



Panel 2. Assessment and Evaluation: Methods To Drive Best Practices

Ricardo Paes de Barros

Greg Welch

Michelle Howell Smith



Methodological Rigor in Early Childhood Research and Evaluation

Greg W. Welch, Ph.D.

*Director, Nebraska Bureau for Education Research,
Evaluation and Policy*

Overview

- Question to Consider
- Historical Context
- Convergence of Evaluation and Research
- Contemporary Practices
- Methodological Debate
- Quantitative Tidbits
- A Note on Fidelity
- Moving Forward

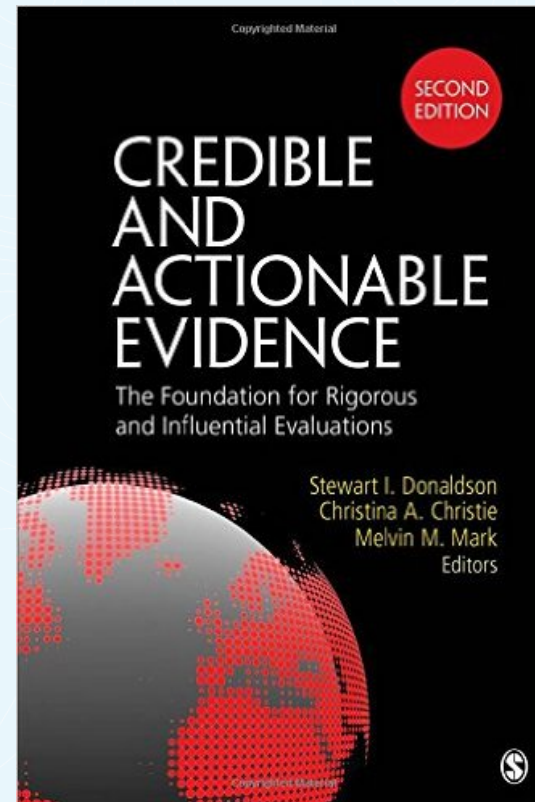
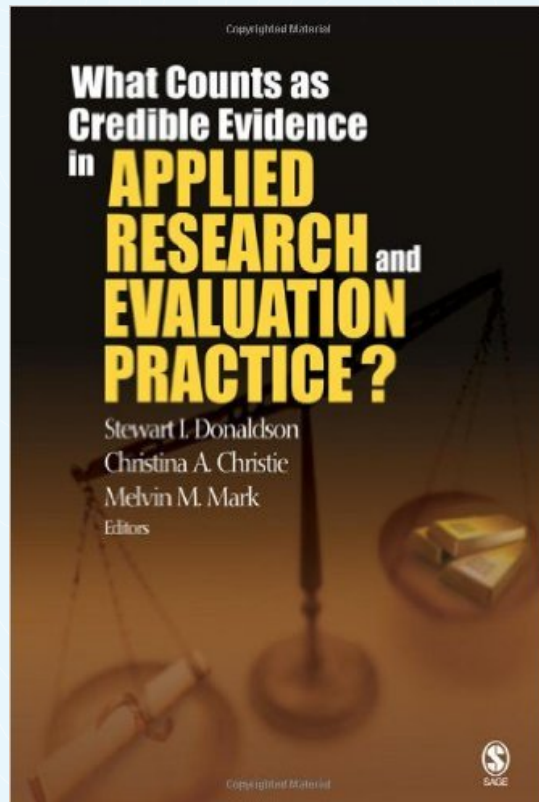


