

Geographic Issues of the 21st Century

Geographic Literacy

1
CLUSTER

SENIOR
2



Learning Experience 1.1: What Is Geography?

- KL-008 Define the term geography.
- KC-001 Give examples of ways in which geographic knowledge and understanding can inform decision making.
- VC-001 Value the importance of geographic knowledge and understanding in making informed decisions.
- S-100 Collaborate with others to achieve group goals and responsibilities.
- S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.
- S-201 Organize and record information in a variety of formats and reference sources appropriately. *Examples: maps, graphs, tables, concept maps...*
- S-302 Draw conclusions and make decisions based on research and various types of evidence.
- S-400 Listen to others to understand their perspectives.

Learning Experience 1.5: Why Care?

- KL-018 Explain the importance of stewardship in the preservation of the Earth's complex environment.
- VL-005 Respect the Earth as a complex environment in which humans have important responsibilities.
- S-103 Promote actions that reflect principles of sustainability.
- S-107 Make decisions that reflect social responsibility.
- S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.
- S-201 Organize and record information in a variety of formats and reference sources appropriately. *Examples: maps, graphs, tables, concept maps...*

Learning Experience 1.4: Global Environmental Types

- KL-014 Explain the concept of global environmental types as physical geographic regions that are composites of climate, vegetation, and soils.
- KL-015 Identify global environmental types on a map of the world.
- KL-016 Locate on a map of Manitoba global environmental types found in Manitoba.
- KL-017 Identify on a map of the world major population clusters and explain the relationship between population and global environmental types.
- S-100 Collaborate with others to achieve group goals and responsibilities.
- S-104 Seek consensus in collaborative problem solving.
- S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.
- S-201 Organize and record information in a variety of formats and reference sources appropriately. *Examples: maps, graphs, tables, concept maps...*
- S-204 Select, use, and interpret various types of maps.
- S-309 Observe patterns and make generalizations based on geographic inquiry.
- S-402 Express informed and reasoned opinions.

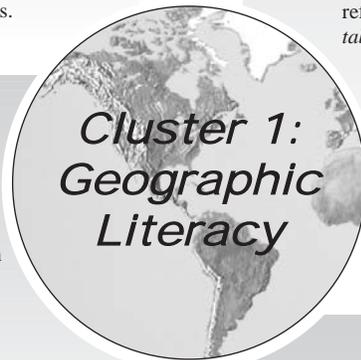
Learning Experience 1.2: Physical and Human Geography

- KL-009 Identify elements of physical and human geography.
- KL-010 Describe the relationship between physical and human geography.
- KL-011 Locate major physical features on a map of North America.
- KL-012 Locate international political divisions on a map of North America.
- KL-013 Locate provinces, territories, and capital cities on a map of Canada.
- S-100 Collaborate with others to achieve group goals and responsibilities.
- S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.
- S-201 Organize and record information in a variety of formats and reference sources appropriately. *Examples: maps, graphs, tables, concept maps...*

S-300 Formulate geographic questions to plan inquiry and research.

S-309 Observe patterns and make generalizations based on geographic inquiry.

S-400 Listen to others to understand their perspectives.



Learning Experience 1.3: Place and Identity

- KI-003 Explain the relationship between place and identity.
- KP-040 Describe ways in which various globes, maps, and map projections may influence perceptions. *Examples: relative size and position, power, sovereignty...*
- KH-032 Recognize that the study of geography includes the study of change over time.
- VI-002 Appreciate the importance of place to their identity.
- S-100 Collaborate with others to achieve group goals and responsibilities.
- S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.
- S-201 Organize and record information in a variety of formats and reference sources appropriately. *Examples: maps, graphs, tables, concept maps...*
- S-204 Select, use, and interpret various types of maps.
- S-205 Recognize and interpret various map projections.
- S-302 Draw conclusions and make decisions based on research and various types of evidence.
- S-309 Observe patterns and make generalizations based on geographic inquiry.
- S-402 Express informed and reasoned opinions.
- S-403 Present information and ideas in a variety of formats appropriate for audience and purpose. *Examples: models, displays, multimedia presentations, editorials...*
- S-405 Articulate their perspectives on issues.

Cluster 1: Geographic Literacy—Overview

This cluster has five learning experiences. It provides students with the opportunity to become familiar with the discipline of geography and understand why it is important. Students define the term geography, identify its various fields, make connections between place and identity, investigate global environmental types, and consider the complexity of the global environment and the importance of stewardship in the preservation of this environment.

This cluster introduces students to the definition of geography (“What is where, why there, and why care?”) developed by Professor Charles Gritzner of the University of South Dakota. This definition is presented as a practical way for students to explore a variety of geographic issues in numerous learning experiences as they work their way through the clusters of the curriculum.



Learning Experience 1.1: What Is Geography?

This learning experience introduces students to the concept of geography, and provides an opportunity to review various definitions and to develop their own. Furthermore, it emphasizes the importance of geographic knowledge and skills in personal and collective decision-making processes. This learning experience also focuses on the important geographic knowledge and collaboration skills in working with others to fulfill responsibilities.

- KL-008 Define the term geography.
- KC-001 Give examples of ways in which geographic knowledge and understanding can inform decision making.
- VC-001 Value the importance of geographic knowledge and understanding in making informed decisions.

Learning Experience 1.2: Physical and Human Geography

The second learning experience extends the definition of geography to include its two major fields: physical geography and human geography. It provides opportunities for students to identify elements of each. The learning experience then proceeds to introduce students to the critical geographic concept of the dynamic interrelationships between the physical and human aspects of the world. This learning experience also gives students an opportunity to consolidate and extend their map knowledge of both human and physical elements of Canada and North America.

- KL-009 Identify elements of physical and human geography.
- KL-010 Describe the relationship between physical and human geography.
- KL-011 Locate major physical features on a map of North America.
- KL-012 Locate international political divisions on a map of North America.
- KL-013 Locate provinces, territories, and capital cities on a map of Canada.

Learning Experience 1.3: Place and Identity

In this learning experience, students explore issues of perception relating to geography. Students make connections between the concepts of place and identity, and reflect upon the importance of place to their personal identity. Students also acquire an understanding that maps and map projections can be powerful symbols that may influence perceptions of position and power. In this learning experience, students also recognize that the study of geography, whether it be physical or human, includes the study of change over time.

- KI-003 Explain the relationship between place and identity.
- KI-003 Explain the relationship between place and identity.
- KH-032 Recognize that the study of geography includes the study of change over time.
- KP-040 Describe ways in which various globes, maps, and map projections may influence perceptions. *Examples: relative size and position, power, sovereignty...*
- VI-002 Appreciate the importance of place to their identity.

Learning Experience 1.4: Global Environmental Types

This learning experience introduces students to the concept of global environmental types as a way of classifying a combination of physical factors that collectively influence human activities. Students identify the major environmental types on a world map and, in particular, those found in Manitoba on an appropriate map. Students also identify and analyze relationships between global environmental types and major world population clusters.

- KL-014 Explain the concept of global environmental types as physical geographic regions that are composites of climate, vegetation, and soils.
- KL-015 Identify global environmental types on a map of the world.
- KL-016 Locate on a map of Manitoba global environmental types found in Manitoba.
- KL-017 Identify on a map of the world major population clusters and explain the relationship between population and global environmental types.

Learning Experience 1.5: Why Care?

In this learning experience, students consider the complexity of the global environment and the importance of stewardship in its preservation. The emphasis is on the “why care” component of the definition of geography. Students will be encouraged to consider how their individual actions affect the environment and to take a pro-active approach regarding their personal responsibility for the well-being of the planet.

- KL-018 Explain the importance of stewardship in the preservation of the Earth’s complex environment.
- VL-005 Respect the Earth as a complex environment in which humans have important responsibilities.

Skills Outcomes for Cluster 1: Geographic Literacy

Skills for Active Democratic Citizenship

- S-100 Collaborate with others to achieve group goals and responsibilities.
- S-103 Promote actions that reflect principles of sustainability.
- S-104 Seek consensus in collaborative problem solving.
- S-107 Make decisions that reflect social responsibility.

Skills for Managing Information and Ideas

- S-200 Select information from a variety of oral, visual, material, print, or electronic sources including primary and secondary.
- S-201 Organize and record information in a variety of formats and reference sources appropriately.
Examples: maps, graphs, tables, concept maps...
- S-202 Select and use appropriate tools and technologies to accomplish tasks.
Examples: Geographic Information Systems (GIS) and Global Positioning Systems (GPS)...
- S-204 Select, use, and interpret various types of maps.
- S-205 Recognize and interpret various map projections.

Critical and Creative Thinking Skills

- S-300 Formulate geographic questions to plan inquiry and research.
- S-302 Draw conclusions and make decisions based on research and various types of evidence.
- S-305 Compare diverse perspectives and interpretations in the media and other information sources.
- S-309 Observe patterns and make generalizations based on geographic inquiry.

Communication Skills

- S-400 Listen to others to understand their perspectives.
- S-401 Use language that is respectful of human diversity.
- S-402 Express informed and reasoned opinions.
- S-403 Present information and ideas in a variety of formats appropriate for audience and purpose. *Examples: models, displays, multimedia presentations, editorials...*
- S-405 Articulate their perspectives on issues.



Learning Experience 1.1: What Is Geography?

KL-008	Define the term geography.
KC-001	Give examples of ways in which geographic knowledge and understanding can inform decision making.
VC-001	Value the importance of geographic knowledge and understanding in making informed decisions.
S-100	Collaborate with others to achieve group goals and responsibilities.
S-200	Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.
S-201	Organize and record information in a variety of formats and reference sources appropriately. <i>Examples: maps, graphs, tables, concept maps...</i>
S-302	Draw conclusions and make decisions based on research and various types of evidence.
S-400	Listen to others to understand their perspectives.

Description of the Learning Experience

This learning experience introduces students to the concept of geography, and provides an opportunity to review various definitions and to develop their own. Furthermore, it emphasizes the importance of geographic knowledge and skills, and personal and collective decision-making processes. This learning experience also focuses on the important geographic knowledge and collaboration skills involved in working with others to fulfill responsibilities.

Vocabulary Focus

The following vocabulary is important for Learning Experience 1.1: What Is Geography?

cities	globes	natural disasters	secondary source
environment	"graphy"	place	trade
"geo"	industry	primary sources	vegetation
geographical system	landforms	products	
geography	maps	region	
geology	mental maps	resources	

Vocabulary Study Strategies

Please see **Appendix A: Content-Area Vocabulary Study Strategies** for suggested strategies to incorporate vocabulary studies into the learning experiences. Further vocabulary strategies are found in Vocabulary Strategies 6.31–6.36 and Information Processing Strategies 6.49–6.53 in *Success for All Learners: A Handbook on Differentiating Instruction* [referred to in this document as SFAL] (Manitoba Education and Training, 1996). In addition, a number of learning experiences within the clusters include vocabulary strategies for learning. Teachers are encouraged to make use of these strategies and to avoid the less meaningful practice of having students copy dictionary definitions.

Targeted Learning Outcomes

Suggested Teaching/Learning Strategies

Students will...

KL-008 Define the term geography.

KC-001 Give examples of ways in which geographic knowledge and understanding can inform decision making.

S-100 Collaborate with others to achieve group goals and responsibilities.

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KL-008 Define the term geography.

KC-001 Give examples of ways in which geographic knowledge and understanding can inform decision making.

