12. Leadership Lesson #3: DECISION MAKING & JUDGMENT

Kristen Schulte  
*University of Wyoming, kschulte87@yahoo.com*

Ana K. Houseal  
*University of Wyoming, ahouseal@uwyo.edu*

Follow this and additional works at: [http://repository.uwyo.edu/ycc_rec](http://repository.uwyo.edu/ycc_rec)  
Part of the [Science and Mathematics Education Commons](http://repository.uwyo.edu/ycc_rec)

Recommended Citation  
[http://repository.uwyo.edu/ycc_rec/11](http://repository.uwyo.edu/ycc_rec/11)
Leadership Lesson #3: Decision Making & Judgment

Overview: This lesson provides youth with an understanding of decision making styles and criteria for choosing which style is best for them during different situations.

Learner Outcomes

Youth will:
1. Be able to examine their own decision making style.
2. Know the complexities of decision making and judgment in risk management.
3. Understand the impact of their decision making style on the quality of the decision made.

Getting Ready

Materials: Youth need journals and writing utensils; staff need handouts.

Background: All of the background is included in the lesson for the ease of instruction.

The hazards referred to in this lesson can be defined as:
1. Environmental Hazards: A component in the workplace environment that can cause injury, illness, or death. For example, high intensity sunlight due to high elevation is a weather hazard.
2. Human Hazards: A component that has a human-made threat having one of the following elements: human intent, negligence, or error. For example, not applying sunscreen would be negligence.

Suggested Procedure

Difficult Decisions (3 minutes)
Examine previous difficult decision regarding a hazard.
Staff will:
1. Ask youth to journal about a time they were faced with a difficult decision and they did something they didn’t feel right about at the time.
   a. Have them examine their decision, identifying the reasons why the decision was difficult to make.
   b. Explain that among the many leadership competences (i.e. leadership styles and communication), perhaps the most important is the ability to make good decisions and reflect on mistakes. Effective decision making, by both staff and youth, is a cornerstone of this program’s risk management.

Types of Decision Making (7 minutes)
Learn about different types of decision making.
Staff will:
1. Explain that the types of decisions they make can be loosely categorized as:
   a. Simple decisions, such as when and where to instruct a lesson
   b. Decisions in response to an obvious hazard, like canceling a peak ascent because it is snowing and the group is not dressed for the snow.
Lesson at a Glance

**Difficult Decisions** (3 minutes)
Examine previous difficult decision youth have encountered.

**Types of Decision Making/How Teams Make Decisions** (22 minutes)
Learn about different types of decision making and team decision making styles.

**“Rule of Thumb” or Heuristics** (3 minutes)
Learn about heuristics and how they can aid in problem solving.

**Just Decide!** (20 minutes)
Youth take part in a scenario of an expedition that becomes stuck in the river while exploring the Yellowstone Plateau. Youth will have to choose which wagon to rescue from the river by using their critical decision making skills. Afterwards, they will debrief their skills in critical decision-making.

**Analytical Decision Making** (13 minutes)
Examine steps to making analytical decisions.

---

c. Decisions made when the hazard is uncertain, such as deciding whether or not to launch boats in variable weather.
   
2. The ability to make good decisions is based on how completely and accurately you identify and evaluate a situation. By practicing awareness and watchfulness, they can help you identify and evaluate situations. But it is not helpful to collect information and then misinterpret the signs; it is possible to collect information thoroughly but selectively ignore or misinterpret it.
   
3. Ask: What is a good decision rooted in? (Answer: risk perception)
   a. Explain how a situation that is voluntary, familiar, pleasant, or predictable is perceived as less risky; a new, dramatic, catastrophic, or difficult situation is perceived as riskier.
   b. Write the following quote on the dry erase board: “One thing is certain: the way people make decisions in the face of a hazard has as much to do with their perceptions of the risk as it does with numerical probabilities” (Leemon & Schimelpfenig, 2005, p. 25).
   c. Ask them to describe, in their own words, what this quote is saying in their journals or in a discussion.

