



# Evaluative Thinking: Principles and Practices for Learning in and about Evaluation

*AEA2017 Preconference Workshop*

**November 8, 2017**  
Washington, DC

**Tom Archibald**  
Virginia Tech

**Jane Buckley**  
JCB Consulting

## introductions

### Please share:

1. Your name
2. Your organization
3. Your area of work
4. Something interesting or meaningful about your name

## expectations

What would **you** like to get out of this workshop?

*“For me, this workshop will be a success if ...”*

## goals

1. Introduce the concept of Evaluative Thinking
2. Learn how practice ET and develop ET skills in the context of Evaluation Capacity Building (ECB)
3. Make a personal plan for incorporating ET habits and routines into your work
4. Learn about Theory of Change (TOC) models and how they can facilitate program development, evaluative thinking and MEAL work

# roles for today



Photo credit: **Mike Pennington** on geograph

ET VIDEO

- <https://youtu.be/EXfxHep5Ww8>

## objectives

Evaluation is an activity. *Evaluative thinking is a way of doing business.*  
This distinction is critical. It derives from studies of evaluation use. Evaluation is more useful—and actually used—when the program and organizational culture manifests evaluative thinking.

- Michael Quinn Patton

Preface to 2014 InterAction Report,  
Embracing Evaluative Thinking for Better Outcomes:  
Four NGO Case Studies

# agenda

Time	Activity
9:00am	Welcome
9:30am	World Café on thinking and learning in/and monitoring and evaluation
10:15am	Thoughts on evaluative thinking (ET)
10:30am	Break
10:45am	Identifying assumptions <ul style="list-style-type: none"><li>• Definitions—types of assumptions (10 minutes)</li><li>• ACTIVITY: Assumption brainstorming (15 minutes)</li><li>• ACTIVITY: Scenario analysis (30 minutes)</li><li>• Reflection and discussion (20 minutes)</li></ul>
12:00am	Lunch break
1:00pm	Pursuing deeper understanding through reflection and perspective taking <ul style="list-style-type: none"><li>• ACTIVITY: Six thinking hats—“Instilling ET in Quarterly Meetings” (30 minutes)</li><li>• ACTIVITY: Conversational roles (15 minutes)</li></ul>
1:45pm	Diagramming thinking and posing thoughtful questions <ul style="list-style-type: none"><li>• Introduction to boundary analysis and pathway modeling (15 minutes)</li><li>• ACTIVITY: Boundary analysis and pathway modelling (30 minutes)</li></ul>
2:30pm	Break
2:45pm	Diagramming thinking and posing thoughtful questions (continued) <ul style="list-style-type: none"><li>• ACTIVITY: Peer review of pathway models (30 minutes)</li><li>• Reflection and discussion; “appreciative Pause” (15 minutes)</li></ul>
3:30pm	Informing decisions in preparation for action <ul style="list-style-type: none"><li>• Strategies and activities to promote ET</li><li>• Group discussion: Overcoming real world barriers to ET</li></ul>
3:50pm	Workshop evaluation
4:00pm	Adjourn

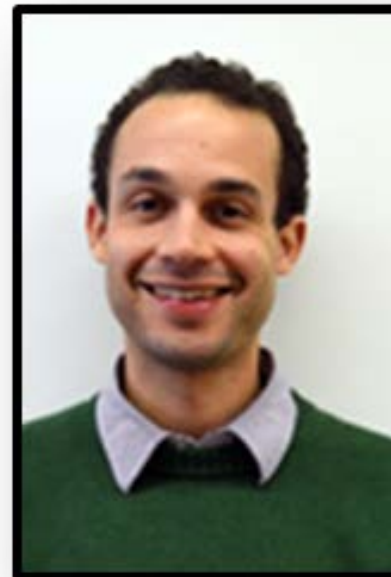
A photograph of an outdoor cafe seating area. The scene is set on a brick-paved patio. In the foreground, a round, light-colored table is surrounded by four black wicker chairs with silver metal frames. The chairs are arranged in a circular pattern around the table. In the background, more similar tables and chairs are visible, receding into the distance. The lighting suggests it might be late afternoon or early morning, with soft shadows. A semi-transparent teal overlay covers the left side of the image, containing white text.

“world café”  
on learning  
and  
evaluation  
culture

Photo credit: Michael Rowen on flickr

## “world café” on learning and M&E culture

- (1) *Under what conditions does evaluation contribute to learning?*
- (2) *Under what conditions does evaluation not contribute to learning?*
- (3) *What makes a “culture of evaluation”? -or- What does a culture of evaluation “look like”?*



# introduction to evaluative thinking



Indulge Your Cravings—and Slim Down!

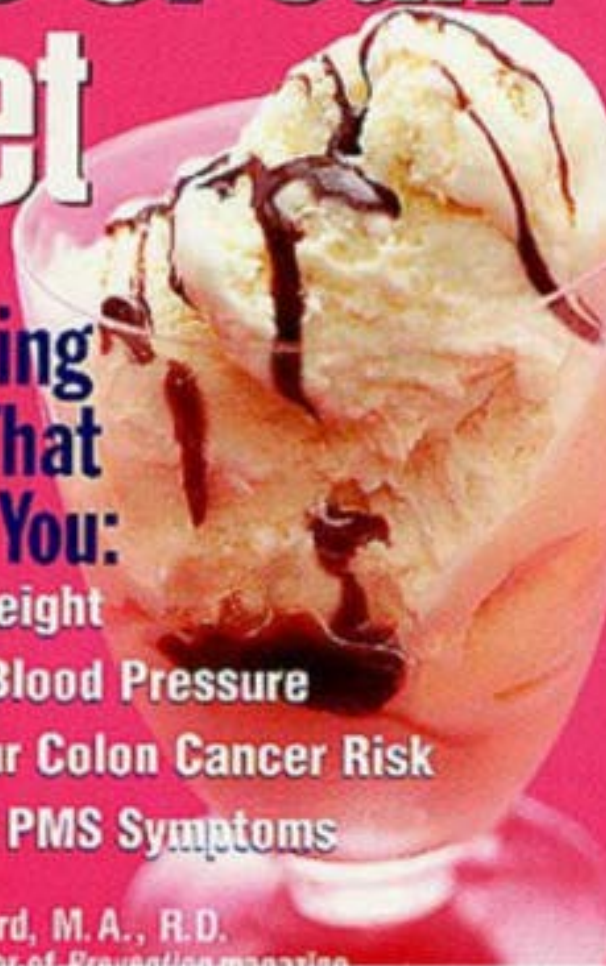
**PREVENTION**  
Magazine

# The Ice Cream Diet

The  
Amazing  
Plan That  
Helps You:

- Lose Weight
- Lower Blood Pressure
- Cut Your Colon Cancer Risk
- Reduce PMS Symptoms

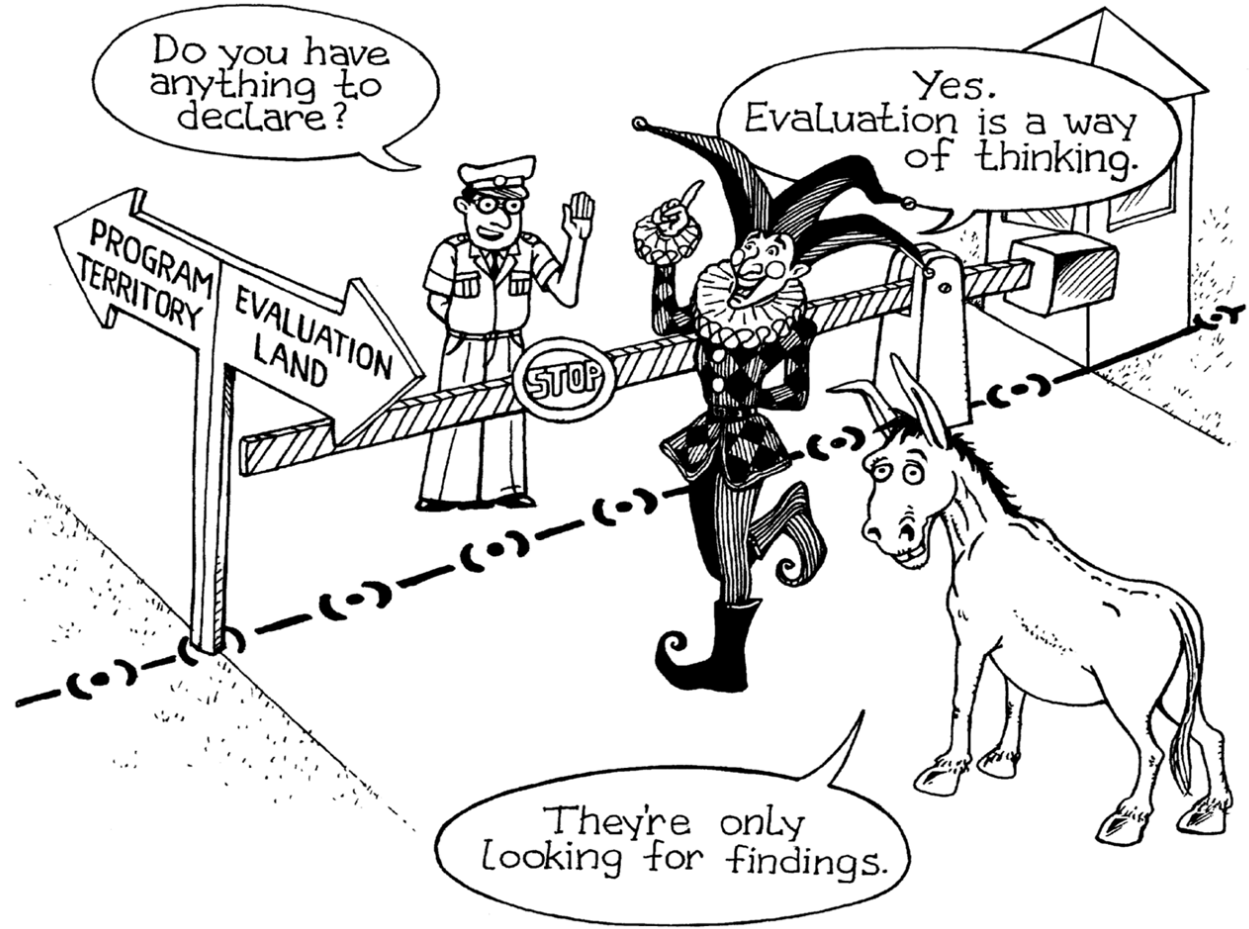
Holly McCard, M.A., R.D.  
Nutrition Editor of Prevention magazine



# introduction to evaluative thinking



# introduction to evaluative thinking



(Patton, 2008)

introduction  
to evaluative  
thinking



# Evaluative Thinking (ET): formal definition

Evaluative thinking is critical thinking applied in the context of evaluation, motivated by an attitude of inquisitiveness and a belief in the value of evidence, that involves:

1. identifying assumptions,
2. posing thoughtful questions,
3. pursuing deeper understanding through reflection and multiple perspective taking,
4. and making informed decisions in preparation for action.

(Buckley, Archibald, Hargraves, & Trochim, 2015)

# Evaluative Thinking (ET): formal definition

Evaluative thinking is ~~critical thinking~~ applied in ~~the context of~~ *the basis of quality programs and their* evaluation, motivated by an attitude of inquisitiveness and a belief in the value of evidence, that involves:

1. identifying assumptions,
2. posing thoughtful questions,
3. pursuing deeper understanding through reflection and multiple perspective taking,
4. and making informed decisions in preparation for action.