S-100 Collaborate with others to achieve group goals and responsibilities.

S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.

Activating Strategies**Strategy 1: Using Geographic Knowledge**

- In small groups, students brainstorm examples of how they use geographic knowledge to make everyday decisions. *Examples: finding the way to school or another location, deciding how to dress for the weather, describing physical features, understanding and locating a natural disaster...*
- Groups report examples to the class.
- Record examples on the board or flip chart and discuss with students the various ways that geographic knowledge is used in their daily lives.
- Students record examples in course notebooks.

Strategy 2: Geographic Terminology

- Students work in small groups and brainstorm a list of words they associate with geography. *Examples: maps, locations, landforms, regions...*
- Groups report to class, create a master list, and check for repetition.
- Students use terms to create a Word Splash for display on a bulletin board in the classroom.
- Students make connections among three or four of the terms to predict how these terms relate to geography.
- Students share the connections they made, in small groups or with the whole class.

Strategy 3: Defining Geography

- Using the Listen-Think-Pair-Share strategy, students identify words with the prefix “geo,” and words with the suffix “graphy.”
- Students record findings in the appropriate spaces on the Word Families Form organizer. (See BLM 1-2.)
- Using the two root words, students create a definition for geography on the organizer and complete the remaining boxes.
- Students refer to dictionaries, geography textbooks, or the Internet to record various definitions of geography.
- Students compare these definitions to the one they created in the organizer.
- Students begin a personal glossary of prefixes, root words, and suffixes.

Suggested Assessment Strategies

Teacher Tips and Resources

Activating Strategies

- Monitor discussion and assess notes for the student's understanding of the term geography and relevance of examples provided.
- Assess examples recorded in notes for the student's knowledge of ways in which geographic knowledge informs decision making.
- Observe and monitor the student's skill in collaborating within groups during the brainstorming activity. (See BLM G-1.)

- Students may not be familiar with the concept of geography. Before active brainstorming can begin, students may need a few examples of how they use geographic knowledge and skills in their daily lives.
- BLM G-1: Group Performance: Assessment Scale
- TN 1: Geography: More Than a Subject in School
- TN 2: The Nature of Geography
- For further information on the discipline of geography, read the Introduction and Appendix A in "Canadian National Standards for Geography," published by *Canadian Geographic* and available on the Canadian Council for Geographic Education website at <www.ccge.org> (Follow the link Pro-Development).

- Monitor discussion and assess the Word Splash for the student's knowledge of geographic terminology.
- Monitor discussion and assess connections made for the student's knowledge of ways in which geographic knowledge can inform decision making.
- Observe and monitor the student's skill in collaborating with others to achieve the group's goals. (See BLMs G-1, G-2.)

- BLM 1-1: Word Splash
- BLM G-1: Group Performance: Assessment Scale
- BLM G-2: Group Performance: Self-Assessment Scale
- SFAL 6.28: Word Splash
- Paper and markers
- Keep a record of the master list for the Activating Strategy in LE 1.2, Strategy 1.

- Assess responses on the Word Families Form and the student's personal glossaries for her or his knowledge of the term geography, and the relevance of examples provided.
- Observe and assess the student's skill in collaborating with others to achieve group goals and responsibilities. (See BLM G-1.)
- Assess the student's skill in selecting information from a variety of sources. (See BLM G-9.)

- BLM 1-2: Word Families Form
- BLM G-1: Group Performance: Assessment Scale
- BLM G-9: Selecting Information: Checklist
- SFAL 6.13: Listen-Think-Pair-Share
- Dictionaries and online dictionaries (See <www.dictionary.com>.)

Note: SFAL refers to the teacher support document *Success for All Learners: A Handbook on Differentiating Instruction* (Manitoba Education and Training, 1996).

Where to Find the Blackline Masters (BLMs)



Cluster-Specific BLMs are found in Appendix B. They are coded, for example, BLM 3-2, where the "3" refers to Cluster 3 and the "2" refers to the sequential number.

General BLMs are found in Appendix C. They are coded, for example, BLM G-6, where the G refers to "General" and the "6" refers to the sequential number. They are used in multiple strategies.

Teacher Notes are found in Appendix D. They are coded TN, and are numbered sequentially (e.g., TN 3 or TN 40).

Targeted Learning Outcomes**Suggested Teaching/Learning Strategies****Students will...**

KL-008 Define the term geography.

KC-001 Give examples of ways in which geographic knowledge and understanding can inform decision making.

VC-001 Value the importance of geographic knowledge and understanding in making informed decisions.

Activating Strategies**Strategy 4: Expanding the Meaning of Geography**

- Using the KWL or KWHL strategy, students record what they already know about the discipline of geography in the “Know” column, its various branches, practical daily uses, careers related to geography, and the importance of geographic knowledge in decision making.
- Students discuss what they have recorded in the “Know” column, then proceed to list things they would like to know in the “Want/Need to Know” column.
- Finally, students discuss strategies that may help them answer questions they have developed (“How to Find Out” column).
- Students complete the “Learned” column in the KWL or KWHL organizer later as questions are answered in other learning activities.

Students will...

KL-008 Define the term geography.

KC-001 Give examples of ways in which geographic knowledge and understanding can inform decision making.

VC-001 Value the importance of geographic knowledge and understanding in making informed decisions.

S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.

S-201 Organize and record information in a variety of formats and reference sources appropriately. *Examples: maps, graphs, tables, concept maps...*

Acquiring Strategies**Strategy 1: Help Wanted: Geographers**

- Working with a partner, students use the Internet and/or career sections of weekend newspapers to search for job/career advertisements related to geography.
- Students research job descriptions and required qualifications (i.e., specific geographic knowledge and skills) to expand their understanding of the importance of geography.
- Students create a list, on a flip chart or on the board, of various job descriptions and required geographic qualifications and skills.
- Students record required qualifications and skills on the Attribute Wheel organizer. (See BLM G-18.)

KL-008 Define the term geography.

VC-001 Value the importance of geographic knowledge and understanding in making informed decisions.

S-100 Collaborate with others to achieve group goals and responsibilities.

S-302 Draw conclusions and make decisions based on research and various types of evidence.

Strategy 2: What Is Where, Why There, and Why Care?

- Individual students or pairs read the article “What Is Where, Why There, and Why Care?” by Charles Gritzner. (See TN 3.)
- Working with a partner and with guidance from the teacher, students use the Information Mapping model to note the main ideas and supporting details of the article.
- As a class, students discuss the importance of each of the components of Gritzner’s definition.

Suggested Assessment Strategies**Teacher Tips and Resources****Activating Strategies**

- Assess the KWL or KWHL organizer for the student’s knowledge of the term geography.
- Monitor discussions and assess the KWL or KWHL organizer for the student’s knowledge of examples of ways in which geographic knowledge can inform decision making.
- Monitor discussions and assess the KWL or KWHL organizer for evidence that the student values the importance of geographic knowledge.

- BLM G-19: KWHL (What do I know? What do I want/need to know? How will I find out? What have I learned?)
- SFAL 6.94: KWL Organizer
- Ask students to keep the KWL or KWHL Organizer in their notes for further additions at the end of the learning activity and for possible use in Applying Strategy 3.

Acquiring Strategies

- Assess the job descriptions list and Attribute Wheel for the student’s understanding of the term geography and examples of ways in which geographic knowledge can inform decision making.
- Monitor pairs’ work and assess the list of job descriptions for evidence that the student appreciates the importance of geographic knowledge.
- Assess the student’s skill in selecting information from a variety of sources. (See BLM G-9.)
- Assess the Attribute Wheel for the student’s skill in organizing and recording information.

- Access to weekend editions of local and national newspapers
- Geography on the Job website at <www.ccge.org> (Follow links “resources” to “Geography on the Job.”)
- BLM G-9: Selecting Information: Checklist
- BLM G-18: Attribute Wheel

- Assess the student’s understanding of the term geography and the importance of geographic knowledge.
- Monitor the student’s contributions to the Information Mapping exercise to determine understanding of the article.
- Observe and assess the student’s collaboration skills. (See BLMs G-1, G-2.)

- You should be familiar with Gritzner’s article prior to teaching this lesson.
- Depending on student reading skills, you may need to provide an overview of the article before assigning the reading.
- BLM G-1: Group Performance: Assessment Scale
- BLM G-2: Group Performance: Self-Assessment Scale
- SFAL 6.49, 6.50: Information Mapping model
- TN 3: “What Is Where, Why There, and Why Care?” by Charles Gritzner

Targeted Learning Outcomes

Suggested Teaching/Learning Strategies

Students will...

KC-001 Give examples of ways in which geographic knowledge and understanding can inform decision making.

VC-001 Value the importance of geographic knowledge and understanding in making informed decisions.

S-302 Draw conclusions and make decisions based on research and various types of evidence.

S-400 Listen to others to understand their perspectives.

Acquiring Strategies

Strategy 3: Using Geographic Knowledge

- As a class, students discuss how to prepare for and conduct interviews, and how to select potential interview candidates. (See TN 14.)
- Working with a partner, students develop a list of questions (open-ended, closed-ended, follow-up) relating to how individuals use geographic knowledge in jobs or activities in the community.
- Students conduct interviews with adults in the school/community and record appropriate information.
- Students discuss criteria for making oral and/or written reports (using or revising parts of BLMs G-3 and G-4) in preparation for reporting interview findings to the class.
- Students share responses and compile information on the board or flip chart.
- Students use interview results to answer the question “Why is geographic knowledge important?”
- Students record shared information in course notebooks.

Students will...

KL-008 Define the term geography.

S-100 Collaborate with others to achieve group goals and responsibilities.

S-201 Organize and record information in a variety of formats and reference sources appropriately. *Examples: maps, graphs, tables, concept maps...*

Applying Strategies

Strategy 1: Definition of Geography Applied

- Individually or in pairs, students identify a specific geographic feature or phenomenon. *Example: their school or a new store...*
- Students use relevant information about the selected feature to answer the questions in Gritzner’s definition of geography by completing BLM G-20 or by creating a poster with this information in a similar format.
- Students share examples with the rest of the class.
- Students record information from peers in course notebooks.

KC-001 Give examples of ways in which geographic knowledge and understanding can inform decision making.

VC-001 Value the importance of geographic knowledge and understanding in making informed decisions.

S-100 Collaborate with others to achieve group goals and responsibilities.

S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.

Strategy 2: Using Geographic Knowledge: Issue-Based Analysis

- From media sources or class discussion, students identify a local or regional issue with geographic implications. *Examples: land use or transportation issue, environmental or ecological concern...*
- Working individually or with a partner, students analyze the issue using the Issue-Based Analysis form. (See SFAL 6.70, 6.115.)
- In small groups, students discuss and produce a brief report on the geographic knowledge and skills they used in making decisions to address the issue.
- Students record shared information in course notebooks.

Suggested Assessment Strategies

Teacher Tips and Resources

Acquiring Strategies

- Monitor discussion and assess reports and notes for the student's understanding of examples of ways in which geographic knowledge can inform decision making. (See BLMs G-3, G-4.)
- Monitor interview questions and assess reports for evidence the student appreciates the importance of geographic knowledge.
- Assess the student's skills in drawing conclusions and making decisions based on information from interviews.
- Observe and assess the student's active listening skills. (See BLMs G-5, G-6.)