   • Possible description: One’s perception of a risk influences, correctly or incorrectly, his or her ability to assess risk. If you over or underestimate a threat, you increase the likelihood of making the wrong decision.

4. Transition: Explain that effective crews use an assortment of decision-making styles by choosing a decision-making process that is appropriate for the situation, their group, their staff, and their crew’s culture.

**How Teams Make Decisions** (15 minutes)
Learn about different team decision making styles and what to consider when making them.

Staff will:

1. Draw a blank version of the Group Decision Making Model, leaving out the different decision making choices.
2. Have youth offer some ways they make group decisions. Name each one as a choice and put them on the graph in the right places, as shown in the handout “Group Decision Making Model.”
3. Clarify the definitions as you write the choice to ensure a shared understanding of the meaning. Refer to the following information for the definitions:
   a. **Directive**: The leader decides and informs the group.
   b. **Consultative**: The leader solicits group input before making a final decision. The input from the group may be to comment on a decision recommended by the leader, or it may be input without knowledge of the leader’s preference. In either case, the decision is made by the leader.
   c. **Vote**: The group decides by voting. Before the vote, make it clear if the decision will be by simple majority, two-thirds majority or another tally method. If the leader has any qualifications for the group decision, such as a right to veto if safety is compromised, these parameters should be made clear to the group beforehand.
   d. **Consensus**: The group makes a decision without voting. A clear definition of consensus is a decision everyone can implement and support.
   e. **Delegate**: The leader allows the group or an individual to make the decision, often within limits such as safety requirements.

4. When the graph is complete, discuss the following questions:
   a. When selecting a decision making choice, what would you want to consider?
      - (i.e. **Ability**: Are the followers/leader able to make this decision? Do they have the necessary skills, experience, knowledge, etc? **Confidence**: Do the followers trust the leader to make the decision? **Willingness**: Is everyone motivated to follow if the leader makes the decision? What if the group makes it?)
   b. As group involvement increases, does the quality of the decision increase as well? Under what circumstances?
   c. Does an increased level of group involvement mean a decision is more likely to be “brought into” and thus implemented?

5. Together you are traveling on the first organized attempt to explore the Yellowstone Plateau in 1860 with Captain William E. Raynolds on a military expedition. The wagons you are traveling in were loaded and packed prior to leaving on the expedition. The wagons each contain enough equipment for the group to survive. Your expedition discovers that the late spring snow has not melted, leaving you unable to explore the Yellowstone Plateau. Your group is very disappointed and frustrated with the turn of events. The nation at large views your expedition as the first to potentially discover Yellowstone in a formal expedition. On your return home, you encounter a difficult river crossing where both wagons become stuck and wrecked in the crossing. The current is strong and the water is cold from the spring mountain runoff. Your expedition can only retrieve items from one of the wagons because of the risk of hypothermia and drowning.

3. Divide them into two groups and present the groups with the items listed from both wagons (see handouts). Instruct both groups to look at the list of items in each wagon and decide the following:
   a. Which of the wagons will they choose to save?
   b. What 10 items will you take out of the wagon you have chosen?
   c. Once they have 10 items selected, they must decide what their expedition will do next. Encourage them to be realistic and think about the items being multi-purpose

4. Tell the groups they have only ten minutes to make their selection. (D1)

5. When a majority has selected a wagon give a two-minute warning for the groups to wrap up their discussions. This will add more pressure to choose items.

6. After the discussion, ask each group to present which wagon they selected, what items they chose, and why.

7. Afterwards, explain that they will examine how decisions were made in their group.

8. Instruct them to journal about the following questions:
   a. What decision making styles were used? What influenced the success of the decision?
   b. Where there any heuristic that came up for the group? Why? Why not?
d. Does “delegate decision making” belong where it is? Where would you draw it on this graph? How could you delegate a decision and make that bubble work in a different place on the graph?

