 10

- Identify the changing nature of families and women's roles in Canadian society.
- Assess the interaction between aboriginal people and Europeans.
- Describe the contributions made by aboriginal people, the French and the British to the development of Canada.
- Demonstrate awareness of ways the arts mirror and shape Canadian society.
- Assess the impact of western expansion and federal policies on aboriginal peoples.
- Identify factors that contribute to the economy of British Columbia.
- Identify and describe the physiographic regions of Canada and the processes that formed these regions.
- Analyze how geography influenced the economic and cultural development of western Canada.

From Social Studies 11

- Recognize connections between events and their causes, consequences and implications.
- Identify elements that contribute to the regional, cultural and ethnic diversity of Canadian society.
- Describe the role of women in the development of Canadian society.
- Identify and assess social issues facing Canadian society.
- Describe the role of Canada's First Nations peoples in shaping Canadian identity.
- Describe Canada's evolution as an independent nation.
- Demonstrate understanding of the history and present status of aboriginal land claims and self-government in Canada.
- Describe Canada's role in international conflicts, including World War I and World War II, and assess the impact on Canada.
- Describe economic cycles in Canada and the world, including the Great Depression.
- Apply the following themes of geography to relevant issues: location, place, movement, regions, and human and physical interaction.

From Geography 12

- Apply the following geographic themes to relevant issues:
 - Location
 - Place
 - Movement
 - Regions
 - Human and physical interaction
- Describe the characteristics of renewable and non-renewable resources.
- Contrast the different ethics related to resource management and use.
- Identify how bias, data availability and data interpretation affect the evaluation of resource sustainability.
- Demonstrate an ability to access, interpret and present geographic information.

From History 12

- Analyze historical evidence to:
 - Assess reliability.
 - Distinguish between primary and secondary sources.
 - Identify bias and point of view.
 - Corroborate evidence.

From First Nations Studies 12

- Demonstrate the ability to think critically, including the ability to:
- Define an issue or problem.
- Develop hypotheses and supporting arguments.
- Gather relevant information from appropriate sources.
- Assess the reliability, currency and objectivity of evidence.
- Assess the role of values, ethics and beliefs.
- Recognize cause-and-effect relationships and the implications of events.
- Design, implement and assess detailed courses of action to address First Nations issues.
- Identify the traditional territories of the First Nations of British Columbia.
- Describe traditional BC First Nations technologies, including the uses of plants and animals.
- Describe the impact of contact between First Nations and Europeans on the demographics in BC
- Analyze stereotypical and authentic portrayals of First Nations people in various works, both historical and contemporary.
- Describe the roles, responsibilities and achievements of current aboriginal groups and leaders, locally, provincially and nationally.
- Explain the significance of Canadian Supreme Court decisions, with reference to key issues.

From Science 8, 9 and 10

- Assess different impacts of using renewable and non-renewable resources.
- Evaluate how major natural events and human activity can affect local and global environments and climate change.

From Information Technology 8, 9 and 10

- Demonstrate the ability to formulate questions, and to use a variety of sources and tools to access, capture and store information.
- Demonstrate the ability to arrange information in different forms to create new meaning.
- Select, use and evaluate a variety of technology tools for making presentations.
- Create multimedia documents using a variety of electronic sources.
- Evaluate information retrieved electronically for authenticity, bias and timeliness.

5. **RECOMMENDED TEACHING STRATEGIES I: LEARNING THROUGH INQUIRY PROCESS AND DEVELOPING CRITICAL THINKING SKILLS**

Teaching students strategies that will enable them to think critically and analytically.

Critical thinking and inquiry learning are based upon engaging students in challenging inquiries that involve questioning and research, acquisition of knowledge and understanding leading to possible solutions or judgements and courses of action. Their inquiry raises questions around which their research may be centred. It identifies a series of questions for which their research will seek answers and possible solutions and, in the end, will suggest courses of action. Inquiry learning depends upon developing skill in critical and creative thinking, problem solving, communication and research.