(Buckley, Archibald, Hargraves, & Trochim, 2015)

# introduction to evaluative thinking: Where it fits in

## Evaluation requires:

- Knowledge: understanding of the “how” and “why” of basic MEAL concepts, terms, methods and resources
- Working skills: observation, analysis, communication, etc.
- Thinking skills: reflection, questioning, strategizing, mental modeling, perspective taking, decision making, the ability to identify assumptions
- Attitudes: belief in the value of MEAL, an intrinsic motivation to pursue evidence

ET ↘

introduction  
to evaluative  
thinking

***"Evaluative thinking is a way of doing business."*** (Patton)

***"...being results oriented, reflective, questioning, and using evidence to test assumptions."*** (Wind & Carden)

***"Reflective Practice"*** (Baker & Bruner)

***"questioning, reflecting, learning, and modifying ... It is a constant state-of-mind within an organization's culture and all its systems."*** (Bennett & Jessani)

**free-range  
evaluation:  
evaluative  
thinking that  
lives unfettered in  
an organization**



# Rethinking and reclaiming evaluation



# Question

# Evidence

# Claim



# Practicing evaluative thinking

- Requires a “safe space” for questioning, identifying assumptions, making suggestions (consider power dynamics)
- Start with outside examples and then work inward
- Practice alongside peers and colleagues – build skills and establish trust

What does  
Evaluative  
Thinking  
sound and  
look like?



Photo of: Gender Analysis- CRS Ethiopia

# Evaluative Thinking:

## what it sounds and looks like in a program work context

- Things you may hear:
  - Why are we assuming X?
  - How do we know X?
  - What evidence do we have for X?
  - What is the thinking behind the way we do X?
  - How could we do X better?
  - How does X connect to our intended outcomes?
  - Stakeholder X's perspective on this might be Y!
- Things you may see:
  - More evidence gathering and sharing
  - More feedback (all directions)
  - Reflective conversations among staff, beneficiaries, leadership, etc.
  - More ToCs/illustrating thinking
  - More motivation to do systematic MEAL work
  - Program evolution
  - More effective staff and programs
  - Greater field staff influence over project decisions

## ***Guiding Principles for Promoting Evaluative***

- I. Promoters of evaluative thinking should be opportunist about engaging learners in evaluative thinking processes in a way that builds on and maximizes intrinsic motivation*** (Bransford, Brown, & Cocking, 1999; Brookfield, 2012; Piaget, 1978; Vygotsky, 1978).
- II. Promoting evaluative thinking should incorporate incremental experiences, following the developmental process of “scaffolding”*** (Bransford, Brown, & Cocking, 1999; Brookfield, 2012).
- III. Evaluative thinking is not a born-in skill, nor does it depend on any particular educational background; therefore, promoters should offer opportunities for it to be intentionally practiced by all who wish to develop as evaluative thinkers*** (Brookfield, 2012; Ericsson & Charness, 1994).
- IV. Evaluative thinkers must be aware of—and work to overcome—assumptions and belief preservation*** (Brookfield, 2012; Lord et al., 1979; Nkwake, 2013).
- V. In order to best learn to think evaluatively, the skill should be applied and practiced in multiple contexts and alongside peers and colleagues*** (Bransford et al., 1999; Brookfield, 2012; Foley, 1999; Halpern, 1998; Simon, 2000).

break



Photo credit: **Stanislaw Szydlo** via **Wikipedia**

# your evaluative thinking experiences & stories

- Identify an example from your own work when you have seen, heard, or engaged in evaluative thinking. What was the outcome or effect?
- Discuss in a two- or three-person buzz group and prepare to share out one example per group.

# Assumptions



“If we teach proper nutrition, youth will make more healthy food choices.”

What are the underlying assumptions here?

# Assumptions



Uncovering these often “buried” or un-stated assumptions to light can affect your:

- Program plan
- Evaluation plan
- Interpretation of evaluation results

*How?*

# My Trip to the Store

Assumption 1	Assumption 2	Assumption 3
I don't have the food I need already in my house	I have money in my wallet	The foods I plan to buy are healthiest for me
Not safe to assume, worth a quick and easy check	Checked this morning (already have reliable evidence)	More formal evidence needed, prior research likely exists

# Identifying Assumptions

## Are assumptions always “bad?”

No! Assumptions are a necessary part of survival!! We ALL make assumptions.

The important thing is to identify assumptions and be conscience about choosing to accept them, seek evidence for them, or plan to “work around them” as needed

