

**Open Space Workshops**  
**for Changing Science and Society:**  
**Reflection on Participation**  
**and Collaboration in STS**

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Science in a Changing World graduate track  
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<http://bit.ly/4S12PT>

~~Open Space~~ CPR Workshops  
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This one wasn’t”**

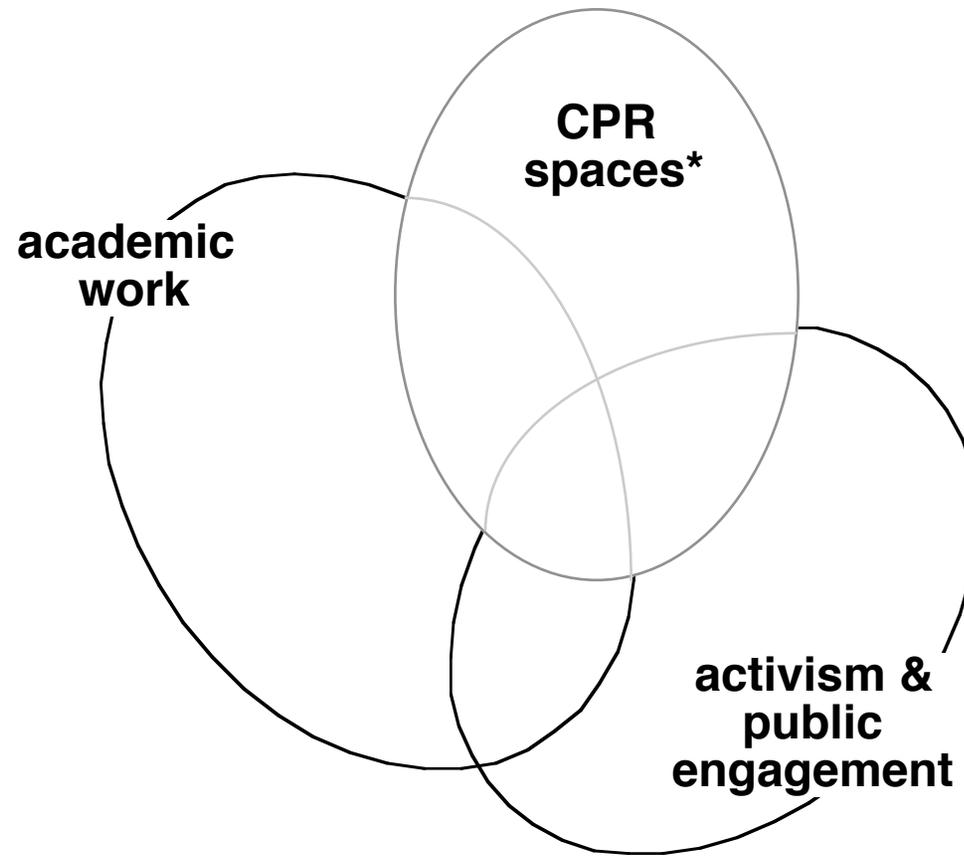
**evaluations  
New England Workshop on  
Science & Social Change  
2004**

“most workshops are dysfunctional.  
This one wasn’t”

-> critique

- improve workshops, conferences, etc.
- provide perspective on knowledge-making in organized, multi-party collaborative processes

- Images
- Relevant detail
- Implications



\* Connecting, Probing, Reflecting

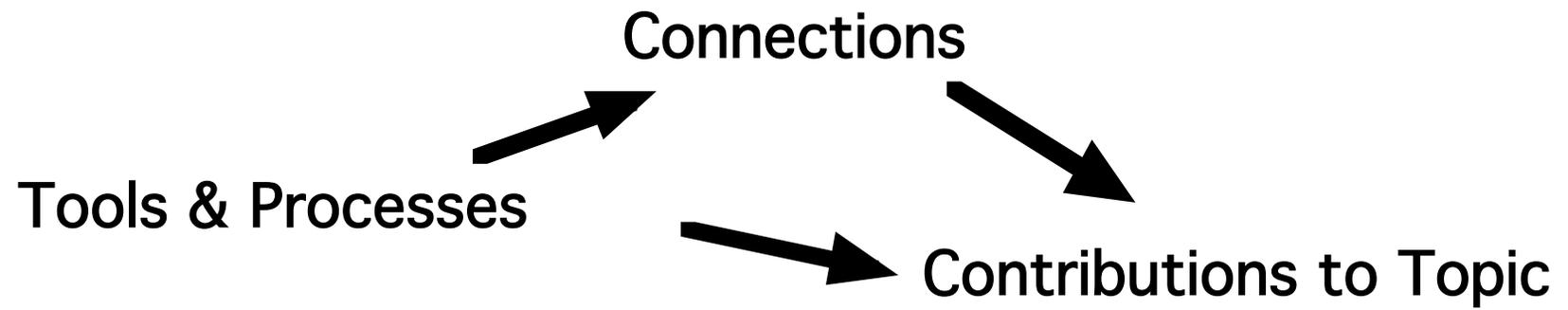
# CPR spaces:

