

Delivering climate Change Research to Support Decision Making

GEER 17 Conference
Coral Springs, FL

April 21, 2017

Mike Spranger, Professor and Extension Specialist
Department of Family, Youth and Community Sciences

University of Florida

spranger@ufl.edu

Public Engagement Strategies to Address Today's Wicked Problems*



*H. Rittel and M. Webber. (1973) *Dilemmas in a General Theory of Planning*, Policy Sciences 4 155-169

Community Issues

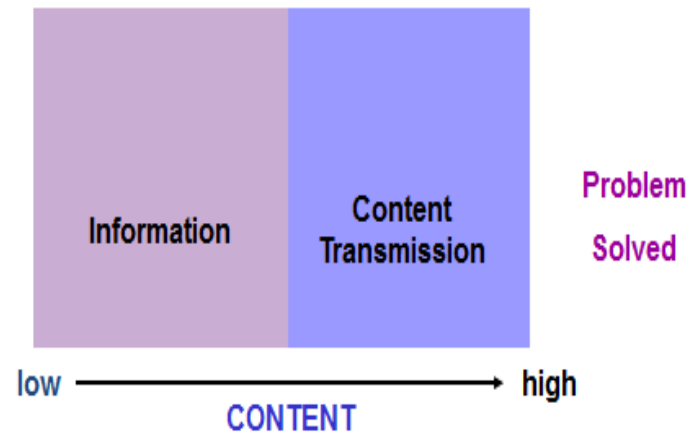
- We used to live in an uncomplicated world
- We knew our neighbors and resolved our issues
- Local governments provided needed services
- Science took care of our technical issues
- Decisions were made and readily accepted

Tame Issues



- Problem Identified
- Bring in technical expert and information
- Utilize information and expertise
- Problem Solved

Educational Processes *“Tame Issues”*



Contemporary Public Issues

- Today's issues are complex
- They affect large numbers and diversity of people
- Many issues are now interdependent
- Many decisions are made where voices are not heard
- These decisions often result in policies and actions that will affect many members of the community, but they have no involvement in the process

*We now live in a wicked world**



*H. Rittel and M. Webber. (1973) *Dilemmas in a General Theory of Planning*, Policy Sciences 4 155-169

The Nature of Our Problems in the 21st Century



Tame v. Wicked



Wicked problems involve **competing underlying values**, paradoxes, and tradeoffs that may not be easily resolved by science. They require tough choices or innovative solutions.

Wicked problems **cannot be “solved.”** Any proposed solution to a wicked problem tends to create new problems. Wicked problems are **systemic and must be treated that way.**

Wicked problems often require **adaptive changes** rather than technical ones. As a result, a broad range of stakeholders must be a part of any solution.

Addressing wicked problems thus necessitates **effective, ongoing collaboration and communication across multiple perspectives.**

