



Using Inquiry in Social Studies Lessons to Target Environmental Education and Stewardship

Social Studies Inquiry Model

Formulate
Questions

Gather and
Organize

Interpret and
Analyse

Evaluate and
Draw Conclusions

Communicate

Introduction: Formulating Questions about Early Societies

This lesson focuses on formulating questions relating to the interrelationship between the environment and life in early civilizations.

Considerations for Planning

Prior to this lesson, students will need:

- experience working collaboratively in small groups;
- experience interpreting data presented in media texts, images, maps; and,
- some experience formulating questions using success criteria.

Resources and Materials

chart paper, post-it-notes, access to technology, a variety of visuals/images/resources which highlight civilizations within the current social studies unit, A River Ran Wild: An Environmental Study, by Lynn Cherry and/or A Street Through Time, by Anne Millard (several copies)

BLM 1.1 – Formulating Effective Questions

BLM 1.2 – The Environment and Life in Early Societies

BLM 1.3 – Exit Card

How does this lesson link to Environmental Education?

Students develop strategies which allow them to better understand and appreciate the “dynamic interactions” related to “the dependency of our social and economic systems on...natural systems” and “the positive and negative consequences, both intended and unintended, of the interactions between human-created and natural systems”.

Shaping Our Schools, Shaping Our Future: Environmental Education in Ontario Schools (2007), p. 6

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Revised (2013) Social Studies History and Geography Curriculum

Lesson: Formulating Questions about Early Societies

This lesson uses images to afford a context to formulate questions as students investigate the relationships between early civilizations and the environment.

Learning Goals:

By the end of this lesson students will understand and be able to:

- use elements of the Social Studies Inquiry Model (formulate questions) to investigate the relationships between early civilizations and the environment.

Curriculum Expectations and Concepts of Social Studies Thinking Grade 4: People and Environments: Political and Physical Regions in Canada

Overall expectation:

- Use the social studies inquiry process to investigate ways of life and relationships with the environment in two or more early societies (3000 BCE–1500 CE), with an emphasis on aspects of the interrelationship between the environment and life in those societies. FOCUS ON: Interrelationships

Specific expectations:

- Formulate questions to guide investigations into ways of life and relationships with the environment in two or more early societies, with an emphasis on aspects of the interrelationship between the environment and life in those societies.

Big Idea: The environment had a major impact on daily life in early societies.

Framing Questions to Guide the Lesson: In what ways did the natural environment influence early societies?

Integrated Expectations across Subject Areas

Language: Reading

- Read and demonstrate an understanding of informational texts using a range of strategies to construct meaning.

Language: Media Literacy

- Use overt and implied messages to draw inferences and construct meaning in media texts;
- Identify whose point of view is presented or reflected in a media text, citing supporting evidence from the text, and suggest how the text might change if a different point of view were used.

Science

- Analyze the effects of human activities on habitats and communities.

Relevant Terminology

interrelationships, impact, natural environment, industry, habitat, stewardship, resources, transportation

Minds On: Connecting Background Knowledge

Formulating Questions through Contextual Images

Large and small group activities (approximately 25 minutes)

- Place several copies of images from A River Ran Wild: An Environmental Study around the room.
- Suggest to students: Consider some of the ways that the natural environment may have influenced early societies.
- Ask students to examine the images from A River Ran Wild: An Environmental Study and invite student observations and comments.
- Suggest to students: With a partner, generate several questions on post-it notes based on the images, and considering the contexts: habitat, food, industry, resources, transportation.
- Review and post criteria for formulating open-ended questions. (See **BLM 1.1 – Formulating Effective Questions**)
- As students/groups generate questions, suggest that they place their post-it notes on the relevant images.
- Circulate, observe and prompt as needed to ensure students follow criteria.
- After a designated period of time, students complete a gallery walk, noting others' questions. Advise students not to discuss, judge or answer any of the questions at this time.
- Collect all posted questions.

Assessment Tools and Strategies:

Assessment for Learning - Observations/notes, *consider*:

- students' ability to formulate questions, based on the criteria outlined in **BLM 1.1**.

Action

Organising and Categorizing Questions

Large and small group activities (approximately 40 minutes)

- Post all questions on a piece of chart paper.
- Revisit criteria for formulating open-ended questions.
- Reformulate any statements into questions with the group as needed, and highlight questions which exemplify the success criteria.
- As a large group examine the questions looking for patterns.
- On chart paper, create a Table with relevant categories, such as habitat, food, industry, resources, transportation along the side.
- Form small groups of students, providing each group with a set of questions from the Minds On task.
- Direct students to organize the questions into the established categories and post them appropriately within the Table.

