

# Systematic Reflection in Leadership and Learning: the UIC DrPH Program

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APHA Annual 2015

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## Presenter Disclosures

**D Patrick Lenihan, PhD**

- (1) The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No relationships to disclose



## Systematic Reflection

- What is systematic reflection?
- Why is it valuable for leadership, learning, practice research?
- How can it be effectively used?
- What practice application tools are available?
- How is it featured in the DrPH Program?

## Role of the DrPH: The emerging consensus

- The basic public health degree is the MPH while the DrPH is offered for advanced training in public health leadership
  - Institute of Medicine, "Who Will Keep the Public Healthy?", 2003
- Curriculum should integrate all five core public health; emphasize work experience and learning in the context of practice; and represent advanced competency in leadership and practice
  - ASPH DrPH Steering Committee, 2007
- DrPH graduates should be prepared for evidence based practice and... generation of practice-based evidence
  - Framing the Future, DrPH for the 21<sup>st</sup> Century. ASPPH, 2014

## A more complete definition of public health

- *“Public health is the science and art of preventing disease, prolonging life and promoting health through the organized efforts and informed choices of society, organizations, public and private, communities and individuals.”*  
CEA Winslow

## A different approach to leadership development

- The organizational landscape for public health is changing rapidly and unpredictably
  - We live in a “period of permanent whitewater”
- Public health problems of today are adaptive challenges
  - Requires adaptive leadership
- Information overload is the new norm
  - Facts and technical information alone are not knowledge
- Organizational learning is required to navigate in a complex environment
  - Authority and expertise of leaders is not enough
- Driving change; fostering innovation; creating systems are now key leadership skills
  - Doing the same things “faster, better, cheaper” is old school

## Value of Systematic Reflection

- for Leadership
  - address adaptive challenges, drive change, foster innovation
- for Learning from practice
  - promote individual and organizational learning
- for Practice Research
  - find the researchable problem in the adaptive challenge
  - create relevant knowledge



## Reflection is....

- 'Active persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and further conclusions to which it tends' (Dewey).
- 'learning procedure during which learners comprehensively analyze their behavior and evaluate the contribution of its components to performance outcomes.' (Ellis)
- 'periodically stepping back to ponder the meaning of what has recently transpired to ourselves and others in our immediate environment' (Gray/Raelin)
- 'involves recalling, thinking about, pulling apart, making sense and trying to understand' (Marquardt)
- 'gain understanding of specific issues in practice through critically contextualizing, observing and analyzing to generate new knowledge and insights which can enhance practice' (Fleming)

## Reflection is....

### the Common Elements

- A sense making, meaning making process
- A structured way of thinking
- An approach to learning
- A means for questioning underlying beliefs and assumptions
- A way of changing how we and others view the world
- An approach to problem solving
- A way of turning tacit knowledge in to explicit knowledge

## Reflection is not...

- A form of meditation
- Stream of consciousness
- Mental technical analysis
- Using your imagination, being creative
- Your belief system
- Intuition
- Being philosophical, getting perspective
- brainstorming



## Barriers to Reflection

- Some vagueness in definition
- Lack of understanding about what it is; how to do it
- Lack of appreciation for its value to leadership
- Emphasis on technical “scientific” rationality
- Little time to reflect in typical leadership situations
- Dominance of existing mental models
- Pressure to take action

## Is Reflection “scientific”?

- Grounded in Pragmatism and Action Science theories
- Rooted in empiricism – search for evidence
- Uses hypothesis testing and experimentation
- Has an explicit methodology – “systematic”
- Operates from a different paradigm – constructivism

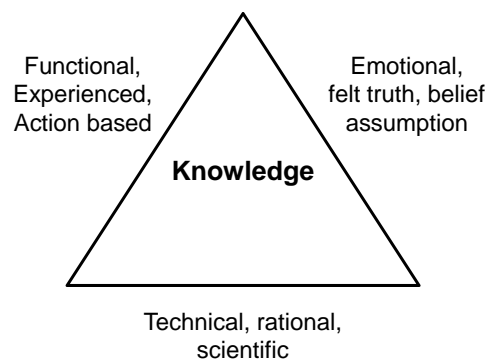
*Research is... “systematic gathering of information with a view to answering certain questions and subjecting that information to objective or public scrutiny or questioning” -- R. Pring*

*“Science underneath is just a formalized way of thinking and as Kuhn has pointed out, there is more than one way”*

