

Decision-Making & Judgment

WRMC Conference
2011

Tod Schimelpfenig & Gates Richards
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.

**NOLS FIELD MEDICAL PROTOCOLS:
DRUG ORDERS, FIELD TREATMENT PRACTICES & EVACUATION GUIDELINES
2010 Master Edition**

By Herb Ogden, M.D. and Tod Schimelpfenig, Drew Leemon, editor

The NOLS Field Medical Protocols are the exclusive property of NOLS and may be used only by NOLS instructors while leading NOLS courses or participating on NOLS sanctioned expeditions. The protocols provide guidance to NOLS instructors to use the listed prescription drugs and treatment protocol only when working for NOLS or participating in NOLS sanctioned expeditions. The contents of this document are not to be copied or reproduced in any form without written permission from NOLS. Copyright 2010 all rights reserved.

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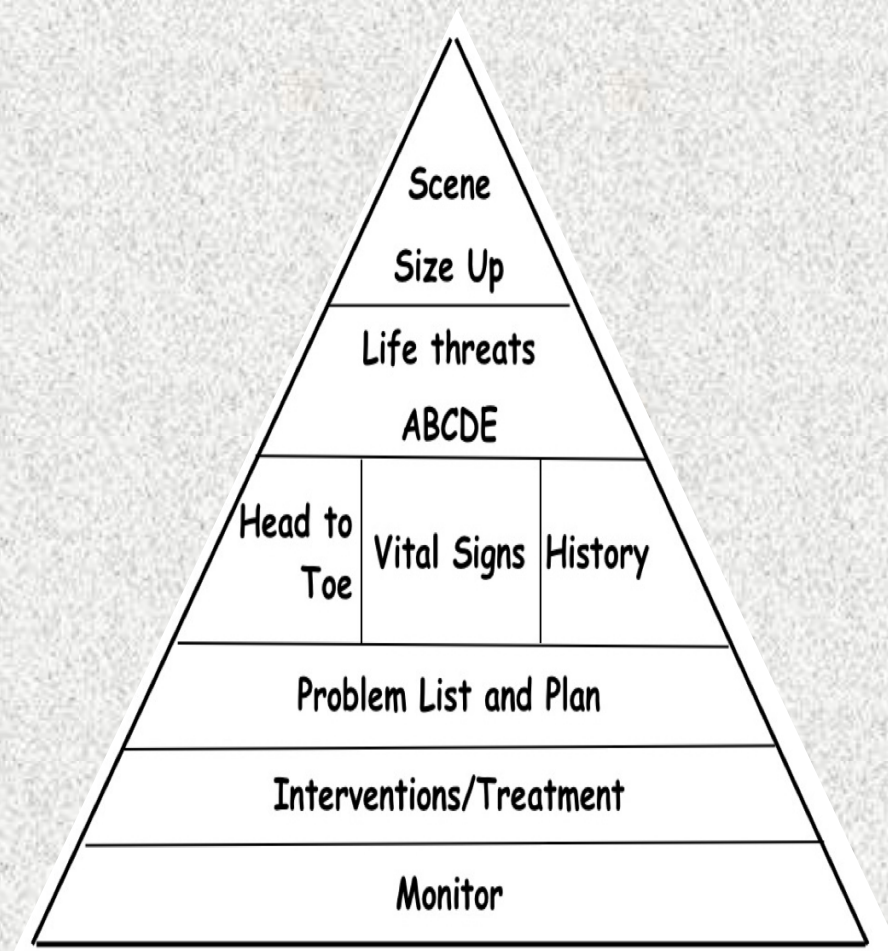
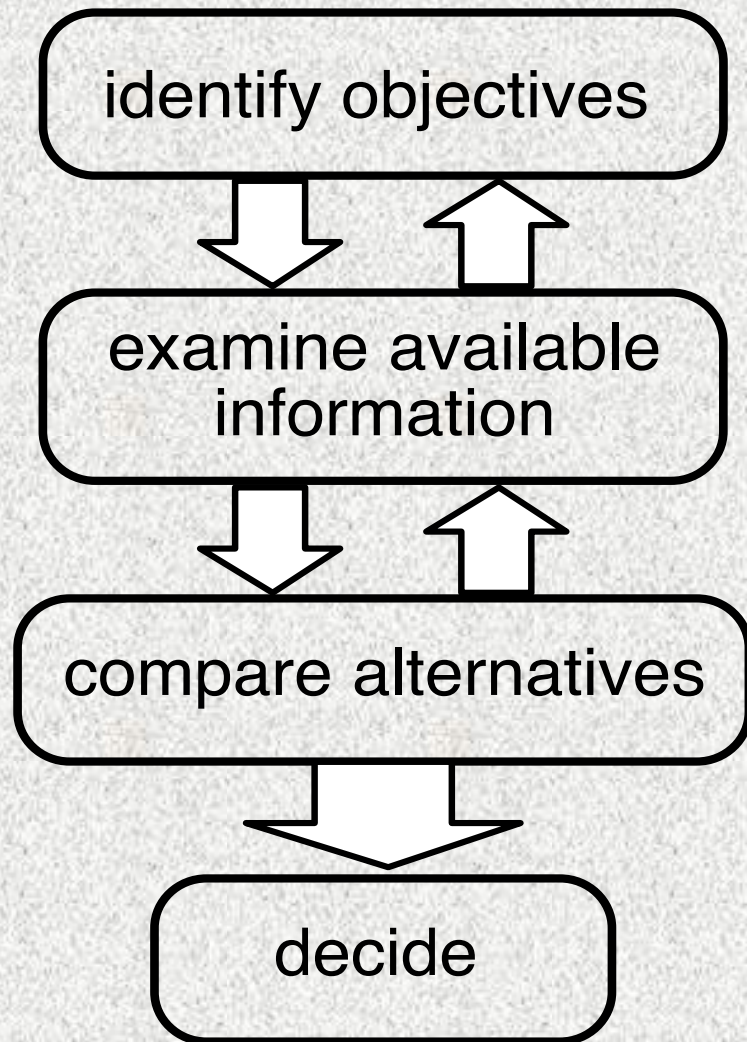
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SUPPLEMENTS

