



Children *and* Family  
Research Center

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN  
SCHOOL OF SOCIAL WORK



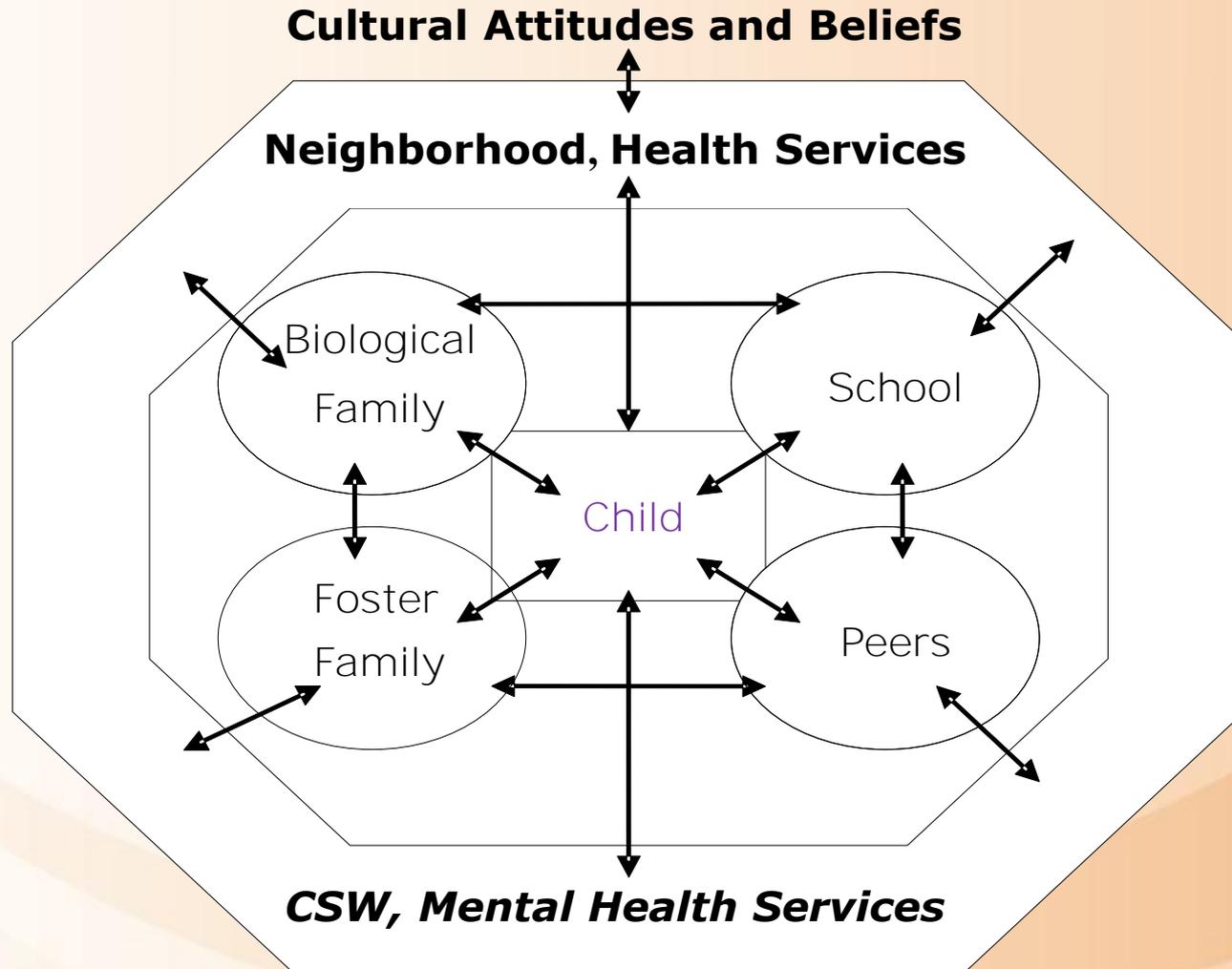
# Mixed Methods Way of Thinking: A Primer

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Summit  
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# Complexity of child welfare