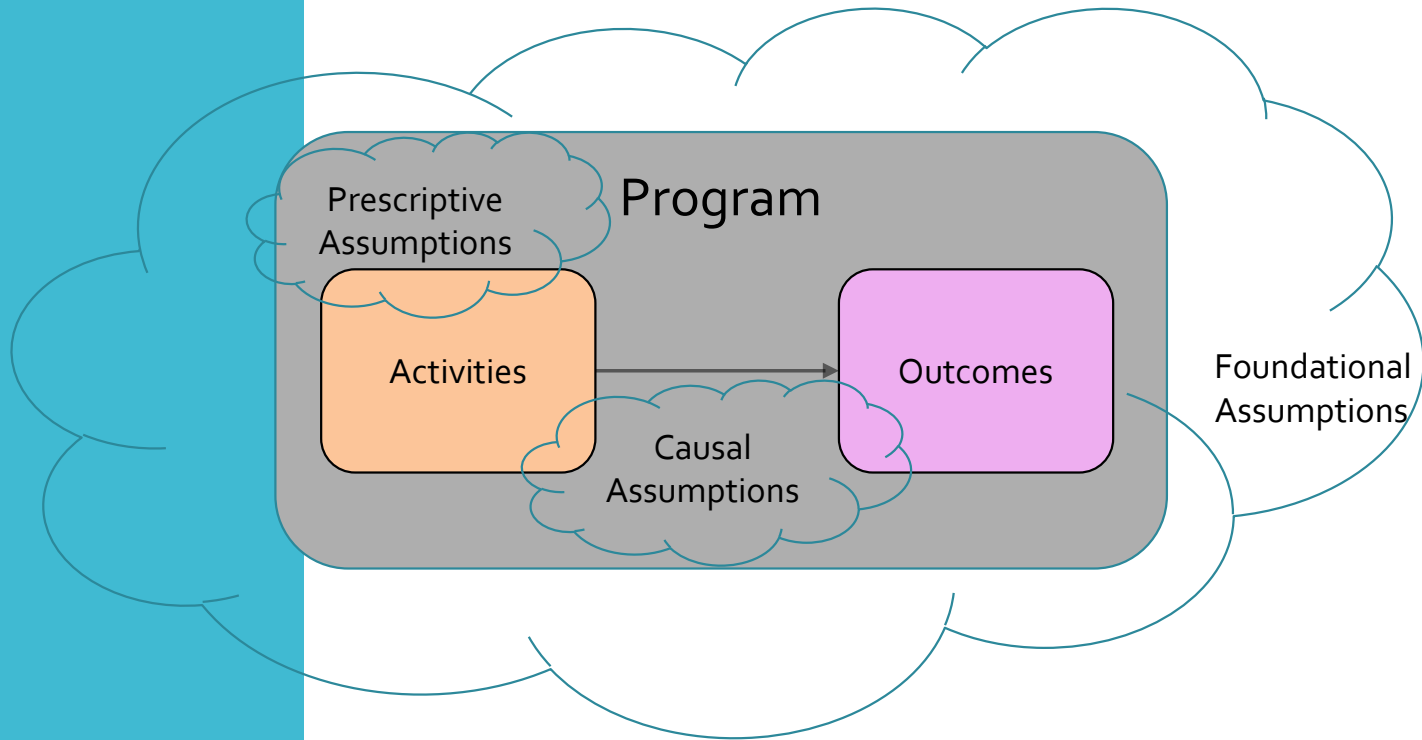


## identifying & working with assumptions

# Types of Assumptions

- **causal**: about how different parts of the world work and about the conditions under which these can be changed. e.g., *If we do X, then Y will result.*
- **prescriptive**: about what we think ought to or should be happening in a particular situation. e.g., *All projects must have a gender component.*
- **paradigmatic**: deeply held foundational beliefs about the world, like a world view. e.g., *Scientific knowledge is fundamentally better than indigenous knowledge.*

# Program Assumptions



# Assumption Brainstorm (5 minutes)

Instructions:

1. Think about your everyday life (outside of work). What sorts of assumptions do you make?
2. With your break out group, brainstorm 3 causal, 3 prescriptive and 3 foundational assumptions you make in your everyday lives.

	causal	prescriptive	foundational
1) everyday life			

# Identifying Assumptions



*Consider the following scenario, then identify as many assumptions (being made by program implementers) as you can:*

A community science education initiative has designed a program that will take place at the public library.

Families with children 12 and under will be invited to participate in a one-time, two-hour event focused on the geology of volcanos. Families will work together to build the volcanos, make them “erupt,” track the flow of lava, and then build a new layer of “rock” (clay) onto their volcanos, demonstrating how volcanos form over time.

The program implementers are focused on demonstrating the impact of their program to funders. In particular, they would like to claim that they have had a positive affect on participating youth’s attitudes towards and interest in science. To that end, program staff have chosen an existing survey of students’ attitudes toward science to be given both before (pre) and after (post) the event at the library.

lunch break



Photo credit: Jpatokal via Wikipedia

Energizer

Handwashing

Plausible alternative explanations



# reflection & discussion

Are there any thoughts you want to share as you think about what we've done so far today?

Ideas include:

Thoughts about the ways people think about their programs and how that relates (or doesn't relate) to the way they think about evaluation

Challenges to facilitating/promoting ET at your home or client office.

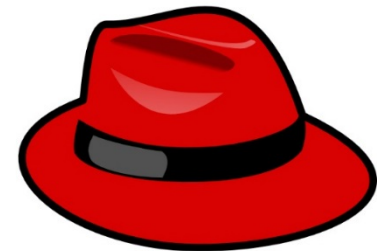
Ways of interpreting or adapting what you've seen

ET VIDEO

- <https://youtu.be/b1EvIKrrmTU>

pursuing  
deeper  
understanding  
through  
reflection and  
perspective  
taking

# Thinking Hats Exercise



pursuing  
deeper  
understanding  
through  
reflection and  
perspective  
taking

## Thinking Hats Exercise

- **Optimistic response** (Yellow) – Positive. Logic applied to identifying benefits, seeking harmony.
- **Discernment** (Black) – Negative. Logic applied to identifying reasons to be cautious, critical, and conservative.
- **Emotions** (Red) - Intuitive or instinctive gut reactions or statements of emotional feeling (but not any justification).
- **Creativity** (Green) - Statements of provocation and investigation, seeing where a thought goes.
- **Information** (White) - Considering purely what information is available, what are the facts?
- **Managing** (Blue) - What is the subject? What are we thinking about? What is the goal?

## Multiple perspectives - six thinking hats exercise

- Review the scenario presented in the handout
- In small groups, assign a different color hat to each group member.
- Discuss the proposal to revise the WASH program plan
- Allow each group member to have a say from their perspective (i.e. according to their hat color).
- Be prepared to report out on the various ideas that are discussed.
- You have 30 minutes.

pursuing  
deeper  
understanding  
through  
reflection and  
perspective  
taking

## Appreciative Pause

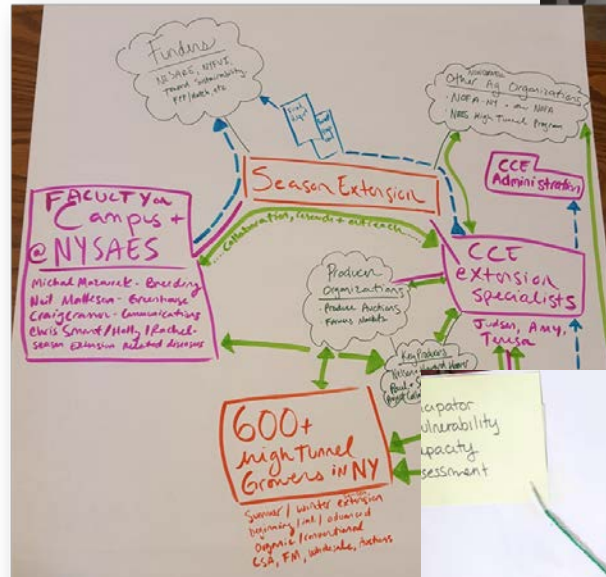
In or after every discussion, pause briefly, so participants can give appreciation for:

- A question that was asked that suggested a whole new way of thinking.
- A comment that clarified something that until then was confusing.
- A comment that opened up a whole new line of thinking.
- A comment that helped identify an assumption.
- A comment that provided helpful evidence.
- A comment that identified a gap in reasoning that needed to be addressed.
- A new idea that is intriguing and had not been considered before.
- A comment showing the connection between two other ideas or contributions when that connection hadn't been clear.
- An example that was provided that helped increase understanding of a difficult concept.