Inquiry learning involves a number of elements that may be introduced in a variety of ways. These phases include:

1. Identify an issue, problem or situation.
2. Develop the criteria for judging or decision making.
3. Identify a working plan that:
 - designates who will make the decision (one person, small group, whole class, whole school, etc.)
 - determines the criteria that will be used to make the decision (simple majority, “least cost,” most “environmentally friendly,” individual choice, etc.)
 - creates a working environment and time framework (group and individual responsibilities, deadlines, presentation dates and format, assessment criteria, etc.).
4. Carry out necessary research, gathering and organizing information, examining a variety of opinions and points of view.
5. Analyze, synthesize and organize data, identifying decision alternatives and possible consequences of each alternative.
6. Make a decision using agreed-upon criteria and processes.
7. Act upon the decision made, including considering the possible need for further research and consideration.
8. Assess the consequences of the decision made as to whether it is acceptable, unacceptable, successful, unsuccessful or in need of revision and/or further study.

A variety of learning strategies can serve as tools for inquiry learning. They include:

- Interviewing and questionnaires
- Group brainstorming and webbing exercises
- Role-taking and simulations
- Co-operative learning
- Individual research
- Public events and forums

We live in an information society in which we are constantly bombarded with data and opinions on social and political issues and problems that are local, national and global in

scope. Inquiry learning and critical thinking are based upon the development and testing of hypotheses— “educated guesses” drawn from research, thoughtful consideration and debate.

Students, and especially those in Social Studies programs, often bring these concerns to their classrooms in their search for understanding and answers. It is important, therefore, that students develop the skills needed to cope with the formidable information explosion they now experience. Much of our thinking involves developing and testing choices; assessing alternatives and consequences; and making reasoned judgements, so it follows that students should be given similar opportunities in their school environments. the inquiry learning process is one means for developing that skill.

6. RECOMMENDED TEACHING STRATEGIES II: READING FOR INFORMATION

Teaching students the strategies that will enable them to more easily understand the information found in the Encyclopedia of British Columbia.

“The reader writes the story.”
— E. Annie Proulx

All readers, whether proficient or not, actively interact with the text they read in an attempt to construct meaning from that text. Their understanding is sometimes deep and sophisticated, but it may be full of misunderstandings and misconceptions. The story they build is dependent upon their experiences and their skills as readers. These skills can and must be taught.

Although not written as a narrative, the *Encyclopedia of British Columbia* is a story. It is a wealth of interesting, exciting and entertaining information about our province and a wonderful resource for students as they learn more about our society and their place in it. The encyclopedia is a just a tool we use to gather information and we cannot take it for granted that all students will be able to comprehend this information at the same speed or to the same depth. Like other references, the *EBC* has specific text features that assist the reader in finding information, understanding it and integrating it with other knowledge. Students need to be taught how to read an encyclopedia and how to use the text features, before it becomes a convenient tool. Features of non-fiction texts that need to be highlighted and taught are:

- Table of contents
- Running heads
- Headings & sub-headings
- Illustrations and captions
- Charts and graphs
- Index
- Cross references
- Abbreviations

As well, they need to be taught the comprehension skills good readers take for granted.

Skills of Good Readers

When proficient readers read, they are constructing meaning from the text using a number of skills or strategies. Pearson et al. (1992), in summarizing these strategies, noted that good readers constantly:

- make connections between what they read and what they already know
- ask questions of themselves and the author
- draw inferences during and after reading
- distinguish between important and less important ideas in the text
- analyze information in the text and across texts
- monitor their understanding
- repair their understanding when meaning is unclear

Keene and Zimmerman (1997) add:

- create mental images or visualize as they construct meaning.

Not all readers employ all of these strategies all the time. Struggling readers may not be able to utilize them at all and must be taught.

Taking the Time in the Beginning

If, as the authors of this guide feel, the *Encyclopedia of British Columbia* is an important resource that helps students pursue the issues and questions necessary to their learning, then it is important for teachers to take some time to teach students to understand what they are reading. Reading for information is an important skill that is best taught in the context of an engaging pursuit of answers to challenging questions.