Wicked problems often require **creativity, innovation, and imagination.**

Wicked Issues defined

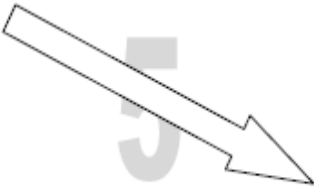


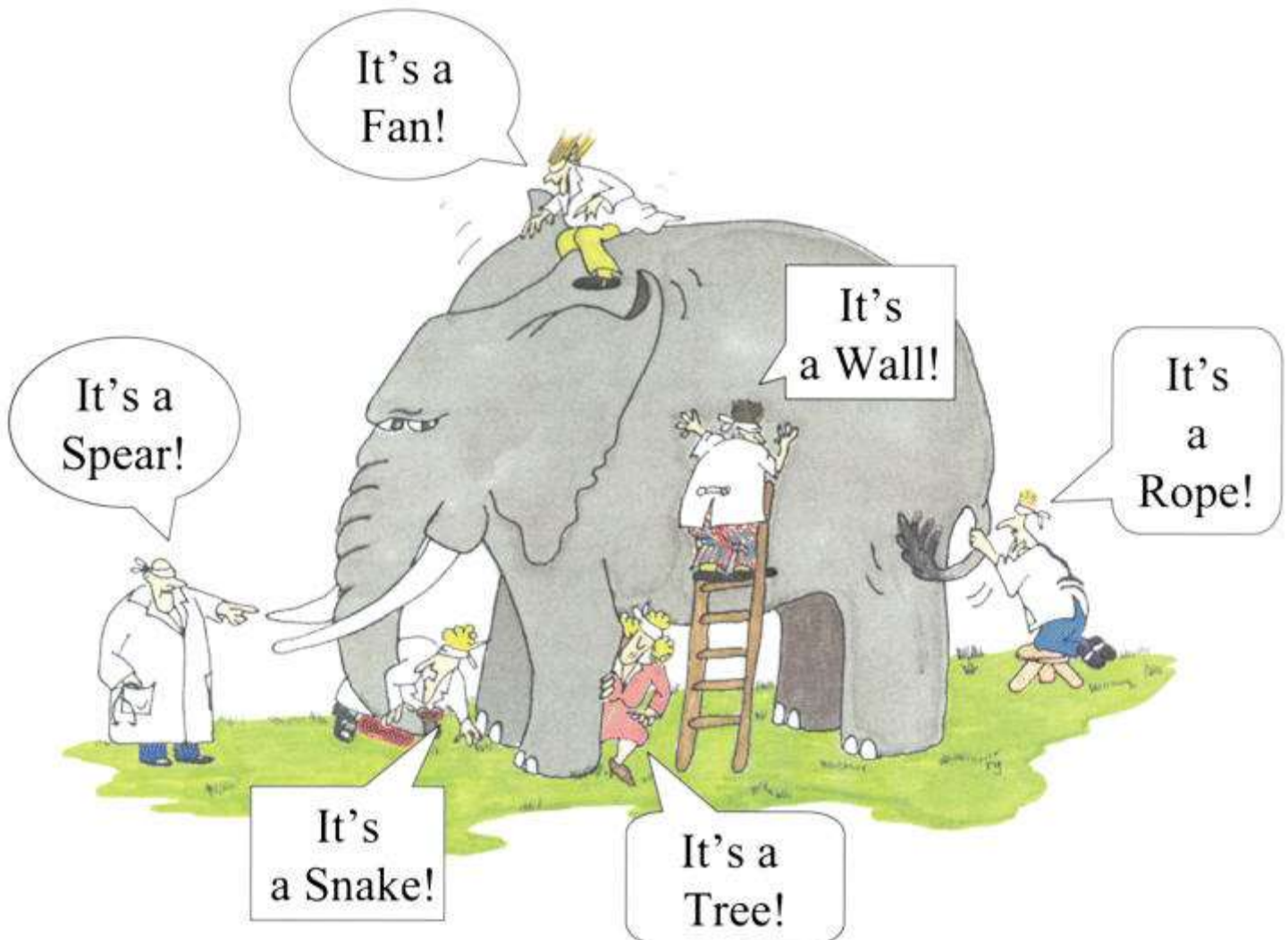
- No definitive formation of problem
- No stopping rule
- No true/false answers (complex, gray, good/bad)
- No immediate test to solution
- Uniqueness

- Values-based Engagement
- Symptom of other problems
- Discrepancy explained in different ways...which may determine its resolution
- May take a multi-disciplinary, systems approach
- Requires cooperation and collaboration

Tame vs. Wicked Issues



Diversity → Complexity ↓	Single party	Multiple parties, each having only some of the relevant knowledge	Multiple parties, conflicting in values/interests
Both problem and solutions known (Heifetz Type 1)	Tame problem 1	2	3
Problem known, solution not known (relationship between cause and effect unclear) (Heifetz Type 2)	4	5 	Wicked problem 6
Neither problem nor solution known (Heifetz Type 3)	7	Wicked problem 8	Very wicked problem 9



It's a Fan!

It's a Spear!

It's a Wall!

It's a Rope!

It's a Snake!

It's a Tree!

