Developing Judgment and Decision Making in Our Staff

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WRMC 2009 Workshop

“Judgment in my estimation is the greatest safety factor you can have. Not only while the students are taking your course but for their safety after they leave your school and might do some of these things on their own.”

Paul Petzoldt

Judgment

• Reasoning In Uncertainty
• Missing Data,
• Conflicting Information,
• Time Pressure,
• Unclear Threats
• Possibility Of Harm

• Highly Valued In Both Medicine And Outdoor Leadership

Premises of Workshop:
• Decision making skills can be developed if we are intentional in reflecting on the decision making process.
• Reflecting can be challenging if it reaches deep personal values of competence and responsibility.
• Knowing that, we need to figure out ways to develop judgment in our staff.

Workshop Goal:
• To help you become a more skilled and astute coach of decision making skills when supervising your staff.

Who are you and what type of program do you work in?

Why did you decide to come to this workshop?

What is one thing you are hoping to take back to your organization from the workshop?

Discussion in groups of 4

• Premise: judgment can be developed when we are intentional in our decision making and reflect on our decisions.

• Question: In your organization, what factors prevent a regular and effective reflection process?
Three steps towards developing judgment in your staff

1. Create an organizational structure and culture supporting the development of judgment.
2. Coach your staff.
3. Reflect on your decision making.

Organizational Structure, Culture

- **Structure**
  - Clarify standards for decision making.
  - Scheduled regular debriefs or staff check-ins.
  - Use decision making models.
- **Culture**
  - Is it comfortable to discuss decisions at your organization?
  - Is the atmosphere growth-oriented or punitive?
  - Does the culture emphasize analyzing decisions AND changing habits over time?
  - Do administrators role model reflection and growth?
  - How often are legal threats considered while making decisions or reflecting on them?

Coaching

- An incredible learning opportunity based on personal and real situations
- Much easier if you have a common language
- Includes emotional risk
- For this workshop we are assuming some brief skill and experience.

Reflecting On Your Own Decisions

- Is integral to being an insightful and empathetic coach
- Is a learnable skill that requires practice.

Outline: The Rest Of The Workshop

- Phase 1: Decision Making Models: from simple to advanced
- Phase 2: Coaching Practice (including Emotional Risk Awareness)
- Phase 3: Personal/Organizational Reflection

Phase 1: Decision Making Models
Accident Potential

- Subjective or human factors
- Objective or environmental factors

Risk Assessment Triangle

Objective hazard (e.g. steep slope)
Behaviors and Attitudes

Likelihood/Consequence Graph

- High likelihood, low severity
- High likelihood, high severity
- Low likelihood, low severity
- Low likelihood, high severity

Lightning/Consequence Graph

- High likelihood, low severity
- High likelihood, high severity
- Low likelihood, low severity
- Low likelihood, high severity

Pitfalls in Group Decisions - Group Think

- Group size affects
- Members of small groups affect each other more than larger groups.
- In larger groups, the tendency is to agree with the group.
- Risk polarization is an inclination for groups to take more (or less) risks than individuals.
- Support theory says that the time spent discussing a risk can increase the group's perception of its probability.
- Attribution theory says groups make riskier decisions because the consequences of a decision are borne by the group, not an individual.
- In the information cascade model, the group makes a poor decision based on imbedded misinformation.

How Groups Make Decisions

- Directive
- Consultative
- Almost decide, then get input
- Get input, then decide
- Vote
- Consensus
- Delegate
- Leader Decides
- Group decides
- Almost decide, then get input
- Get input, then decide
- Vote
- Consensus
- Delegate

How People Make Decisions

- Random Choice
- Expertise Model
- Heuristics
- Analytical Model
Random Choice

• Without the experience, information or the expertise to decide between alternatives, a guess may be a good choice.
• The consequences should not be serious.
• Sometimes action, which gives you experience and information, is better than endless discussion.

Traps in the Expertise Model

• You’re not an expert (expert halo trap).
• Distorted pattern recognition.
• Premature closure.

Rules of Thumb, Heuristics, Axioms, Postulates

- Recognizing patterns, applying axioms
  - The “golden hour”
  - Occam’s razor vs. Hickam’s Dictum.
  - Red and yellow kill a fellow; red and black, venom lack.
  - 70-90% of diagnoses can be made from history?
  - Whumping or collapsing in snowpack.
  - The 30/30 lightning rule
  - Pain, S08, Bloody Sputum = Pulmonary Embolus

Rules of Thumb, Heuristics, Axioms, Postulates

- Problem-solving aids adopted from experience.

Traps in Heuristics, Axioms, Postulates

• They may not be accurate.
• They may not be specific.
• Distorted pattern recognition.
• Wrong prototype.