Question to Consider



Framing the Topic

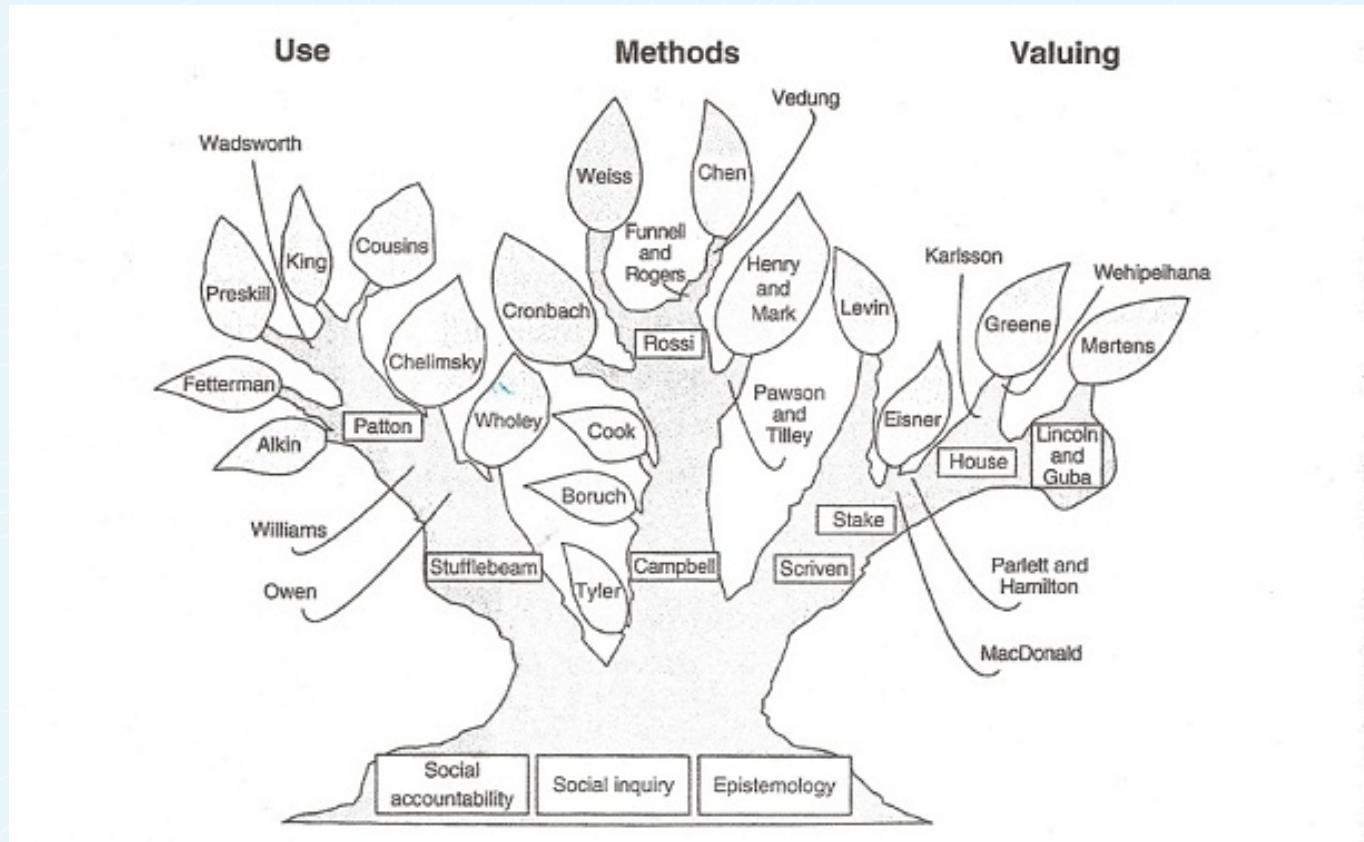
- What counts as *credible evidence* in the Early Childhood research and evaluation?