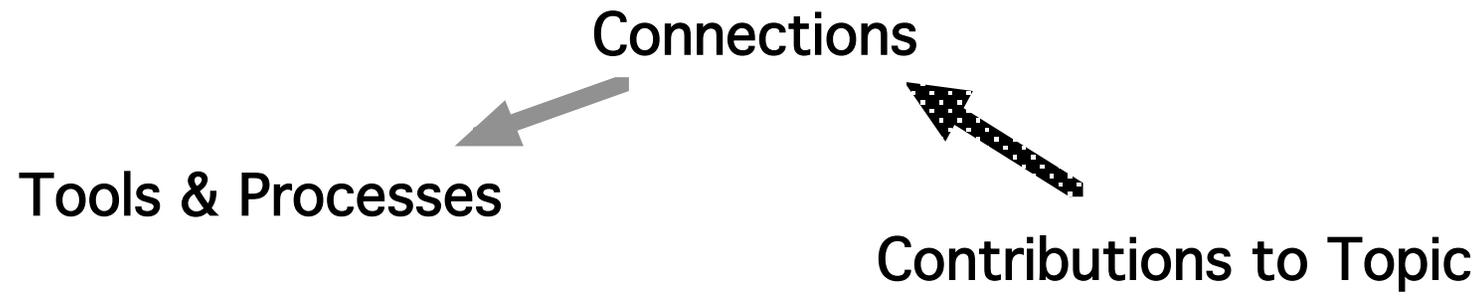
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one's identity and affinities  
with academic and action/engagement dimensions  
kept in view

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*≠ Open spaces of WSF & OWS*

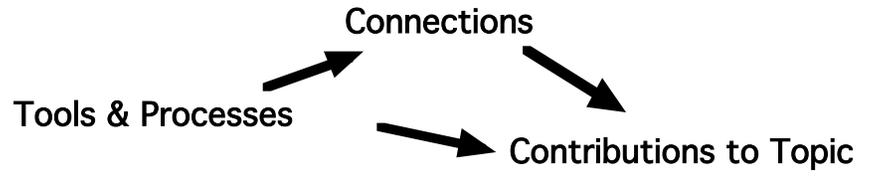
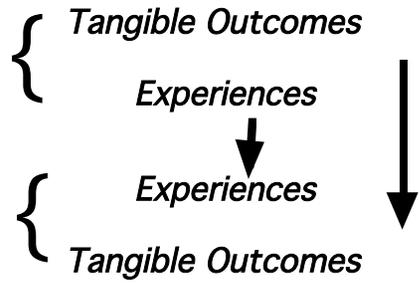


