Learning from Escaped Prescribed Fire Reviews

A Joint Fire Science Program Project
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Project Goal

Identify ways to further organizational learning in the context of Prescribed Fire
Project Objectives

- Investigate existing learning
- Identify ways to further organizational learning
Project Methods

Workshops

Small Inter Agency workshops organized around concept of Dialogue

- Portland, Denver, Salt Lake City, Tucson, Florida
- 2 day workshops
  - < 25 people
  - Range of responsibilities (ground – WO)
  - Range of agencies

Analysis

Instrumental: What is said – Compare against concepts of organizational learning, resiliency engineering, high reliability, human performance

Systems: How things are said – Communications, Dialogue
Project Products

- Recommendations – based on understanding of strengths, weaknesses, gaps, opportunities when/where/how learning currently occurs
- Podcasts – based on tips and techniques identified
- Peer review articles
## Learning: our sandbox

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<th>Review Process</th>
<th>Review Product</th>
<th>Transfer Activities</th>
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**INSIGHT – ‘aha’**

**ACTION – new behavior**
Types of conversation

- **Generative learning**
  - Goal: Developing emerging possibilities
  - Tone: Present to self, other, deep connections

- **Mutual Learning**
  - Goal: Understanding
  - Tone: Speaking to be understood
  - Listening to understand

- **Serial monologue**
  - Goal: Info exchange
  - Tone: Talking nice

- **Dueling monologues**
  - Goal: Persuasion
  - Tone: Speaking to persuade
  - Listening to defend

**Focus on group**

**Focus on individuals**

*Sources: ActionDesign, Dialogos, Scharmer*
Workshop Structure

• Day 1 – Drilling down into learning
  ✓ Personal stories of insight and action

• Day 2 -- Barriers/facilitators to learning
  ✓ Processes, Products, Transfer methods
Preliminary results

Agency Affiliation

- FS
- NPS
- BIA/Tribe
- FWS
- BLM

Experience

- Both subject and team member?
- The line officer accountable for a review?
- A member of a review team?
- The subject of an escaped Rx review?
One lens for assessing learning

Single-Loop Learning
Most common style of learning is really just problem solving — improving the system as it exists.

Techniques,
Goals, Values
and Strategies
What We Do

Results
What We Get
Where is learning occurring?

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Different audiences, different lessons, different phases
How are products being used?

- discussed an escape in a refresher course
- held a FLA
- conducted a sand-table exercise
- held a discussion with your burn team
What do we hear about the current Process?

Current InterAgency Guidelines: at a minimum cover 7 elements – burn plan, qualifications, causal factors

• From the ground
  – CP highlights the Burn Plan, which consists of ‘fluff’ and sideboards, but is not an operational plan. Therefore, most reviews do not provide feedback on the area of our most intensive focus: the burn operation itself
What do we hear about the current Process?

Current InterAgency Guidelines: at a minimum cover 7 elements – burn plan, qualifications, causal factors)

• From management
  – CP provides the means to meet the Interagency Guidelines and Agency Policy: and often through this, the means to explain the incident to external audiences - ie, our responsibility
How can we improve learning?

We need a system!

• An easy, institutionalized reporting system
  – Track all outcomes
    • the good, routine, bad and ugly
  – Quick, efficient collection/dissemination
  – Check for trends at an organizational level

• A clear, nested and aligned system of reviews
  – Don’t mix pursuit of cause with pursuit of learning
How can we improve learning?

We need a system!

• Rethink review teams
  – Direction, tone and training
  – Staff for skills to hit intended audience

• A defined dissemination system
  – Create a buzz about the product
  – Develop a systematic notification system
  – Tailor transfer to specific audience(s)
    • Peer-to-peer
    • Web-based
  – Train those who transfer lessons
  – Single clearinghouse with cross-references
Reflecting though the lens of learning

Existing strengths

Single Loop
Adaptive Learning

Deepening mastery – particularly personal
• burn plan development, review
• fire environment
• operations
• human interactions

Double Loop
Transformational Learning

Rethinking the purpose of reviews
• for whom?
• how tiered?

Exploring new processes
• FLA/APA
• transfer mechanisms/activities
Reflecting though the lens of learning

Possible gaps and opportunities

**Single Loop**

*Adaptive Learning*

Deepening mastery – collective and cross-scale

**Double Loop**

*Transformational Learning*

Developing system’s perspective

• defining a system
• patterns- in learning, gaps
• connections
Thank you!
Questions?