- You may need to provide examples of everyday uses of geographic knowledge and skills to help students generate interview questions. *Examples: drivers finding their way, managers knowing the location of clients, farmers understanding soil and weather conditions, emergency services workers knowing their community...*
- BLM 1-3: Sample Interview Form
- BLM G-3: Oral Presentation: Observation Checklist
- BLM G-4: Oral Presentation: Self-Assessment Checklist
- BLM G-5: Listening Skills: Observation Checklist
- BLM G-6: Listening Skills: Self-Assessment
- TN 11: Asking Geographic Questions
- TN 12: Asking Questions
- TN 14: Conducting an Interview

Applying Strategies

- Assess the organizer/poster and notes for the student's understanding of the definition of geography and appropriateness of examples.
- Observe the student's collaboration skills if working with partners. (See BLM G-1.)
- Assess the organizer and notes for the student's skills in organizing and recording information.

- BLM G-1: Group Performance: Assessment Scale
- BLM G-20: Geography Questions Organizer
- Poster paper, markers

- Assess the report and notes for the student's understanding of ways in which geographic knowledge can inform his or her own and others' decision making.
- Monitor discussions and assess the report for evidence of the student's appreciation of the importance of geographic knowledge.
- Observe and monitor group work for the student's skills in collaborating with others. (See BLMs G-1, G-2.)
- Assess access to and use of a variety of media and the student's selection of appropriate issue-based news items for her or his skill in selecting information. (See BLM G-9.)

- Newspapers, magazines, Internet, and TV or radio news reports
- BLM G-1: Group Performance: Assessment Scale
- BLM G-2: Group Performance: Self-Assessment Scale
- BLM G-9: Selecting Information: Checklist
- SFAL 6.70, 6.115: Issue-Based Article Analysis

Targeted Learning Outcomes

Suggested Teaching/Learning Strategies

Students will...

KL-008 Define the term geography.

S-100 Collaborate with others to achieve group goals and responsibilities.

S-201 Organize and record information in a variety of formats and reference sources appropriately. *Examples: maps, graphs, tables, concept maps...*

Applying Strategies**Strategy 3: What Have You Learned about Geography?**

- Students retrieve the KWL or KWHL organizer they started in the Activating Strategies segment of this learning experience; then, working in small groups, students review information already completed in the “Know” and “Want to Know” columns of their organizers.
- After a brief discussion on what questions they have answered in this learning experience activity, students complete the last column (Learned) in the KWL or KWHL organizer.
- Individually, students express their concept of the meaning of the term geography in the Concept Overview organizer. (See SFAL 6.112.)

Teacher Reflections

Suggested Assessment Strategies

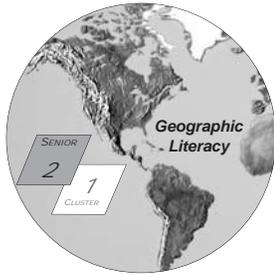
Teacher Tips and Resources

Applying Strategies

- Assess responses on the KWL/KWHL and Concept Overview organizers for the student's understanding and knowledge of the term geography.
- Observe the student's participation in group discussions as they review their learning to determine her or his skill in collaboration. (See BLMs G-1, G-2.)
- Assess KWL/KWHL and Concept Overview organizers for the student's skill in organizing and recording information.

- Remind students to retrieve their partly completed KWL or KWHL organizers from the Activating Strategies segment of the learning experience.
- BLM G-1: Group Performance: Assessment Scale
- BLM G-2: Group Performance: Self-Assessment Scale
- BLM G-19: KWHL
- SFAL 6.94: KWL Organizer
- SFAL 6.112: Concept Overview

Teacher Reflections



Learning Experience: 1.2

Physical and Human Geography

- | | |
|--------|---|
| KL-009 | Identify elements of physical and human geography. |
| KL-010 | Describe the relationship between physical and human geography. |
| KL-011 | Locate major physical features on a map of North America. |
| KL-012 | Locate international political divisions on a map of North America. |
| KL-013 | Locate provinces, territories, and capital cities on a map of Canada. |
| S-100 | Collaborate with others to achieve group goals and responsibilities. |
| S-200 | Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary. |
| S-201 | Organize and record information in a variety of formats and reference sources appropriately. <i>Examples: maps, graphs, tables, concept maps...</i> |
| S-300 | Formulate geographic questions to plan inquiry and research. |
| S-309 | Observe patterns and make generalizations based on geographic inquiry. |
| S-400 | Listen to others to understand their perspectives. |

Description of Learning Experience

The second learning experience extends the definition of geography to include its two major fields: physical geography and human geography. It provides opportunities for students to identify elements of each, and proceeds to introduce students to the critical geographic concept of the dynamic interrelationships between the physical and human aspects of the world. This learning experience also gives students an opportunity to consolidate and extend their map knowledge of both human and physical elements of Canada and North America.

Vocabulary Focus

The following vocabulary is important for Learning Experience 1.2: Physical and Human Geography.

aerial photograph	global positioning systems	plains	states
agriculture	human geography	plateaus	territories
borders	ice age	political divisions	thematic
boundaries	igneous	provinces	topographic map
climate	line scale	ratio scale	transect
continental	map basics	remote sensing	transition zones
earthquakes	map scale	rock cycle	verbal scale
fauna	marine	rock types	water cycle
flora	metamorphic	rocks	
general purpose maps	minerals	satellite image	
geographic information systems	mountains	sedimentary	
glaciation	physical geography	shield	

Vocabulary Study Strategies

Please see **Appendix A: Content-Area Vocabulary Study Strategies** for suggested strategies to incorporate vocabulary studies into the learning experiences. Further vocabulary strategies are found in Vocabulary Strategies 6.31–6.36 and Information Processing Strategies 6.49–6.53 in *Success for All Learners: A Handbook on Differentiating Instruction* [referred to in this document as SFAL] (Manitoba Education and Training, 1996). In addition, a number of learning experiences within the clusters include vocabulary strategies for learning. Teachers are encouraged to make use of these strategies and to avoid the less meaningful practice of having students copy out dictionary definitions.

Targeted Learning Outcomes**Suggested Teaching/Learning Strategies****Students will...**

KL-009 Identify elements of physical and human geography.

S-100 Collaborate with others to achieve group goals and responsibilities.

S-400 Listen to others to understand their perspectives.

Activating Strategies**Strategy 1: Fields of Geography**

- With partners or in small groups, students brainstorm words related to geography.
- With their partner/group, students sort terms into categories of “physical” and “human.”
- Students record information on the Sort and Predict Frame. (See SFAL 6.100.)
- Groups share predictions with the rest of the class to check for agreement and make necessary corrections.

KL-009 Identify elements of physical and human geography.

KL-010 Describe the relationship between physical and human geography.

S-100 Collaborate with others to achieve group goals and responsibilities.

S-300 Formulate geographic questions to plan inquiry and research.

S-400 Listen to others to understand their perspectives.

Strategy 2: Asking Geographic Questions

- Working with a partner, students develop geographic questions. Answers to these questions will reflect the impact of the physical environment on human activities.
Example: Why do we wear heavy coats in the winter?
- Students then develop answers to their questions or to other students’ questions to demonstrate a possible relationship between physical and human geography.
Example: We wear heavy coats because the mid-latitude continental winter season is cold.
- Student partners quiz class members to test for knowledge of the relationship between physical and human geography.
- As a class, students discuss the relationship between physical and human geography.

KL-013 Locate provinces, territories, and capital cities on a map of Canada.

S-201 Organize and record information in a variety of formats and reference sources appropriately. *Examples: maps, graphs, tables, concept maps...*

Strategy 3: Mental Map of Canada

- Working individually and from memory (i.e., without the benefit of an atlas or wall map), students use a blank sheet of paper to draw a freehand map of Canada.
- Students focus on the outline shape of Canada’s boundaries, the provincial boundaries, and the capital cities of the provinces and territories.
- Students share freehand maps with classmates and compare them with an atlas or wall map of Canada.
- On the back of their map sheets, students make a list of goals they will need to work on to improve their knowledge of Canada.

Suggested Assessment Strategies

Teacher Tips and Resources

Activating Strategies

- Assess the Sort and Predict Frame for the student’s understanding of physical and human geography.
- Have the student self-assess his or her collaborative skills using BLM G-2.
- Assess the student’s skill in listening to others to understand their perspectives. (See BLMs G-5, G-6.)

- If the Word Splash activity was selected in LE 1 (Activating Strategy 1), students start with that list and add any new terms that come to mind.
- Students may find it necessary to add a third Sort and Predict category, “geographic tools,” to include terms that may be on their list such as maps, globes, atlases, and GIS software.
- BLM G-2: Group Performance: Self-Assessment Scale
- BLM G-5: Listening Skills: Observation Checklist
- BLM G-6: Listening Skills: Self-Assessment
- SFAL 6.100: Sort and Predict Frame
- TN 4: Physical Geography
- TN 5: Human Geography

- Assess questions for the student’s understanding of human and physical elements and the relationship between them.
- Observe and assess the student’s skill in collaborating with others to achieve group goals and responsibilities. (See BLM G-1.)
- Assess the student’s skill in formulating geographic questions.
- Monitor the student’s listening skills during reports to class and in class discussion. (See BLMs G-5, G-6.)

- Students may need a number of examples of questions to initiate their thinking about the extent to which the physical environment affects human activities. TN 11 (Asking Geographic Questions) may be useful. *Examples: Why is mining a major economic activity in Thompson? Why do prairie farmers grow wheat crops instead of bananas and oranges? What is the major locational factor for the city of Winnipeg?*
- Although the impact of physical factors on human activities may be the dominant form of the relationship between physical and human geography, human activities can also affect the surrounding physical environment. *Examples: human-induced climate change, increased slope erosion due to cutting of forests...*
- BLM G-1: Group Performance: Assessment Scale
- BLM G-5: Listening Skills: Observation Checklist
- BLM G-6: Listening Skills: Self-Assessment
- TN 11: Asking Geographic Questions

- Assess the freehand map of Canada for the student’s prior knowledge of locating provinces, territories, and capital cities.
- Assess the map of Canada for the student’s skill in organizing information appropriately.

- This learning activity is based on an exercise developed by Dr. J. Lewis Robinson at the University of British Columbia to assess first-year geography students’ knowledge of Canada. (See “The Varied ‘Mental Maps’ Our Students Have,” *Canadian Geographic*, April/May 1981, Volume 101, Number 2.)
- Blank sheets of paper and pencils
- Wall map of Canada, atlases
- Depending on students’ knowledge of Canada, they may wish to include on their freehand maps major physical features such as lakes, rivers, and mountains.

Targeted Learning Outcomes**Suggested Teaching/Learning Strategies****Students will...**

KL-009 Identify elements of physical and human geography.

KL-011 Locate major physical features on a map of North America.

S-100 Collaborate with others to achieve group goals and responsibilities.

S-400 Listen to others to understand their perspectives.

Activating Strategies**Strategy 4: North American Travel Experience**

- Working in small groups, students identify memorable places they have visited in North America.
- Students describe both the physical and human features of places visited.
- Students report to class and create a master list, on the board or flip chart, of places visited and their respective physical and human characteristics.
- Students identify locations listed on a wall map of North America and discuss possible relationships between physical and human geography for each.
- Individually, students label places on an outline map of North America.

Students will...

KL-010 Describe the relationship between physical and human geography.

KL-011 Locate major physical features on a map of North America.

KL-013 Locate provinces, territories, and capital cities on a map of Canada.

S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.

