Systematic Review Techniques as a Means of Taming "Wicked" Evaluations

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Presentation Outline

- Overview
- Concepts
- Approach
- Conclusion

Overview: Community Connect Network

- Community Connect Network was created as a public-private collaborative for the purpose of discovering and implementing sustainability mechanisms for Washington State's Community Technology field.

- Partners:
  - City of Seattle Department of Information Technology
  - NPower Seattle
  - Puget Sound Center for Teaching, Learning and Technology
  - Stone Soup
  - Washington State University of Extension
  - University of Washington Information School

- Funding: Bill and Melinda Gates Foundation

Overview: Communities Connect Network

- What is Communities Connect Network objective?
  - To ensure that Washington state is a leader in "digital inclusion" – the movement to ensure that all individuals have access and the skills to use the Internet and information technologies.
- What does CCN do?
  - Supports service providers
  - Conducts research
  - Disseminates and trains community technology providers on best practices
  - Brings awareness of the need for and impact of digital inclusion to public officials, business leaders, and the citizens of Washington state

Overview: Community Connect Network

- Learn more at http://communitiesconnect.org

Overview: Purpose

- Developing a set of indicators that could be used to demonstrate the impact of the Community Technology field in the state of Washington.

- The purpose of this effort was as a way of informing policy makers.

Overview: Audience and Stakeholders

- Policy makers
- Community technology service providers
- Associated service providing organizations
- Community technology services users
- Researchers
- General Public