Expert Decision Model - Expert Intuition

Perceive the situation

Recognized as typical?
yes
no

Recalled response

Pattern - Recognition

Sex, Drugs and White Death, McCammon 2004.
Protocols, Algorithms, Decision-Making Aids

Teach the young and remind the old

<table>
<thead>
<tr>
<th>Clue</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avalanches</td>
<td>In the area in the last 48 hrs.</td>
</tr>
<tr>
<td>Loading</td>
<td>By snow, wind or rain in the last 48 hrs.</td>
</tr>
<tr>
<td>Path</td>
<td>Identifiable by a novice.</td>
</tr>
<tr>
<td>Terrain</td>
<td>Gullies, trees, cliffs or other features that increase severity of being caught.</td>
</tr>
<tr>
<td>Rating</td>
<td>Considerable or higher based on the current avalanche bulletin.</td>
</tr>
<tr>
<td>Unstable area</td>
<td>Collapsing, cracking, hollow or other clear evidence of instability.</td>
</tr>
<tr>
<td>Thin</td>
<td>Recent warming of the snow surface due to sun, rain, or warm air.</td>
</tr>
</tbody>
</table>

Table 1. An example of a simple decision framework based on obvious clues. Users simply add up the number of clues that apply to the slope. The acronym ALPURTH is a handy memory aid.

Protocols, Algorithms and Decision Making Aids

Pre-determined decisions

Abdominal pain that is:
- > 12 hours, especially if constant.
- Localized.
- With guarding, tenderness, distension, rigidity.
- Made worse by movement or foot strike.

Associated S/S:
- Blood in vomit, feces, urine.
- Persistent anorexia, vomiting, diarrhea >24 hours.
- Fever > 102°F (39°C).
- S/S shock.
- Possible pregnancy.

A Simple Analytical Decision Model

identify objectives
examine available information
compare alternatives
decide

Analytical Traps

- Inability to identify the pertinent variables.
- Intuition or guess masquerading as analysis.
- Overestimate the probability of an event which is easily and vividly imagined.
- Correlation is not causation.
- Easily remembered or available information has more weight.

Traps with Protocols

- The cook stops thinking
- The protocol is not accurate
- Is it based on sound science, educated guess, expert opinion, myth?
Phase 2: Coaching Practice

Coaching Scenario #1

1. Debrief Preparation Exercise
   - 30 Minute Workshop Break
2. Role Play (Tod and Liz)
3. Scenario Wrap Up

Analytical Traps

- Looking for information to confirm our biases or desired outcomes.
- Information presented early, or late, has more weight.
- The use of known facts to draw inferences about the unknown.
- The probability of an event or the weight of evidence is inappropriately influenced by the detail in a discussion.

Scenario #1
You, a program manager, are about to debrief Tod, a senior trip leader who just ran a 10-day backpacking trip with ten high school students.

At the post-trip lunch, you hear students talk about being scared from the “lightning on top of the mountain climb.”

There was no mention of lightning in the course log or in any near-miss report.

The log for the peak climb day states “we had a great day; we climbed the mountain.”

This incident concerns you.

Activity 1: How would you prepare for this conversation?
Your goals are to:
1. Find out what happened.
2. If appropriate, have the trip leader learn something.
3. If appropriate, deliver your program’s boundaries and prevent another similar incident.

In groups of four, spend ten minutes discussing this question. We will draw on a few of these answers after the break.
Effective Coaching

Analytic Plan
Intuitive Information Gathering

Disciplined follow-thru to completion

Scenario #2
• A group of 10 students and two instructors were on a 10-day early summer backpacking trip in the Sierras.
• They were hiking in two different groups, and encountered a river crossing.
• One group crossed and finished their day at a pre-designated campsite.
• The other group decided it was too hazardous to cross; set up camp and waited until the next morning (when the water was lower) to cross.
• No one got hurt in either group, and the river crossings did not meet your organization’s definition of a “near miss.”
• The instructors moved on with the trip without talking about the decisions.

Coaching Scenario #2
1. Role play, in groups of four (10 minutes)
2. Debrief the role play, in groups of four (5 minutes)
3. Wrap up scenario, in full group (5 minutes)

Managing Emotional Risk in Judgment Coaching
• Use models.
• Use ongoing, specific feedback in a 6:1 positive: critical ratio.
• How can you help this person feel respected and supported? It’s different for different people.
• “What can WE do differently next time?”

Managing Emotional Risk (cont.)
• Be prepared to offer clear boundaries, even if it means firing someone.
• Know how deep to go in a given conversation, and when.
• Recognize the emotions that YOU bring to the conversation.
Phase 3: Personal/Organizational Reflection

Reflective Practice
- The cultivation of the observing self in the moment of the decision.
- Intentional attentiveness to raw thoughts, sensations, emotions, judgments and heuristics.

Motivation
- The development of judgment requires honest self-evaluation in a motivated learner.