5. Have them think of some decision they have seen during the work week and use the graph to explain why they think that the decision was made that way. Ask if they believe a different decision making style should have been made.

6. Conclude: By practicing different decision-making styles, you can challenge yourself and your group to step outside the box. If a decision is not urgent, and you tend to be directive or consultative, try consensus or voting. If you’re normally passive, try participating in a medical scenario or emergency drill and be directive.

“Rule of Thumb” or Heuristics (3 minutes) 
Staff will:
1. Ask: What do you rely on to make a decision? Are they instinctive or intentional decisions?
2. Explain that one of the most common ways to make decisions is to rely on simple “rules of thumb,” also known as heuristics. Heuristics are problem-solving aids that you adopt from your experience. You use heuristics in everyday decisions, often without thinking. For example, “leaves of three let it be”. You can come to some heuristics because they’ve been proven over time, “measure twice, cut once”. Others are supported by statistics, like the fact that small samples do not accurately represent general populations.
3. Ask: What are the pros and cons of heuristics? When do you use them most?
4. Transition: Explain that they will be looking closely to see what heuristics and decision making styles come up within team decision making processes.

Just Decide! (20 minutes)
Staff will:
1. Ask youth to open the frame of their mind to understand the way they think about decision making.
2. Tell them to imagine the following scenario:

10. Use the following questions to fuel a group discussion: (F1)
   a. Did people listen to each other? If not, why not?
   b. What roles did group members adopt?
   c. What kinds of behavior helped or hindered the group?
   d. What situations at work/YCC/home/school do you think are like this activity?

11. Explain that often finding the information we need to make a decision is not easy. There are facts we cull from science, but they can be elusive when trying to predict natural phenomena like weather or illness. There are things we think we know but are not based on facts and are only educated guesses. Finally, there are urban legends, folklore, and myths often masquerading as facts. We should develop a habit of questioning assumptions and seeking facts.
   • For example, the practice of disinfecting wilderness water. The biased warnings of the water-filter manufacturers and the dramatic statements on trailhead kiosks give the impression that the protozoa Giardia and Cryptosporidium are prevalent in the water and that illness is common. Outdoor texts and wilderness medicine courses repeat this advice. However, the facts are elusive. The few biological studies on wilderness water give us mixed results. Some argue contamination is prevalent, others that it’s uncommon. We can’t separate illness from poor camp hygiene with illness from drinking untreated water. There is good science that our methods for disinfecting water, boiling, chemically treating or filtering, have a low risk of making us sick. There is folklore that clear, fast moving alpine water is clean, that protozoa sink and thus surface water is safer to drink, or conversely, that protozoa float and are disinfected by ultra violet radiation. We need to identify and discard the unclear scientific evidence on the risk of becoming ill from drinking untreated wilderness water and balance this with the consequences of not disinfecting our water, a nasty case of diarrhea.
We take some sound but inconclusive science, mull the risk of becoming ill from how we disinfect water, and come up with a practice of habitually disinfecting water that is more than folklore, but less than clear science-based advice, it’s our best educated guess.

12. Ask: Do you think any information was faulty, irrelevant or incomplete in the wagon scenario?
   • Lead them to the conclusion that:
     i. Wagon 1: Has items for staying
     ii. Wagon 2: Has items for travel

13. Transition: Explain that the more we learn about how the human brain works, the more we realize that people tend to make decisions with unscientific methods. We recognize patterns, use mental shortcuts like heuristics, and other subconscious thought processes far more commonly than an analytical process. An analytical decision-making process appears complex and laborious, especially when compared to the flow and spontaneity of heuristics. It is also tempting to use heuristics in a time-sensitive situation, however, many decisions in the wilderness are less urgent, and you have the time for an analytical approach.