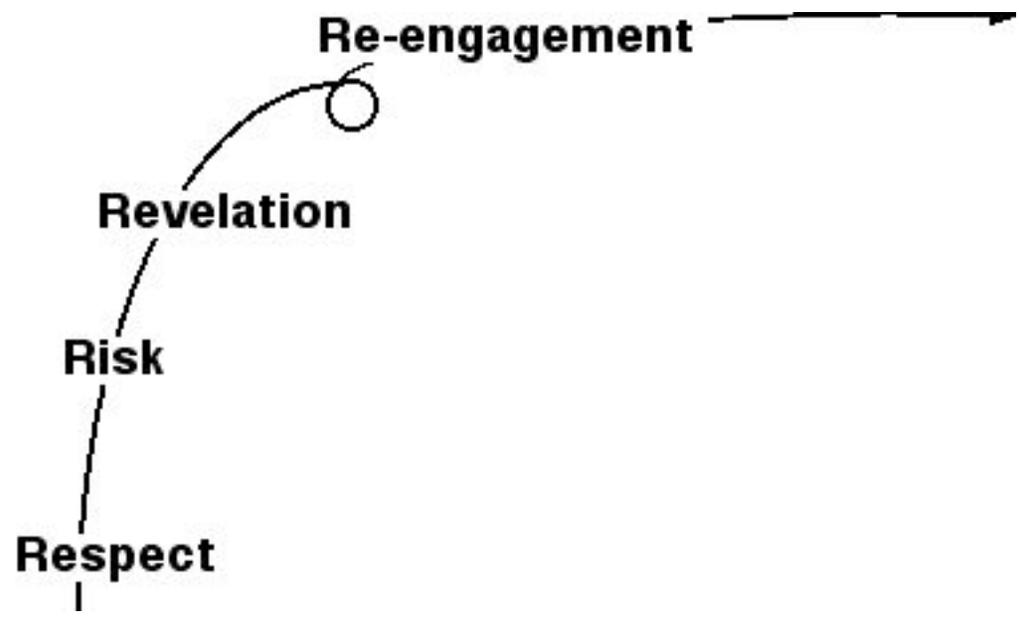


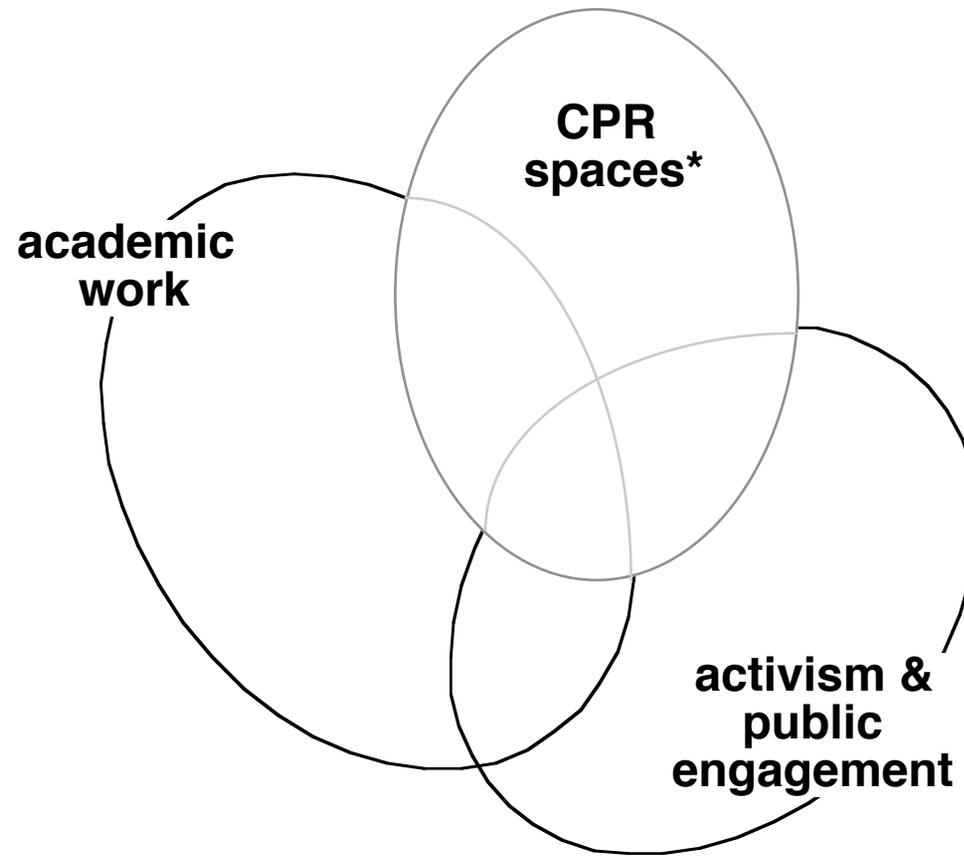
Here & Now



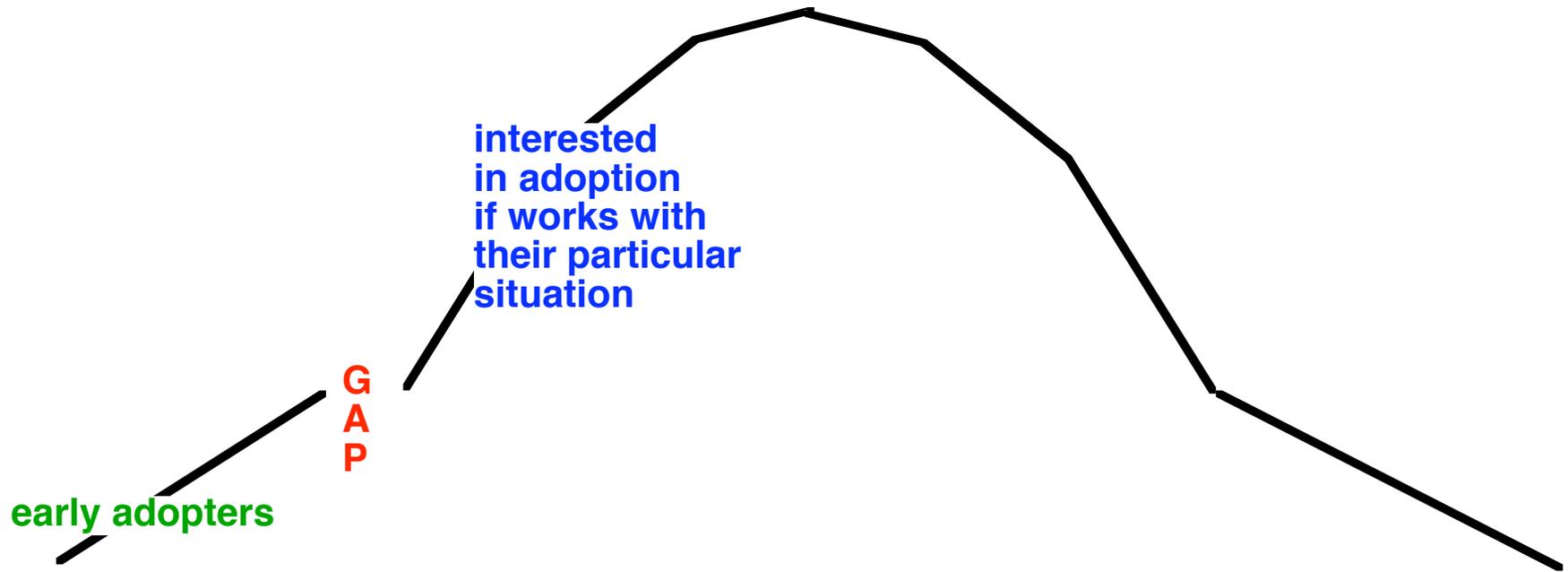
Subsequently...







\* Connecting, Probing, Reflecting



- **Relevant detail**

# New England Workshop on Science & Social Change

## Objectives

1. Promote Social Contextualization of Science
2. *Innovative* workshop processes
3. Training and capacity-building
4. Repeatable, evolving workshops
- + 5. Tangible outcomes and experiences developed beyond the workshop

# New England Workshop on Science & Social Change

## Topics have included

- social shaping of the use of genetic knowledge
- complexities of genes-environment-development
- social implications of ecological restoration
- collaborative generation of environmental knowledge and inquiry
- social theory about science and social change
- heterogeneity in biosocial development
- teaching and public engagement beyond disciplinary boundaries
- open spaces
- collaborative production of knowledge: health, environment, and publics (Portugal)

*upcoming:* troubled by heterogeneity? (Portugal in November)

# New England Workshop on Science & Social Change

## Phases of the four-day workshop

1. Exposing Diverse Points of Potential Interaction
- 2a. Focus on Detailed Case Study
- 2b. Outdoors Excursion for Informal Conversations
3. Activities to Engage each Other in our Projects
4. Taking Stock of the Experience

# New England Workshop on Science & Social Change

## Examples of group processes common to most workshops

Guided Freewriting (early on Day 1)

Autobiographical Introductions (Day 1)

Structured discussion of an in-depth case study or key article (Day 2)

Go-arounds, e.g., Day 2/3, "I didn't expect to be thinking about..."

Office Hours (Day 3)

# New England Workshop on Science & Social Change

## Examples of evaluations in relation to 4Rs

### 1. Respect

"The workshop was special to me in that I saw 12 people put in time, effort, creativity to figure out how to work together."

"One immediate impact was to participate in a collective that was created from so many different experiences."