S-309 Observe patterns and make generalizations based on geographic inquiry.

Acquiring Strategies**Strategy 1: Map of Canada**

- Using print and electronic resources, students locate and label major physical features on a map of Canada. *Examples: major landforms, rivers, and bodies of water...*
- On the same map, students locate and label capital cities of provinces and territories of Canada.
- Students analyze and describe any relationships between Canada's physical features and location of capital cities. *Examples: Near what kind of features are most capital cities located? In what type of landform region? Why?*
- Students share responses with peers.
- Students record findings in their course notebooks.

Teacher Reflections

Suggested Assessment Strategies

Teacher Tips and Resources

Activating Strategies

- Monitor group discussions and assess the master list for the student's knowledge of elements of physical and human geography.
- Assess the map for the student's knowledge of locations of major physical features in North America.
- Assess work in small groups for the student's skill in collaborating with others. (See BLM G-1.)
- Monitor the student's active listening skills in group discussions and reports to class. (See BLMs G-5, G-6.)

- Teachers may need to define the extent of North America as described in most geography textbooks (including Central America and the Caribbean).
- Students with limited travel experience may need to be reminded that, from a geographic perspective, any location (however familiar it may seem to us) is as interesting as any other seemingly "exotic" location.
- Wall Map of North America
- BLM G-1: Group Performance: Assessment Scale
- BLM G-5: Listening Skills: Observation Checklist
- BLM G-6: Listening Skills: Self-Assessment
- BLM G-35: Map of North America

Acquiring Strategies

- Assess the report and notes for the student's knowledge of the relationship between physical and human geography.
- Assess the map for the student's knowledge of locations of major physical features, provinces, territories, and capital cities.
- Observe and monitor the student's skill in selecting information from atlases/wall maps.
- Monitor reports and assess notes for the student's skill in observing physical and human patterns and making generalizations.

- You may need to provide some examples of physical features and specify the major rivers, lakes, and landforms that students are required to label on maps.
- BLM G-34: Map of Canada
- TN 8: Geographic Information Systems (GIS)
- Access to print and online atlases, wall maps for reference (See <www.atlas.gc.ca>, <www.canadiangeographic.ca/atlas>.)
- The mapping activities may be conducted using outline handout maps or GIS computer software.
- The Manitoba Education, Citizenship and Youth website includes an activity to construct a GIS map of Canada: "Locating Provinces, Territories and Capital Cities on a Map of Canada." (See <www.edu.gov.mb.ca> and follow the links: Kindergarten to S4/Curriculum/Social Studies/GIS Resources.)

Teacher Reflections

Targeted Learning Outcomes

Suggested Teaching/Learning Strategies

Students will...

KL-009 Identify elements of physical and human geography.

KL-010 Describe the relationship between physical and human geography.

KL-011 Locate major physical features on a map of North America.

KL-012 Locate international political divisions on a map of North America.

S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.

S-309 Observe patterns and make generalizations based on geographic inquiry.

KL-009 Identify elements of physical and human geography.

KL-010 Describe the relationship between physical and human geography.

S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.

S-302 Draw conclusions and make decisions based on research and various types of evidence.

Students will...

KL-009 Identify elements of physical and human geography.

KL-010 Describe the relationship between physical and human geography.

S-201 Organize and record information in a variety of formats and reference sources appropriately. *Examples: maps, graphs, tables, concept maps...*

S-309 Observe patterns and make generalizations based on geographic inquiry.

Acquiring Strategies

Strategy 2: Mapping Physical Features of North America

- Using print and electronic resources, students locate and label the major physical features on an outline map of North America.
- Students also label the major political divisions on the map of North America.
- Students analyze maps and identify countries that are dominated by one or two major physical features and those that have a variety of physical features. *Examples: mountains, plains...*
- In small groups, students discuss the possible implications of physical features on the type and variety of human activities.
- Individually, students write an Exit Slip to describe the implications of physical features on the type and variety of human activities.

Strategy 3: Relationship between Physical and Human Geography

- Working with a partner, students select a human (cultural) feature located either locally or anywhere in North America. *Examples: site of an industry, transportation route, location of golf course, site of a settlement...*
- Students discuss physical and human factors that may have determined the location of their selected feature. *Examples: golf course located on river flats not appropriate for housing due to risk of flooding, near urban centre to attract many golfing enthusiasts...*
- Students share examples with the class.
- Students record in their course notebooks examples of the relationship between physical and human factors of selected features.

Applying Strategies

Strategy 1: Reviewing the Definition of Geography

- Students work individually to review their knowledge of geography and the relationship of the two major fields: physical and human.
- Students record their knowledge on a Concept Relationship Frame. (See SFAL 6.53, 6.104.)

Suggested Assessment Strategies**Teacher Tips and Resources****Acquiring Strategies**

- Assess the map, analysis, and Exit Slip for the student's knowledge of elements of physical and human geography and possible relationships between the two fields of geography.
- Assess the map for the student's knowledge of locations of major physical features and political divisions of North America.
- Monitor the student's skill in selecting information from appropriate electronic and print atlas resources.
- Assess the student's skill in observing patterns and making generalizations about physical and human features of North America.

- BLM G-35: Map of North America
- Print and electronic atlas resources (See <www.atlas.gc.ca>.)
- SFAL 6.60: Exit Slips
- The mapping activities may be conducted with GIS computer software.
- TN 8: Geographic Information Systems (GIS)

- Monitor the discussion and assess notes for the student's understanding of the elements of and relationships between physical and human geography.
- Assess the student's skill in selecting her or his own examples of physical and human geography (primary sources).
- Assess the student's skill in drawing conclusions and making decisions based on various types of evidence.

- Some students may need further examples of human features they can select. (*Examples: specific local features [building, sports field], large features [cities, farmland], or linear features [roads or pathways]...*) The main objective is for students to understand there are always reasons (physical, human, or both) that explain why human-made features are located where they are.
- TN 4: Physical Geography
- TN 5: Human Geography

Applying Strategies

- Assess the Concept Relationship Frame for the student's knowledge of the elements of, and relationship between, physical and human geography.
- Assess the student's skill in organizing and recording information and observing patterns on the Concept Relationship Frame.

- You may need to model the use of the Concept Relationship Frame.
- This strategy can be related to the Sort and Predict activity in the Activating Strategy earlier in this learning experience.
- SFAL 6.53, 6.104: Concept Relationship Frame

Targeted Learning Outcomes**Suggested Teaching/Learning Strategies****Students will...**

KL-009 Identify elements of physical and human geography.

KL-010 Describe the relationship between physical and human geography.

S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.

S-201 Organize and record information in a variety of formats and reference sources appropriately. *Examples: maps, graphs, tables, concept maps...*

Applying Strategies**Strategy 2: Scenes of North America**

- Students collect a variety of pictures depicting physical features and human (cultural) activities in North America.
- Students attach pictures in appropriate locations on a large wall map (or large outline map they have created).
- Students justify their choice of location for each picture. *Example: identify specific clues from the picture that help determine its location in North America...*
- Students record their rationale for choices in their course notebooks.

KL-009 Identify elements of physical and human geography.

KL-010 Describe the relationship between physical and human geography.

S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.

S-201 Organize and record information in a variety of formats and reference sources appropriately. *Examples: maps, graphs, tables, concept maps...*

Strategy 3: Home to School Transect

- Students note both physical and human features along their route from home to school.
- Students create a transect of their route and label the physical and human features along the transect.
- Students share the transect with the class, pointing out major features along the route, and explaining possible relationships between physical and human elements.

Teacher Reflections

Suggested Assessment Strategies

Teacher Tips and Resources

Applying Strategies

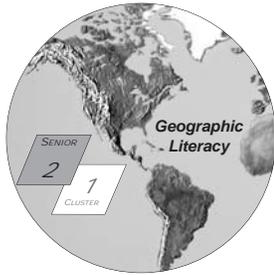
- Assess the location of pictures and accompanying explanations for the student's understanding of the relationship between physical and human geography of North America.
- Assess the student's skill in selecting appropriate pictures from a variety of sources.
- Assess the student's skill in organizing and placing pictures in appropriate locations on the map of North America.

- Students may wish to create a large outline map of North America by projecting an overhead transparency map or a GIS-produced map on a large sheet of poster paper and tracing the outline.
- Access to supply of magazines that can be cut up for pictures (*Examples: Canadian Geographic, National Geographic, Maclean's...*)
- Brochures from travel agencies, pictures from calendars
- Overhead/LCD projector
- BLM G-35: Map of North America

- Assess transect and explanations for the student's understanding of physical and human elements and their relationship.
- Observe the student's skill in selecting information from primary sources for inquiry.
- Assess the transect for the student's skill in organizing and recording information.

- TN 4: Physical Geography
- TN 5: Human Geography
- TN 19: Creating a Transect
- A local street map and/or topographic map may be helpful for students to identify routes from home to school.
- Sheets of drawing paper or poster paper

Teacher Reflections



Learning Experience 1.3: Place and Identity

- | | |
|--------|--|
| KI-003 | Explain the relationship between place and identity. |
| KP-040 | Describe ways in which various globes, maps, and map projections may influence perceptions. <i>Examples: relative size and position, power, sovereignty...</i> |
| KH-032 | Recognize that the study of geography includes the study of change over time. |
| VI-002 | Appreciate the importance of place to their identity. |
| S-100 | Collaborate with others to achieve group goals and responsibilities. |
| S-200 | Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary. |
| S-201 | Organize and record information in a variety of formats and reference sources appropriately. <i>Examples: maps, graphs, tables, concept maps...</i> |
| S-204 | Select, use, and interpret various types of maps. |
| S-205 | Recognize and interpret various map projections. |
| S-302 | Draw conclusions and make decisions based on research and various types of evidence. |
| S-309 | Observe patterns and make generalizations based on geographic inquiry. |
| S-402 | Express informed and reasoned opinions. |
| S-403 | Present information and ideas in a variety of formats appropriate for audience and purpose. <i>Examples: models, displays, multimedia presentations, editorials...</i> |
| S-405 | Articulate their perspectives on issues. |

Description of the Learning Experience

In this learning experience, students explore issues of perception relating to geography. Students make connections between the concepts of place and identity, and reflect upon the importance of place to their personal identity. Students also acquire an understanding that maps and map projections can be powerful symbols that may influence perceptions of position and power. In this learning experience, students also recognize that the study of geography, whether it be physical or human, includes the study of change over time.

Vocabulary Focus

The following vocabulary is important for Learning Experience 1.3: Place and Identity.

absolute location	Greenwich Mean Time	perceptions	small scale
change over time	identity	Peterson	sovereignty
compass	International Date Line	place	stereoscope
compass bearing	large scale	place attachment	sub-tropics
compass rose	latitude	polar	temperate
direction	location	power	time zones
earth grid	longitude	prime meridian	tropics
equator	map distortion	projections	values
equatorial	Mercator	relative location	
gazetteer	meridians	Robinson	
geographic coordinates	parallels	sense of place	

Vocabulary Study Strategies

Please see **Appendix A: Content-Area Vocabulary Study Strategies** for suggested strategies to incorporate vocabulary studies into the learning experiences. Further vocabulary strategies are found in Vocabulary Strategies 6.31–6.36 and Information Processing Strategies 6.49–6.53 in *Success for All Learners: A Handbook on Differentiating Instruction* [referred to in this document as SFAL] (Manitoba Education and Training, 1996). In addition, a number of learning experiences within the clusters include vocabulary strategies for learning. Teachers are encouraged to make use of these strategies and to avoid the less meaningful practice of having students copy out dictionary definitions.