# Mixed Methods Demographics

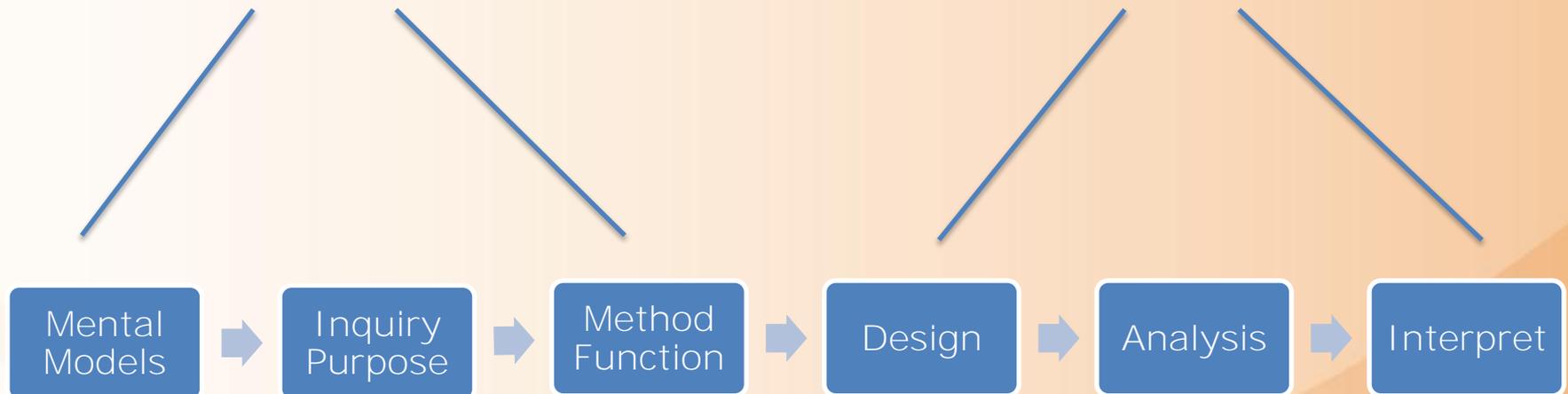
- Publications
- Disciplines
- Peculiarities of an emerging field
  - Language barriers
  - **Author “strands”**
  - Where to start?



# Workshop Focus

How do we determine  
what to study?

How do we determine  
how to study it?





# Meet the audience- (no slide?)

- Work at universities? Research institutions?  
Agencies?
- Education in Social work? Public health? Psychology?  
Law? Other?
- Worked in child welfare on the front lines?
- Done child welfare evaluation less than 3 years?  
More than 10?
- Believe that you can know things that aren't  
measurable?
- Have you done a mixed methods study before?



**Mental Models** → Inquiry Purpose → Method Function → Design → Analysis → Interpret

# What motivates your decisions about what to study and how to study it?

Discipline

Education

Methodological training

Values

Epistemology

Metaphors

Paradigm

Personal commitments

Theoretical stances

Assumptions

Professional experience

Personal wisdom

Political beliefs

Funding sources

Resources

Skills



**Mental Models** → Inquiry Purpose → Method Purpose → Design → Analysis → Interpret

## Mental Models influenced by:

- 1) Substantive theory and theoretical commitments
- 2) Disciplinary perspectives
- 3) Philosophy of science
- 4) Methodological traditions
- 5) Education and training
- 6) Contextual factors (e.g. resources)
- 7) Political factors (who has power etc.)
- 8) Personal values

Greene, 2004



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## What is the purpose of your study?

“A study does not begin with design or method but rather with a well-defined and well-justified purpose and a clearly delineated set of inquiry questions”



Mental Models ➔ Inquiry Purpose ➔ **Method Purpose** ➔ Design ➔ Analysis ➔ Interpret

## Does DR Work? Evaluation Questions:

- **Child Safety:** Are children whose families receive the non-investigation pathway as **safe** as or safer than children whose families receive the investigation pathway?
- **Pathway Differences:** How is the non-investigation pathway different from then investigation pathway in terms of **family engagement, caseworker practice, and services provided?**
- **Program Costs:** What are the **cost** and funding implications to the child protection agency of the implementation and maintenance of a DR approach?



# PBC Research Questions

1. Does an inclusive and comprehensive planning process produce broad scale buy-in to clearly defined PBC/QA?
2. What are the necessary components of PBC/QA systems that promote the greatest improvements in outcomes for children and families?
3. When operating under a PBC/QA system, are the child family and system outcomes produced by private contractors better than those under the previous contracting system?
4. Are there essential contextual variables that independently appear to promote contract and system performance?
5. Once initially implemented, how do program features and contract monitoring systems evolve over time to ensure continued success?