"This workshop... made me realize I have an academic community I never knew existed..."

### 2. Risk

"... successful in creating a space in which participants could take risks..."

"... people participated, questioned, revealed vulnerabilities,..."

"...(most) academic markers are removed from consideration so all participants are expected to play all the time.... As one participant noted, he was learning the most during the times he was most uncomfortable."

# New England Workshop on Science & Social Change

## Examples of evaluations in relation to 4Rs

### 3. Revelation

"The various activities do not simply build connections with others, but they necessitate the discovery of the identity of others through their own self-articulations. But since those articulations follow their own path, one sees them not as simple reports of some static truth but as new explorations of self, in each case. Then one discovers this has happened to oneself as much as to others-one discovers oneself anew in the surprising revelations that emerge in the process of self-revelation."

### 4. Re-engagement

"The energy level of all attendees... remarkable given our considerable duties as professors and researchers."

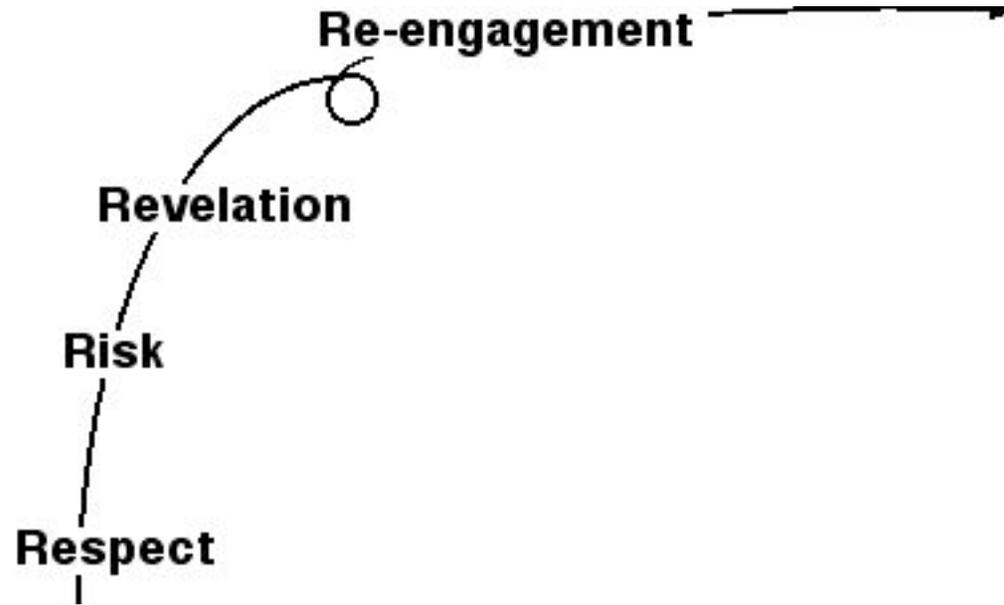
workshop "engaged people in multiple ways... Fully engaged people can develop exciting ideas and insights."

"For those of us working in the spaces between disciplines, especially the spaces between science and other disciplines, this kind of intellectual community is invaluable... I can't say enough about this experience."