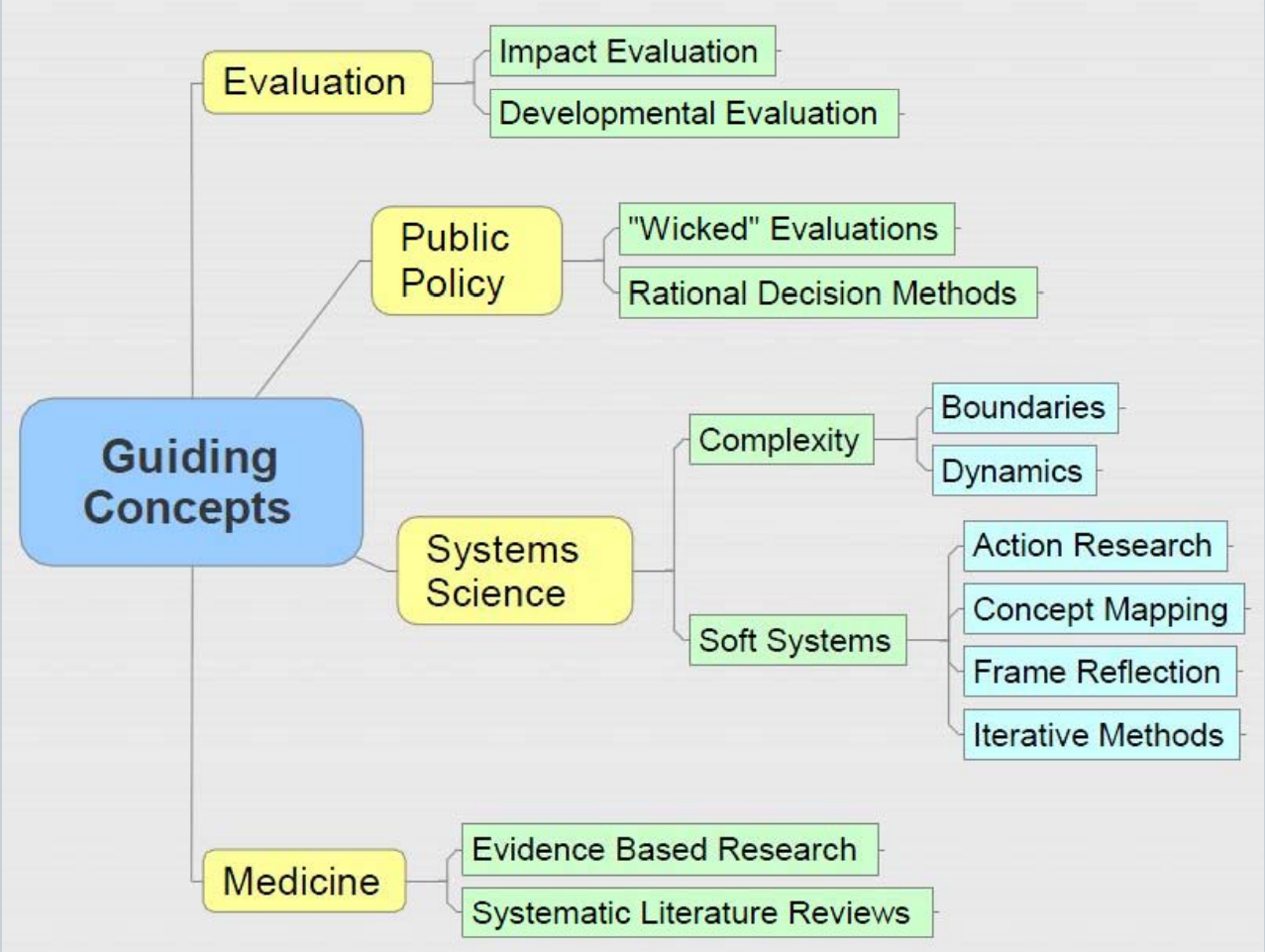
Overview: Challenges

- Ambiguity
  - Regarding definitions
  - Regarding scope
  - Regarding focus
- Boundaries
- Scope

Overview: Approach

- Recognized process centered
- Continued systems approach
- Use of existing research to bear on the problem
- Addressed complexity

Concepts: Overview



Concepts: Overview

- Impact or Outcome evaluation

- Developmental evaluation
  - Providing feedback and learning opportunities to stakeholders
  - Developing new measures and monitoring mechanisms as goals emerge & evolve
  - Position evaluation as an internal, team function integrated into action and ongoing interpretive processes
  - Design the evaluation to capture system dynamics, interdependencies, and emergent interconnections
  - Aim to produce context-specific understandings that inform ongoing innovation
  - Accountability centered on the innovators deep sense of fundamental values and commitments
  - Evaluator collaborates in the change effort to design a process that matches philosophically and organizationally
  - Evaluation supports hunger for learning

Source: Patton, Michael Q. "Evaluation for the Way We Work." The Nonprofit Quarterly, Spring 2006, pp. 28-33

Concepts: "Wicked" Evaluations

- Wicked Problems:
  1. There is no definitive formulation of a wicked problem
  2. Wicked problems have no stopping rule
  3. Solutions to wicked problems are not true or false, but good or bad
  4. There is no immediate and no ultimate test of a solution to a wicked problem
  5. Every solution to a wicked problem is a "one-shot" operation; because there is no opportunity to learn by trial and error, every attempt counts significantly

Rittel, Horst, and Melvin Webber; *Dilemmas in a General Theory of Planning*, Policy Sciences, Vol. 4, pp. 155-169, Elsevier Scientific Publishing Company, Inc.,

Concepts: "Wicked" Evaluations cont.

- Wicked Problems:
  6. Wicked problems do not have an exhaustively describable set of potential solutions, nor is there a well-described set of permissible operations that may be incorporated into the plan.
  7. Every wicked problem is essentially unique.
  8. Every wicked problem can be considered to be a symptom of another problem.
  9. The existence of a discrepancy representing a wicked problem can be explained in numerous ways.
  10. The planner has no right to be wrong

Concepts: Systems perspective

- Cause of a “wicked problem”
- Perspective of the role of CTCs as component of a larger system
- Examined the linkages and interactions between the elements of the system

Concepts: Soft systems

- Frame Reflection (Schon, 1994)
- Soft systems (Checkland, 1990)

Concepts: Evidence based policy making

UK education Secretary, David Blunkett as

"social science research evidence is central to development and evaluation policy... We need to be able to rely on social science and social scientists to tell us what works and why and what types of policy initiatives are likely to be most effective."

Concepts: Interactive model

- Policy evolves as a result of an interactive relationship between researchers and decision makers
- Policy shaped within “polciy communities”.

