



Learning from Escaped Prescribed Fire Reviews

**A Joint Fire Science Program Project
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**PI's: Anne Black, Dave Thomas,
Jim Saveland
Jennifer Ziegler**

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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

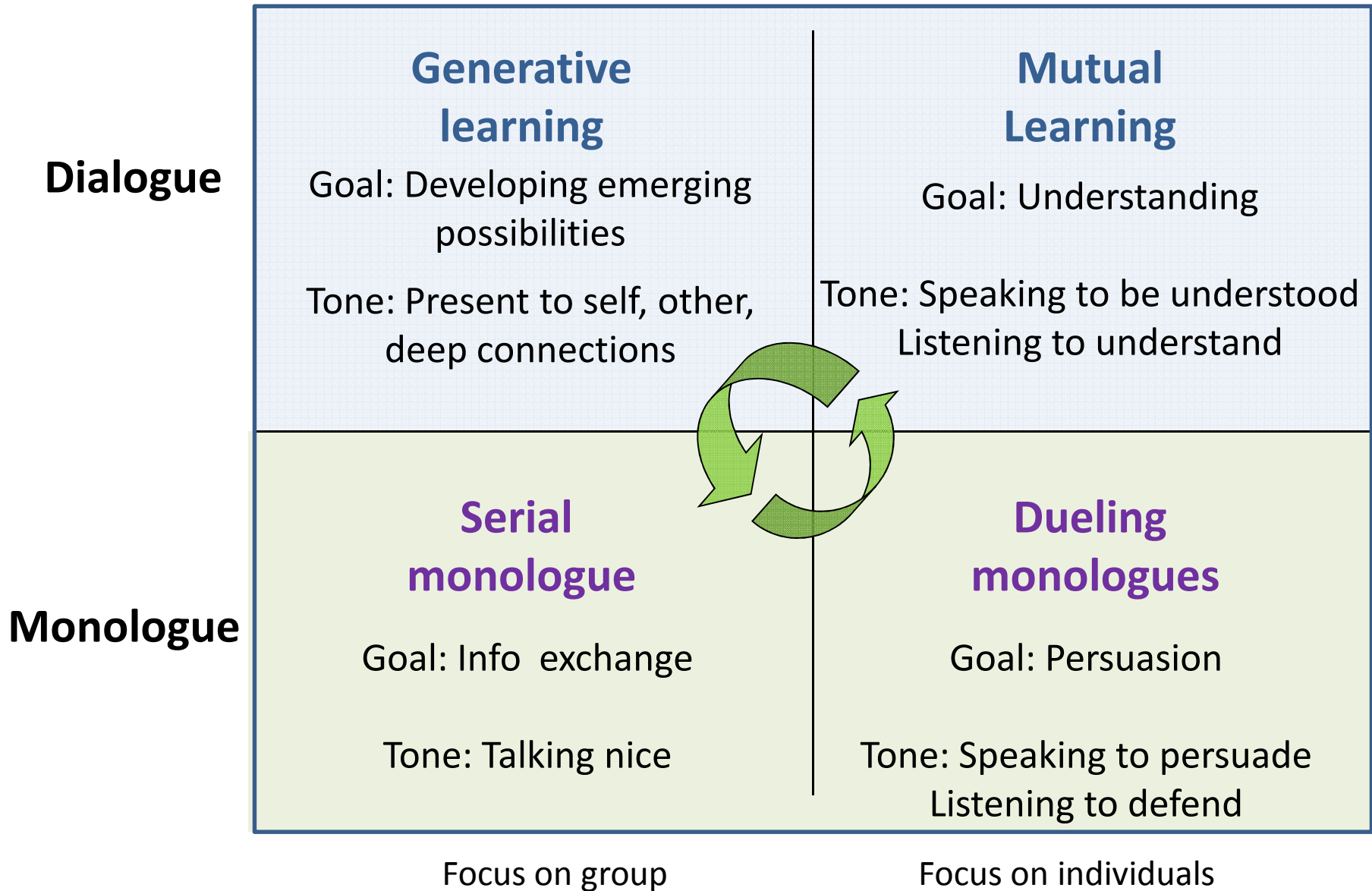
- Recommendations – based on understanding of strengths, weaknesses, gaps, opportunities when/where/how learning currently occurs
- Podcasts – based on tips and techniques identified
- Peer review articles

