Pin the Tail on the Donkey

Measurement & Evaluation Amid Complexity

Back Loop Consulting
Fisher Qua & Charley Haley
www.back-loop.com
Purpose & Goals

• To experiment with some of the hunches we are developing out of our experience in the field

• To gather your reactions, responses, and ideas about improving how we do measurement & evaluation of complex activities – without any expertise necessary

• To learn together in a seriously playful way that may induce confusiasm among us all!

• To share a few approaches to measurement & evaluation that others have lovingly provoked us with... but without the sting (we hope)

P. S. YOU WILL NOT OFFEND US IF YOU WANT TO GO TO A MORE CONVENTIONAL SESSION
Agenda & Sequence of Activities

- Identify measurement challenges :: 1-2-4-All
- Sift-and-sort challenges :: Agreement~Certainty Matrix
- Compare & evaluate responses to the challenges at hand :: 1-2-4-All
- Loving provocations :: Presentation & discussion
What are you trying to understand, measure & evaluate about your efforts to implement lean & continuous improvement?
1-2-4- All Steps

1. Alone :: Respond to prompt :: 1 min
2. Pairs :: Share responses :: 2 mins
3. Quartets :: Continue clarifying and identify 1 or 2 examples to share :: 4 mins
4. Full group :: Harvest key examples :: 4 mins
Agreement-Certainty Matching Matrix

Sorting Challenges into Simple, Complicated, and Complex Categories
Agreement Certainty Matrix
Sort Challenges Into Simple, Complicated, Complex Categories

Certainty / Predictability

Agreement

Simple

Complicated

Complex

Far from –

Close to +

Far from –

Close to +

Rocket to the Moon

Raising A Child

Pin Tail To Donkey
## Management Challenges

<table>
<thead>
<tr>
<th>SIMPLE</th>
<th>COMPLICATED</th>
<th>COMPLEX</th>
<th>CHAOTIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Following a Recipe</td>
<td>Sending a Rocket to the Moon</td>
<td>Raising a Child</td>
<td>“Pinning the Tail On The Donkey”</td>
</tr>
</tbody>
</table>

- **The recipe is essential**: Rigid protocols or formulas are necessary. Protocols rarely help; launch experiments to see what works. Rigid protocols may be counter-productive or misdirect responses.

- **Recipes are tested to assure easy replication of success**: Sending one rocket increases assurance of future success; key elements are identical. Raising one child provides experience but no assurance of future success. Experience may help or hinder finding what works to diagnose & abate the crisis.

- **No particular expertise is required (cooking skill can improve the success rate)**: High levels of expertise in a variety of fields are necessary for success. Expertise can contribute but is neither necessary nor sufficient to assure success. Rapid action & improvising skills, plus unleashing a network of local on-the-ground know-how can help.

- **Recipes produce standardized, predictable results every time**: Rockets are similar and there is a high degree of outcome predictability. Every child is a unique individual with unpredictable “outcomes”. As unknowables recede, novel patterns may emerge.
Agreement Certainty Matrix
Sort Challenges Into Simple, Complicated, Complex Categories

Certainty / Predictability

Agreement

Simple
Complicated
Complex
Chaotic

Recipe
Raising A Child
Pin Tail To Donkey
Rocket To Moon
Simple/Complicated Machine Metaphor

Role defining - specify job and task descriptions
Conflict management - restore order in each part
Tight structuring - use formal chain of command
Simplifying - prioritize or limit simple actions
Socializing - seek homogeneous values & ideas
Decision making - find the "best" choice
Knowing - decide & tell others what to do
Controlling - tightly managed execution w/max specs
Planning via forecasting - plan & then roll out
Staying the course - align & maintain focus

Complex Biologic Metaphor

Relationship building - work with patterns of interaction
Uncover paradox - draw out difference as source of creativity
Loose coupling - work with informal communities of practice
Complicating - add more degrees of freedom & multiple actions
Diversifying - draw out & exploit difference
Sense making - many right answers in different local contexts
Learning - act/learn/plan at the same time
Improvising - acting in an instant w/minimum specs
Shape robust adaptive strategies - co-evolve & hedge strategies
Noticing emergent direction - build on what works
Place the items from your list on the A~C Matrix worksheet.
Example: Education & Classroom Learning

What I want to understand, evaluate & measure is...

1. how the classroom experience is advancing my student’s developmental maturity
2. how well they know the 33 Liberating Structures
3. how skillful they are with the Liberating Structures repertoire
4. the frequency with which they use Liberating Structures when interacting with groups
Agreement Certainty Matrix
Sort Challenges Into Simple, Complicated, Complex Categories

Certainty / Predictability

+ Close to
+ Close to

Far from -
Far from -

Simple
Complicated
Complex
Chaotic

Measure frequency of use
Measure skillfulness
Understand developmental maturity
Evaluate how many LS they know
Compose a list of the approaches you take to measure, evaluate, & understand these things
Example: Education & Classroom Learning

My approaches to these questions include...