Mental Models ➔ ***Inquiry Purpose*** ➔ Method Function ➔ Design ➔ Analysis ➔ Interpret

## Possible Purposes

- Predict
- Add to knowledge base
- Impact people, institutions, or organizations
- Measure change
- Understand complex phenomenon
- Test new ideas
- Generate new ideas
- Inform constituencies
- Examine the past



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# Quantitative Methods

- Purposes:
  - to test theories or hypotheses
  - gather descriptive information
  - examine relationships
- Examples:
  - descriptive surveys
  - observational studies
  - case-controlled studies
  - randomized controlled trials
  - time-series designs
  - Administrative data analysis



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# Qualitative Methods

- Purposes:
  - understand processes (e.g. program implementation)
  - provide details about context
  - emphasize voice of participants
  - theory development
- Examples:
  - In-depth interviews
  - Document review
  - Ethnographic observation
  - Focus groups



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## Mixed Methods

A procedural technique defined as the employment of at least one qualitative and at least quantitative method, in combination, within a single study.



Mental Models ➔ Inquiry Purpose ➔ **Method Purpose** ➔ Design ➔ Analysis ➔ Interpret

## Mixed Methods

- Adds *meaning* to numbers and *exactness* to narrative
- Provides *breadth* (quantitative) and *depth* (qualitative) to results
- Studies complex phenomena with *multiple levels of analysis*, (e.g. child, family, organization)
- Simultaneously *tests* and *generates* theory
- Uses the strengths of one type of method to *overcome the limitations* of another



# IL Differential Response Evaluation: Methods

- ***Random Control Trial (RCT):*** Compares outcomes for families randomly assigned to the investigation or DR pathway
- ***Process Evaluation:*** Looks at how DR is implemented at the agency level and at the caseworker level – what actually occurs in a DR case?
- ***Contextual Factors:*** Looks at how worker, agency, and regional variations affect the outcomes



# Illinois Differential Response Evaluation

Family Exit  
Survey

Worker  
Survey

Case-specific  
Report

SACWIS/  
CYCIS

Caregiver  
Interviews

Key Informant  
Interviews

Stakeholder  
Focus Groups

Field  
Observations

Cost data



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## PBC Implementation Case Studies

- Performance on PBC outcome measures
- On site facility visit
- Implementation survey of frontline, supervisory, clinical and administrative staff on implementation drivers (78 items)
- Separate implementation focus groups of frontline, supervisory/clinical, administrative staff (15 questions) on implementation drivers, practice changes, strategies to achieve benchmarks
- Document review
- QIC PCW frontline staff and QA surveys if completed by the agency



# PBC Study Methods

<b>RQ 1 Collaborative Planning Process</b>	<b>RQ2 PBC/QA Necessary Components</b>	<b>RQ3 Better Outcomes under PBC</b>	<b>RQ4 Contextual Variables</b>	<b>RQ5 Program Features Evolving Over Time</b>
<ul style="list-style-type: none"> <li>▪ Survey of Interagency Collaboration (200)</li> <li>▪ Steering Committee semi-structured interviews (18)</li> <li>▪ Critical stakeholder focus groups (120)</li> <li>▪ Observational notes (500+ meetings over 3 years)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Staff survey on training, supervision and evidence-informed practice (2,000+)</li> <li>▪ Quality improvement directors survey (45)</li> <li>▪ Steering Committee interviews (18)</li> <li>▪ Implementation case studies (15 agencies over 3 years)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Administrative outcome data on contractual performance measures</li> <li>▪ Administrative QA monitoring data</li> <li>▪ Critical stakeholder focus groups</li> <li>▪ Implementation case studies</li> </ul>	<ul style="list-style-type: none"> <li>▪ Environmental scans</li> <li>▪ Steering Committee semi-structured interviews</li> <li>▪ Critical stakeholder focus groups</li> <li>▪ Implementation case studies</li> </ul>	<ul style="list-style-type: none"> <li>▪ Administrative QA and fiscal monitoring</li> <li>▪ Staff survey on training, supervision and evidence-informed practice</li> <li>▪ Quality improvement directors survey</li> <li>▪ Steering Committee interviews</li> <li>▪ Implementation case studies</li> </ul>



Mental Models ➔ Inquiry Purpose ➔ **Method Purpose** ➔ Design ➔ Analysis ➔ Interpret