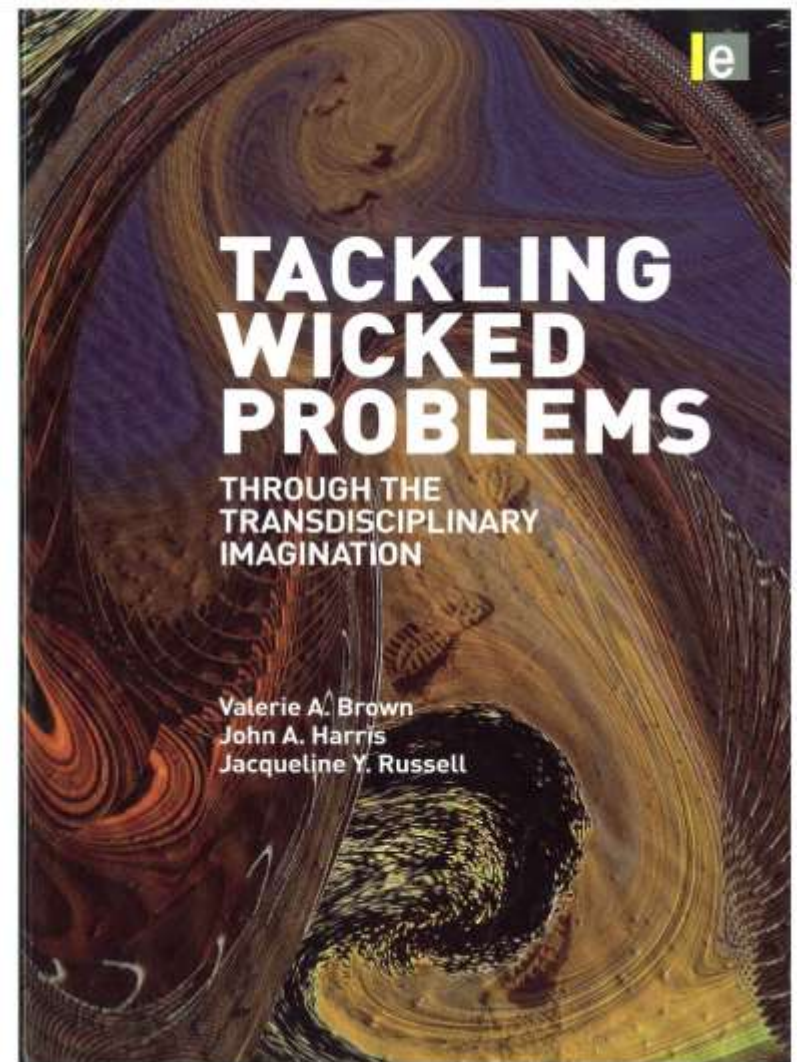
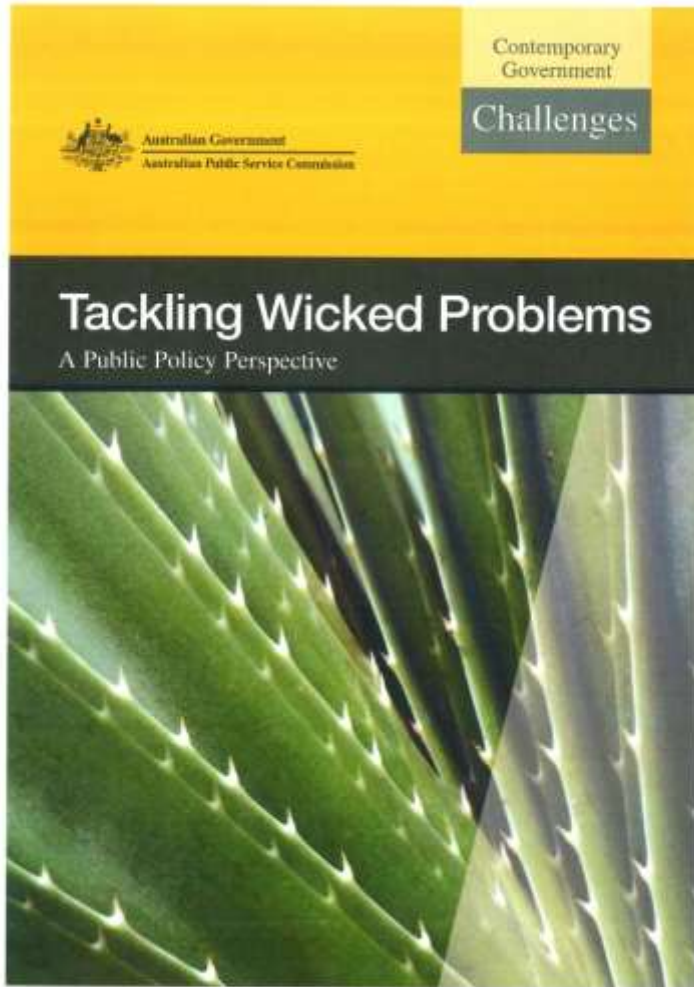
Wicked Issues

Examples

- Sustainability
- Climate Change
- Everglades Restoration
- Poverty
- Obesity
- Genetic Modified Foods

- Urban/Rural Interface
- Resource Management
- Community Redevelopment
- Land Use/New Urbanism
- Food/Shelter for the Homeless
- Medical Use - Marijuana

Tackling “Wicked Problems”