## reflection & discussion

How do perspective taking activities help promote ET?

# modeling & diagramming thinking

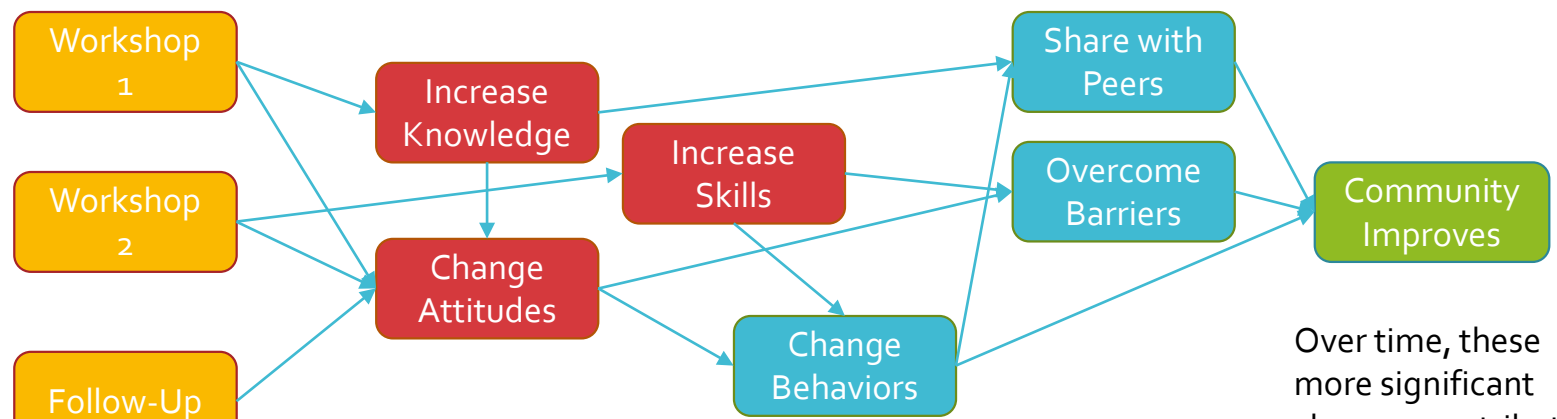


# modeling & diagramming thinking

## Introduction to Pathway Models:



# Pathway Model



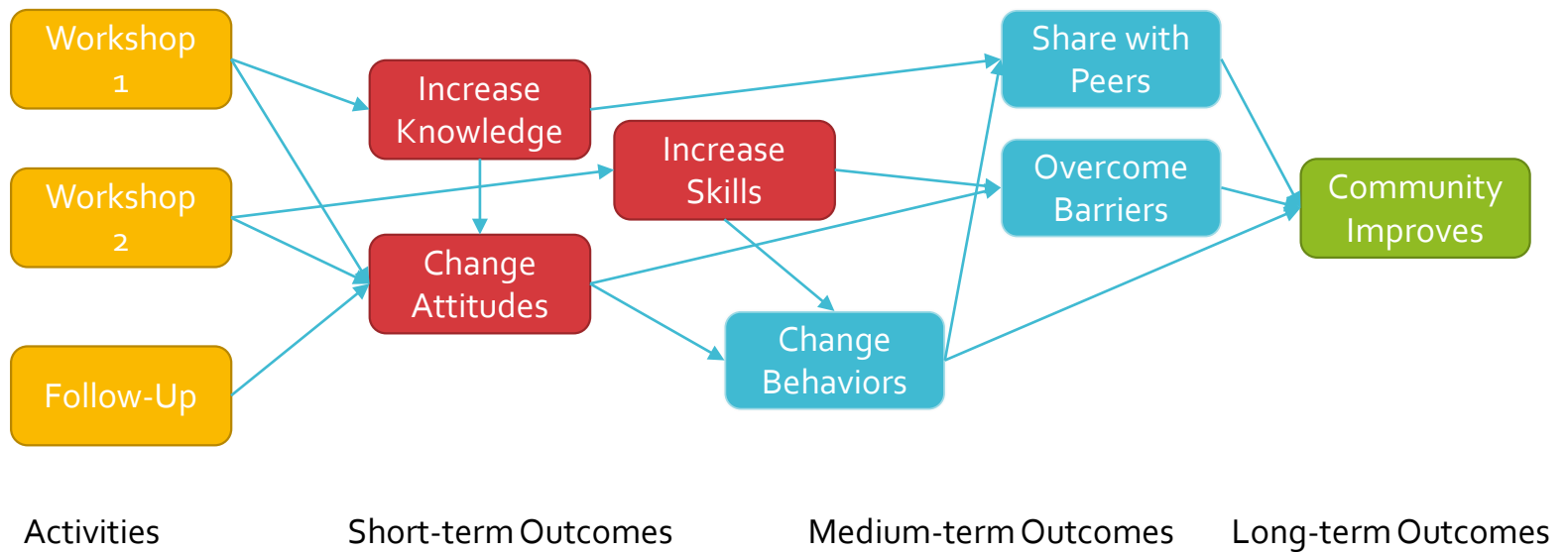
Once upon a time, there was a workshop.

Immediately after the workshop, some small changes occurred.