1. Longitudinal qualitative study where I interview each student every year for 10 years

2. Create a test that asks them to identify the steps of each Liberating Structure and write about the importance of the 5 micro-organizing elements

3. Develop a survey that asks them to indicate how frequently they’ve used each structure over the past 2-4 weeks

4. Ask them to keep a journal and write regular reflections on what they are learning in the class and the difference that LS has made for them
Agreement Certainty Matrix
Sort Challenges Into Simple, Complicated, Complex Categories

Certainty / Predictability

Agreement
- Journaling
- Evaluate how many LS they know
- Longitudinal study
- Test
- Direct Observation
- Measure frequency of use
- Survey

Complex
- Understand developmental maturity
- Measure skillfulness

Complicated

Far from –

Chaotic
Look for mismatches: How well do your measurement, evaluation, and assessment practices ‘match’ what you want to understand? What do you notice?
Agreement Certainty Matrix
Sort Challenges Into Simple, Complicated, Complex Categories

- Journaling
- Evaluate how many LS they know
- Longitudinal study
- Measure frequency of use
- Direct Observation
- Measure skillfulness
- Survey
- Test

Certainty / Predictability

- Mismatch
- Understanding developmental maturity
- Chaotic
- Complicated
- Complex
1-2-4- All Steps

1. Alone :: Respond to prompts :: 1 min
2. Pairs :: Share responses and help each other :: 2 mins
3. Quartets :: Consider implications of any mismatches & generate ideas :: 4 mins
4. Full group :: Harvest key ideas :: 4 mins
So, what are the implications of any mismatches?
Now, what ideas do you have for developing better matched approaches?
How will we know we are making a difference?

- What will we notice has changed?
- How will we know behaviour and culture is changing?
- What kinds of things will we actually see?
<table>
<thead>
<tr>
<th>Attributes Survey Baseline</th>
<th>Social Network Baseline</th>
<th>Baseline Efficiency</th>
<th>Leapfrog Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>frequency, timeliness, accuracy, &amp; problem-solving focus of cross-functional communication</td>
<td>core and periphery participation in new innovation practice</td>
<td>employee satisfaction</td>
<td>rate of promising concepts, prototypes, and field tests</td>
</tr>
<tr>
<td>mutual respect</td>
<td>awareness (individual)</td>
<td>cycle time metrics</td>
<td>scientific papers generated</td>
</tr>
<tr>
<td>shared goals &amp; knowledge</td>
<td>influence (individual)</td>
<td>financial performance</td>
<td>advances judged by external partners</td>
</tr>
<tr>
<td>rich/lean communication</td>
<td>diverse participation</td>
<td>external partner satisfaction</td>
<td>failure rate (boldness index)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>rate of interdisciplinary collaboration</td>
</tr>
</tbody>
</table>

**Relational Coordination**

Relationship Attributes

**Social Networks**

Relationship Patterns

**Process Measures**

Efficiency-Economy

**Technical Outcomes**

Effectiveness

**Sources:**

- Relational Coordination Research Collaborative  
  [http://rrcc.brandeis.edu/about-rc/difference.html](http://rrcc.brandeis.edu/about-rc/difference.html)
- RC Mapping  
- Innovation Learning Collaborative  
- Network Weaving  
  [http://www.networkweaver.com](http://www.networkweaver.com)
- Social Network Webbing  
<table>
<thead>
<tr>
<th>Liberating Structures</th>
<th>Developmental Evaluation</th>
<th>Relational Coordination</th>
<th>Social Network Mapping</th>
<th>Diffusion of Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generative Relationships STAR :: Diagnose and act on the attributes that enable a group to reliably generate novel results</td>
<td>What, So What, Now What :: Use evidence gathered in hindsight, to generate insight, shape foresight</td>
<td>Relational Coordination Survey :: Measure a set of variables related to communication patterns within groups and across scales</td>
<td>Network Pattern Cards :: Quickly notice the way change is unfolding in groups</td>
<td>Still in Development</td>
</tr>
<tr>
<td>Wicked Questions :: Evaluate progress on the paradoxical realities you must face up to</td>
<td>Simple Ethnography :: Go to where the action is unfolding and gather evidence and observations about what's happening</td>
<td></td>
<td>Power Maps :: Identify the density of connections &amp; loci of power within groups</td>
<td></td>
</tr>
<tr>
<td>Ecocycle~Panarchy :: Continuously notice the evolutionary progression of activities and identify opportunities to work across scales</td>
<td>10x10 Writing Prompts :: Rapidly generate large amounts of qualitative data about what's happening</td>
<td></td>
<td>Digital SNW Maps :: Assess how information and practices flows across a group</td>
<td></td>
</tr>
</tbody>
</table>
Liberating Structures

• Invite & include more people to participate in shaping your measurement, evaluation, and learning efforts

• Distribute responsibility for gathering data & evidence more widely

• Generate novel insights by continuously using different LS to evaluate, measure, and notice progress or stagnation together

• Make it SAFE for everyone to face up to the challenges-at-hand and rigorously confront reality

www.liberatingstructures.com

Keith McCandless & Henri Lipmanowicz
Developmental Evaluation

• Avoid simple or complicated approaches to understanding complex, unfolding and unpredictable circumstances

• Effectively assess innovation or change initiatives that defy conventional approaches

• Use evaluation to make improvement constant and continuous

www.betterevaluation.org
MQ Patten
Relational Coordination

• Identify and assess how communication flows within, across, and beyond groups
• Understand how the different levels of organization interact and respect one another’s work
• Look for simple opportunities to shift patterns that dampen innovation and amplify those that enable it

http://rcrc.brandeis.edu/

Relational Coordination Research Collaborative — Brandeis University
Attribution:

• Liberating Structures co-developed by Keith McCandless & Henri Lipmanowicz

• Developmental Evaluation inspired by Michael Quinn Patten

• Relational Coordination Measures & Survey adapted from Brandeis University

• Diffusion of Innovation drawn from Everett Rogers
Charley Haley – charley@back-loop.com
Fisher Qua – fisher@back-loop.com
www.back-loop.com
Seattle, WA