## Mixed Method Purposes

- **Triangulation**- Seeks convergence or correspondence from different methods
- **Complementarity**- Seeks elaboration or clarification of the results from one method with the results from the other
- **Development**- Seeks to use the results from one method to inform the other method
- **Initiation**- Seeks the discovery of paradox and contradictions, new perspectives or frameworks
- **Expansion**- Seeks to extend the breadth and range of inquiry by using different methods for different inquiry components



Mental Models ➔ Inquiry Purpose ➔ Method Function ➔ **Design** ➔ Analysis ➔ Interpret

*“Developing a thoughtful and appropriate mixed methods **design** is less a process of following a formula...and more an **artful crafting**...that will best fulfill the intended purposes for mixing within the practical resources and contexts at hand.”*

- Greene 2007, pg. 129



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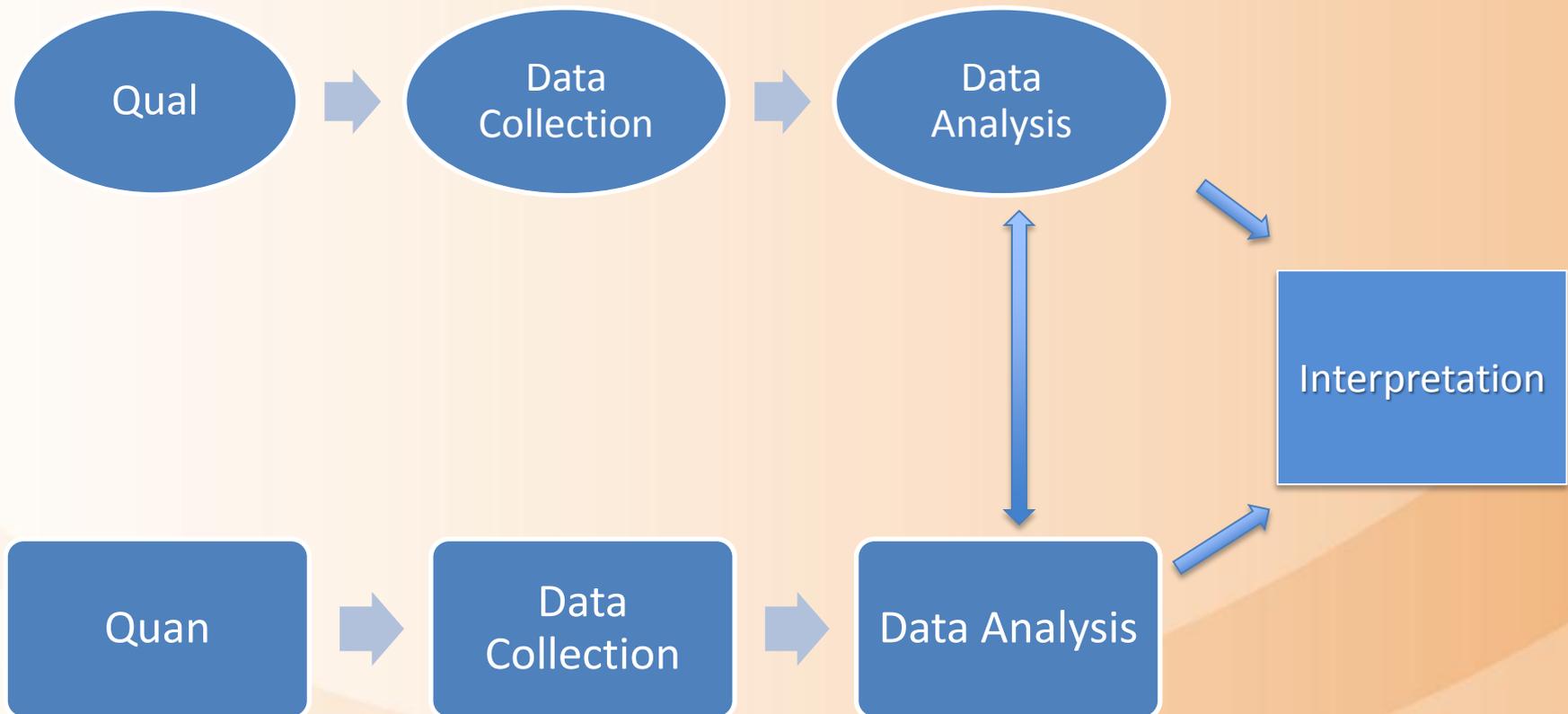
## Some Design Considerations

1. Independent (component) or interacting?
2. Which method is dominant? Are they equal?
3. Timing?
  1. Concurrent
  2. Sequential



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## Triangulation function leads to Component Design





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Development function leads to  
**Sequential Design**





Mental Models ➔ Inquiry Purpose ➔ Method Purpose ➔ **Design** ➔ Analysis ➔ Interpret

# Mixed Methods Design References

*Mixed Methods in Social Inquiry (2007)* by Jennifer Greene.

*Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (2009)* by John W. Creswell.

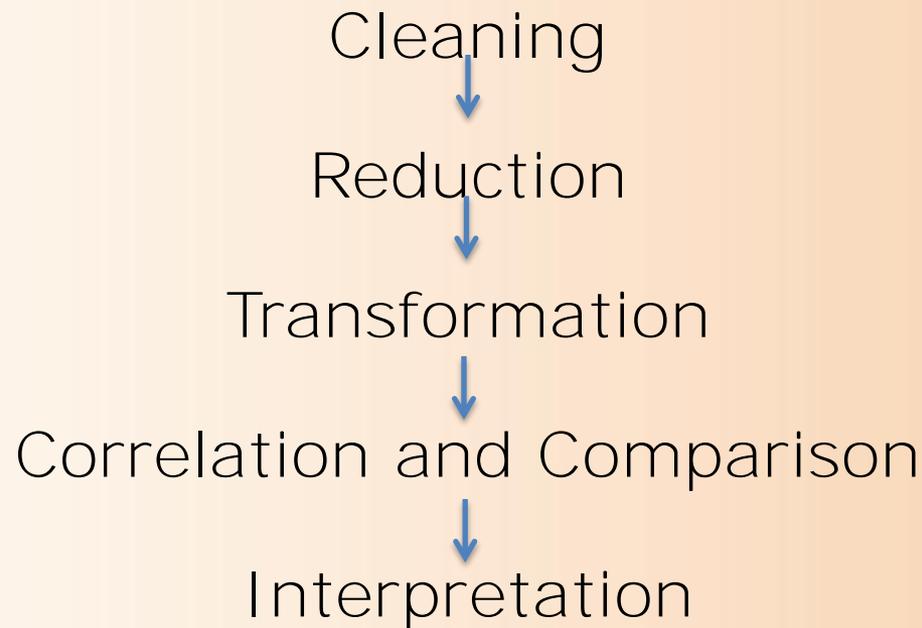
*Handbook of Mixed Methods in Social and Behavioral Research (2003)* by Tashakkori and Teddlie.

Best Practices for Mixed Methods Research in the Health Sciences (2011) by Creswell et. al. NIH-Brief



Mental Models ➔ Inquiry Purpose ➔ Method Purpose ➔ Design ➔ **Analysis** ➔ Interpret

## A Basic Analysis Process





Mental Models ➔ Inquiry Purpose ➔ Method Purpose ➔ Design ➔ Analysis ➔ **Interpret**

# Interpretation

## Difficulties

- Unequal emphasis on different methods by team members
- Accuracy of different data
- Whether methodological assumptions can or should be combined

## Strengths

- **“Hidden” findings in another method**
- More complete conclusions



## What did you find out about the use of PBC in residential care that you would not have found out if you didn't use a mixed method approach?

- No frontline staff were aware of the PBC outcome measures and confused PBC with required changes to Medicaid documentation
- Implementation of 3 major reform efforts at once led to “innovation fatigue”
- No agency changed how it selected, trained, supervised/coached or evaluated staff
- No agency changed its QA system to include the PBC outcome measures
- 1 agency had no functioning QA program; 2 agencies had no treatment model
- Lower performing agencies blamed the youth for poor performance
- Higher performing agencies had clear treatment models, organizational structure and programmatic/fiscal alignment
- Higher performing agencies had fiscal tracking mechanisms in place
- All agencies reported a high percentage (10-25%) of their residential population had come from disrupted adoptions or kinship placements



# Mixed Methods

- Active Engagement with Differences
  - Researchers
  - Purposes
  - Methods
  - Theories
  - Designs
  - Interpretations

***The goals is not convergence  
but is insight.***



*A mixed method way of thinking* seeks not so much convergence as insight; the point is not a well-fitting model or curve but rather the generation of important understandings and discernments through the juxtaposition of different lenses, perspectives, and stances; in a good mixed methods study, difference is constitutive and fundamentally generative (Greene, 2005).