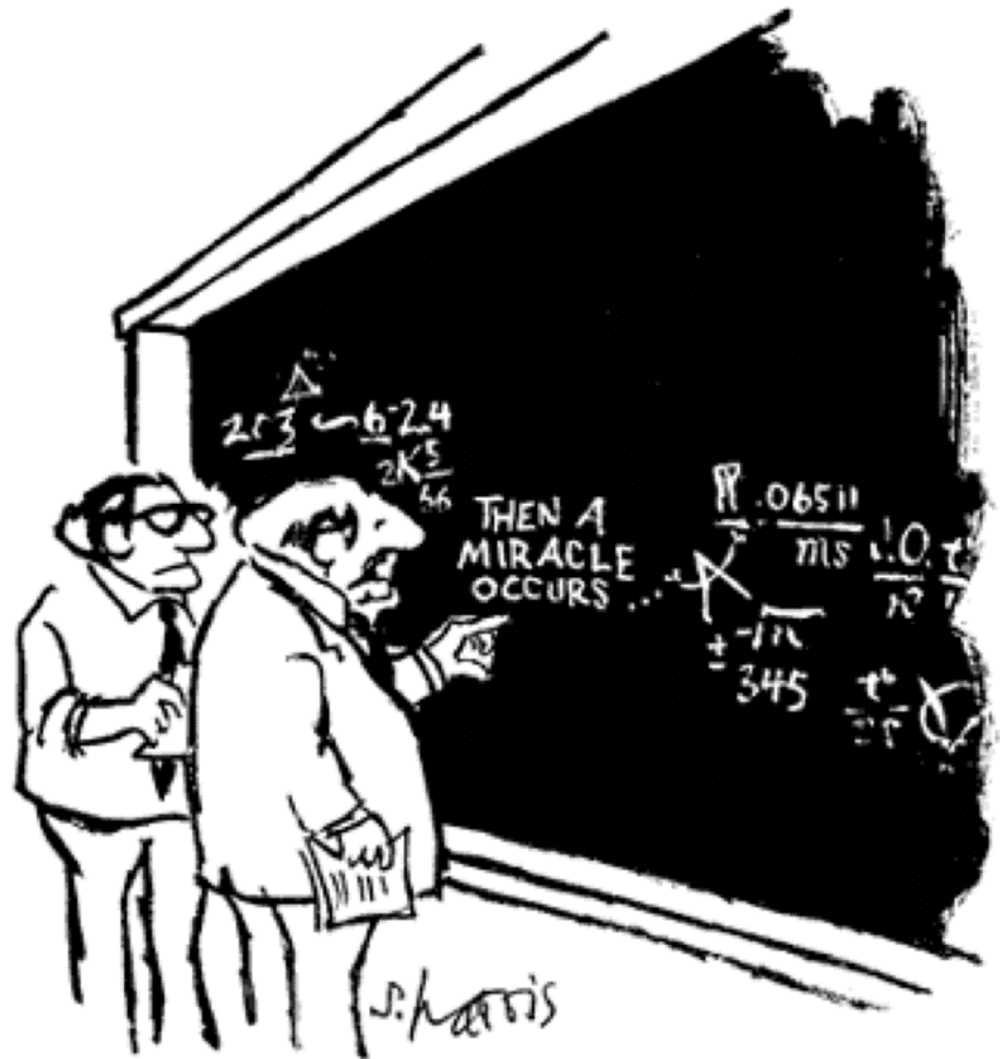
Some time later, these smaller changes led to larger, more significant changes.

Over time, these more significant changes contributed to a healthier community where people lived happier ever after...

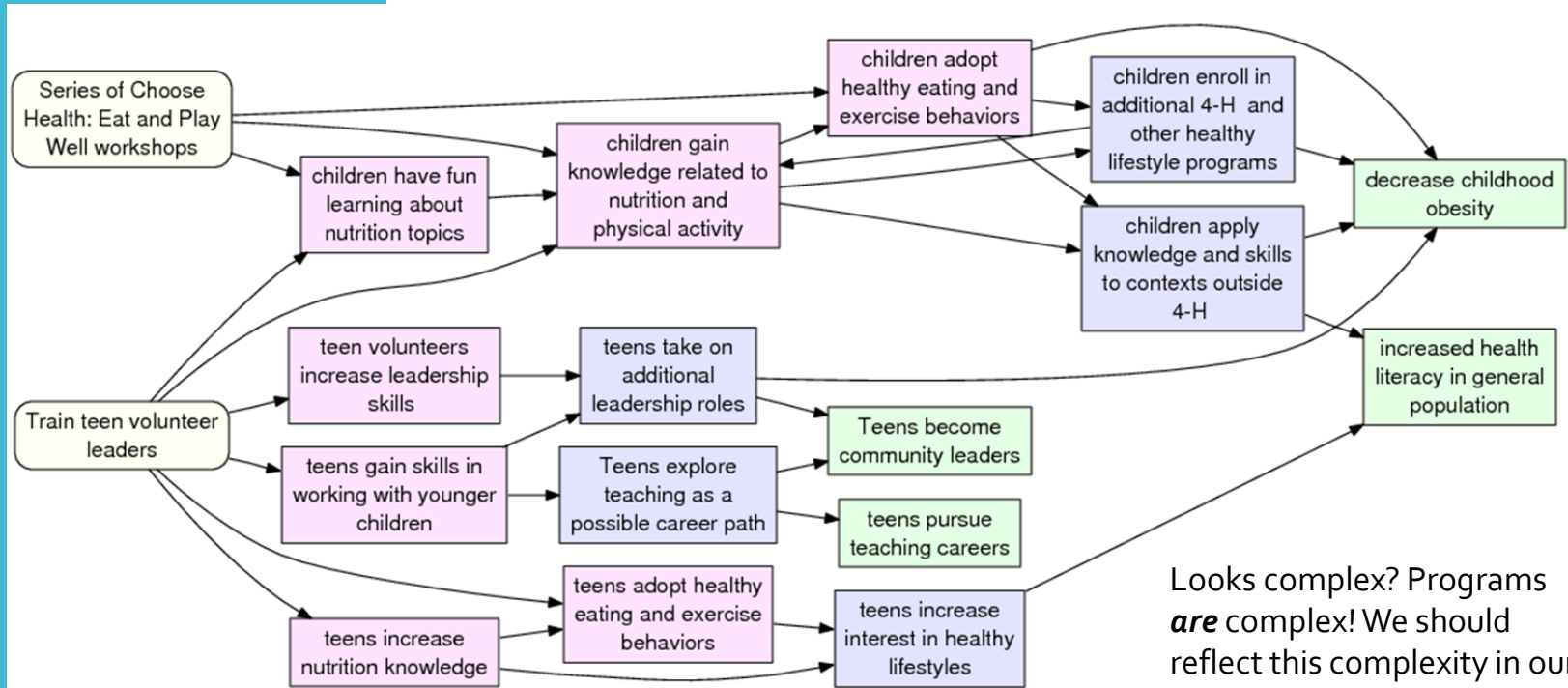
# Pathway Model



Pathway  
Models and  
ET:



"I think you should be more explicit here in step two."



