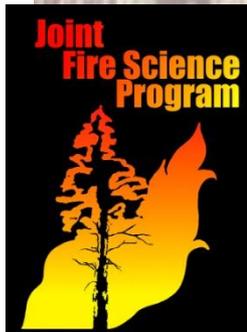


Learning from Escaped Prescribed Fire Reviews

A Joint Fire Science Program Project
(JFSP # 10-1-05-1)

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NWCG Fuels Management Committee
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Boise, ID



Today's Objective

Overview of methods, participants, results, interpretation, discussion.

- Project overview
 - Objectives
 - Methods
 - Participants

- Results – focusing on data resulting in recommendations
 - illustrate key themes

- Concepts to help interpret and use results

- Discussion

Project Objectives

- ❖ Investigate existing learning
- ❖ Identify ways to improve organizational learning

Methods

Inter Agency Workshops

organized around concept of Dialogue

Held 5:

- Portland – January
- Denver, Salt Lake City - March
- Tucson - April
- Florida – July

2 day workshops

- < 25 people
- Range of responsibilities (ground – WO)
- Range of agencies

Workshop Flow

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

How do we define learning?

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

INSIGHT – 'aha'
ACTION – new behavior

How do we set the tone for learning?

Dialogue

Generative learning

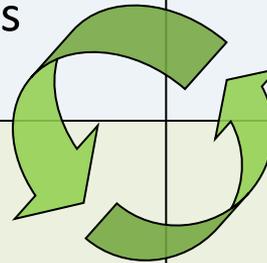
Goal: Identify emerging possibilities

Tone: Present to self, other, deep connections

Mutual learning

Goal: Understanding

Tone: Speaking to be understood
Listening to understand



Monologue

Serial monologue

Goal: Info exchange

Tone: Talking nice

Multiple monologues

Goal: Persuasion

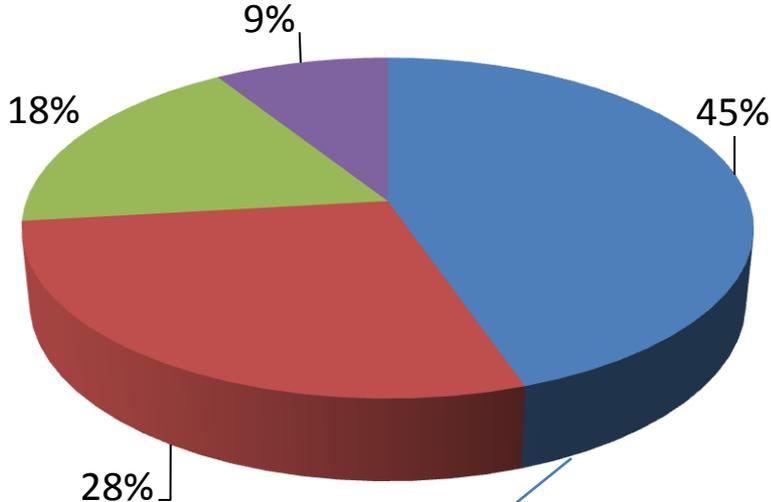
Tone: Speaking to persuade
Listening to defend

Focus on group

Focus on individuals

Adapted from: ActionDesign, Dialogos, Scharmer

Organizational Level



67 Total

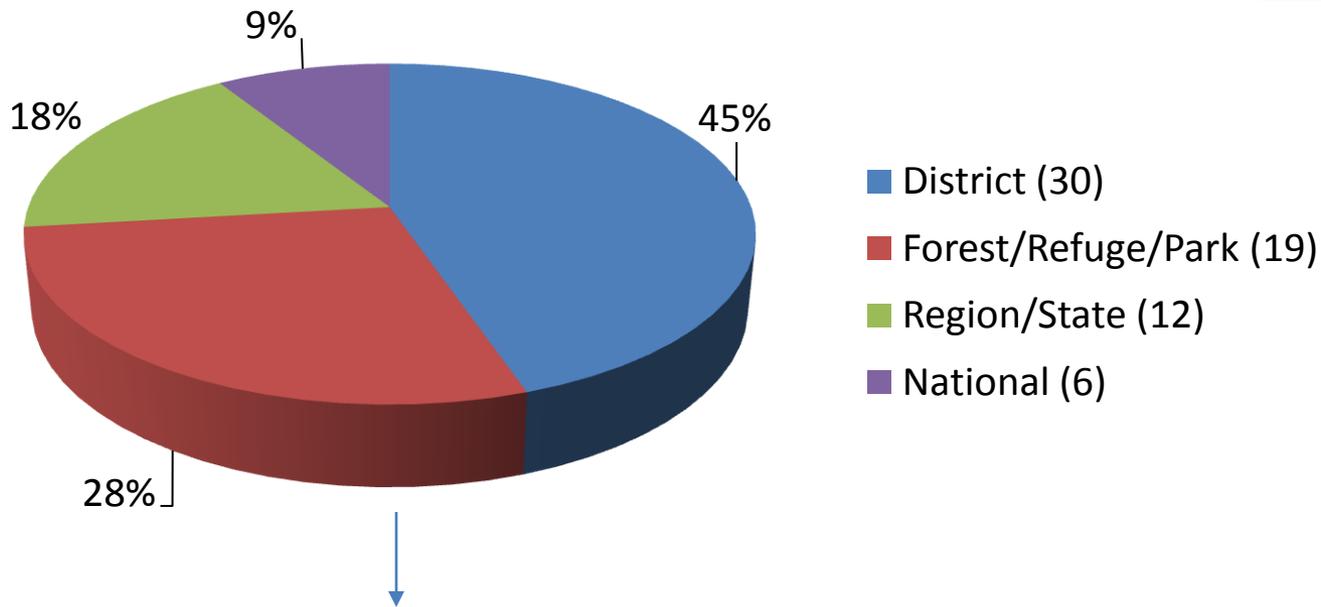
- District (30)
- Forest/Refuge/Park (19)
- Region/State (12)
- National (6)