Targeted Learning Outcomes

Suggested Teaching/Learning Strategies

Students will...

KI-003 Explain the relationship between place and identity.

VI-002 Appreciate the importance of place to their identity.

S-405 Articulate their perspectives on issues.

KP-040 Describe ways in which various globes, maps, and map projections may influence perceptions. *Examples: relative size and position, power, sovereignty...*

S-204 Select, use, and interpret various types of maps.

S-205 Recognize and interpret various map projections.

S-302 Draw conclusions and make decisions based on research and various types of evidence.

KH-032 Recognize that the study of geography includes the study of change over time.

S-100 Collaborate with others to achieve group goals and responsibilities.

S-309 Observe patterns and make generalizations based on geographic inquiry.

Activating Strategies

Strategy 1: Perceptions of Place and Identity

- In a class discussion, students brainstorm the idea of “place attachment.” They discuss how they have come to know and feel comfortable with the place where they were born or have lived for a length of time.
- Students identify both physical and human aspects of this place, and the things that are familiar to them or the things that they miss when they are away from this familiar environment. *Examples: street, neighbourhood, or farm...*
- Students who have recently moved explain this experience. They may speak of missing their old place, and the challenges of getting to know a new place, becoming “attached” to it, and feeling comfortable in their new surroundings.
- Students complete the organizer in BLM 1-4 to express their perceptions of place and identity.

Strategy 2: Map Projections and Perceptions

- Students examine a Mercator projection wall map of the world (or in an atlas) to observe relative size of countries and continents in various parts of the world.
- Students view the following pairs of countries and/or continents to see which appears to be larger, and record their findings:
 - i) Greenland and South America
 - ii) China and Canada
 - iii) Scandinavia and India
 - iv) North America and Africa
- Students then view the same pairs, using a globe, to see how their perceptions of relative sizes might change (students could also use a gazetteer to determine actual areas of the countries/continents for comparison and contrast), and record findings.
- Students discuss possible reasons for these changing perceptions from the map to the globe.
- Students record findings in their course notebooks.

Strategy 3: Time and Change in Your Community

- In small groups, students brainstorm any recent changes that have taken place near their school, in their neighbourhood, or in their community. *Examples: a new building, road construction or paving, clearing of trees, removal of old farm buildings, development in an open space, erosion of a riverbank...*
- Students report examples to the class and develop a list on the board or flip chart.
- Students record examples of changes and note possible reasons for these changes in their course notebooks.

Suggested Assessment Strategies

Teacher Tips and Resources

Activating Strategies

- Monitor discussions and assess the organizer for the student's understanding of the relationship between place and identity.
- Monitor examples provided and assess the organizer for evidence of the student's appreciation of the importance of place to his or her identity.
- Assess the student's discussions and the organizer for her or his skill in articulating perspectives about place and identity. (See BLM G-10.)

- You may wish to introduce the concept of "place attachment" with a discussion of being homesick.
- Photographs of familiar places can be used to evoke feelings of place and identity.
- You might remind students that the sense of place and identity might also apply to their school experiences, and that feelings of apprehension about going to a new school result from leaving a familiar place and trying to become comfortable in the new surroundings.
- Classrooms with new Canadians provide opportunities for new citizens to identify aspects of their former home and places they miss.
- BLM 1-4: Sense of Place and Identity
- BLM G-10: Articulating Perspectives: Observation Checklist
- TN 10: Place and Identity
- TN 33: Articulating Perspectives on Issues

- Monitor student's observations and assess findings to assess the student's understanding of ways in which globes and various map projections influence perceptions of relative size.
- Assess the student's skill in selecting, using, and interpreting appropriate maps.
- Monitor discussions and assess notes for the student's skill in drawing conclusions based on observations of map projections.

- A classroom display including a globe and maps of varying projections might provide visual encouragement for students to view and analyze characteristics and differing perceptions of globes and maps.
- Travel and tourism maps often highlight and distort specific areas to draw the interest of the traveller to that region.
- Access to atlases, wall maps, globes
- TN 6: Map Projections
- TN 7: Map Types and Properties

- Monitor brainstorming and assess the report and notes for the student's understanding that the study of geography includes the study of change over time.
- Observe and monitor the student's collaborative skills in group work. (See BLMs G-1, G-2.)
- Monitor brainstorming and assess examples listed for the student's skill in observing patterns and making generalizations about changes in his or her community.

- Historical photos of local features could be posted in the classroom to further emphasize change over time.
- Students may have "before and after" photographs of a changing feature at their home or neighbourhood to share with the class.
- BLM G-1: Group Performance: Assessment Scale
- BLM G-2: Group Performance: Self-Assessment Scale

Targeted Learning Outcomes**Suggested Teaching/Learning Strategies****Students will...**

KI-003 Explain the relationship between place and identity.

VI-002 Appreciate the importance of place to their identity.

S-100 Collaborate with others to achieve group goals and responsibilities.

S-405 Articulate their perspectives on issues.

KP-040 Describe ways in which various globes, maps, and map projections may influence perceptions. *Examples: relative size and position, power, sovereignty...*

S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.

S-201 Organize and record information in a variety of formats and reference sources appropriately. *Examples: maps, graphs, tables, concept maps...*

S-205 Recognize and interpret various map projections.

KH-032 Recognize that the study of geography includes the study of change over time.

S-100 Collaborate with others to achieve group goals and responsibilities.

S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.

S-201 Organize and record information in a variety of formats and reference sources appropriately. *Examples: maps, graphs, tables, concept maps...*

S-309 Observe patterns and make generalizations based on geographic inquiry.

Acquiring Strategies**Strategy 1: Perceptions of Place and Identity in Manitoba**

- In small groups, students examine tourism materials of their community or region. *Examples: brochures, maps, websites...*
- Students identify and list specific features, events, and characteristics that are unique to the identity of the community (place) in question. *Examples: geographic location or feature, seasonal event such as a local fair; cultural characteristics, roadside monument, major economic activities...*
- Groups report their findings to the class and discuss how communities emphasize these relationships between place and identity to promote tourism.
- Students write an Exit Slip to explain what they have learned about the relationship between place and identity and the importance of place to their personal identity.

Strategy 2: Characteristics and Perceptions of Map Projections

- Working with a partner or in small groups, students view world maps in different projections.
- Using a variety of information sources, students research three well-known projections used for world maps: Mercator, Peters, and Robinson.
- Students identify key characteristics of each projection and record findings. Should include information for each, such as:
 - When and why it was developed
 - Characteristics of lines of latitude and longitude
 - Characteristics of area, shape, direction, and distances
 - Visual perception (perceived versus actual size of countries) and distortion
 - Major uses
 - Advantages and disadvantages
- Students report to class to share findings and discuss how projections may influence perceptions.

Strategy 3: Physical and Human Changes over Time

- Working in small groups, students use a variety of sources to study geographical changes, both physical and human, in their community over time.
- Students identify specific features and describe the changes over time. The feature should be identified as a human feature or a physical feature.
- Students create sketch maps and/or drawings to reflect changes identified.
- Groups present findings to class.
- Classmates make notes on changes listed and classify them as physical or human in their course notebooks.

Suggested Assessment Strategies

Teacher Tips and Resources

Acquiring Strategies

- Monitor the report and assess the Exit Slip for the student's understanding of the relationship between place and identity.
 - Monitor the report and assess the Exit Slip for evidence of the student's appreciation of the importance of place to her or his identity.
 - Monitor the student's collaborative skills. (See BLM G-1.)
 - Assess the report and Exit Slip for the student's skill in articulating perspectives. (See BLM G-10.)
-
- Assess the organizer for the student's understanding of characteristics and perceptions of map projections.
 - Observe and monitor the student's skill in selecting and using appropriate maps for gathering information.
 - Assess the organizer for the student's skill in organizing and recording information.
 - Monitor the report and assess the organizer for students' skill in recognizing and interpreting various types of map projections.
-
- Assess the organizer, sketch map/drawing, and notes for the student's knowledge of geographic change over time.
 - Monitor and assess group work for the student's skill in collaborating with others to achieve group goals and responsibilities. (See BLMs G-1, G-2.)
 - Assess the student's skill in selecting appropriate examples of changing features in her or his community.
 - Assess the organizer, sketch, and notes for the student's skills in organizing and recording information.
 - Monitor and assess the student's skill in observing patterns and making generalizations about changes over time.

- Some picture books for children could be used to study the importance of place and identity for those growing up in the prairies. *Examples: If You're Not from the Prairie* by David Bouchard, illustrated by Henry Ripplinger; and *The Prairie Alphabet* by Jo Bannatyne-Cugnet, illustrated by Yvette Moore...
 - Tourism materials of community or region
 - Access to the Internet (See <www.bigthings.ca/bigmb.html> with links to individual communities.)
 - BLM G-1: Group Performance: Assessment Scale
 - BLM G-10: Articulating Perspectives: Observation Checklist
 - SFAL 6.60, 6.61: Exit Slips
 - TN 33: Articulating Perspectives on Issues
-
- Wall maps, atlases (introductory sections in some atlases provide information on globes, maps, and projections), encyclopedias
 - The Internet (suggested sites: <atlas.gc.ca> and follow the links: Learning Resources/Map Making/Map Projections; <www.colorado.edu/geography>, and follow the links: Geographers Craft/Lecture and Discussion Notes/Map Projections)
 - TN 6: Map Projections
 - TN 7: Map Types and Properties
 - Video: *Many Ways to See the World*. (Available at <www.petersmap.com> and follow the links: How to Order the Peters Map/Video *Many Ways to See the World*.)
-
- This activity could be combined with a local field study to identify physical and human changes subsequent to the last photo or map coverage of the study region.
 - Current and historical aerial and ground photographs of the study region
 - Various editions of topographic and street maps of the study region
 - Community and regional history books
 - Local citizens for interviews
 - BLM G-1: Group Performance: Assessment Scale
 - BLM G-2: Group Performance: Self-Assessment Scale
 - TN 14: Conducting an Interview
 - TN 30: Field Studies in Geography

Targeted Learning Outcomes**Suggested Teaching/Learning Strategies****Students will...**

KI-003 Explain the relationship between place and identity.

VI-002 Appreciate the importance of place to their identity.

S-309 Observe patterns and make generalizations based on geographic inquiry.

KP-040 Describe ways in which various globes, maps, and map projections may influence perceptions. *Examples: relative size and position, power, sovereignty...*

S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary

S-204 Select, use, and interpret various types of maps.

S-403 Present information and ideas in a variety of formats appropriate for audience and purpose. *Examples: models, displays, multimedia presentations, editorials...*

KH-032 Recognize that the study of geography includes the study of change over time.

S-100 Collaborate with others to achieve group goals and responsibilities.

S-302 Draw conclusions and make decisions based on research and various types of evidence.

S-402 Express informed and reasoned opinions.

Applying Strategies**Strategy 1: Designing Team Names and Logos—Place and Identity**

- Working with a partner, students create a team name and logo, and design a mascot for a sport in their own town, a nearby town, or any North American city.
- Students select a town or city they are familiar with and consider the features and characteristics that are part of its identity. (*Examples: landform, major industry, historical event, cultural feature, common bird, animal, or plant...*) (See BLM 1-5 for further examples.)
- Students record details of their team name, logo, and supporting information in an organizer. (See BLM 1-6.)
- Students post their team logo on a bulletin board and tell the class of their team name and mascot.
- Students provide a rationale for their choices and explain how they reflect place and identity.