These supplemental medications listed on the next page are in addition to or replacements for the standard medications provided for each course and are intended to address medical conditions unique to certain program areas or are provided because medications available in the U.S. are not available in other countries. These lists of supplements correspond with the various location editions of the protocols

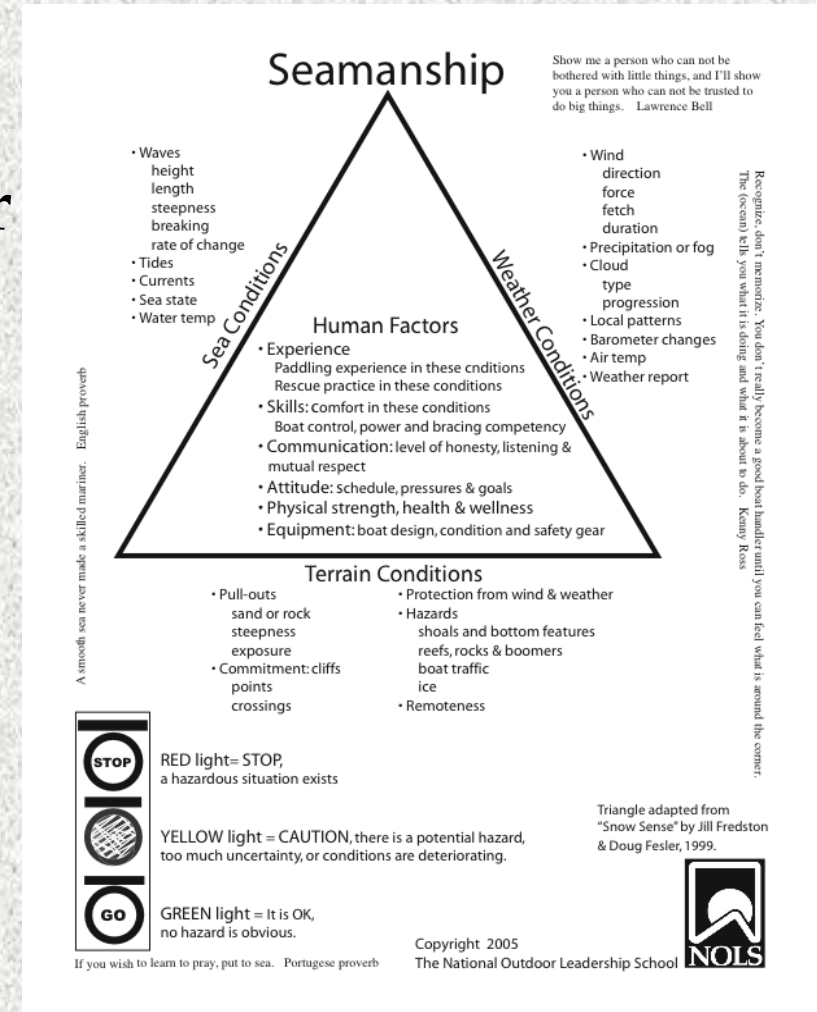
Analysis



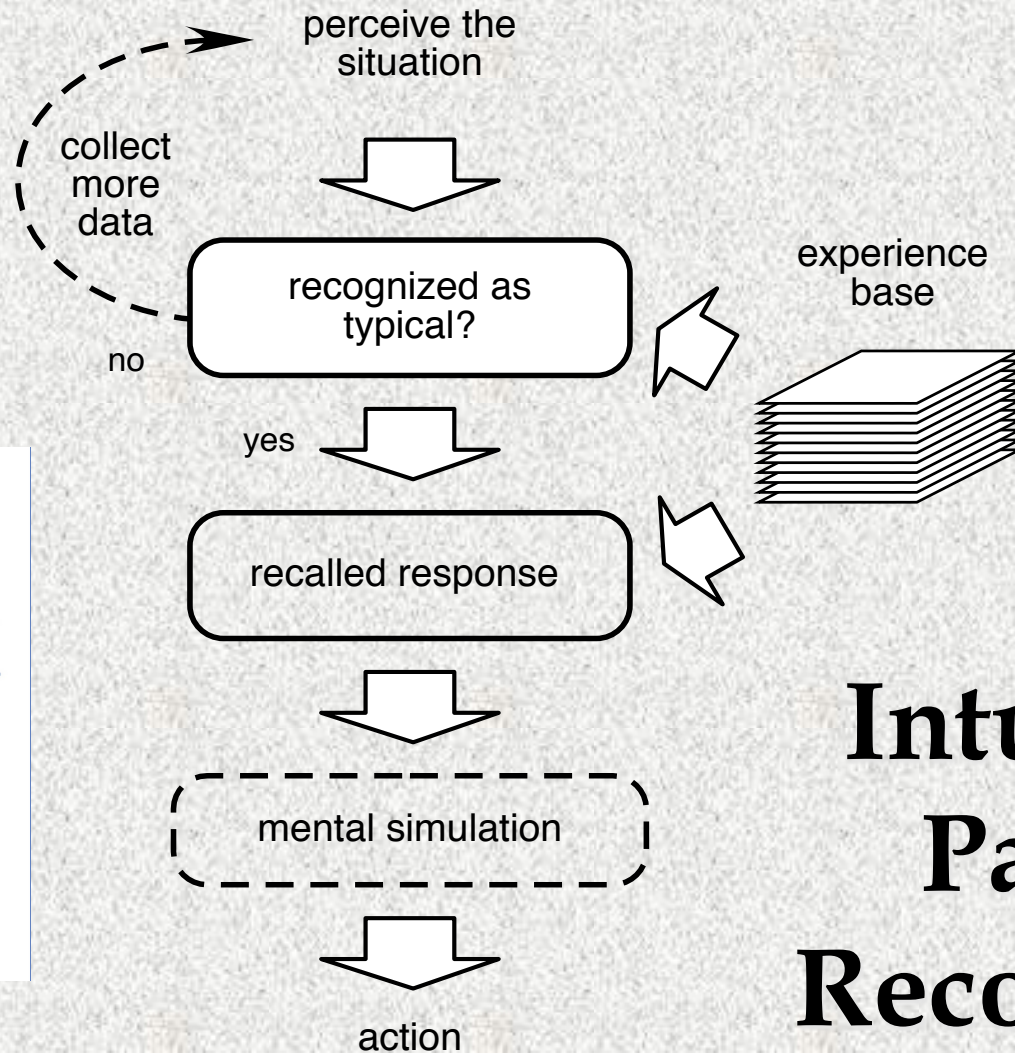
Information Gathering

- Rational Choice Model
 - Gather information, consider alternatives, decide.