Presence
- Cultivate the mental stability to be open, curious, flexible and present when faced with anxiety, uncertainty and chaos.
- Repetitive training, like a WFR scenario, or transceiver drills, can be helpful.

Reflective Practice
- See information as novel and describe it before rendering judgment.
- Welcome new data even if it disconfirms an initial hypothesis
- “Absolute diagnosis are unsafe, and are made at the expense of a clear conscience.” Osler
- Don’t confuse educated guesses, rumors, myth with fact.
- See from multiple perspectives. What is this? What else could it be?
- Intentionally consider other explanations.

Decision Reflection
Identify in pairs a significant field decision you’ve made in last year and the process that you went through in making it.
- Use a decision making model to identify factors you used in making this decision.
- Can you identify one trap in which you fell, or to which you are susceptible?
- What emotional risk do you feel when evaluating the decision you made?

Action Plan
- 5 minutes, individually on paper:
  - Please describe three measurable steps that you can take to develop judgment in your staff.
  - What will your challenges be?
  - Name one way that your organization is currently good at developing staff judgment.

Wrap Up
Workshop Goal:
To help you become a more skilled and astute coach of decision making skills when supervising your staff.

Two frameworks to remember:
1. To develop judgment in your staff, you need to work at three levels:
   1. Organizational structure and culture.
   2. Coaching
   3. Personal reflection.
2. To coach effectively while supervising you need to:
   1. Think analytically.
   2. Use intuition to gather more information.
   3. Follow through to a clear conclusion.
Where to find these models

Subjective/Objective Accident Potential: NOLS Risk Management for Outdoor Leaders and NOLS Wilderness Educator Notebook

Likelihood/Consequence Graph: NOLS Wilderness Educator Notebook

Peer Group Decision Making: NOLS Leadership Educator Notebook or NOLS Risk Management for Outdoor Leaders

Group Decision Making Traps: NOLS Leadership Educator Notebook and NOLS Risk Management for Outdoor Leaders

Individual Decision Making Strategies: NOLS Leadership Educator Notebook and NOLS Risk Management for Outdoor Leaders

Individual Decision Making Traps: NOLS Leadership Educator Notebook and NOLS Risk Management for Outdoor Leaders

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Protocol, Algorithms, Decision-Aids

Travel Plans, Evacuation Plans

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Has the organization given thought to what their standards for judgment might be?

Outside of a clear blunder, we are evaluated throughout our careers on subjective but communal perceptions of how we handle situations.

What is the standard for an outdoor leader? Avoiding harm to the health or wellbeing of a student or staff member seems a clear boundary. Harm to the environment? Harm to the equipment? Failure to achieve your educational objectives?

How do we learn what the standard for our judgment will be? Random absorption of organizational culture? Intentional instruction?

How does your organization handle the fact that people make mistakes, and sometimes these mistakes have consequences? Is there an atmosphere of learning, or is punitive, fear and unapproachable?

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Restraints at NOLS on Developing Judgment

- “Rules are for Fools.”
- “Technical Courses can’t teach judgment.”
- The NOLS Culture of “Doing” all the time.
- Imbalance between task and process.
- Lack of reflection.

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The Kolb Learning Cycle
A method for choosing a group decision-making style.

Potential Causes of Accidents in Outdoor Pursuits

<table>
<thead>
<tr>
<th>Potentially Unsafe Conditions Due To:</th>
<th>Potentially Unsafe Acts Due To:</th>
<th>Potential Errors in Judgment Due To:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Falling Objects (Rocks, etc)</td>
<td>Inadequate Protection</td>
<td>Desire to Please Others</td>
</tr>
<tr>
<td>Inadequate Area Security</td>
<td>Inadequate Instruction</td>
<td>Trying to Adhere to a Schedule</td>
</tr>
<tr>
<td>(Physical, Political, Cultural)</td>
<td>Inadequate Supervision</td>
<td>Misperception</td>
</tr>
<tr>
<td>Weather</td>
<td>Unsafe Speed (Fast/Slow)</td>
<td>New or Unexpected Situation</td>
</tr>
<tr>
<td>Equipment/Clothing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swift/Cold Water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animals/Plants</td>
<td>Poor Position</td>
<td>Distraction</td>
</tr>
<tr>
<td>Physical/Psychological Profile of</td>
<td>Unauthorized/Improper Procedure</td>
<td>Miscommunication</td>
</tr>
<tr>
<td>Participants and/or Staff</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A method designed by Ian McCammon. NOLS Leadership Educators Notebook 2004

How To Choose Decision-Making Style Based On Hersey-Blanchard (Modified)

Potential Causes of Accidents in Outdoor Pursuits with a few heuristics...

From Dan McCammon. NOLS Leadership Educators Notebook 2004

A matrix designed by Dan Meyer (1979) and edited by Jed Williamson (1989-2008) ©