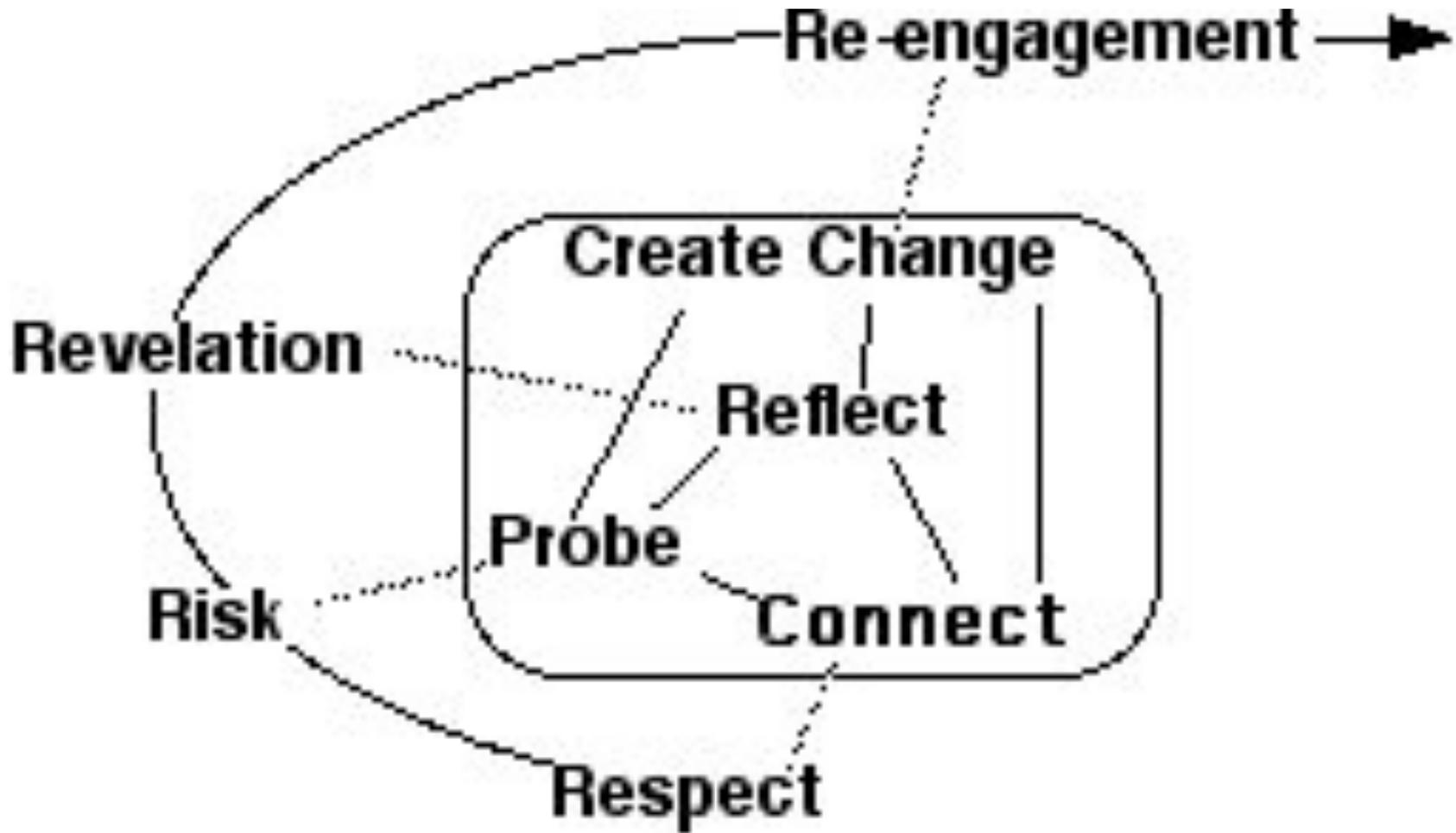
"This workshop model is something I would like to continue to engage in at various points throughout my academic career."

# • Implications

*cultivate collaborators*



*extend 4Rs: teaching*



## project-based learning (PBL)

begins from a **Scenario** -- problems not well defined.

Students brainstorm -> range of problems; Choose one/some to investigate & report on; Problem-definitions evolve

- engagement in self-invented inquiry
- content coverage by class as a whole
- motivation for subsequent, more-focused inquiry.

**Interdisciplinary Coaching, Inverted pedagogy, KAQ framework for inquiry and exchange, Internet facilitation**

## project-based learning (PBL)

“This is wonderful and I wish I had taken this course my first semester of graduate school. It is very helpful to have a structured way to follow my own questions.”

“The freedom to explore my own lines of inquiry while still linking them to the work of others provided a rich knowledge-building experience. The diverse experiences of the other participants was a key contribution to the class as were the insights and feedback provide by outside experts.”

“This course is a gift – the chance to be open – open-ended in design, open to process, open to other perspectives, open to changing your ideas, and open to sharing. Of course this means it’s risky too – you won’t always know when you’re coming from or where you are going – you might think you aren’t sufficiently grounded by the course. But you have the freedom to change that – and being on the other side of it now, I see it works out beautifully.”