Strategy 2: Map Collection

- Working in small groups, students collect as many different kinds of maps as possible from various sources. *Examples: from newspapers, magazines, cartoons, travel advertisements, tourism offices, local/provincial road and travel maps, history books, the Internet...*
- Students analyze maps to check for accuracy, scale, and conventional map basics. *Examples: title, legend, coordinates, scale, symbols...*
- Students write a brief statement for each map to indicate what perception it is attempting to portray to the reader.
- Students create a bulletin board or wall display of their maps and lead class through a Gallery Walk.
- Classmates list maps presented and describe perceptions portrayed by each in their course notebooks.

Strategy 3: Then and Now in Photographs

- Working in collaborative groups, students collect old photographs of any five features (human or physical) in or near their community. *Examples: houses, street scenes, riverbank, woodland, commercial buildings, park...*
- Students identify the feature and location in the photographs, and determine the date of the photograph if possible.
- Students then photograph the same features to show their current appearance.
- Students analyze changes that have taken place and write a paragraph to discuss their findings.
- Students display the photos and their written analyses in a “Then and Now” poster or on the bulletin board.

Suggested Assessment Strategies**Teacher Tips and Resources****Applying Strategies**

- Assess the organizer for the student's knowledge in explaining the relationship between place and identity.
- Monitor work in pairs and assess the organizer for evidence of the student's appreciation of the importance of place to identity.
- Assess the student's skill in observing patterns and making generalizations about place and identity as reflected in his or her projects.

- Students may refer to actual team names and logos for ideas, but they should create their own for this learning experience.
- BLM 1-5: Team Names and Logos: A Reflection of Place
- BLM 1-6: Creating a Team Name and Logo
- Art materials as required

- Assess maps and notes about perceptions communicated for the student's understanding of ways in which various maps and projections may influence perceptions.
- Monitor and assess the student's skill in selecting appropriate maps from a variety of sources.
- Assess assortment of maps collected and analysis of each for the student's skill in selecting and interpreting various types of maps.
- Assess the student's skill in presenting maps and analyses in an appropriate format for audience and purpose.

- Remind students that information from Acquiring Strategy 2 in this learning experience may be helpful for this strategy.
- Access to cutting and mounting materials, such as newspapers, magazines, travel literature, road/street maps
- Access to the Internet for each group
- BLM G-3: Oral Presentation: Observation Checklist
- BLM G-4: Oral Presentation: Self-Assessment Checklist may be adapted for this learning experience.
- BLM G-8: Assessment Guide for Visuals may be adapted for this learning experience.
- SFAL 6.80: Gallery Walk
- TN 6: Map Projections
- TN 7: Map Types and Properties

- Assess photographs and the display for the student's knowledge and understanding of changes over time.
- Observe and assess the student's collaborative skills. (See BLM G-1.)
- Assess the student's skill in interpreting changes and drawing conclusions based on evidence.
- Assess written analyses for the student's skill in expressing informed and reasoned opinions.

- Photographs in albums and in community/regional history books may be used. (Seek permission to use historical photographs and handle them with care. These could be copied for use in the project and originals returned to owners.)
- Students may have access to family photographs that might be appropriate.
- Cameras for photographing current geographical features
- BLM G-1: Group Performance: Assessment Scale
- BLM G-7: Checklist for Creating Visuals



Learning Experience 1.4: Global Environmental Types

- KL-014 Explain the concept of global environmental types as physical geographic regions that are composites of climate, vegetation, and soils.
- KL-015 Identify global environmental types on a map of the world.
- KL-016 Locate on a map of Manitoba global environmental types found in Manitoba.
- KL-017 Identify on a map of the world major population clusters and explain the relationship between population and global environmental types.
- S-100 Collaborate with others to achieve group goals and responsibilities.
- S-104 Seek consensus in collaborative problem solving.
- S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.
- S-201 Organize and record information in a variety of formats and reference sources appropriately. *Examples: maps, graphs, tables, concept maps...*
- S-204 Select, use, and interpret various types of maps.
- S-309 Observe patterns and make generalizations based on geographic inquiry.
- S-402 Express informed and reasoned opinions.

Description of Learning Experience

This learning experience introduces students to the concept of global environmental types as a way of classifying a combination of physical factors that collectively influence human activities. Students identify the major environmental types on a world map and locate those found in Manitoba on an appropriate map. Students also identify and analyze relationships between global environmental types and major world population clusters.

Vocabulary Focus

The following vocabulary is important for Learning Experience 1.4: Global Environmental Types.

alpine	forest	population density	soils
aquatic	grasslands	population clusters	steppe
arid	Mediterranean	prairie	taiga
biome	monsoon	rain forest	terrestrial
boreal	natural vegetation	savanna	tundra
desert	organic	semi-arid	
ecozones	organisms	soil profile	

Vocabulary Study Strategies

Please see **Appendix A: Content-Area Vocabulary Study Strategies** for suggested strategies to incorporate vocabulary studies into the learning experiences. Further vocabulary strategies are found in Vocabulary Strategies 6.31–6.36 and Information Processing Strategies 6.49–6.53 in *Success for All Learners: A Handbook on Differentiating Instruction* [referred to in this document as SFAL] (Manitoba Education and Training, 1996). In addition, a number of learning experiences within the clusters include vocabulary strategies for learning. Teachers are encouraged to make use of these strategies and to avoid the less meaningful practice of having students copy out dictionary definitions.

Targeted Learning Outcomes**Suggested Teaching/Learning Strategies****Students will...**

KL-014 Explain the concept of global environmental types as physical geographic regions that are composites of climate, vegetation, and soils.

S-309 Observe patterns and make generalizations based on geographic inquiry.

KL-015 Identify global environmental types on a map of the world.

KL-016 Locate on a map of Manitoba global environmental types found in Manitoba.

S-104 Seek consensus in collaborative problem solving.

S-309 Observe patterns and make generalizations based on geographic inquiry.

KL-015 Identify global environmental types on a map of the world.

KL-016 Locate on a map of Manitoba global environmental types found in Manitoba.

KL-017 Identify on a map of the world major population clusters and explain the relationship between population and global environmental types.

S-309 Observe patterns and make generalizations based on geographic inquiry.

Activating Strategies**Strategy 1: Defining Global Environmental Types (Biomes)**

- As a class, students discuss general differences in vegetation, climate, and soils from place to place within Manitoba, Canada, and the world.
- Students list on the board or flip chart as many environmental types (biomes) as they can think of.
- Based on the discussion and examples, students complete the Concept Overview sheet, paying particular attention to the development of a definition of global environmental types (biomes). (See SFAL 6.65–69; 6.112.)
- Students share work and consult a dictionary to confirm or revise their definitions.

Strategy 2: Locations of Environmental Types (Biomes) around the World

- Working with a partner, students collect pictures of different biomes of Manitoba and around the world.
- Students identify the biome and its possible location in Manitoba or the world.
- Students attach pictures in appropriate places on a wall map of Manitoba or the world.
- Partners report to class giving a brief description of the biomes as seen in pictures and their rationale for placement.

Strategy 3: Relationship between Global Environmental Types and Population

- As a class, students discuss the ability of various global environmental types (biomes) to support human populations.
- Students use knowledge of their home province to identify global environmental types in Manitoba that support the largest and smallest populations and discuss possible reasons.
- Students predict which global environmental types (biomes) around the world would likely have major population groups and which ones would not, and create a matching list on the board or flip chart.
- Students check predictions by comparing global environmental types with major population centres around the world.
- Students complete an Exit Slip to record any observed patterns between environmental types and populated regions.

Suggested Assessment Strategies

Teacher Tips and Resources

Activating Strategies

- Assess the Concept Frame for the student’s understanding of global environmental types and examples.
- Monitor discussion of examples and assess the Concept Overview for the student’s skill in observing patterns and making generalizations based on geographic inquiry.

- Most published sources use the term “biomes” for Global Environmental Types. (See TN 9 for explanations.)
- Although students may not be familiar with some of the terminology of biomes, they may be able to identify a number of them once several examples are provided. *Examples: grasslands, tundra, boreal forest, desert...*
- SFAL 6.65-69; 6.112: Concept Overview Frame
- TN 9: Global Environmental Types (Biomes) provides background information for the teacher, and suggests a method of biome classification to use in this learning experience.

- Assess picture selections and placement on the map for the student’s knowledge of global environmental types in the world.
- Observe types and placement of appropriate pictures for the student’s knowledge of environmental types in Manitoba.
- Monitor the student’s collaboration skills. (See BLM G-1.)
- Assess selection and placement of pictures for the student’s skill in observing patterns and making generalizations.

- TN 9: Global Environmental Types (Biomes) may be shared with students to remind them of the different types of biomes around the world.
- Access to magazines, tourist brochures, and the Internet to collect pictures of global environmental types (biomes)
- Wall map of Manitoba and the world to mount pictures
- BLM G-1: Group Performance: Assessment Scale

- Monitor predictions and assess the Exit Slip for the student’s knowledge and understanding of global and Manitoba environmental types and their respective locations.
- Monitor predictions and assess the Exit Slip for the student’s knowledge of major population clusters around the world and their relationships to global environmental types.
- Monitor predictions and assess the Exit Slip for the student’s skill in observing patterns and making generalizations.

- This learning experience could be completed in conjunction with the previous experience (Strategy 2: Locations of Global Environmental Types [Biomes] around the World).
- Atlases, world population map
- SFAL 6.60-6.61: Exit Slips
- TN 9: Global Environmental Types (Biomes) may assist students in making their predictions

Targeted Learning Outcomes**Suggested Teaching/Learning Strategies****Students will...**

KL-014 Explain the concept of global environmental types as physical geographic regions that are composites of climate, vegetation, and soils.

KL-015 Identify global environmental types on a map of the world.

S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.

S-201 Organize and record information in a variety of formats and reference sources appropriately. *Examples: maps, graphs, tables, concept maps...*

KL-016 Locate on a map of Manitoba global environmental types found in Manitoba.

KL-017 Identify on a map of the world major population clusters and explain the relationship between population and global environmental types.

S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.

S-201 Organize and record information in a variety of formats and reference sources appropriately. *Examples: maps, graphs, tables, concept maps...*

Acquiring Strategies**Strategy 1: Characteristics of Global Environmental Types**

- Working in pairs, students use a variety of sources to research various global environmental types (each pair may be assigned a different type to promote interdependent learning).
- Students identify specific categories of information about each environmental type, and individually record their findings in an organizer. Organizer headings could include: Type, Location, Landforms, Vegetation, Climate, and Human Settlement and Activities.
- Students include an appropriate title for the organizer, and reference the sources they use for information.
- Pairs share findings with the class.
- Class members record information about global environmental types presented in their organizer.

Strategy 2: Global Environmental Types (Biomes) of Manitoba

- Working individually, students research a variety of sources for information about environmental types in Manitoba.
- Students locate and label environmental types found in Manitoba on a map of the province.
- Students locate and label all the cities (legal designation) in Manitoba as reference points.
- Students identify the most- and least-populated environmental types in Manitoba.
- Students share findings with class and write a journal entry about the possible reasons for the relationship between environmental types and population in Manitoba.