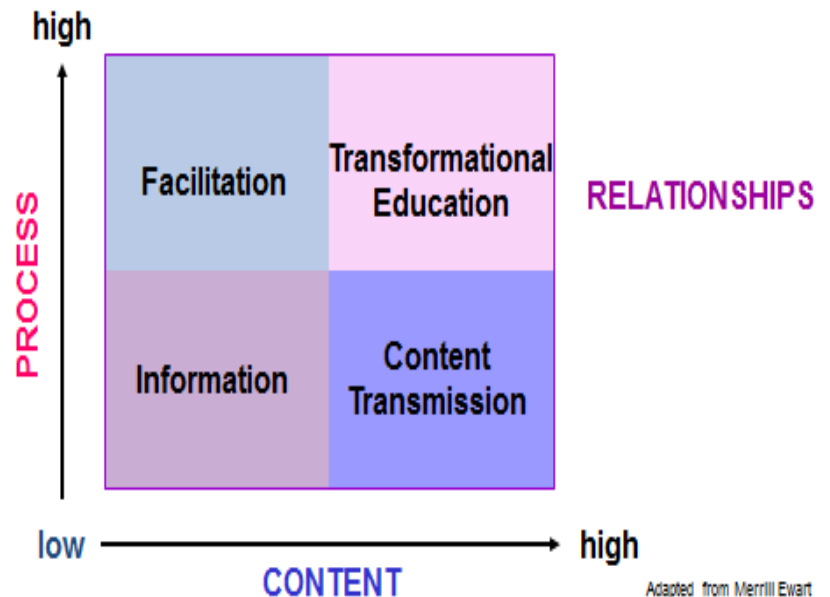


Wicked Issues

Need a multi-disciplinary response

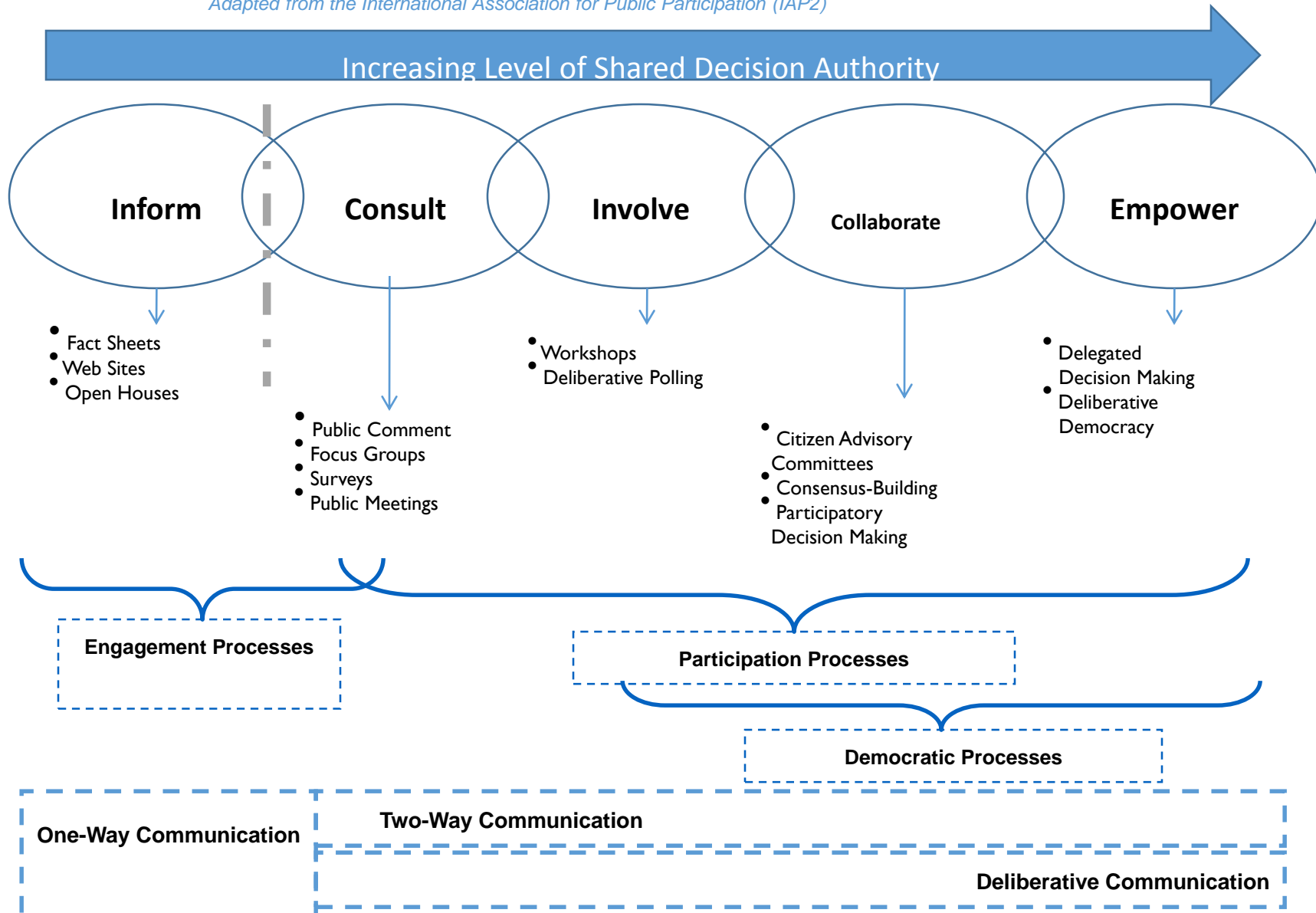
- Science and Knowledge (Content)
- Collaboration (Process)