Concepts: Evidence based medicine

- Medicine pioneered the use of evidence to support decision making
- Tends to be more quantitative

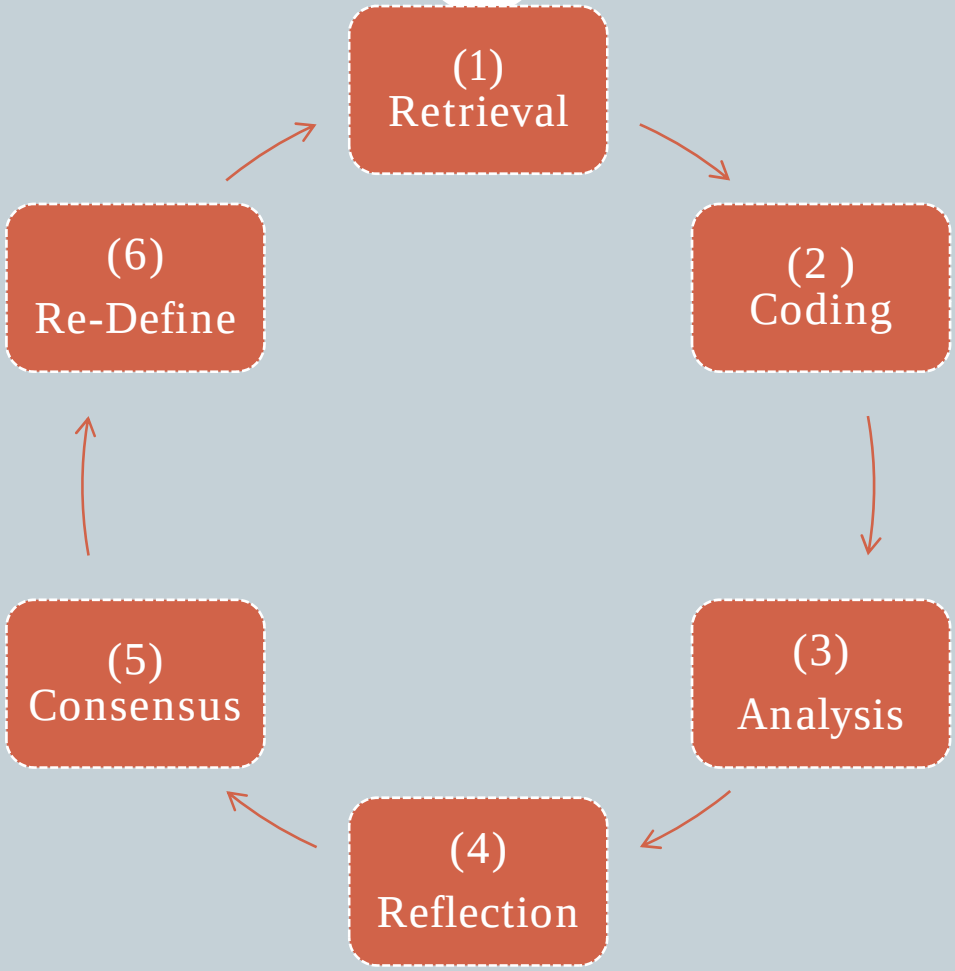
Concepts: Systematic Literature Review

- Literature reviews very common
- Addresses the desire for more rigor
- Utilize evaluation work already completed

Approach: Overview

- Understand impact in the context of a larger system
- Grounded our claims of relationships between individual measures to larger system through supporting literature
- Used qualitative research approaches to code literature
- Used software to manage literature collection
- Identified themes and gaps in literature

Approach: Iterative review cycle



Approach: Step 1 - Retrieval

- Initially focused on building a broad collection of literature regarding the topic area
- Future iterations focus on developing a deeper and more narrow literature collection
- The objective becomes to develop a more comprehensive, exhaustive review of the literature

Approach: Step 2 – Coding and Organization

- Applied qualitative coding techniques to literature base
- Process largely exploratory in nature
- Document coding done primarily at a meta-level
- Interactively developed coding trees