Comprehension Strategies

As well as teaching students the strategies of reading for information there are a few suggestions that will make the comprehension instruction successful. Whatever the content area teachers should:

- make explicit reading instruction part of the teaching and learning
- set aside a few large blocks of time to teach the reading strategies
- model the strategies repeatedly for the students
- provide some opportunities for students to practise strategies in self-selected, short pieces of text that they are able to read
- discuss reading strategies and monitor content understanding frequently
- highlight features of the encyclopedia and show how non-fiction text is organized

The reading strategies included here, pre-reading strategies and strategies to use during reading, are designed to encourage readers to think about what they are reading before and as they read. This helps them focus on the meaning of the text and discourages lack of attention.

Each strategy is a model of a skill that proficient readers consistently use. Because skills need to be practised, students need to use them often. It is also important to debrief their thinking after they have practised the strategy.

Semantic Mapping

This strategy helps students identify a purpose for reading and monitor their comprehension while they read.

- Choose a number of key words from a passage in the *EBC* and give it to the students.
- Organize small groups and guide students to create a web, or Semantic Map, of ideas, phrases and pictures around each key word.
- As they read the passage and add to the map, respond to their work and encourage discussion, helping them to connect the exercise to their prior knowledge and to arrive at a focus for their reading. As they read the passage they add to the map.
- After a number of guided experiences with the strategy, encourage students to choose their own key words and develop their own maps.

Scan-Select / Read-Reflect

This activity helps students focus on the meaning of the text by scanning for key words, predicting the meanings and then comparing their predictions with the actual meaning.

- Students quickly scan the first section of a passage and note key words on paper. (Start with a paragraph and increase the size of the “chunk” according to the reader’s ability.)
- Using these key words, each student gives a partner a short prediction of what the passage will be about.
- Students read the passage and determine how their key work was actually used and how close their predictions were.
- After finishing the passage they retell or rewrite a summary of the text.

I Predict – I Learned

This activity emphasizes that readers need to predict, stop and reflect, summarize, and predict again as they read.

- Distribute small post-it notes. They write their responses on post-its to keep them brief.
- Depending on the ability of the reader either the teacher reads the text and decides on logical “chunks” or stopping places or the stopping places are identified and the students reads. Stopping places could be at the end of each paragraph, subheading or page.
- Students use two post-its at each stopping place. One for their summary of the passage and the other for their prediction for the next chunk.
- At the end of the passage students copy their notes on a divided page of their note books.

I predicted ...	I learned ...
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Working with the Text of the EBC

This activity encourages students to become more conscious of the thought processes involved in good reading, and to learn more of these skills from each other by challenging and supporting each other's ideas.

- The teacher chooses a short passage and reads it to the students (demonstrating the process he/she wishes them to follow). While she reads, she thinks out loud, noting her questions, inferences and discoveries. She puts each of these "thoughts" on a post-it and sticks it to the page. The code below is posted on the wall of the classroom and used to help keep notes brief.
- Once the strategy is modelled and debriefed, students can work with partners and take turns modelling the strategy.
- As they become proficient they can "mumble read" the text and then graduate to silent reading, all the while using the post-its to help them understand the text.

WORKING-THE-TEXT; CODE

?	question
Huh	puzzled
WOW	learned something neat
etc	

7. LESSON PLANNING - UNDERSTANDING BY DESIGN

Begin with the question, *What would we accept as evidence that students have attained the desired understandings and proficiencies?* – before proceeding to plan teaching and learning experiences.

— Wiggins & McTighe, *Understanding By Design*

If we, as teachers, wish to develop deep understanding we must design backwards, or, as Steven Covey would say: begin with the end in mind. When we plan with the end in mind we must have a very clear idea of what the students will be demonstrating or performing to show that they have learned the knowledge or skills we have taught. And this must be articulated before we design the activities that teach, practice and apply the new knowledge. In addition to the teacher knowing what the end looks like the students must also know where they are headed and what the criteria for success is before they embark on their learning journey.

Grant Wiggins and Jay McTighe in *Understanding By Design* identified these three stages in the “backward design” process:

1. Identify desired results.
 - What should the student know, understand and be able to do?
 - What enduring understandings are desired?
2. Determine acceptable evidence.
 - What evidence will we accept of student understanding and proficiencies?
 - What formative assessment methods (observations, dialogues, quizzes, tasks) will we use to gather the evidence?
 - What summative performance task or project will we use?
3. Plan learning experiences and instructions.
 - What activity will be used to find out what the student already knows?
 - What prior knowledge will students need to reach the desired results?
 - What will need to be taught?
 - What activities will be used to teach the new knowledge and skills?
 - How will students apply and practice the new knowledge and skills?
4. Assign the summative performance task or project.