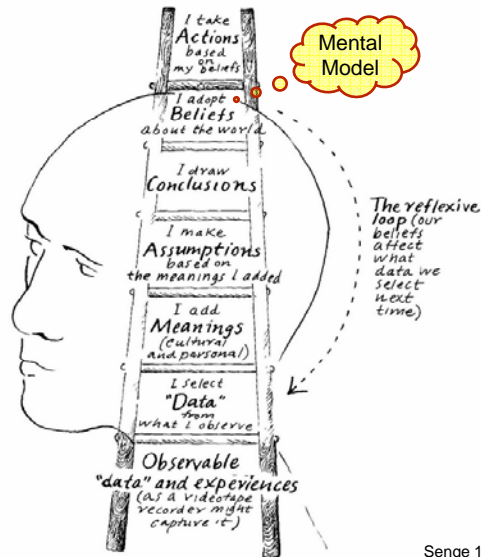
## The thinking underlying Reflection

- We learn and “know” best from experience
- We learn more from failures than successes
- Meaning of experience is not revealed easily
  - *We don't learn from experience... we learn from reflecting on experience* – J. Dewey
- Interpreting experience can be biased, selective
  - We filter experience through our hidden mental models – tacit assumptions about the world
- Need to uncover and make explicit our mental models
- A deliberate approach is needed to explore the experience and extract meaning

## What is knowledge?



## Using the Ladder of Inference



## Key elements of Systematic Reflection

- Focus on experience
  - reflection “on” and “in” action
- Search for evidence, inquiry
- Explicitness, transparency in thinking
  - making the tacit, explicit
- Questioning assumptions and mental models
- Connection, integration of elements to make meaning
- Iterative; occurs in stages, on multiple levels
  - Technical (what, how) → Practical (why) → Critical (so what, now what)
- “Systematic”, structured, deliberate process
- Done by individuals and groups



## Questioning is critical to Reflection

- Questioning underlies all phases of reflection
- Principal method of “unfreezing” current situation
- Allows time to consider answers and assumptions
  - Questions create temporal gaps
- Forces awareness, active consideration vs. tacit, automatic thinking
- Creates tension, uneasiness, motivation to change
  - May not come easily; more comfortable with advocacy than inquiry
- One distinction between leaders and managers

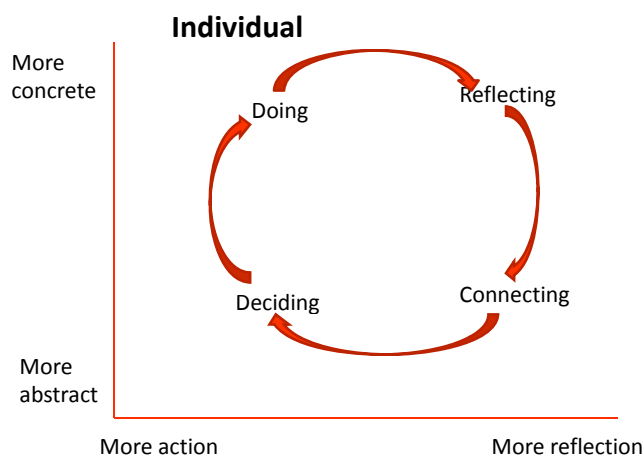
## Reflective questions

- Who, what, were, when, how?
  - Evidence level
  - “just the facts ma’am” – Joe Friday
- Why, what if, what else?
  - Assumption level
  - “I believe this;.... you believe something else?”
- So what, now what?
  - Critical reflection level
  - “So this is what this all means.... I may have changed my mind”;

## The Systematic Reflection process

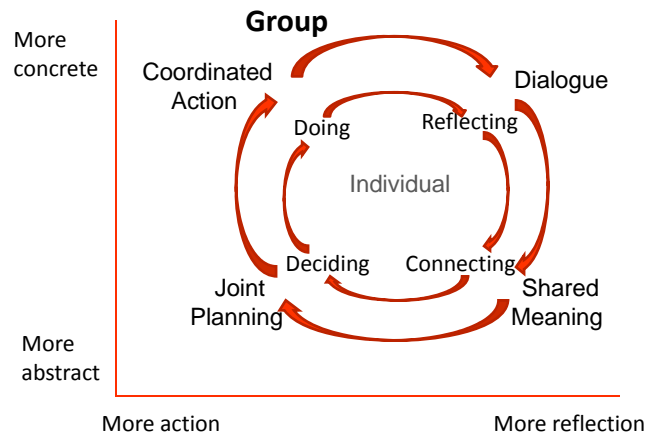
1. Consideration of an experience and spontaneous interpretation – “naming and framing”
2. Describe the experience using evidence – the facts
3. Question assumptions about the experience – expose the current mental model
4. Test the validity of the assumptions – alternative models
5. Draw conclusions establishing a new mental model – making change
6. Act on the conclusions
7. Repeat the process