Learning: our sandbox

| | Event | Review Process | Review Product | Transfer Activities |
|--------------|-------|----------------|----------------|---------------------|
| Individual | | | | |
| Burn Team | | | | |
| Review Team | | | | |
| Peers/Units | | | | |
| Organization | | | | |

INSIGHT – 'aha'
ACTION – new behavior

Types of conversation

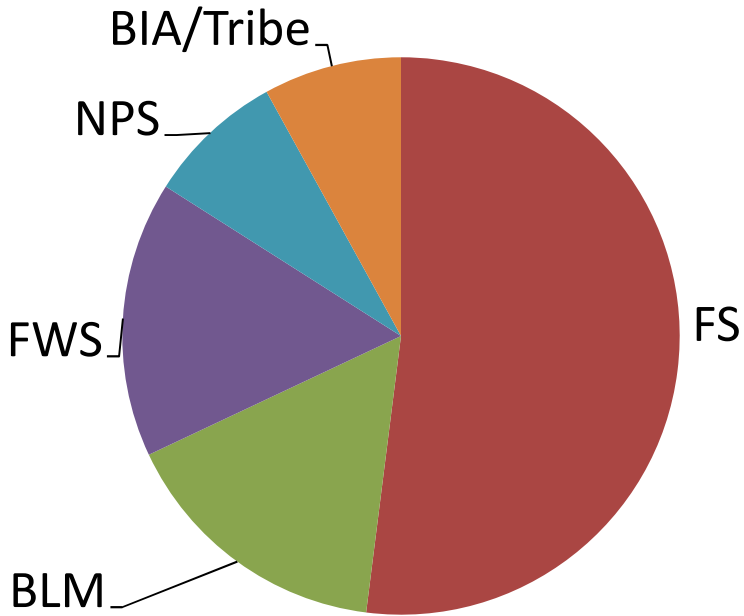


Sources: ActionDesign, Dialogos, Scharmer

Workshop Structure

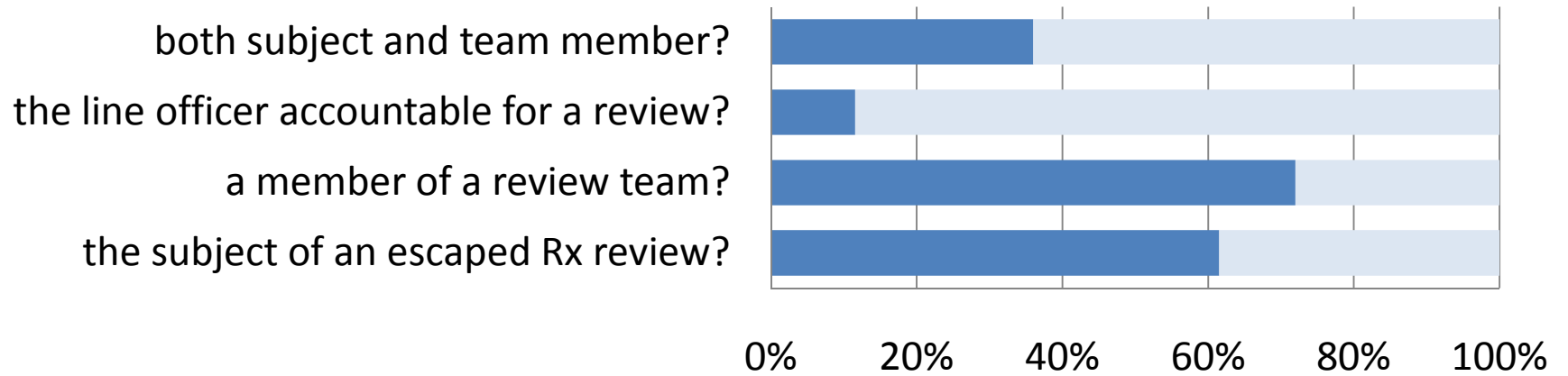
- Day 1 – Drilling down into learning
 - ✓ Personal stories of insight and action
- Day 2 -- Barriers/facilitators to learning
 - ✓ Processes, Products, Transfer methods