Analytical Decision Making (13 minutes)
Examine steps to making analytical decisions.
1. Here are some approaches to making an analytical decision:
   a. Describe the decision that needs to be made or the problem that needs to be solved. Keep it simple. Try to say it from as many viewpoints as possible. This can illuminate the problem and point ways to alternative decisions.
   b. Identify parameters for the decision. Are there clear boundaries on this decision such as limits to your resources?
   c. Gather information.
      i. Environment: What are the hazards? Can they be avoided? If not, can exposure be mitigated?

Assessment Check Ins:

(D1): Observe how their behavior demonstrates the prior self-awareness of their personal or group decision-making style. This information will assist the staff in understanding the youth’s individual decision-making styles

(F1): Provides information on individual youth experience and reflection of the “just decide” activity within the dynamics of a group. This assessment will provide insight into youth’s self-awareness of their decision-making styles.

(S1): Assesses what youth have learned by reflecting on key points of the lesson.

Staff Notes:
• Staff should be aware that youths might have different levels of experiences with decision-making.

• Some of them may not have developed heuristics yet and need guidance in their decisions. Others may find themselves with an unusual or especially difficult problem. In this case a systematic approach of gathering information, weighing alternatives and deciding what is best can be a valuable tool. An analytical approach can be thorough and well reasoned. It can help you organize and survey factors that will go into the decision.

• Just Decide Activity: The purpose of the activity is to highlight how people frequently have hidden tactics or unquestioned assumptions when they go into decision-making situations. In this activity, the decision is whether or not the group is going to stay or leave the wagon wreck site. The two wagons clearly represent these two options without saying so, i.e. wagon one has large bulk items in it and enough building material to construct a shelter. The second wagon has enough lightweight and appropriate materials for traveling quickly and safely to civilization.
ii. Human: Do we have the experience to make this decision? Is the group fresh or fatigued, strong or weak? Do we have the people and skills to manage the problem? What is driving us to make this decision?

iii. Resources: What information do we need? What gear do we need?

iv. Time: Do we have time to make this decision? What is the urgency for this decision?

d. Identify options or choices. Are there alternatives?

e. Compare the options. What are the consequences? What could go wrong? Imagine alternative scenarios, solutions, and outcomes.

f. Decide, implement and evaluate. What style will you use for your decision? Delegate, consensus, vote, or the leader decides?

2. **Transition:** Analytical processes only work well if we collect data and ponder alternatives before making a decision.

Conclude: (5 minutes)

Staff will:

1. Ask youth to summarize the points of the lesson. (S1)
2. Examples of summary of points:

   a. Effective decision making, by both staff and youth, is a cornerstone of YELL-YCC risk management.
   b. Teams use a variety of decision-making styles including directive, consultative, voting, consensus, and delegating.
   c. An analytical approach of gathering information can help you organize and survey factors in the decision.
   d. Heuristics are simple rules-of-thumb, aids to problem solving.

---

**Reference:**


The instructional activity content served as the selection list for the Wagons One and Two handouts in this lesson. It was modified in the following way: Some instructional language was used to match the REC.

**Handouts:**

- Just Decide Activity
- Group Decision Making Model
Just Decide Activity

Wagon One Items

1. Small Ax
2. Bag of Sugar
3. Bag of Flour
4. 2 Hammers
5. 3 lbs. of Cheese
6. Fry Pan
7. Set of dishes
8. 3 Feather Filled Pillows
9. Water Jugs
10. 2 large canvas tarpaulins
11. Coffee
12. Dried beef
13. 1Tent
14. Loaded .45-caliber pistol

Wagon Two Items

1. Bag of raisins
2. One 10’ x 10’ canvas tarpaulin
3. Three 1 qt. canteens of water
4. A coiled rope
5. 3 pair of boots
6. Hunting knife
7. 2 pair woolen mittens
8. Bag of rice
9. 2 pillow cases
10. 1 small rodent trap
11. Small metal box of matches
12. 2 set of Snow Shoes
13. Compass and Map
Group Decision Making Model

(Reprinted from Leemon & Schimelpfenig, 2005, pg. 26).