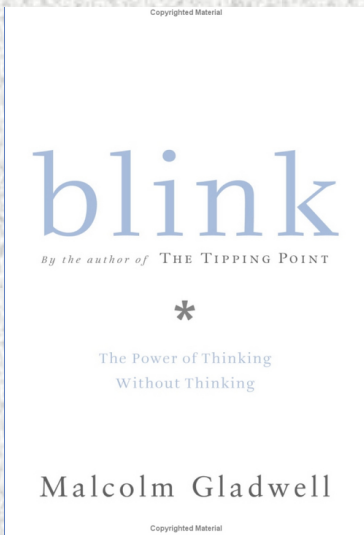
- Limited by
 - biases in selection and observation.
 - the illusion of thoroughness.



Expertise



Intuition / Pattern Recognition



From Ian McCammon. NOLS Leadership Educators Notebook 2004



Unconscious

Conscious

Rational

Sex, Drugs and White Death. McCammon 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

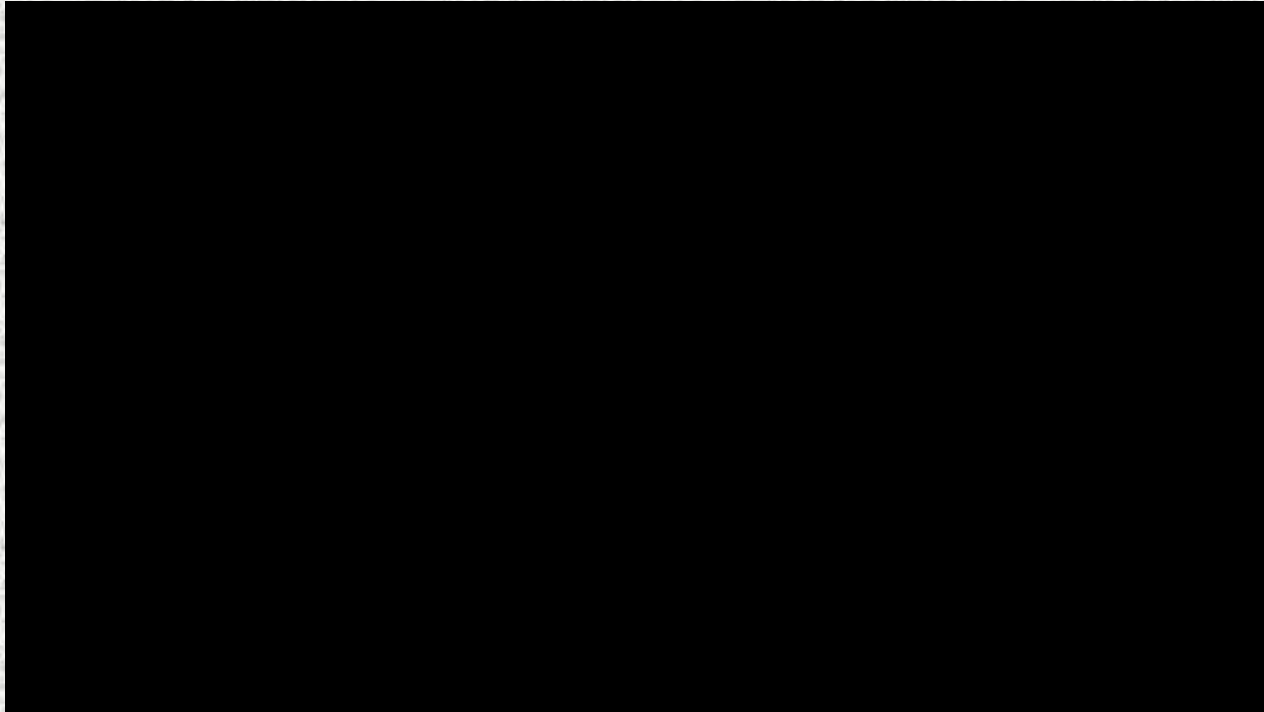
- Errors of Skill



