
Blackline Masters

BLACKLINE MASTERS

BLM 1a

Decision-Making Process*

The 10 stages involved in making a thoughtful decision are described below. Use the chart on the next page to work through the stages and to record your work. As you complete the chart, you may return to an earlier stage and add to it, or rewrite it. You may want to fill out the chart in pencil so you can revise it.

Issue:	State the issue.
Decision Question:	Write a precise wording of the question that needs to be answered. The wording can affect the decision you make.
Type of Decision:	A decision may be scientific, technological, legal, political, or moral. It may also be a public policy decision — a general decision that prescribes ways for handling a public situation. A public policy decision is not restricted by moral, political, military, legal, or any other type of decision, but it can be informed by those types of decisions.
Alternatives:	Fill out alternatives as you think of them. Some decisions may only have two alternatives (for example, guilty or not guilty).
Risk/Benefit Analysis:	For each alternative, list the negative and positive consequences of taking the action.
Logic Check:	Double-check the validity of your risk/benefit arguments for each alternative. (How logical are your conclusions? Are they based on false causes? How probable are your conclusions?)
Values Awareness:	If you look closely at each alternative you provided and the associated consequences, you will see that they reflect certain values. Examples of values include: generating wealth for a country, loyalty, being in balance with nature, causing no harm to people, justice, abiding by the laws, and honesty. The values you detect may not necessarily be your own personal values, but you must recognize and clarify them anyway. To help you identify the values, ask yourself the question: What would people highly value if they strongly believed in alternative X?
Personal Priority of Values:	Of all the values you listed above, which value is most important to you personally in this situation? Prioritize the other values from second in importance to least important.
Choice and Reason:	What alternative do you choose after weighing the consequences and considering the logic of your thinking, the probabilities, and your values?
Action Recommended:	In order to carry out your decision, what action should be taken? By whom? When?

(continued)

* From LOGICAL REASONING IN SCIENCE & TECHNOLOGY. TEACH RES. PKG 1st edition by AIKENHEAD. © 1991. Reprinted with permission of Nelson, a division of Thomson Learning: www.thomsonrights.com. Fax 800 730-2215.

Decision-Making Chart*

Issue:			
Decision Question:			
Type of Decision:			
Alternatives	Risk/Benefit Analysis	Logic Check	Values Awareness
Alternative	Negative Consequences		
	Positive Benefits		
Alternative	Negative Consequences		
	Positive Consequences		
Personal Priority of Values (from most to least important):			
Choice and Reason:			
Action Recommended (what, by whom, and when):			

* From LOGICAL REASONING IN SCIENCE & TECHNOLOGY. TEACH RES. PKG 1st edition by AIKENHEAD. © 1991. Reprinted with permission of Nelson, a division of Thomson Learning: www.thomsonrights.com. Fax 800 730-2215.

Video-Related Questions

Answer the following questions, based on the video *Sila Alangotok—Inuit Observations on Climate Change*.

1. What were some of the observations of climate change made by the community members of Sachs Harbour?
2. Why may the observations of Inuit Elders and community members be important in a discussion of climate change?
3. How do the observations of Inuit Elders and community members contribute to the understanding of natural climate change and climate change associated with human activities?
4. What are some actions you might take (as an individual or as part of a group) to reduce climate change?

Trip Report Summary

Group Members: _____

Trip Report Number:

Purpose and Objectives:

Methods:

Findings:

Trip Report: Reflection Questions

1. List the methods used to gather information in the Sachs Harbour community.
2. The science group found that interviews were a valuable method of gathering information. Summarize the benefits of this methodology. (Hint: Look at Trip Report 2 for specific points.)
3. Using the information from the video and the trip reports, discuss with your group whether the scientists gained valuable information about climate change through this project. Develop a statement that justifies, to funding groups, the use of this costly and time-consuming method of gathering information about climate change from other communities.

Impact of Climate Change on the Arctic

1. Watch the video *Sila Alangotok—Inuit Observations on Climate Change*. Use the first column in the table below to identify observations that Elders and community members of Sachs Harbour make related to the impacts of climate change.
2. Read the “Executive Summary” from *Responding to Global Climate Change in Canada’s Arctic* (Maxwell, 1997, xiv–xvii). This Environment Canada report discusses several possible impacts of climate change suggested by Western scientists. Using information from the report, complete columns two and three of the table below, identifying direct and indirect impacts of climate change mentioned.
3. Complete the questions that follow the table.

Impact of Climate Change on the Arctic

Video—Community Information	Report—Scientists’ Information	
	Direct Impacts	Indirect Impacts

(continued)

(continued)

Video—Community Information	Report—Scientists' Information	
	Direct Impacts	Indirect Impacts

Questions

1. Note similarities and differences between observations of community members and information from scientists.
 - a. Summary of Similarities:

 - b. Summary of Differences:

2. Do you think it is important to include information from both scientists and community members when trying to understand something as complex as climate change? Why or why not?