Educational Processes
“Wicked Issues”



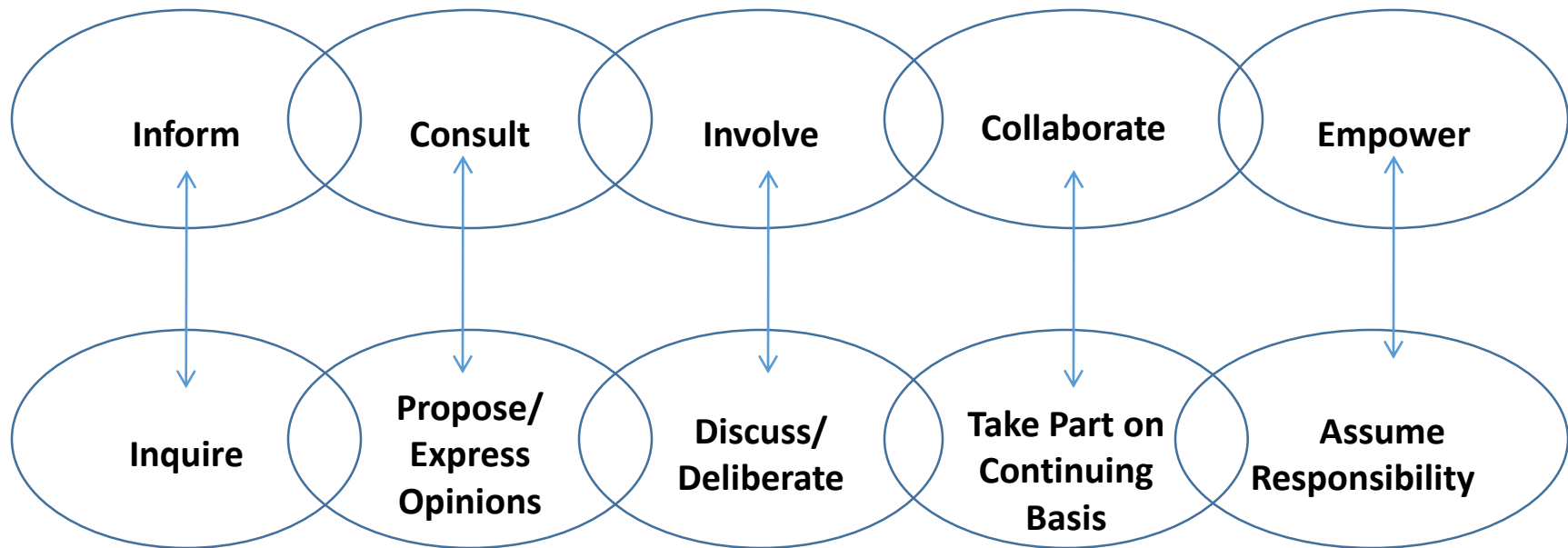
Spectrum of Public Participation

Adapted from the International Association for Public Participation (IAP2)



Reciprocity: Actions Required of Agencies and Citizens

Actions by Agencies/Organizations



Actions by Citizens

Questions to Ponder



1. How can decision-makers, stakeholders and interested publics become more engaged and involved in the issues that impact them?
2. What is the role of scientists and decision-makers in the public engagement process?
3. What are some tools and techniques that can be utilized to bring all to the table to discuss and become engaged in the discussion and resolution of these wicked issues?
4. What level of engagement do we want - inform, consult, involve, collaborate, empower – with individuals we work with?