DISTRICT

NFS	22
NPS	5
FWS	1
BLM	1
BIA/Tribe	0
AD	1

- District/Zone AFMO (5)
- District/Zone FMO (8)
- District Fuels Specialist (4)
- Zone Fuels specialist (2)
- Zone Fire Staff Officer (1)
- Engine Captain (2)
- Seasonal (1)
- Smokejumper (1)
- WF Module (2)
- Hotshot , Asst Sup (1)
- AD (1)
- District Ranger (2)

Organizational Level

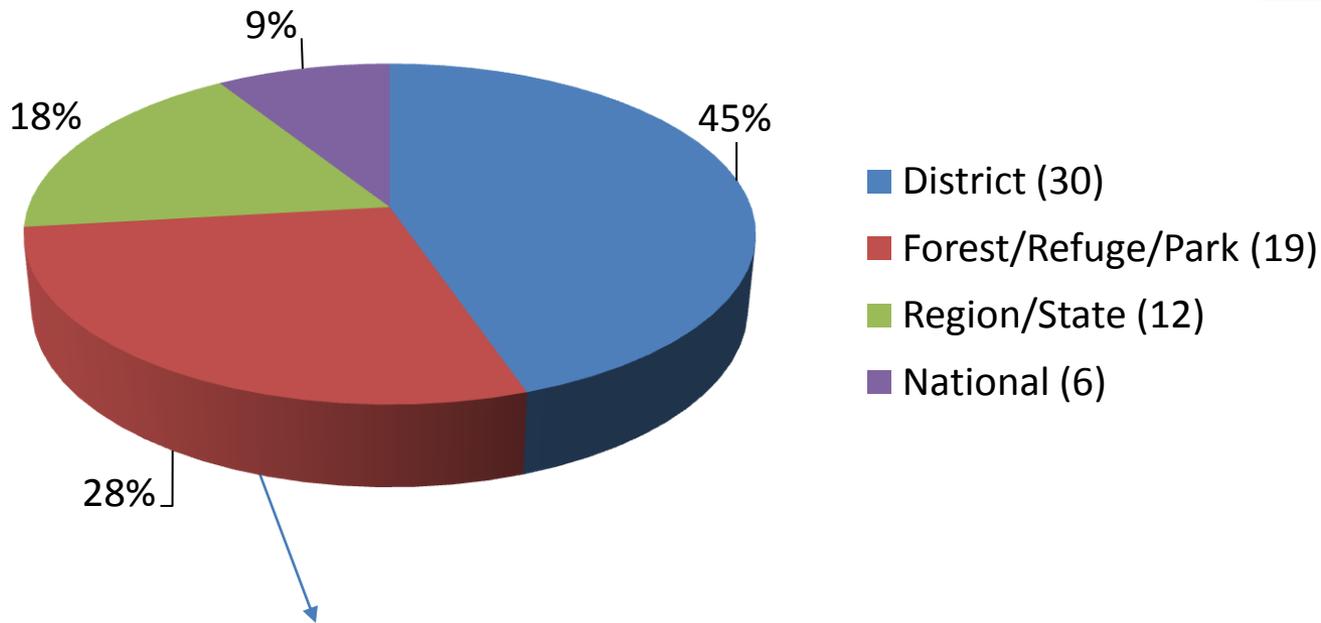


FOREST/REFUGE/PARK

NFS	13
NPS	0
FWS	4
BLM	0
BIA/Tribe	1
TNC	1

Multi-refuge FMO	(4)
Forest /Tribe FMO	(6)
Forest Fuels Specialist	(5)
Forest Fuels Planner	(1)
Forest Fire Staff Officer	(1)
Burn Boss	(1)