Looks complex? Programs **are** complex! We should reflect this complexity in our models, and consider it in planning and MEAL work!

# A Pathway Model

1. Review and critique the pathway model on the handout
2. Identify assumptions in and around the pathway model provided

break



Photo credit: **Stanislaw Szydlo** via **Wikipedia**

# Promoting Evaluative Thinking

Building capacity is ultimately about building relationships.





**create an intentional evaluative  
thinking learning environment**

1. Display logic models
2. Create “parking lots” for questions and assumptions
3. Post inspirational questions:
  - “Is there an alternative explanation?”
  - “How do we know what we think we know?”


**establish ET practice-focused discussions and/or meetings**



1. “Mine” your model
2. Use opening questions (Brookfield, 2012)
  - a. What assumptions are we working under?
  - b. How can we check our assumptions for accuracy?
  - c. What alternative perspectives or explanations might we use?
3. Conduct a media critique (Taylor-Powell, 2010)
4. Engage in critical debate (*neutral but relevant topic*)

A stage with red curtains and spotlights. The text is centered on the stage.

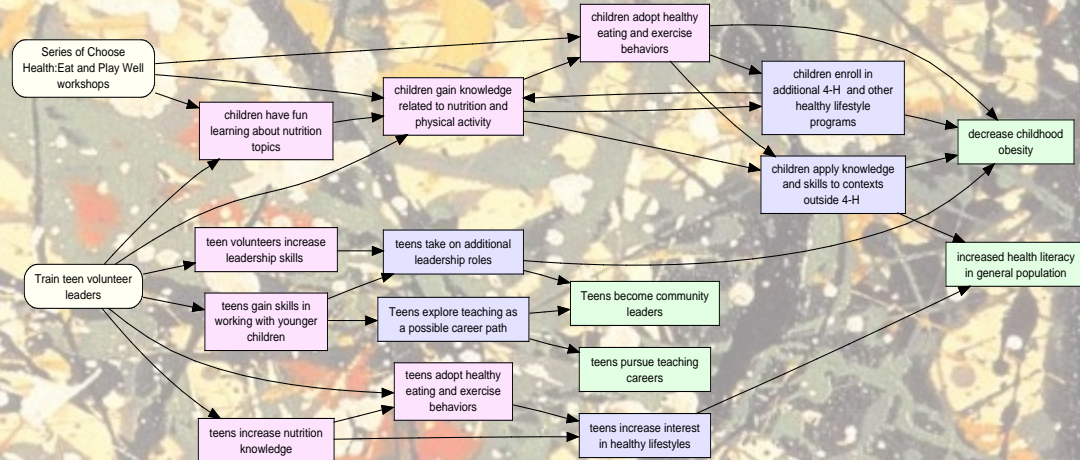
**use role-play  
when thinking  
about  
evaluation  
strategies**

- 
- A stage with red curtains and spotlights. The stage is set with a wooden floor and four spotlights. The curtains are red and have tassels. The text is overlaid on a semi-transparent white box in the center of the stage.
- 1. Scenario analysis**  
(Brookfield, 2012)
  - 2. Thinking hats** (De Bono, 1999)
  - 3. Evaluation simulation**

An abstract splatter painting background with a dense, chaotic pattern of colors including black, white, yellow, orange, red, and green. The paint is splattered and dripped across the surface, creating a complex, textured visual.