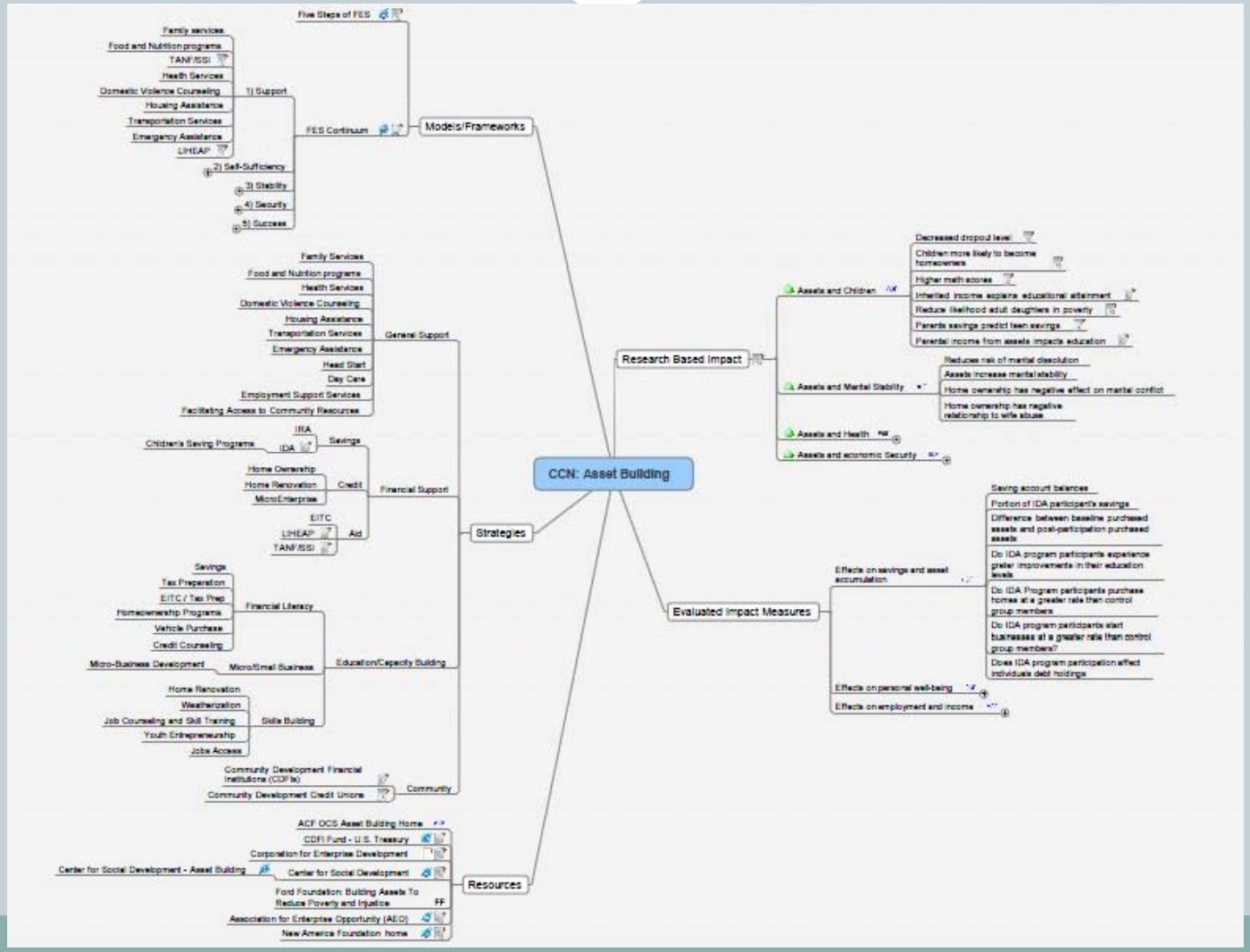
Approach: Step 3 – Analysis

- Examination of the literature according to the themes identified in the coding hierarchies
- Provides for analysis of literature addressing topics such as:
  - how thoroughly the literature addresses a topic
  - correlation between topics within the literature
  - subjective measures in terms of quality of the research