Organizational Level

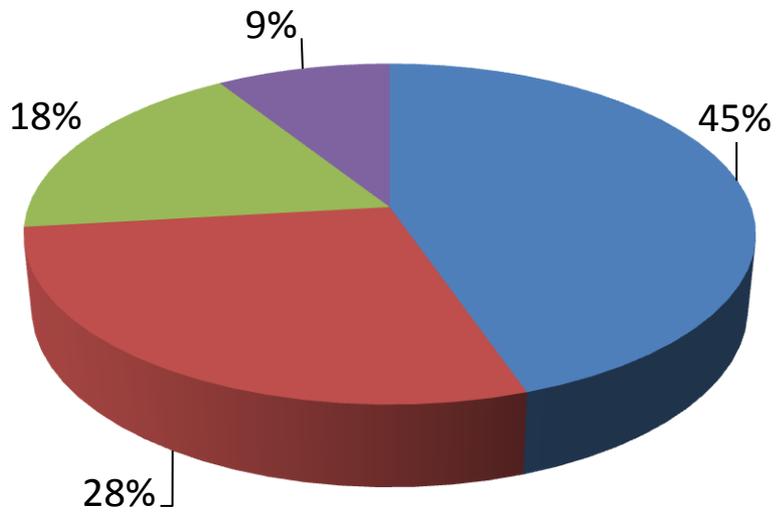


REGION/STATE

NFS	5
NPS	1
FWS	4
BLM	1
BIA/Tribe	1
Other	0

Regional/Deputy Regional FMO (3)
State/Regional Fuels (6)
Regional Fire Ecologist (1)
Regional Safety (1)
Regional Asst Dir F&AM (1)

Organizational Level



- District (30)
- Forest/Refuge/Park (19)
- Region/State (12)
- National (6)

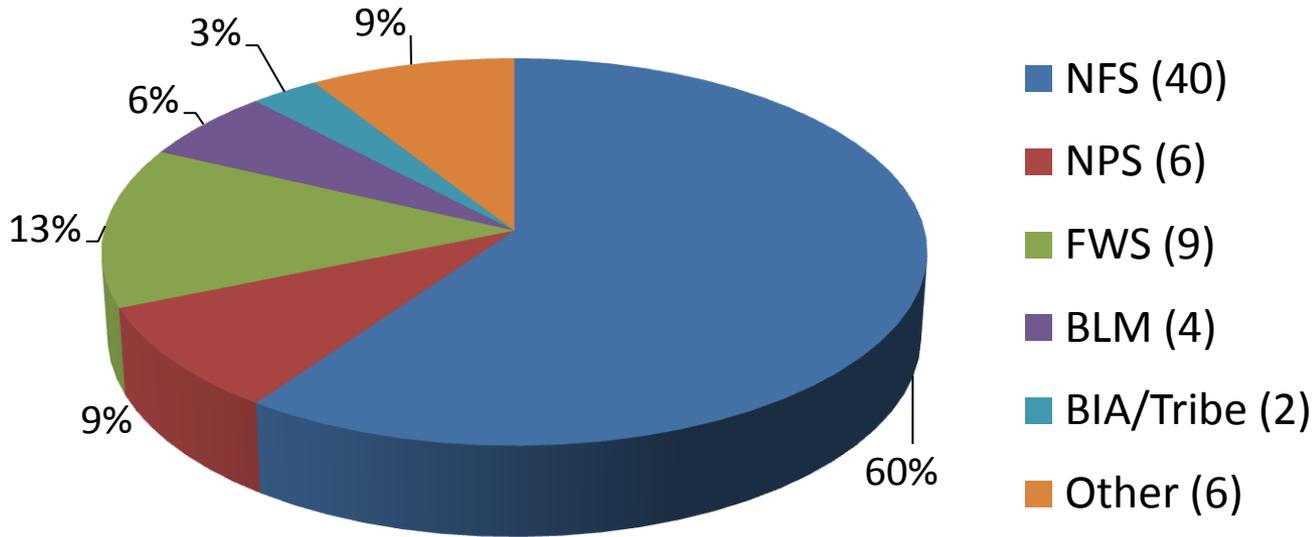


National

BLM	2
TNC	1
FUTA	1
PFTC	1
LLC	1

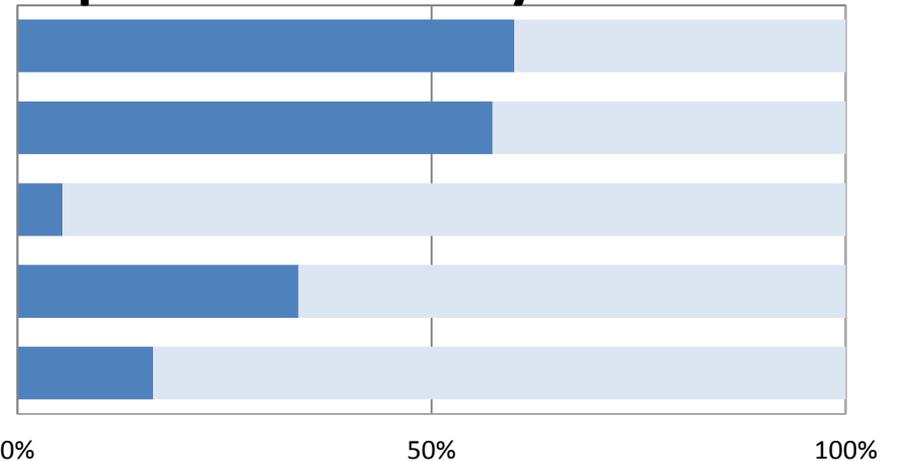
Agency

Participants



Experience - Have you ever been:

- the subject of an escaped Rx review?
- a member of a review team?
- the line officer accountable for a review?
- both subject and team member?
- No experience



Data and Analysis Methods

DATA

ANALYSIS

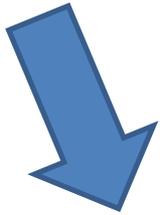
PRODUCT

Workshop notes
Flip-chart summaries



Workshop summary
Flip chart summary

Audio recordings



Transcribed QA/QC



a) Application Oriented

- syntheses
GTR & chapters
presentations

- tips and techniques
Pod-casts

- recommendations

b) Theory Oriented

- peer-review papers
- conference presentations

Analysis

Instrumental: (What) –

- * Synthesize and describe major types of learning
 - when/how/who/why
 - facilitators/barriers
 - recommendations

Systems: (How /Why) –

- * Use theory as lens
 - high performance: resiliency, learning
 - communications: rhetoric, dialogue

Results

Major themes relate to:

- Policy and Guidance
- Conducting a Review
- Transferring/Institutionalizing Lessons

drawn from points consistently made:

- across workshops
- across levels of the hierarchy
- across agencies

Illustrative Narrative- overview

“ I get a little confused, because we keep talking about learning. ... And I'd ask, who's supposed to be learning what? Because there's all these different levels.

There's the Burn Boss.

There's the Holding Boss.

There's a guy on the nozzle that could very well be learning something from it, and how they're going to learn it is going to depend a lot on where it's presented, how it's presented.

Agency Administrators want to learn something else.

Policymakers might want to learn something else.

So it's kind of like we take this thing, we make a document out of it and put it on the website, and all of a sudden, presto, it's going to meet all of these different learning needs? It doesn't seem like that's possible. It seems like it's missing all of the boats by trying to get all of them at once.”

(FWS, Regional AFMO)

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Illustrative Narrative - overview

“ the bigger issue was for **the healing process** to start. It takes a mental, physical, **emotional toll** on everybody from the Burn Boss {uhhmmm} to the lighter to the Line Officer to the Fire Staff ...

... And to really get ...it behind you, ...[with] The report not being out, you're not able to get past it **to get closure**” *(USFS, Zone Fire Staff Officer)*

Audience: Who desires what?

Corrective (policy) Action: “What we’re looking for at our level is findings, recommendations that need to be addressed by policy change or something like that. “(*National Fire Ops, BLM*)

Personal improvement :“I was pretty disappointed with the [] report. I was looking at the review team as kind of the experts ...to come in and tell me, well, these are the tricks of the trade or whatever .. the [] report was written to teach other people what happened on the [unit]. It wasn’t written to teach the [us] how to be better, {ah, hmm.”
(*USFS, District Fuels Specialist*)

Info to train/coach: “I’m looking for ...something that I can maybe turn into a sand table exercise. ...from the actual players ... some kind of a bullet list that you can go through and sort of latch onto it.” (*NPS, Fuels Management Specialist*)

“**the story** is in the experience as well as all the decision-making leading up to lighting the match and following through with it...I want to hear the stories. “ (*Tribal FMO*)

Audience: Who desires what?

Due Diligence: “Number one through seven in the policy guide, {laughter} seriously. That’s what I need when I’m on the receiving end of one of those until such time as that policy changes at the minimum.”
(*USFS Regional F&AM*)

Trends: “Are there themes coming out that make our program very vulnerable in future planning and implementation and application?”
(*USFS, Regional Fuels*)

Audience: Summary

There is need for explanation AND learning

“We’re still a public agency. We still work for Congress. We still are subject to litigation. We’re still subject to public opinion, and if we don’t do the formal review process on incidents that happen, then I think our bosses, the American public, and Congress have a right to say, “What the hell are you doing?”

Now having said that, that’s that one audience. That’s the administrative, the bureaucratic, the legislative, the litigative audience. There’s the whole other part that’s how can we, for organizational learning, get better? And I think trying to use A to reach B may be our whole problem, and we can’t use that kind of document to reach these people and to get those lessons across.”