**diagram or illustrate thinking when  
communicating with colleagues**

# 1. Build logic and pathway models



# 2. Diagram program history

# 3. Create a system, context or organization diagram

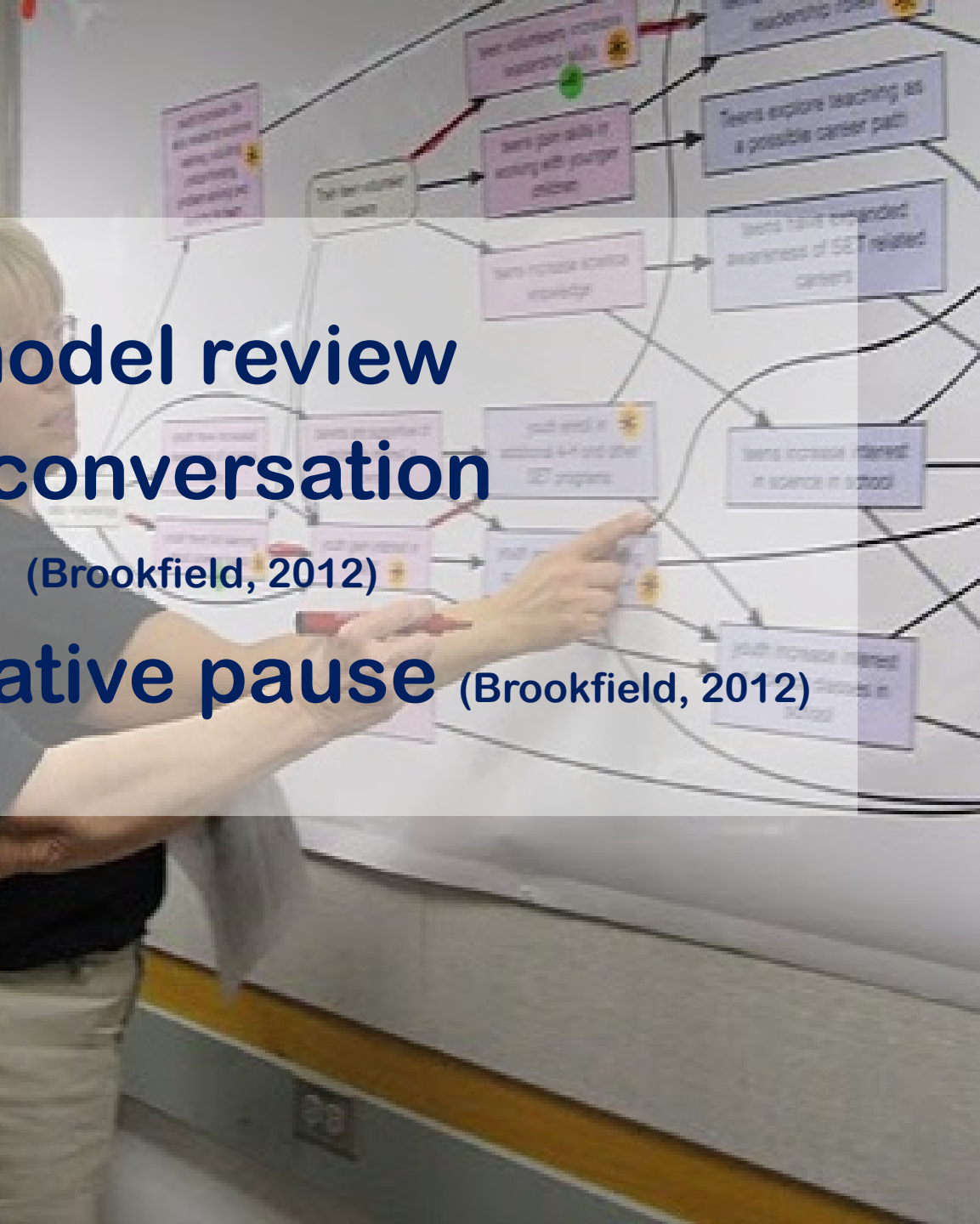


**engage in  
supportive, critical  
peer review**

1. Logic model review

2. Critical conversation protocol (Brookfield, 2012)

3. Appreciative pause (Brookfield, 2012)



**establish time and space to  
explore intrinsically motivated  
evaluation questions both  
formally and informally**

**don't leave  
evaluation  
exclusively to the  
evaluator(s)!**



# Potential practical applications

## Enabling Environment

- Governments that are open to questioning and different perspectives
- Donors that are open to questioning and are flexible in their funding
- Trust-based relationships with government, donors, peer organizations, and communities
- Functioning national or regional evaluation networks

## Organizational

- Organizational culture supportive of inquiry, reflection, and learning
- Leadership and senior management support for evaluative thinking
- Influential organizational champions for evaluative thinking
- Strategies, policies, and practices that encourage questioning, reflection, and evidence-based decision making
- Staff dedicated to promoting evaluative thinking
- Budget dedicated for evaluative thinking activities
- Job descriptions and performance plans that prioritize and reward evaluative thinking
- Investments in staff's evaluative thinking capacities
- Processes that engage partner organizations and communities in evaluative thinking processes

## Individual

- Staff attitude and mindset, including willingness to question assumptions and seek evidence
- Staff knowledge and skills for engaging in evaluative thinking, including skills related to listening, facilitation, and participatory monitoring and evaluation
- Membership or participation in M&E networks or associations

Strategies	Examples of Activities
1. Create an intentional ET learning environment	<ul style="list-style-type: none"> <li>a) Display logic models in the workplace—in meeting rooms, within newsletters, etc.</li> <li>b) Create public spaces to record and display questions and assumptions.</li> <li>c) Post inspirational questions, such as, “How do we know what we think we know?” (Patton, 2005).</li> <li>d) Highlight the learning that comes from successful programs and evaluations and also from “failures” or dead ends.</li> </ul>
2. Establish a habit of scheduling meeting time focused on ET	<ul style="list-style-type: none"> <li>a) Have participants “mine” their logic model for information about assumptions and how to focus evaluation work (for example, by categorizing outcomes according to stakeholder priorities) (CORE, 2012).</li> <li>b) Use “opening questions” to start an ET discussion, such as, “How can we check our assumptions for accuracy?” (Brookfield, 2012); “What plausible alternative explanations are there for this finding?” (Shadish, Cook, &amp; Campbell, 2002).</li> <li>c) Engage in critical debate on a neutral topic.</li> <li>d) Conduct a media critique (critically review and identify assumptions in a published article, advertisement, etc.) (Taylor-Powell, 2010).</li> </ul>
3. Use role-play when planning evaluation work	<ul style="list-style-type: none"> <li>a) Conduct a scenario analysis (have individuals or groups analyze and identify assumptions embedded in a written description of a fictional scenario) (Brookfield, 2012).</li> <li>b) Take on various stakeholder perspectives using the “thinking hats” method in which participants are asked to role play as a particular stakeholder (DeBono, 1999).</li> <li>c) Conduct an evaluation simulation (simulate data collection and analysis for your intended evaluation strategy).</li> </ul>
4. Diagram or illustrate thinking with colleagues	<ul style="list-style-type: none"> <li>a) Have teams or groups create logic and pathway models (theory of change diagrams or causal loop diagrams) together (CORE, 2012).</li> <li>b) Diagram the program’s history.</li> <li>c) Create a system, context and/or organization diagram.</li> </ul>
5. Engage in supportive, critical peer review	<ul style="list-style-type: none"> <li>a) Review peer logic models (help identify leaps in logic, assumptions, strengths in their theory of change, etc.).</li> <li>b) Use the Critical Conversation Protocol (a structured approach to critically reviewing a peer’s work through discussion) (Brookfield, 2012).</li> <li>c) Take an appreciative pause (stop to point out the positive contributions, and have individuals thank each other for specific ideas, perspectives or helpful support) (Brookfield, 2012).</li> </ul>
6. Engage in evaluation	<ul style="list-style-type: none"> <li>a) Ensure that all evaluation work is participatory and that members of the organization at all levels are offered the opportunity to contribute their perspectives.</li> <li>b) Encourage members of the organization to engage in informal, self-guided evaluation work.</li> <li>c) Access tools and resources necessary to support all formal and informal evaluation efforts (including the support of external evaluators, ECB professionals, data analyzers, etc.).</li> </ul>

"If we could change ourselves, the tendencies in the world would also change." - *Gandhi*



- Be open
- Establish trust
- Build relationships
- Demonstrate reflection
- Identify ET champions
- Build ET into everyday activities
- Reward evaluative thinking
- Other ideas?



Personal Evaluative Thinking Learning-to-Action  
Plan *(see handout)*

Report  
preparation

## Final activities

- Appreciative Pause
- Workshop Evaluation

adjourn

THANKYOU



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