Suggested Assessment Strategies

Teacher Tips and Resources

Acquiring Strategies

- Assess the organizer for the student's knowledge of characteristics of global environmental types and locations.
- Monitor the student's research for skills in selecting information from a variety of sources.
- Assess the organizer for the student's skill in organizing and referencing information.

- Global environmental types (biomes) can be classified in a number of different ways. Review TN 9: Global Environmental Types (Biomes) for suggested simplified classification system for this learning experience.
- If students are using a textbook that includes a section on global environmental types, you may wish to use those classifications.
- TN 9: Global Environmental Types (Biomes) may be used as a handout if other sources of information are limited or access to the Internet is not available.
- Access to the Internet (Check <www.ucmp.berkeley.edu/glossary/gloss5/biome/index.html> for a site that uses the classifications suggested in TN 9.)

- Assess the student's map of Manitoba for knowledge of locations of environmental types found in the province.
- Assess the map and journal for the student's understanding of the relationship between environmental types and population in Manitoba.
- Monitor and assess the student's skill in selecting information from a variety of sources.
- Assess the map and journal entries for the student's skill in organizing and recording information.

- BLM G-30: Map of Manitoba
- TN 22: Journal Writing in Geography
- Access to the Internet for population of Manitoba cities, legal designation (Check the following provincial site for conducting searches: <www.communityprofiles.mb.ca> and follow the link to Municipal Community Profiles.)
- This learning experience could be completed as an extension to the previous Acquiring Strategy as similar sources of information apply.
- In some sources, biomes are subdivided into smaller units called ecozones for more specific study of environmental types in smaller regions. (See TN 9 for explanation.)
- Information and maps on Canadian ecozones can be found on the following sites:
 - <www.ccea.org> and follow the links: Canada's Ecosystems/Terrestrial Ecozones of Canada
 - <atlas.gc.ca> and follow the links: Explore Our Maps/Environment/Terrestrial Ecozones Map
- The *ArcCanada 3.0 Data Sets* that accompany GIS software available from Manitoba Education, Citizenship and Youth include data and shape files on ecozones in Canada.
- Reference to a Canadian ecozones map may assist students in creating their map of Manitoba environmental types.

Targeted Learning Outcomes**Suggested Teaching/Learning Strategies****Students will...**

KL-015 Identify global environmental types on a map of the world.

KL-017 Identify on a map of the world major population clusters and explain the relationship between population and global environmental types.

S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.

S-204 Select, use, and interpret various types of maps.

Acquiring Strategies**Strategy 3: World Global Environmental Types and Population Clusters**

- Students use an atlas and/or websites to find the major world population clusters and mark these on an outline map of the world.
- Students use an atlas and/or websites to find the location of the various environmental types around the world and show these, with the use of colour codes, on the same map or as overlays.
- Students complete an Exit Slip noting any correlations between environmental types and population, and speculate on possible reasons.

Students will...

KL-008 Define the term geography.

KL-014 Explain the concept of global environmental types as physical geographic regions that are composites of climate, vegetation, and soils.

S-309 Observe patterns and make generalizations based on geographic inquiry.

S-402 Express informed and reasoned opinions.

Applying Strategies**Strategy 1: Analyzing a Biome Using the Definition of Geography**

- Working individually, students select a global environmental type and review the information gathered in previous strategies for this learning experience.
- Students record information in Part A of BLM 1-7.
- As a class, students reflect on the Gritzner definition of geography (what is where, why there, why care?), and discuss how this definition might relate to their knowledge of global environmental types and why it might be important.
- Working individually again, students summarize the main points of the class discussion in Part B of BLM 1-7.

KL-014 Explain the concept of global environmental types as physical geographic regions that are composites of climate, vegetation, and soils.

S-100 Collaborate with others to achieve group goals and responsibilities.

S-201 Organize and record information in a variety of formats and reference sources appropriately. *Examples: maps, graphs, tables, concept maps...*

Strategy 2: Biomes in a Box (Creating a Diorama)

- Working in small groups, students select a global environmental type (or have one assigned by teacher), and review relevant information from previous learning in this learning experience.
- Students create a diorama (using a large shoe box or slightly larger box and art materials) to illustrate the selected biome.
- Students identify the selected biome in a prominent title near the top of the box.
- Students paint the inside bottom and sides of the box appropriately to represent typical landscape and vegetation of that region, and add pictures or cut-out shapes to represent animals, plants, and a typical human dwelling found in that environmental type.
- The Characteristics of Global Environmental Types organizer and map (developed in the Acquiring activities above) is displayed alongside the diorama.
- Groups present projects to the class explaining features they have included.

Suggested Assessment Strategies

Teacher Tips and Resources

Acquiring Strategies

- Assess the map for the student's knowledge of location of environmental types and population clusters.
- Review the Exit Slip to assess the student's understanding of the relationships between environmental types and population clusters.
- Monitor the student's research for skills in selecting information from a variety of map, atlas, and Internet resources.
- Assess the student's skill in selecting, using, and interpreting various types of maps.

- Websites listed in Acquiring Strategy 1 in this learning experience may be of use for this learning activity.
- Atlases, wall maps of the world
- BLM G-33: Map of the World
- SFAL 6.60 – 6.61: Exit Slips
- TN 7: Map Types and Properties
- TN 8: Geographic Information Systems (GIS)
- This learning activity could be conducted using *ArcView* GIS software and *ArcCanada* data available from Manitoba Education, Citizenship and Youth.

Applying Strategies

- Assess the organizer for the student's knowledge of the definition of geography and the concept of global environmental types.
- Assess the student's skill in observing patterns and making generalizations about geographic relationships.
- Monitor the student's contributions to class discussion and assess her or his skills in expressing informed and reasoned opinions.

- Students may need some modelling on how to complete BLM 1-10: Analyzing a Biome Using the Definition of Geography.
- BLM 1-7: Analyzing a Biome Using the Definition of Geography
- TN 3: What Is Where, Why There, and Why Care?

- Assess components and related information in the diorama for the student's knowledge of environmental type selected.
- Observe the student's collaboration in group activities. (See BLM G-1.)
- Assess the student's skill in organizing and recording information in model format. (See BLM G-8.)

- Students may have the option of creating a poster to illustrate their environmental type.
- Ask students in advance to bring materials.
Examples: box, paints...
- Arrange use of art materials as required.
- Students may wish to refer to images on websites (listed in previous strategies) for additional information about the characteristics of the selected environmental type or to print and paste into the project.
- BLM G-1: Group Performance: Assessment Scale
- BLM G-7: Checklist for Creating Visuals
- BLM G-8: Assessment Guide for Visuals

Targeted Learning Outcomes**Suggested Teaching/Learning Strategies****Students will...**

KL-014 Explain the concept of global environmental types as physical geographic regions that are composites of climate, vegetation, and soils.

KL-015 Identify global environmental types on a map of the world.

KL-016 Locate on a map of Manitoba global environmental types found in Manitoba.

KL-017 Identify on a map of the world major population clusters and explain the relationship between population and global environmental types.

S-201 Organize and record information in a variety of formats and reference sources appropriately. *Examples: maps, graphs, tables, concept maps...*

Applying Strategies**Strategy 3: Reviewing Global Environmental Types**

- Working with a partner, students create a Sort and Predict Frame to review the major global environmental types.
- Depending on which biome classification is used, students may need to redesign the Sort and Predict Frame to accommodate the number of categories in their classification. (See SFAL 6.100.)
- Student partners develop a random list of terms (in the left column of the frame) that represent characteristics, locations, and descriptors for the major global environmental types.
- Student pairs exchange Sort and Predict sheets with another pair and complete the activity as a review.

Teacher Reflections

Suggested Assessment Strategies

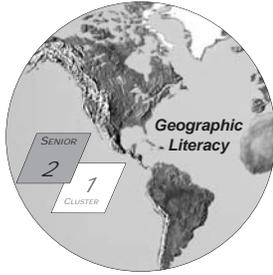
Teacher Tips and Resources

Applying Strategies

- Assess the Sort and Predict Frame for the student's knowledge of global and Manitoba environment types and their locations.
- Assess the Sort and Predict Frame for the student's knowledge of world population clusters and their relation to global environmental types.
- Assess the Sort and Predict Frame for the student's skill in organizing and recording information.

- You may wish to photocopy the best Sort and Predict Frame to hand to the entire class as an alternative to the student exchange.
- SFAL 6.63-64; 6.100: Sort and Predict Frame (redesigned by students to include more categories if necessary)

Teacher Reflections



Learning Experience 1.5: Why Care?

- | | |
|--------|---|
| KL-018 | Explain the importance of stewardship in the preservation of the Earth's complex environment. |
| VL-005 | Respect the Earth as a complex environment in which humans have important responsibilities. |
| S-103 | Promote actions that reflect principles of sustainability. |
| S-107 | Make decisions that reflect social responsibility. |
| S-200 | Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary. |
| S-201 | Organize and record information in a variety of formats and reference sources appropriately. <i>Examples: maps, graphs, tables, concept maps...</i> |

Description of Learning Experience

In this learning experience, students consider the complexity of the global environment and the importance of stewardship in its preservation. The emphasis is on the “why care?” component of the definition of geography. Students will be encouraged to consider how their individual actions affect the environment and to take a proactive approach regarding their personal responsibility for the well-being of the planet.

Vocabulary Focus

The following vocabulary is important for Learning Experience 1.5: Why Care?

biodegradable	environmental groups	organic waste	renewable resources
complex	environmentally friendly	pesticides	social responsibility
composting	herbicides	pollution	stewardship
consumerism	landfill	preservation	sustainability
environment	organic production	recycle	

Vocabulary Study Strategies

Please see **Appendix A: Content-Area Vocabulary Study Strategies** for suggested strategies to incorporate vocabulary studies into the learning experiences. Further vocabulary strategies are found in Vocabulary Strategies 6.31–6.36 and Information Processing Strategies 6.49–6.53 in *Success for All Learners: A Handbook on Differentiating Instruction* [referred to in this document as SFAL] (Manitoba Education and Training, 1996). In addition, a number of learning experiences within the clusters include vocabulary strategies for learning. Teachers are encouraged to make use of these strategies and to avoid the less meaningful practice of having students copy out dictionary definitions.

Targeted Learning Outcomes**Suggested Teaching/Learning Strategies****Students will...**

KL-018 Explain the importance of stewardship in the preservation of the Earth's complex environment.

VL-005 Respect the Earth as a complex environment in which humans have important responsibilities.

S-201 Organize and record information in a variety of formats and reference sources appropriately. *Examples: maps, graphs, tables, concept maps...*

KL-018 Explain the importance of stewardship in the preservation of the Earth's complex environment.

VL-005 Respect the Earth as a complex environment in which humans have important responsibilities.

S-103 Promote actions that reflect principles of sustainability.

KL-018 Explain the importance of stewardship in the preservation of the Earth's complex environment.

VL-005 Respect the Earth as a complex environment in which humans have important responsibilities.

S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.

Activating Strategies**Strategy 1: Environmental Mind Maps**

- Using the Mind Map strategy, students individually brainstorm current issues and concerns relating to the Earth's complex environment, both local and global, and record them in Mind Map format.
- Students discuss Mind Maps with a partner and add further ideas and connections.
- Students share Mind Maps with the class, discuss any possible misconceptions that may arise, and create a master list of issues and concerns raised on the board or flip chart.
- Students classify environmental issues into categories. *Examples: soil, water, air, wildlife...*

Strategy 2: Saving the Environment

- Students begin with an introductory class discussion on the importance of stewardship in the preservation of the Earth's environment.
- Students use the Focused Free-write strategy to write about a number of environmental issues and what actions they, as individuals, can take to demonstrate stewardship.
- Students share writing with class and develop a collective list of actions on the board or flip chart.
- Class members list in their course notebooks actions suggested.