(USFS, Regional Fuels Specialist)

Summary of themes

Policy and Guidance

- General confusion about types of reviews; purpose and intent; flexibility; outcome
- General agreement that pursuing the seven
 - May be useful for WO, but not meeting field desires
 - But, may be due to perceived intent as opposed to specific elements.
- General desire for flexibility, scalability to review *all* types of outcomes
- General desire for learning oriented reviews focused on unit
- Desire ability to trend

Conducting a Review

- Several critical pieces of a successful review:
 - Line officer intent and direction to Review Team clear, transparent to unit
 - Approach matters – questions v. listening -- Review team training/skills
 - Meet local culture where it is in terms of their learning orientation

Transferring/Institutionalizing Lessons

- Desire for more effective transfer and incorporating lessons into practice

How to improve learning? - - - Policy and Guidance

- Don't mix pursuit of cause, the 7 elements, with pursuit of learning
 - Stage it or separate it
- Review 7 elements to assess if they augment or distract/impede a learning organization (how we react to unintended events will create or destroy a learning culture)
- Clearly describe the options, when to use

Clarify intent

“Do we have the objective of reviewing policy and checking the seven steps **or** do we have an objective to facilitate a learning culture within our organizations?” (*USFS, AFMO*)

Establish a learning oriented, collaborative Review Process

“Set up the review to analyze what happened, and it should be a negotiated thing, so both sides are comfortable with it coming in, and you're going to have a lot better from everybody's perspective coming out of it.” (*BIA, Regional Fuels*)

How to improve learning? - - Policy and Guidance

Review all types of outcomes - - - practice makes better

“when the AAR process first came about it took us a while to get where we were comfortable with really truly doing an AAR ... And this is more of a question. But if we reviewed more positive outcome, whatever the review process would be, whatever you wanted to call that, something more in depth than an AAR, something more formal than an AAR, something more documented than an AAR, and we reviewed our successes on a more routine basis, then when we had a negative outcome or a non-desirable outcome, would that process be comfortable? (USFS, Forest Fire Staff Officer)

Provide for some Review Product consistency

“if you have standardized reports, you know where to go to look for the points that you’re interested in, rather than if everyone comes up with a different format, a different order of things. You’re searching through the whole document to find what you want. “ (USFWS, FMO)

How to improve learning? --- conducting a review

Review Team composition - - focus on peers, needed expertise

“we need to put a lot of thought into the make up of those review teams. You need some level of somebody that understands the policy, understands the politics, can do the writing and the editing, and gets all that stuff, but boy, we need to really think about, if there’s a Squad Boss from a hotshot crew out there that’s the Burn Boss on the thing, having him to talk to one of his own, that they speak the same language, is huge just from the intimidation factor. *(BLM, National Fire Operations)*

“as long as it’s ... somebody who I see as doing the same things that I do so can understand, from my perspective whether I know them, whether they work in the same fuels or not, but I know that [X’s] a Burn Boss. I’m a Burn Boss. So we can talk. *(PFTC)*

Review Team tone

“we’ve got to get away from the bare bulb and rubber stanchion kind of, and that’s how they are, whether we intend to set them up like that or not.” *(BLM, National Fire Operations)*

How to improve learning? --- conducting a review

The Story – needs to be accurate

if we want the review to be a learning experience, the document needs to accurately reflect what was experienced by the people there on the ground and be credible to that. And if it's not, they're not going to learn from it. They're going to, you know, they're going to blow it off and say, that has nothing to do with what really happened. *(USFS District Ranger)*

The Story -- needs to be told chronologically not in hindsight

“an important thing coming out of a review is the understanding of the decisions that were made by the people that were involved at the moment. So decisions are made based on the information that's available at the time... And so really capturing what the people were thinking at that time based on I was standing on this knoll. This is what I saw....This is what was happening. So I made this decision, and then to me, that helps you be in their shoes, understand their decision space, because it's easy to look back and say, well, they should have done this, because this is how all that played out. But you don't know. You only know what you know at 14:34 right now. *(USFS Regional Fuels)*

How to improve learning? - - Transferring and Institutionalizing

PAY ATTENTION TO TRANSFER

Develop a personal connection to event:“If I can create a personal connection to it, it has a lot more relevance, and I’m likely to learn those lessons, rather than if it’s another report or even a video interview or something that I can’t make a connection to.” *(USFS, Forest FMO)*

Develop Transfer Mechanisms:“ there really isn’t that defined mechanism for getting the lessons learned on escaped prescribed fires out or even the review reports. “ *(USFS, Forest FMO)*

FOLLOW-UP

“Make sure those corrective actions happen, and let all this political stuff, drop it out of the equation and try and get people .. engaged with us.” *(BIA, Regional Fuels)*

How to improve learning?

Target the audience

Be clear about who the intended audience is and how review products will meet the needs of the intended outcomes.

Set the tone

- Be clear, collaborative, and transparent about intended outcomes and the process to get there.
- Staff the Review Team with expertise to achieve desired process and product outcomes.

Practice and Train

- Practice reviewing by looking at all outcomes
- Identify desired Review Team skill-set and train

Share and Compare

- Identify roll-up lessons and target these to a specific audience.
- Pick up someone else's review and use it to benchmark your organization.

Follow-up

- Incorporate sharing into daily, weekly, annual meetings and refreshers.
- Review prior recommendations; incorporate lessons – into burn plans, actions, processes.

How to make sense of this?