3. Brainstorm two other situations where it would be important to gather information from both scientists and local community members (e.g., To see the impacts of...).

Role Cards for Conference Members

Inuit Trapper/Hunter

Create a name for this individual. _____

This individual has been trapping and hunting in the area for the past 30 years. All members of his or her family have been involved in trapping and hunting as a livelihood for generations. In the winter, Arctic foxes are trapped, the pelts sold to the local Natural Resources office, and the money used to buy food and clothes for a family of six (two adults and four young children). Geese and ptarmigan are often hunted in the fall for food over the winter, in addition to caribou that migrate through the area.

Vice-President of Ready Gas

Create a name for this individual. _____

Ready Gas is a medium-sized gas and oil exploration company that has been involved in Arctic exploration for 40 years. Due to the overwhelming demand for oil in the United States and the abundance of oil resources in northern Canada, Ready Gas has developed an agreement with the United States to supply oil at a highly profitable price. The vice president (VP) is fully aware of the current debate on climate change and the impact suggested by scientists but subscribes to the critics' views on the subject. This individual has been active in a group of companies lobbying the government to change the Kyoto agreement because the recommended emission reductions are too large and will greatly interfere with the operations of their companies. The VP of Ready Gas lives in a large city in Canada and relies upon the information provided by scientists to make decisions regarding explorations.

Community Council Member

Create a name for this individual. _____

The council member has been involved in the economic development of the community for the past five years. In the past, this person created a housing project that employed 40 community members. The unemployment rate of the community is quite high, even taking into consideration individuals making a living off the land (self-employed), and this council member is interested in increasing opportunities for employment in the community. The council member also hunts and traps over the winter as the members of his or her family have done for generations.

(continued)

Role Cards (*continued*)

President of Inuit Oil and Gas

Create a name for this individual. _____

Inuit Oil and Gas is a small-sized exploration company that has been involved in this field for only three years. The president is fully briefed on the Kyoto agreement but has not yet taken a stand on the emission reduction targets. The president lives in a community in the same region as the proposed development. Inuit Oil and Gas was established to provide economic development, under Inuit control, for the region and is very aware of the high unemployment rate in local communities. The president also takes part in trapping and hunting activities with his or her family.

Carpenter

Create a name for this individual. _____

The carpenter was trained by a community-based college program and has journeyman papers. The employment of carpenters has been sporadic in the community in the past 10 years; there was a housing development project that provided employment for the past five years but that project is coming to an end. The carpenter is concerned about future opportunities. Due to the sporadic nature of the work, the carpenter traps and hunts over the winter to provide food for his or her family.

Local Science Teacher

Create a name for this individual. _____

The local science teacher has lived in the community for the past two years. Originally from a different Arctic community, the science teacher moved here for work. In science class the teacher emphasizes the importance of environmental stewardship. The teacher is also a strong supporter of community-based decision making and tries to model this approach in the classroom. In the community the science teacher has been working on instituting an energy conservation program; the council is currently considering the request for funds to begin the program.

(*continued*)

Role Cards (*continued*)

Environmental Group Leader

Create a name for this individual. _____

For this individual, environmental activism has been a lifelong passion. Currently the leader of GreenCops Inc., a not-for-profit organization, this individual is responsible for investigating policy development that may affect the environment in the North. GreenCops is very knowledgeable about the fragile Arctic ecosystem and has been collecting data from other northern development projects about the impact of oil and gas exploration on both the land-based and marine ecosystems. There are already indications that these ecosystems are being adversely affected by development.

Provincial/Territorial Minister of the Environment

Create a name for this individual. _____

This Minister has the responsibility for developing and enforcing policy related to environmental protection. Concerns have been raised about the rapid development that has taken place in other regions and the environmental impacts that are only just beginning to surface.

Federal Member of Parliament—Environment Minister

Create a name for this individual. _____

As the Environment Minister, this individual has been involved in the federal government's participation in the contracts associated with the Kyoto Protocol and is responsible for promoting Canada's position with provincial/territorial contacts. However, several companies have been placing some pressure on this individual, indicating that they believe the emission reduction agreement includes targets that are unrealistic or too expensive. Ready Gas has been one of these companies.

Local Community Member

Create a name for this individual. _____

This individual's family has lived in the community for a long time. As a family of seven (two adults and five children), they plan to remain there and are concerned about the future impact of an oil and gas company operating nearby. Currently this community member contributes to the health and well-being of the family by assisting in hunting, trapping, fishing, and preparing hides. In addition, the community member works part-time at the local grocery store during the winter.