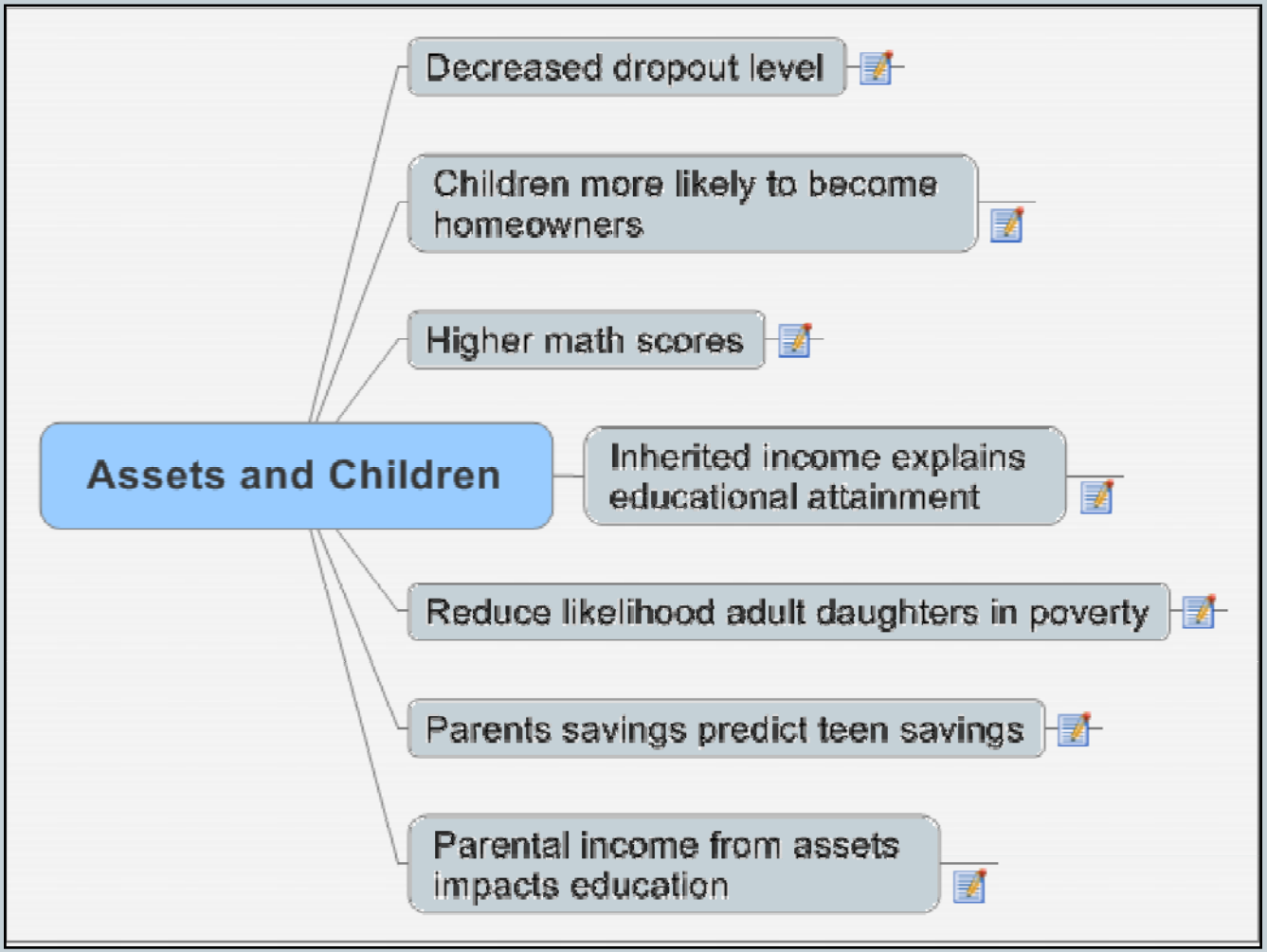
Approach: Step 4 – Reflection

- Report findings to the larger stakeholder group
- Used concept and mind maps as a way of reporting
- Focused conversation on objectives of identifying and clarifying focus areas
- Grounded discussions in the literature base

Approach: Step 4 – Reflection - MindMap



Approach: Step 4 – Reflection - Mindmap Node



Approach: Step 5 – Consensus building

- Consensus difficult
- Development of option sets
- Decision making becomes focused on which options are best rather than searching for possible options
- Construction of “boundaries” based on literature – not arbitrary
- Narrows the scope of inquiry

Approach: Step 6 – Redefinition

- Translation of consensus goals to the expression of information need
- The expression of these information needs informs the continual development of the literature collection

Conclusion

- Why important?
  - Supports rational policy making / evidence based policy
  - Creates a degree of rigor
  - Utilizes existing knowledge – avoids repeats of mistakes
- Who it helps?
  - Large literature base
  - Where there are unknowns – multi-disciplinary
- Future directions?
  - Further development of tools
  - Potential as bridge for collaborative efforts among disciplines and between practitioners and researchers
  - Refinement of the model to support meta-analysis and indicator development