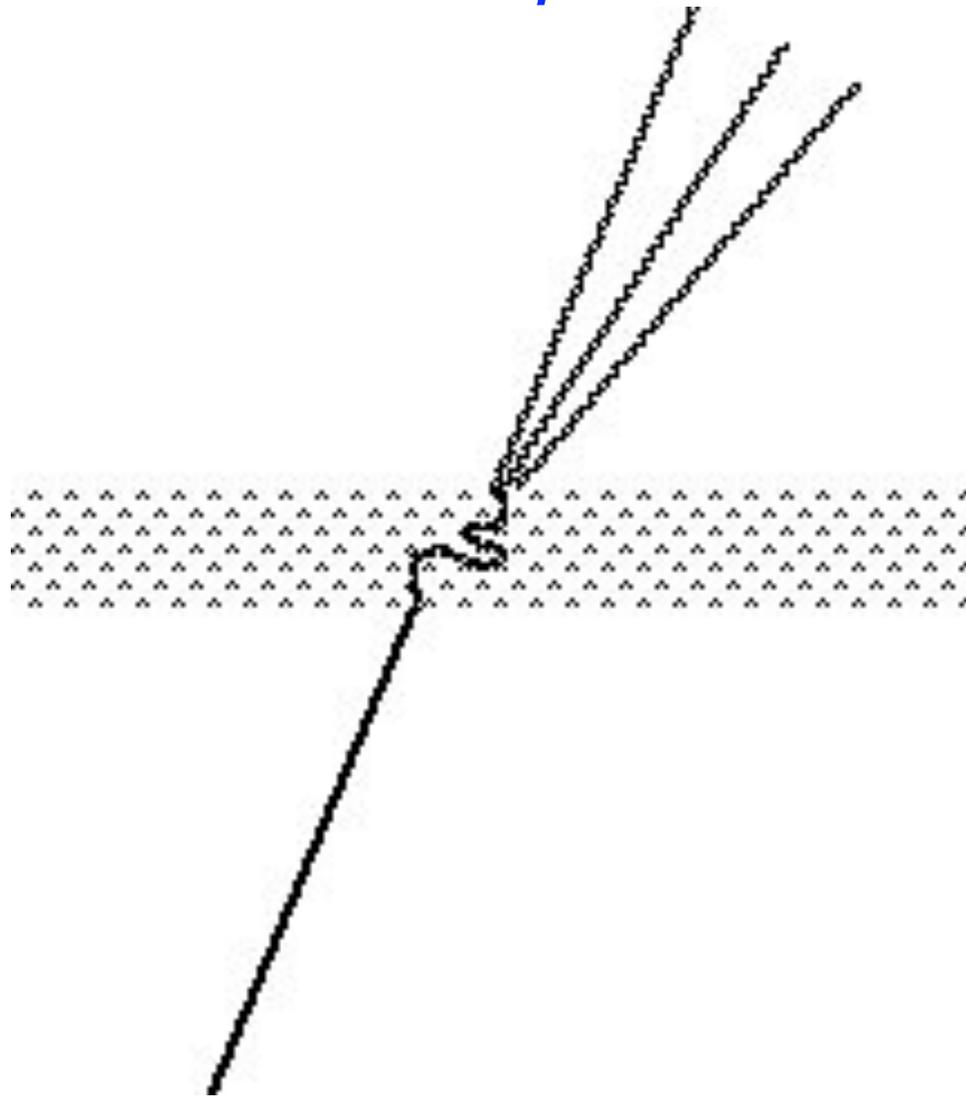
*extend 4Rs: dialogue hours (or shorter)*

<http://bit.ly/FivePhase>

## *extend 4Rs: shorter workshops*

- Changing Research, Teaching and Society (Wollongong)
  - Ethics of participatory processes [envtl. Science] (Millbrook, NY)
    - Creative thinking in epidemiology (Amherst, Toronto, Chicago)

*refractive practice*



## Why emphasize collaboration in environmental research?

### A. Sum of the Parts

*Combining multiple perspectives*

*Extending over time*

*Spanning distance*

### B. Greater than the Sum of the Parts (= outcomes over & above A)

*Generating new perspectives*

*Durable*

*Developing capacities*

## *evaluation of developing capacities?*

**Hope** = workshop participants improve their ability to respond to changes in the intersecting (or “transversal”) processes of political-economic-environmental-health-scientific change.

How would we *know* if they had?

How would we *show* that we had influenced someone’s ability to respond to change?

Method of assessment allows for

- heterogeneous life trajectories
- heterogeneous circumstances
- unfolding evolution of those circumstances
- reflexivity (process of assessment influences ability being assessed).

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