Preliminary results



Agency Affiliation

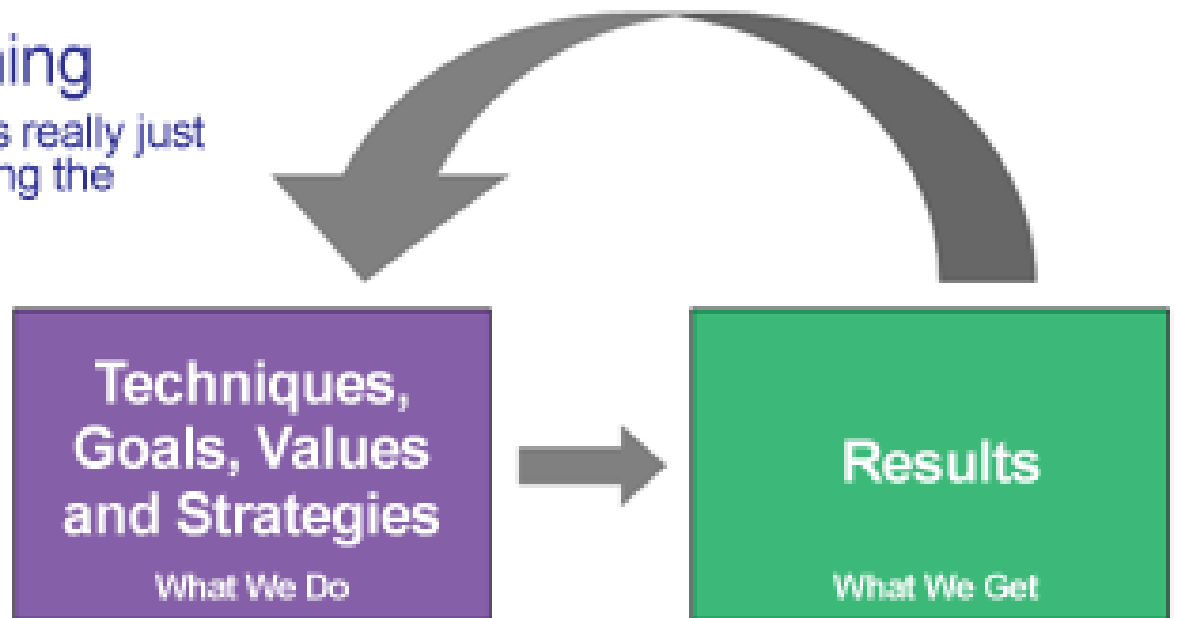
Experience



One lens for assessing learning

Single-Loop Learning

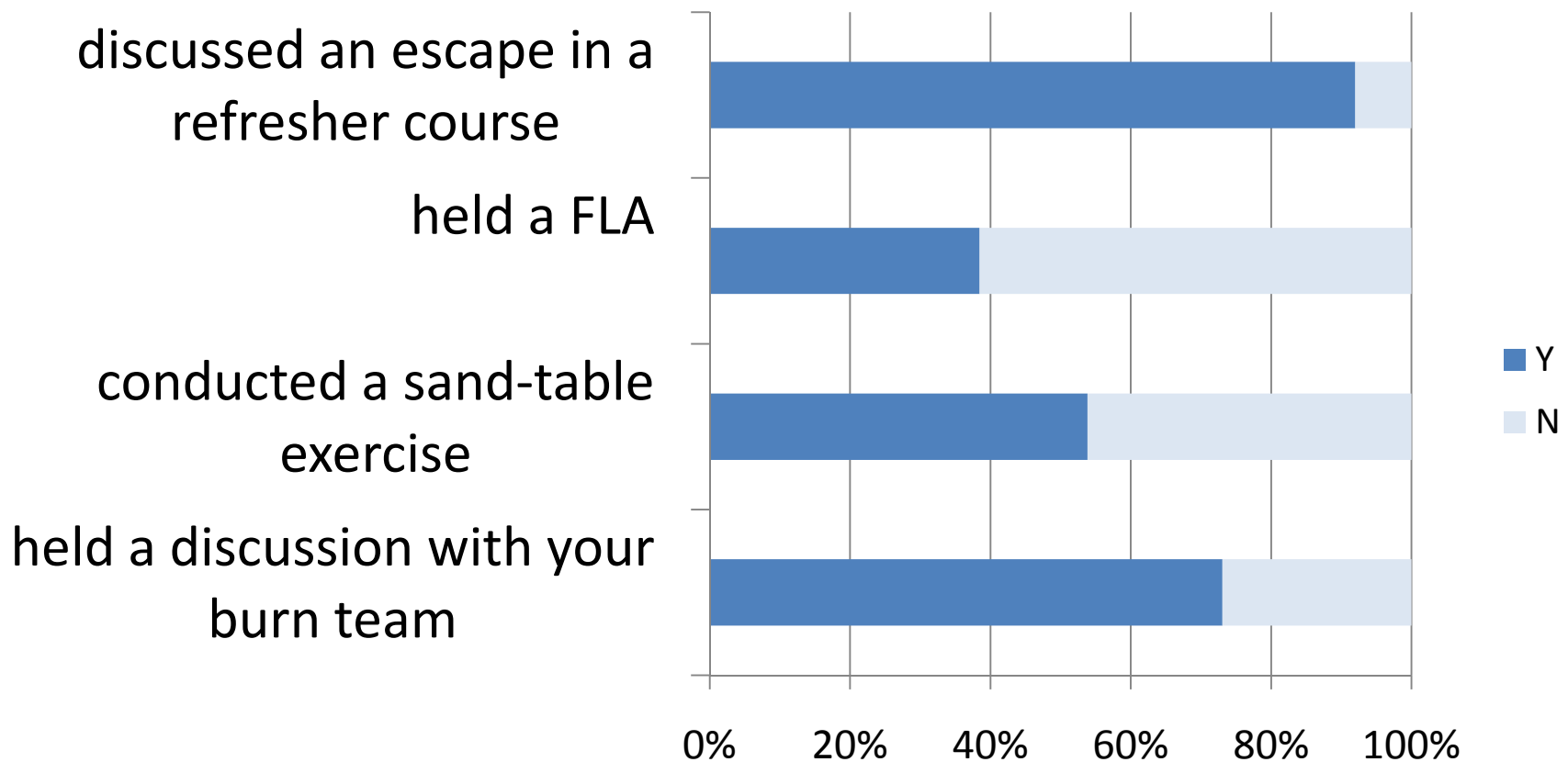
Most common style of learning is really just problem solving — improving the system as it exists.



Where is learning occurring?

| | Event | Review Process | Review Product | Transfer Activities |
|--------------|-------|--|----------------|---------------------|
| Individual | ✓ | ✓ | ✓ | ✓ |
| Burn Team | ✓ | different audiences, different lessons, different phases | | |
| Review Team | | | | |
| Peers/Units | | | ✓ | ✓ |
| Organization | | ✓ | | |

How are products being used?



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?