The lessons this guide are based on “The Understanding By Design” model of curriculum development that has guided the authors in their choices of teaching and assessment activities. Each lesson will include the following components:

1. Lesson Focus
2. Essential Question
3. Instructional Objectives
4. Performance and/or Demonstration
5. Determining Prior Knowledge
6. Lesson Preparation and Resources
7. Instructional Activities
 - Making Connections With Prior Knowledge
 - Teaching and Processing New Content and/or Skills
 - Using and Practising what We Know
8. Extension Activities

Specifically, each of these components has a purpose, a connection to how learners construct understanding. Therefore it is important that the learners are aware of what they are trying to learn, where the activities are headed, how they will learn and show what they have learned, as well as why they are involved in each activity. It is also important that, through the development of the criteria for success and access to exemplars of other’s success, students learn what it looks like to succeed. Students who are actively involved in this process of developing understanding will be more engaged in the learning activities.

Lesson Framework

The framework for all of the lessons included in this guide include the common components mentioned in the previous section. Each component is described in more detail in the following section.

1. LESSON FOCUS
 - The main idea or title
2. ESSENTIAL QUESTION
 - Meaningful to students
 - Focus on an issue or problem
 - Embedded in the core of the curriculum
 - Naturally occurring
 - Leads to more questions
 - Encourage numerous ways to arrive at a solution
3. INSTRUCTIONAL OBJECTIVES
 - Students will be able to know and/or understand

4. PERFORMANCE/DEMONSTRATION
 - What students will do to show what they have learned.
 - Specifically planned to demonstrate that the student has reached the instructional objectives.

5. DETERMINING PRIOR KNOWLEDGE
 - Assessing their level of prior knowledge.
 - Important prerequisites may have to be taught.

6. LESSON PREPARATION & RESOURCES
 - Comprehensive
 - Outline teacher preparations
 - Adequate lead time

7. INSTRUCTIONAL ACTIVITIES
 - a) Making connections with prior knowledge
 - Accessing prior knowledge
 - Building prior knowledge
 - High emphasis

 - b) Teaching and processing new content
 - Skills, concepts, knowledge, attitudes

 - c) Using and practicing what we know
 - Application of new skills, concepts, knowledge or attitudes.
 - Time to practice

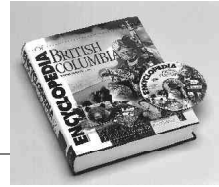
8. EXTENSION ACTIVITIES
 - Activities that extend the learning into other areas of study or to a more sophisticated level of application and understanding.

8. PERFORMANCE ASSESSMENT

The suggested PERFORMANCE/DEMONSTRATION activities included in each lesson are designed to allow students to show their level of understanding. It is our intent that these activities are meaningful and engaging as well as directly related to the learning outcomes. The INSTRUCTIONAL ACTIVITIES are designed to teach students the knowledge and skills necessary to complete the performance activity. For these activities to provide complete assessment information teachers must:

- Establish a time line and evaluation criteria.
- Share and/or develop the criteria with the students.
- Work with the students to develop guidelines that provide specific directions for successfully completing an activity.
- Identify opportunities for formative assessment (observations, drafts, reflections, discussions).
- Provide opportunities for reflection, self-assessment and peer assessment.
- Provide alternatives to meet the needs of all students (Special Needs, ESL).

As teachers incorporate performance assessment into their practice, they will find that students become increasingly able to establish criteria, reflect and assess their own progress. Teachers will also find more time and opportunity for working with students and for observation.



1. Lesson Focus

THE NATURE OF THE BC ECONOMY.

2. Essential Question

Where will all the jobs be for me and my kids?

- What do past conditions and apparent trends suggest about the future of the BC economy? What will the BC economy look like in, say, fifty years? How might it be different from the present and the past? Which areas will best supply employment opportunities?