Focusing Inquiry

Large and small group activities (approximately 25 minutes)

- Distribute **BLM 1.2 – The Environment and Life in Early Societies** to each student.
- Suggest that students consider the interrelationship between the environment and life in early civilizations as the context of an inquiry.
- Ask students to identify the early civilization(s) that have been studied within the current unit of social studies. Add to **BLM 1.2**.
- Within groups, students list one or two questions from each category on the table in **BLM 1.2**.
- Distribute additional resources related to the early civilization(s) currently under investigation.
- Students examine the resources and formulate additional questions concerning the way(s) the environment had an impact on daily life in early societies. Add additional questions to **BLM 1.2**. Remind students to consider the success criteria as they devise questions.
- During this investigation, conference with each group to determine which questions are most effective to guide an inquiry.
- Share new questions with the large group.

Assessment Tools and Strategies:

Assessment for Learning – group research, *consider*:

- students' ability to apply criteria to formulate effective questions concerning the environment and life in early societies

Consolidation and Debrief

Exit Strategy – Considering and Summarizing Perspectives

Large group and individual activities (approximately 15 minutes)

- Ask students to reflect upon the following: How did examining images/media texts assist you in formulating new questions? How challenging was it to categorize your questions, as in **BLM 1.2**?
- Distribute **BLM 1.3 - Exit Card** to each student to complete independently.

Assessment Tools and Strategies

Assessment as Learning – **BLM 1.3 - Exit Card**, *consider*:

- students use of the criteria for effective questions
- questions that students construct or select regarding the relationship between the environment and ways of life in early societies
- students' ability to communicate the reasons for their choices

Further Opportunities for Learning

Small Group Culminating Task

Students work in small groups to collaborate toward the creation of a culminating task - visual display or digital story based on the inquiry developed in the lesson, above. Each group contributes evidence, data, information and images based on the interrelationship between the environment and the ways of life of the early society currently under investigation.

Related Resources and References

Websites

- Ministry of Education
<http://www.edu.gov.on.ca/eng/teachers/enviroed/education.html>
- Ministry of Education
<http://www.edu.gov.on.ca/eng/curriculum/elementary/sshg.html>
- Natural Curiosity
<http://www.naturalcuriosity.ca>
- The Nashua River Watershed Association
<http://www.nashuariverwatershed.org/who-we-are/mission-and-history.html>
- Harvard Education Letter
<http://www.hepg.org/hel/article/507>

References

Arias de Sanchez, Gabriela (2013) "The Art of Questioning: Using Bloom's Taxonomy in the Elementary School Classroom", *Teaching Innovation Projects*: Vol. 3: Iss. 1, Article 8.

Ministry of Education. *Acting Today, Shaping Tomorrow; A Policy Framework for Environmental Education in Ontario Schools*. Ontario, 2009

The Laboratory School at the Dr. Eric Jackman Institute of Child Study. *Natural Curiosity: Building Children's Understanding of the World through Environmental Inquiry*. University of Toronto (2011)

Rothstein, D. and Santana, L. *Teaching Students to Ask Their Own Questions: One Small Change Can Yield Big Results*. Harvard Education Letter, Volume 27, Number 5. September/October 2011

BLM 1.1 – Formulating Effective Questions

Students formulate questions, either independently or with guidance from the teacher, and either individually or in groups:

- to explore various events, developments, and/or issues that are related to the overall expectations in order to identify the focus of their inquiry;

- to help them determine which key concept (or concepts) of social studies thinking is relevant to their inquiry;
- that reflect the selected concept(s) of social studies thinking;
- to develop criteria that they will use in evaluating evidence and information, making judgements or decisions, and/or reaching conclusion. (excerpt from Revised (2013) SSHG), page 61

When developing criteria for effective questions, encourage students to formulate open-ended, divergent questions based on higher level thinking skills. Often, these types of questions begin with who, what, where, why, when or how.

Here are some suggestions for question starters for this lesson, considering: habitat, food, industry, resources and transportation:

Who ?

Who may have lived....? Who collects/gathers...?

What ?

What did.....eat? What happened at...? What happened after....? What would happen if...?
 What must have happened when...? What differences exist between...?
 What might have been the impact of...? What are some of the problems of...?
 What were some of the motives behind...? What is a possible solution to...?
 What would result if...? What do you know about the lives of...based on...?

Where ?

Where could...have happened...? Where did...get ...?

Why ?

Why did the...? Why did changes concerning...occur? Why is ... of value?

When ?

When could...have happened...? When did....change?

How ?

How did...survive? How is this... similar to...? How did this....end? How did...deal with...?
 How many ways did...? How did...travel? How did...get what they need?

Adapted from: <http://www.nmmu.ac.za/cyberhunt/bloom.htm>

BLM 1.2 – The Environment and Life in Early Societies

Early Society:

Category

Questions

Habitat

Food

Industry

Resources

Transportation

BLM 1.3 – Exit Card

Consider all of the questions that were formulated by the class.

1. Which do you consider the two most relevant questions concerning the relationship between the environment and ways of life in early societies? Explain your thinking.

2. Why do the questions meet the criteria for effective, open ended questions ?