- Incomplete mastery of skills
- Miscommunication
- Wicked environments

Human Hazards

- Errors of Perception



- Pattern Recognition Errors
- Illusion of Attention
- Illusory Causation

Human Hazards

- Errors of Thought

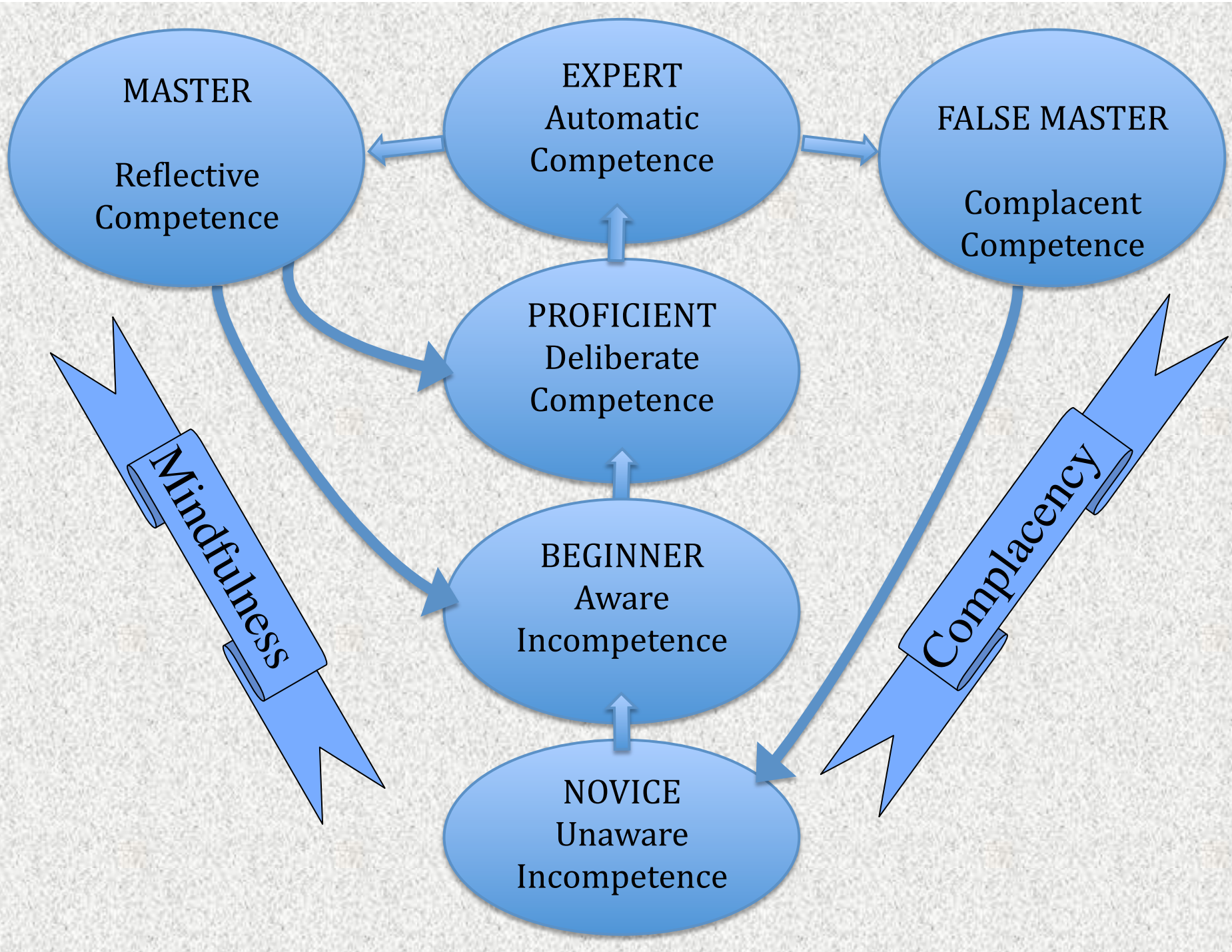


- Illusion of Knowledge
- Illusion of Cause
- Emotional Hooks

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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