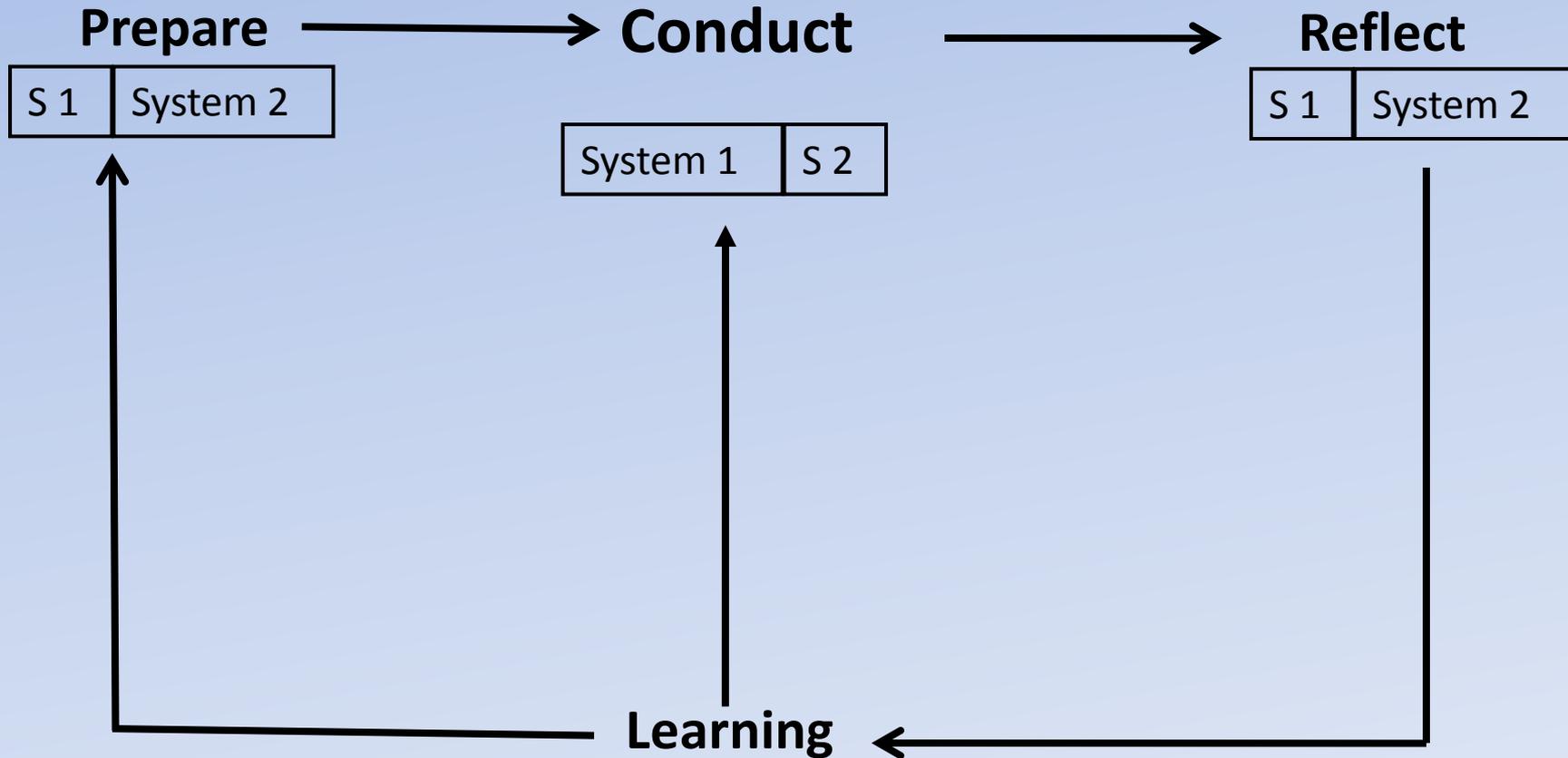
How do we think about (what's our theory) of performance – safety, reliability....?