## Wheel of Learning



Senge 1994

## Wheel of learning



Senge 1994

## Value of group Reflection

- Enriches search for evidence
- Brings in alternative perspectives and mental models
- More efficiency; greater capacity for testing assumptions
- Creates 'shared understanding', shared process
- Generates knowledge for organizational learning

## Tools for Systematic Reflection

- Journaling
- Using metaphor
- Concept mapping
- Critical incident analysis
- The ladder of inference
- Asking “why” 5 times
- Scenario development
- Storytelling
- Two column note taking
- Dialogue
- Affinity diagrams
- Fishbone diagrams
- Action Learning

*“If you want to teach people a new way of thinking, don’t bother trying to teach them. Instead, give them a tool, the use of which will lead to new ways of thinking”*

Buckminster Fuller

## Learning Reflection, enhancing learning

- Experiential learning is more effective for professional development especially for subjects such as leadership
- Reflection requires experience as its subject
- Reflection and experience can be structured in a learning format as a “reflective practicum”
  - The “design studio” approaches to teaching

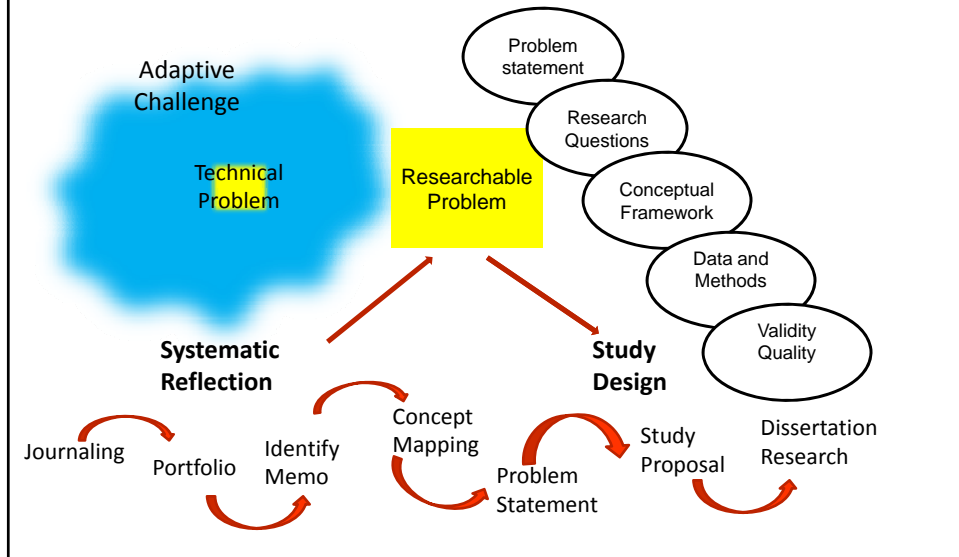
## Reflection in the DrPH Program

- Program structured as a “reflective practicum”
- In the curriculum
  - IPHS 501 – group reflection in leadership
  - IPHS 502 – using reflection for strategy development
  - IPHS 503 and 505 – reflection in approaching research design
  - IPHS 511 – individual reflection in personal leadership
  - IPHS 512 – reflection in problem specification
- In the portfolio
  - Assessing & demonstrating adaptive leadership capacity
  - Choosing electives
- In the dissertation
  - Selecting a dissertation topic
  - Developing a researchable problem

## Reflection in the DrPH Portfolio

- Phase 1 – “self explanation”
  - Initial evidence from experience and academic work – the CV
  - Initial mental model for leadership – personal vision statement
  - More advocacy than inquiry
- Phase 2 – “verification”
  - Consideration of alternative mental model – DrPH competencies
  - Deeper, more systematic search for evidence; greater explicitness
  - More inquiry than advocacy
- Phase 3 – “critical reflection”
  - Critical examination of all evidence
  - Integration into new mental model of personal adaptive leadership
  - Balanced advocacy and inquiry

## Reflection in the DrPH dissertation



## Crisis of Confidence in Professional Knowledge

*"In the varied topography of professional practice, there is a high, hard ground overlooking a swamp. On the high ground, manageable problems lend themselves to solution through the application of research-based theory and technique. In the swampy lowland, messy, confusing problems defy technical solution."*

*"The irony of this situation is that the problems of the high ground tend to be relatively unimportant to individuals or society at large, however great their technical interest may be, while in the swamp lie the problems of greatest human concern. The practitioner must choose. Shall he remain on the high ground where he can solve relatively unimportant problems according to prevailing standards or rigor, or shall he descend to the swamp of important problems and nonrigorous inquiry?"*

D. Schon, *Educating the Reflective Practitioner*

# UIC DrPH Theory of Change Model