Strategy 3: Environmental Headlines and Images

- Working with a partner or in small groups, students search newspapers, magazines, and other media for headlines and images that reflect environmental issues and the importance of stewardship.
- Students browse headlines and images, identify the nature of issues represented, and note any associated messages promoting stewardship.
- Groups post headlines and images on a wall or bulletin board and discuss findings and interpretations with members of the class.
- Individual students write an Exit Slip indicating new things they have learned about environmental issues and identifying any related questions they may have.

Suggested Assessment Strategies

Teacher Tips and Resources

Activating Strategies

- Assess the Mind Map for the student's knowledge and understanding of current environmental issues.
- Monitor contributions to class discussions and assess the Mind Map for evidence of the student's respect for the Earth as a complex environment in which humans have important responsibilities.
- Assess the Mind Map for the student's skills in organizing and recording information appropriately.

- Students may need examples to help them identify local or regional environmental concerns.
Examples: agricultural concerns such as chemical and pesticide use or soil erosion, and industrial concerns such as air pollution and disposal of hazardous wastes...
- SFAL 6.24: Mind Maps
- SFAL 6.100: Sort and Predict Frame (This resource may be useful for classifying environmental issues.)

- Monitor contributions to class and assess Free-write compositions and notes for the student's understanding of the importance of stewardship.
- Assess the Focused Free-write composition and notes for demonstration of respect for the environment and stewardship.
- Monitor contributions to class discussion and assess the Focused Free-write and notes for the student's skill in promoting actions that reflect principles of stewardship and sustainability.

- SFAL 6.30: Focused Free-write

- Assess headlines and images collected and the Exit Slip for the student's knowledge of the importance of stewardship in the preservation of the Earth's complex environment.
- Assess the Exit Slip for individual expressions of respect for the Earth and importance of stewardship.
- Monitor and assess the student's skill in selecting information from a variety of sources. (See BLM G-9.)

- A collection of recent and current newspapers and news magazines for clipping articles
- Access to the Internet, printers
- BLM G-9: Selecting Information: Checklist
- SFAL 6.6: Exit Slips
- Newspaper/magazine articles collected may be appropriate for a more detailed study in the subsequent Acquiring Strategies.

Targeted Learning Outcomes**Suggested Teaching/Learning Strategies****Students will...**

KL-018 Explain the importance of stewardship in the preservation of the Earth's complex environment.

VL-005 Respect the Earth as a complex environment in which humans have important responsibilities.

S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.

S-201 Organize and record information in a variety of formats and reference sources appropriately. *Examples: maps, graphs, tables, concept maps...*

KL-018 Explain the importance of stewardship in the preservation of the Earth's complex environment.

VL-005 Respect the Earth as a complex environment in which humans have important responsibilities.

S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.

KL-018 Explain the importance of stewardship in the preservation of the Earth's complex environment.

VL-005 Respect the Earth as a complex environment in which humans have important responsibilities.

S-200 Select information from a variety of oral, visual, material, print, or electronic sources, including primary and secondary.

S-103 Promote actions that reflect principles of sustainability.

Acquiring Strategies**Strategy 1: Viewing Environmental Issues**

- Students view a video that describes an environmental problem and suggest actions to resolve it.
- Students record important information and key points from the video on prepared forms provided. (See BLMs G-27 or G-28.)
- Students share and discuss what they have learned about environmental issues and possible solutions.

Strategy 2: Analyzing Current Environmental Issues

- Working with a partner, students search paper and electronic sources for news stories about environmental issues and concerns on a local, national, or global scale.
- Students read and analyze articles and determine whether they are fact-based or issue-based.
- Students complete the article analysis sheets. (See SFAL 6.114, 6.115.)
- Partners share articles and analyses, including personal viewpoints, with classmates.
- Classmates make notes listing all the issues presented in their course notebooks.

Strategy 3: Stewardship and Sustainability in Your Community

- In a class discussion, students identify specific examples of local or school initiatives and programs that reflect responsibility towards the environment and stewardship in its preservation. *Examples: recycling programs, organic production, energy efficient heating systems, chemical-free lawns, healthy transportation...*
- Students select an initiative or program for detailed study and analysis.
- In small groups, students research and acquire information about the initiative or program.
- Students report findings in the form of a poster or electronic presentation for the class.
- Students complete a Concept Frame for the term "stewardship." (See SFAL 6.111.) Students provide a definition and outline the principles of environmental stewardship and sustainability.

Suggested Assessment Strategies

Teacher Tips and Resources

Acquiring Strategies

- Assess organizers for the student's understanding of the complexity of the environment and the importance of stewardship.
- Monitor discussions and assess organizers for evidence of the student's respect for the Earth as a complex environment.
- Assess organizers for the student's skills in selecting, organizing, and recording important information from the video.

- Consult the Manitoba Education Instructional Resources Unit catalogue, *CBC News in Review*, and *The Nature of Things* for appropriate videos. *Examples: The Red #2988, Boreal Forest #8448...*
- BLM G-27: Acquiring Information from an Audio-visual (You may wish to revise this organizer for specific videos.)
- BLM G-28: B-D-A Viewing Worksheet

- Assess article analysis sheets and notes for the student's knowledge and understanding of the importance of stewardship.
- Monitor sharing and assess article analysis sheets for evidence of the student's respect for the environment and stewardship.
- Observe the variety of sources the student selected and used, and the relevance of news articles selected. (See BLM G-9.)

- Access to a variety of recent and current newspapers and magazines for clipping
- Access to the Internet (You may wish to prepare a list of Internet sites or useful key words for searches.)
- Students may use articles they selected in the Activating Strategy 3: "Environmental Headlines and Images."
- BLM G-9: Selecting Information Checklist
- SFAL 6.114-115: Fact-Based and Issue-Based Article Analysis forms

- Assess the presentation and Concept Frame for the student's understanding of the importance of stewardship. (See BLM G-7.)
- Monitor discussions and assess the presentation and Concept Frame for evidence of the student's respect towards the environment and promoting stewardship actions.
- Observe and assess the student's skill in using a variety of sources for research, including primary and secondary. (See BLM G-9.)
- Assess the report and Concept Frame for the student's skill in promoting actions that reflect principles of environmental stewardship and sustainability.

- Students may need suggestions on local sources of information. *Examples: city hall or municipal office, local government offices, Manitoba Hydro, project administrators and employees, fleet owners, farm organizations...*
- Access to computers with presentation software *Examples: PowerPoint, Freelance, Astound...*
- Poster paper and art supplies
- BLM G-7: Checklist for Creating Visuals
- BLM G-9: Selecting Information: Checklist
- SFAL 6.111: Concept Frame
- TN 16: Creating an Electronic Presentation
- TN 18: Creating a Poster
- TN 24: The Inquiry Process (Conducting Research)
- For more information about sustainable development and, particularly, the United Nations Decade of Education for Sustainable Development, go to <www.unesco.org> and follow the links: Education/United Nations Decade of Education for Sustainable Development.

Targeted Learning Outcomes**Suggested Teaching/Learning Strategies****Students will...**

KL-018 Explain the importance of stewardship in the preservation of the Earth's complex environment.

VL-005 Respect the Earth as a complex environment in which humans have important responsibilities.

S-103 Promote actions that reflect principles of sustainability.

S-107 Make decisions that reflect social responsibility.

KL-018 Explain the importance of stewardship in the preservation of the Earth's complex environment.

VL-005 Respect the Earth as a complex environment in which humans have important responsibilities.

S-103 Promote actions that reflect principles of sustainability.

KL-018 Explain the importance of stewardship in the preservation of the Earth's complex environment.

VL-005 Respect the Earth as a complex environment in which humans have important responsibilities.

S-103 Promote actions that reflect principles of sustainability.

S-107 Make decisions that reflect social responsibility.

Applying Strategies**Strategy 1: Individual Environmental Responsibility**

- Making use of knowledge gained in this learning experience, students develop a list of activities and actions for individuals to show their interest in and commitment to stewardship and preservation of the environment.
- Working in small groups, students use this knowledge to develop a convincing brochure or TV advertisement encouraging young people to become better stewards of the environment.
- Students post brochures for a Gallery Walk and/or present TV advertisements to the class.
- Class members list suggested actions in their course notebooks.

Strategy 2: Speaking Out

- Working individually, students identify a local, regional, or national company or organization that is facing a decision either to improve its stewardship of the environment, resulting in reduced profit margins in the short term, or to continue its questionable environmental practices without loss of profits.
- Students write a letter to the president of the company (or to the editor of a local paper) and explain why the company's decision should favour environmental stewardship over short-term profits.
- Students share arguments with the class.
- Class members record in their course notebooks the arguments presented.

Strategy 3: Importance of Environmental Stewardship—Taking Action

- Working with a partner, students identify a specific environmental issue that calls for specific individual or collective action to show stewardship.
- Students identify what might happen to the environment as a result of taking action, or what might happen if they do not take action to resolve the issue.
- Students use the Decision Tree strategy to record variables.
- Students discuss the importance of making decisions to preserve the environment and promote stewardship.

Suggested Assessment Strategies

Teacher Tips and Resources

Applying Strategies

- | Suggested Assessment Strategies | Teacher Tips and Resources |
|---|--|
| <ul style="list-style-type: none">• Assess the brochure/advertisement and notes for the student's understanding of the importance of stewardship in the preservation of the Earth's environment.• Assess the brochure/advertisement and notes for evidence of the student's respect for the Earth as a complex environment.• Assess inherent messages in the brochure/advertisement for the student's skill in promoting actions that reflect stewardship and sustainability.• Assess the brochure/advertisement for the student's skill in making decisions that reflect social responsibility. | <ul style="list-style-type: none">• Poster paper and art supplies• SFAL 6.80: Gallery Walk• TN 15: Creating a Brochure• TN 20: Creating a TV Commercial• TN 25: Persuasive Writing |
| <ul style="list-style-type: none">• Assess the letter and notes for the student's understanding of the importance of environmental stewardship and responsible corporate actions.• Assess the letter and arguments presented for evidence of the student's respect for the Earth as a complex environment.• Assess the letter and arguments presented for the student's skill in promoting actions that reflect principles of environmental stewardship and sustainability. | <ul style="list-style-type: none">• Students may need suggestions about local companies or organizations for this learning experience; alternatively, students could select a company in another part of North America or create an imaginary scenario.• Students may need to discuss and set criteria for letters, including content and format.• TN 25: Persuasive Writing• TN 26: Writing an Editorial |
| <ul style="list-style-type: none">• Monitor the discussion and assess the Decision Tree for the student's knowledge and understanding of sustainability and stewardship issues.• Monitor the discussion and assess the Decision Tree for evidence of the student's respect for the Earth as a complex environment.• Assess the Decision Tree for the student's skill in promoting actions and decisions that reflect social responsibility and in making decisions that reflect social responsibility. | <ul style="list-style-type: none">• Often students feel that their individual decisions regarding the environment are of little consequence. However, this activity demonstrates the importance of individual decisions and the difference they can make to create a better, more sustainable environment.• BLM G-25: Decision Tree |

