Decision-Making &
Judgment

WRMC Conference
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Wilderness Medicine Institute of NOLS
National Outdoor Leadership School

- Founded in 1965.
- Leadership, teamwork, outdoor skills, expeditioning.
- 3000 field expedition students per year.
- 150,000 program days.
Wilderness Medicine Institute of NOLS

• First course in 1990.
• Teach WFA, WFR, WEMT and advanced courses.
• 13,000 students/yr.
  • 15 countries.
• 4 languages.
Goals

• Mindful Practice
• Decision-Making Models
• Human Hazards
• Expertise
• Making Good Decisions
“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
Mindful Practice

• The ability to purposefully observe ourselves in the midst of the complexity and chaos of the moment.

• The presence of mind to be open, curious, flexible and present when faced with anxiety, uncertainty and chaos.
Decision-Making Models

- Rules of Thumb (Heuristics)
- Protocols
- Analysis
- Expertise
Rules of Thumb

- Heuristics
- Mental shortcuts
- Problem solving aids

- Limited by
  - the accuracy or relevance of the rule of thumb.
  - accuracy of the pattern recognition.
Protocols

- Pre-determined decisions
- Recipes

- Limited by
  - the relevancy and accuracy of the protocol.
identify objectives

examine available information

compare alternatives

decide

From Ian McCammon. NOLS Leadership Educators Notebook 2004
Information Gathering

• Rational Choice Model
  o Gather information, consider alternatives, decide.

• Limited by
  o biases in selection and observation.
  o the illusion of thoroughness.
Expertise

perceive the situation

collect more data

recognized as typical?

yes

recalled response

mental simulation

action

no

experience base

Intuition/Pattern Recognition

From Ian McCammon. NOLS Leadership Educators Notebook 2004
Expertise

- Experience-based
- Pattern Recognition
- Naturalistic Decision Making
- Mental Simulation

- Limited by
  - actual experience.
  - flawed patterns.
  - lenient learning environments.
Break

• Questions?
• Observations?
• Comments?
• Critique?
Human Hazards

- Errors of Skill
- Errors of Perception
- Errors of Thought
Human Hazards

• Errors of Skill
  o Incomplete mastery of skills
  o Miscommunication
  o Wicked environments
Human Hazards

- Errors of Perception
  - Pattern Recognition Errors
  - Illusion of Attention
  - Illusory Causation
Human Hazards

• Errors of Thought
  o Illusion of Knowledge
  o Illusion of Cause
  o Emotional Hooks
Break

• Questions?
• Observations?
• Comments?
• Critique?
The Expertise Model
(Revisited)
Making Good Decisions

- Use protocols
- Situational awareness
- Tolerate uncertainty
- Be self-aware

- Use your team
- Communicate
- Seek feedback
- Get good info

Be mindful and intentional
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