3. Instructional Objective(s)

Students will identify factors that contribute to the economy of British Columbia.

4. Performance / Demonstration

Using the *Encyclopedia of British Columbia*, students will examine the main sectors of the BC economy and write a paragraph or point-form summary of what they think the BC economy will be like in the future, based upon current economic activity and changes in the past.

5. Determining Prior Knowledge

- Using a short passage from the *EBC* and accompanying comprehension questions, ascertain how well students have read the text in the encyclopedia. Some instruction may be needed for those who struggle. See the “Reading For Information” section of the *EBC* teacher’s resource.
- Students will need to be reminded and/or taught how to find relevant information in an encyclopedia.
- Lead a discussion to establish how aware students are of the ways British Columbians earn a living.

6. Lesson Preparation and Resources

- Copies of the *Encyclopedia of British Columbia* and/or access to the on-line version will be needed.
- A data gathering form with instructions for reporting findings and predictions is provided with this lesson as one possible reporting format (See attached Worksheet 1).
- This lesson will require about two hours’ working time and further reporting time, depending upon how students present their research and opinions.

7. Instructional Activities

a) Making Connections with Prior Knowledge

- Lead a class discussion in which students identify the various sectors of the BC economy.
- In small groups, have them create a chart that compares what their parents and grandparents did for a living, with the kinds of jobs their older siblings and other young people currently do.
- Have each group note the changes in types of work they see from one generation to the next.
- Debrief these changes as a whole group.
- Encourage students to discuss in which sectors of the economy they think they will most likely find work in the future.

b) Teaching and Processing New Content

This lesson provides an opportunity for developing learning skills, particularly re-searching information, synthesizing and presenting it in a summary format.

- Using these pages of the *EBC*: Agriculture (pages 4–7), Fishing (pages 243–53), Forest industry (pages 259–63), Mining (pages 464–66), Tourism (page 709), High-technology industry (page 329) and Economy of BC (pages 193–98). Have students verify their list of the major industries that contribute to the BC economy. Use other information sources, including the Grade 10 core resource book, to verify the information gathered.
- Using the agriculture industry as an example and the *EBC* for reference, chart the economic and technological changes that have been made in the past 100 years on the Student Sheet “Plotting The Future.”
- Discuss what economic impact these changes have had on the agriculture industry in British Columbia. As well, discuss how agricultural practices of the past have resulted in current problems or issues in the industry.
- Using the Student Sheet “Plotting The Future,” have small groups of students complete the “Future” section by predicting what changes will occur in the next fifty years in the agriculture industry.
- As a whole group, discuss these predictions and the reasons for making them.

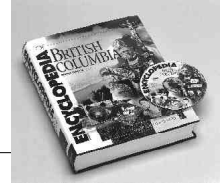
c) Using and Practising What We Know

- Have students complete the Student Sheet “Plotting The Future” (see attached Worksheet 2) for the other major industrial sectors of the BC economy (forest industry, mining, fishing, energy, tourism and “high tech”).
- Have them grade each industry, including agriculture, as to its potential to provide employment in the future. Give reasons why.

8. Extension Activities

- Students can use what they have learned about the BC economy in considering the importance of the various sectors, and in considering their own career choices.
- This lesson can be a lead-off point for a more detailed study of the BC economy as a whole, or of any of the various sectors. Or it can be used to expand an investigation of how jobs (occupations) in BC have evolved over time, and issues such as the changing roles and attitudes towards women in the workforce.

**WORKSHEET 1:
DATA GATHERING**

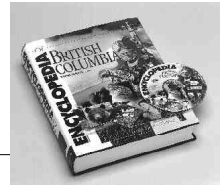


Historical developments in (industry) _____

Using the following two headings gather important developments in the industry you are studying. Note why you feel each development is important.

What's Important?	Why is it important?

**WORKSHEET 2:
PLOTting THE FUTURE**



Past important developments

Blank area for writing past important developments.

The present state of the industry in British Columbia

Blank area for writing the present state of the industry in British Columbia.

The future of the industry in British Columbia

Blank area for writing the future of the industry in British Columbia.

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