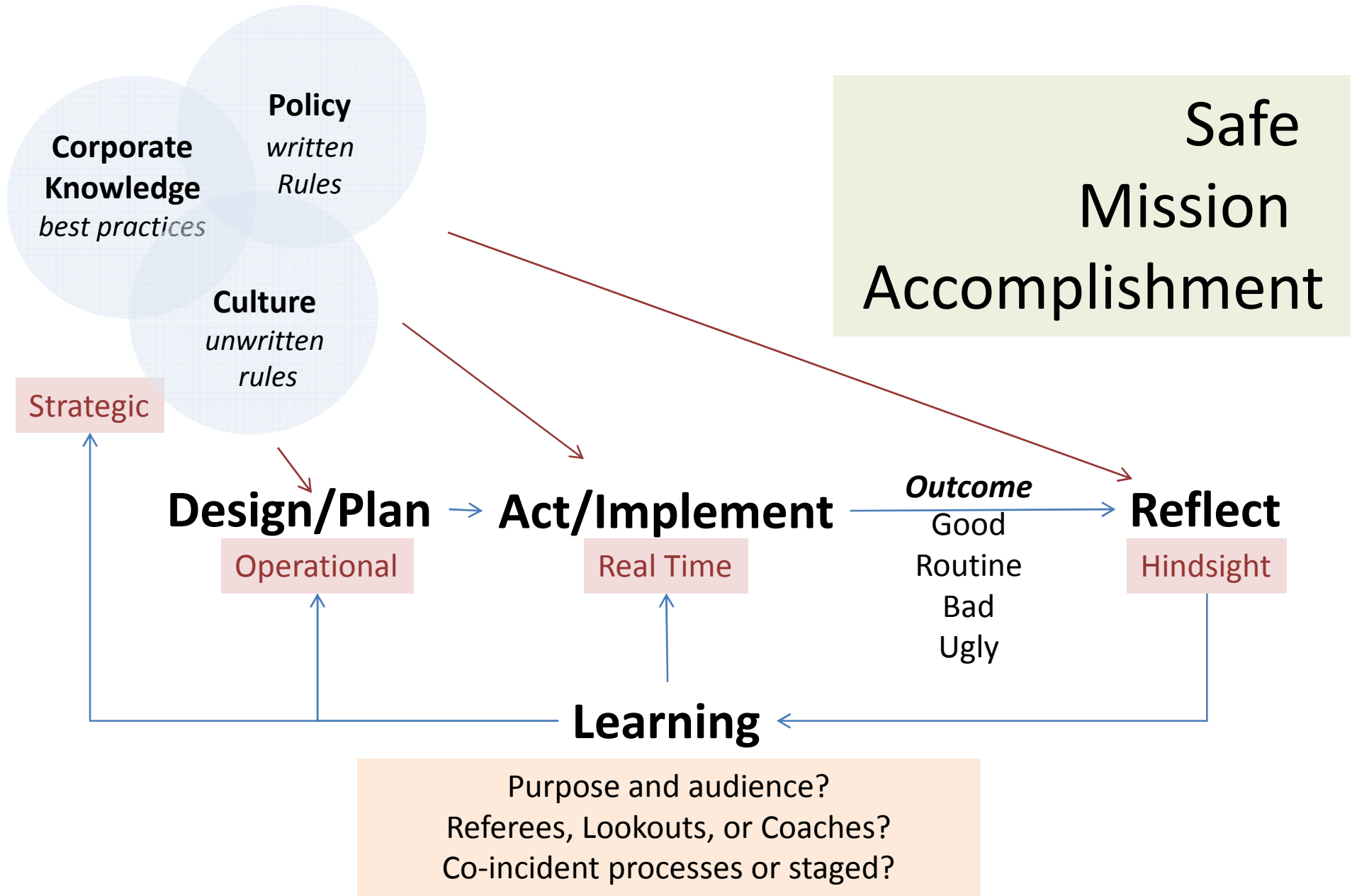
Current InterAgency Guidelines: at a minimum cover 7 elements – burn plan, qualifications, causal factors)

- 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



Strategic

Design/Plan

Operational

Act/Implement

Real Time

Outcome

Good
Routine
Bad
Ugly

Reflect

Hindsight

Learning

Purpose and audience?
Referees, Lookouts, or Coaches?
Co-incident processes or staged?

Safe Mission Accomplishment

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 through 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?