Respond to/Seek to Improve Outcomes

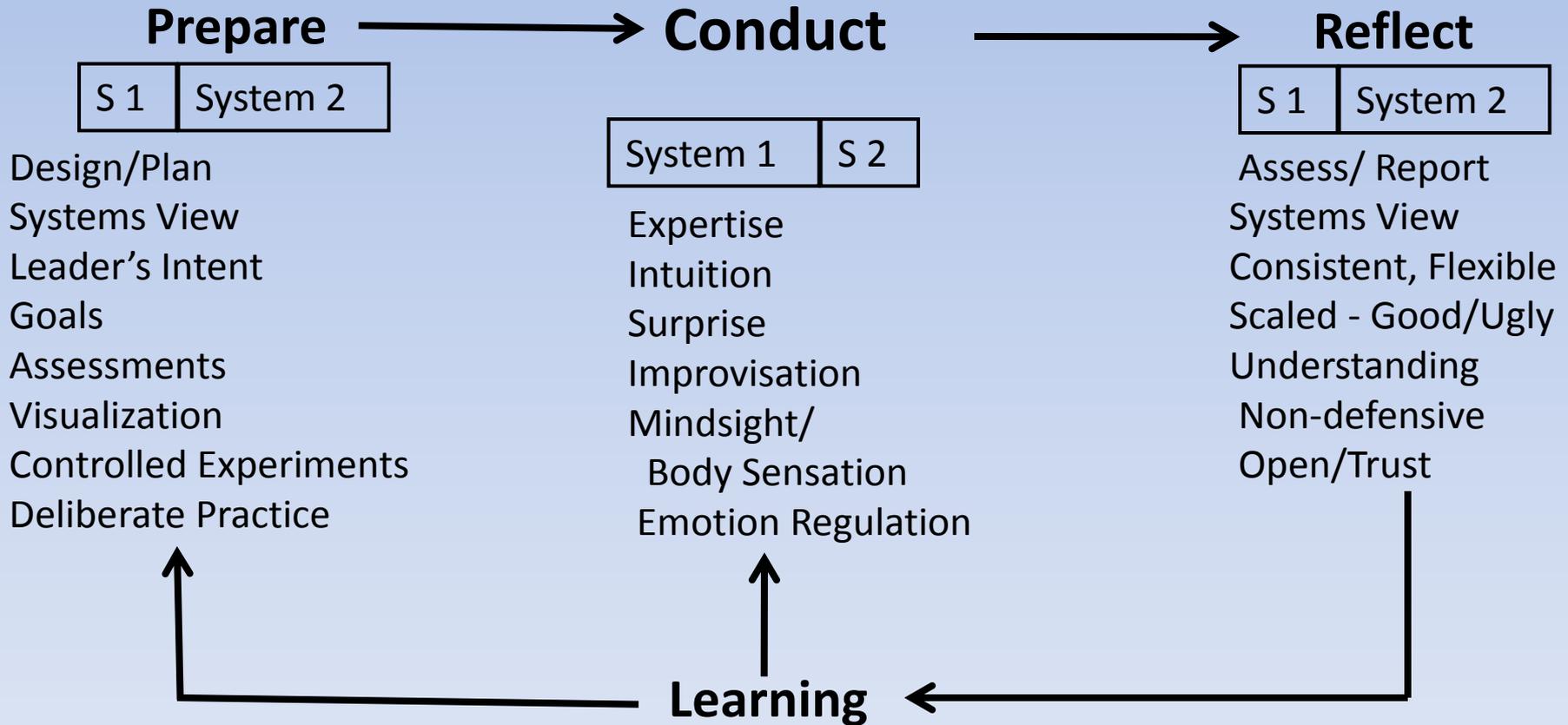
Think about Action & Learning

Build Resilience to Stress

Action and Learning



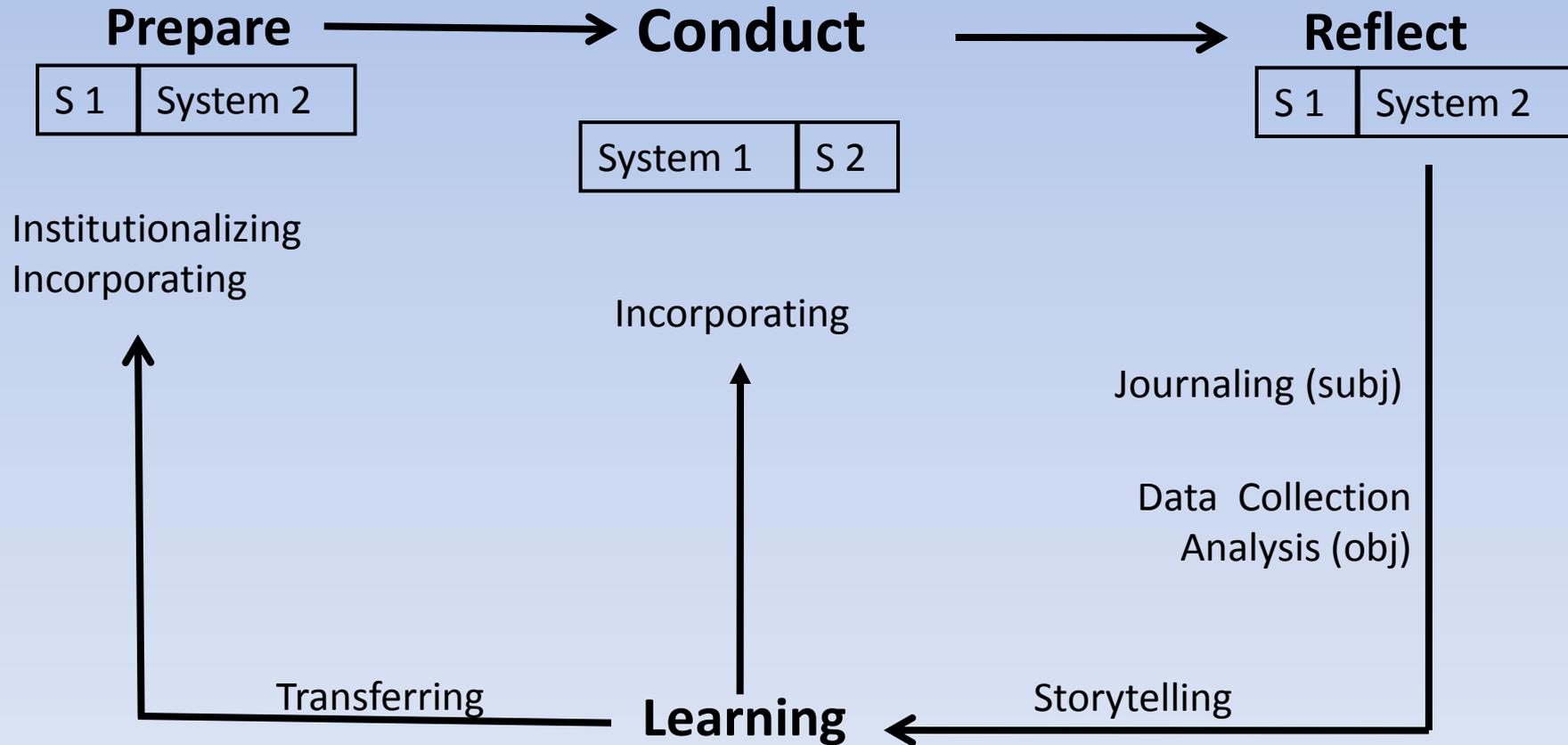
Action and Learning



Action and Learning

Confidence – Self/Other

Compassion - Self/Other



Action and Learning

Confidence – Self/Other

Compassion - Self/Other

Sand-tables BAR Pre-mortem

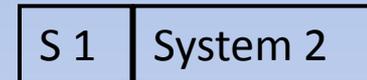
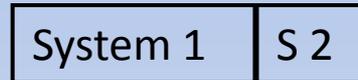
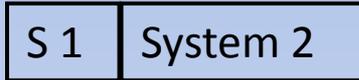
AAR

Outcome Review

Prepare

Conduct

Reflect



Institutionalizing
Incorporating

Sense-making

Journaling (subj)

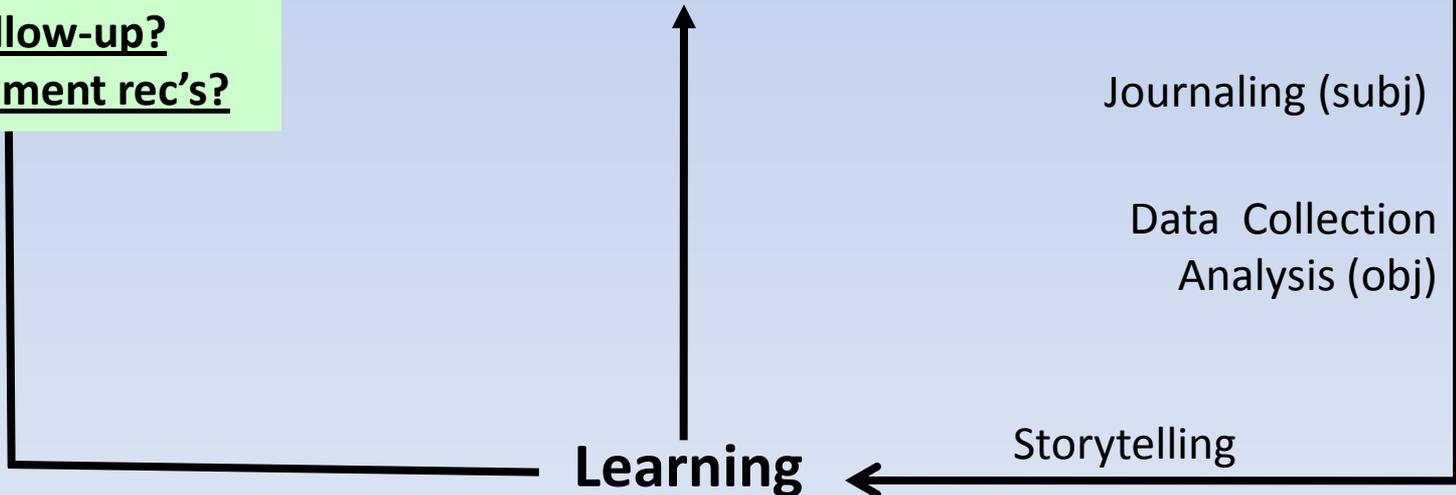
Data Collection
Analysis (obj)

Storytelling

Learning

?follow-up?
?implement rec's?

?Refreshers, LLC library?



Summary and Implications

- Data supports, adds detail to our models of learning and performance.
- Collectively, suggest several sorts of activities to pursue:
 - ❖ Vector towards learning on the Compliance – Risk – Learning Spectrum
 - ❖ Enhance learning by closing the Learning Loop
 - ❖ Emphasize coaching to build resilience to stress

Discussion