Historical Context



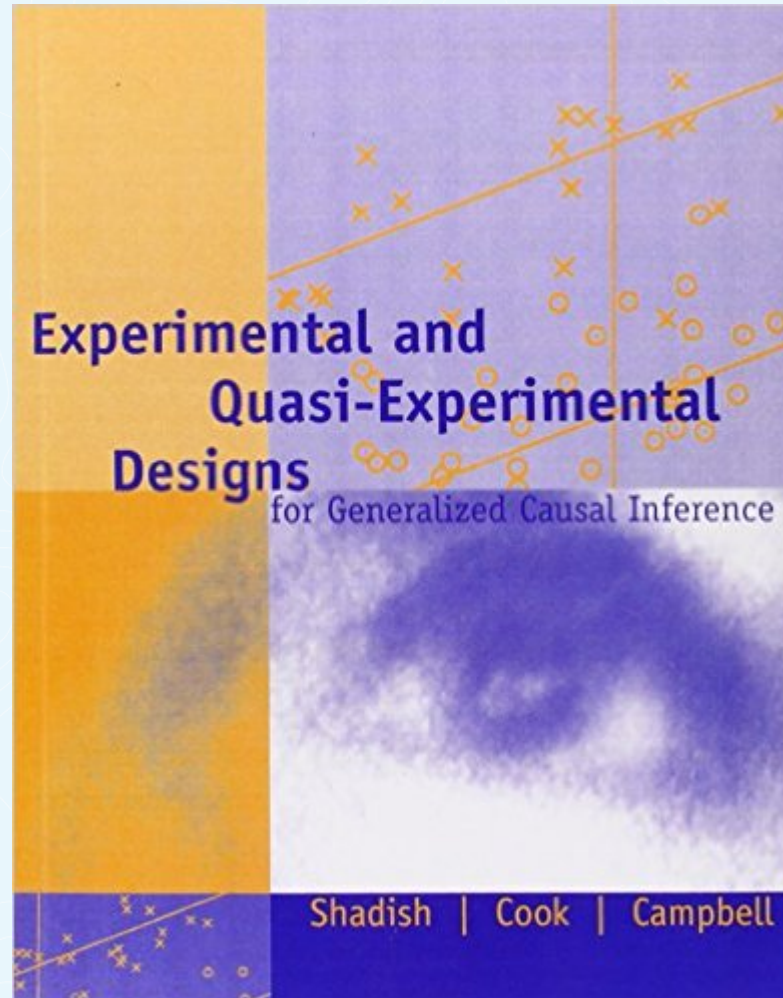
Evaluation Roots



Experimenting Society



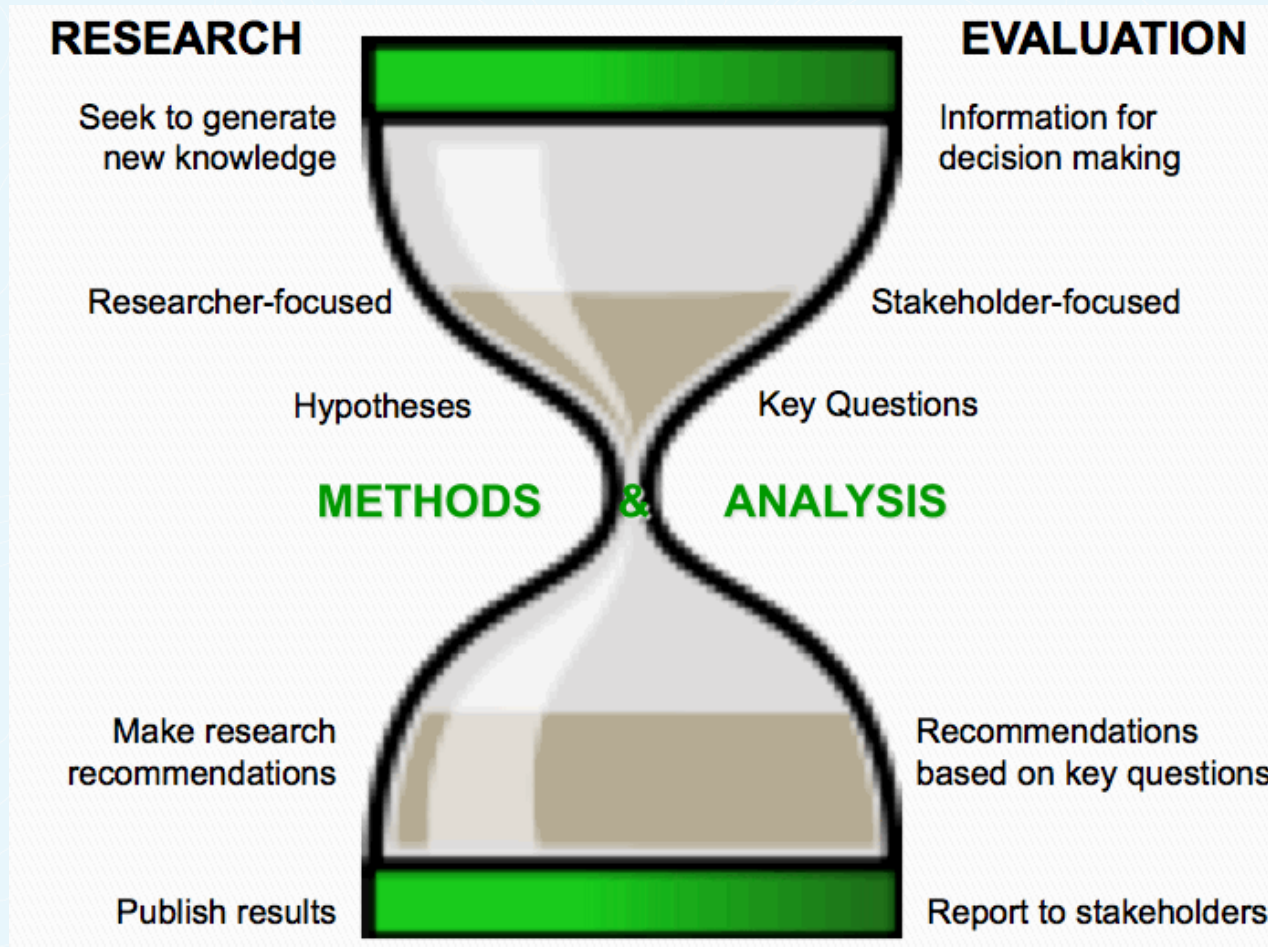
The Accidental Evaluator



Convergence of Evaluation and Research



Evaluation Research



* <http://aea365.org/blog/john-lavelle-on-describing-evaluation/>



Contemporary Practices



United States Center for Disease Control and Prevention



CDC – Credible Evidence is...

- Compiling information that stakeholders perceive as trustworthy and relevant for answering their questions. Such evidence can be **experimental** or **observational, qualitative** or **quantitative**, or it can include a **mixture of methods**. Adequate data might be available and easily accessed, or it might need to be defined and new data collected. Whether a body of evidence is credible to stakeholders might depend on such factors as how the questions were posed, sources of information, conditions of data collection, reliability of measurement, validity of interpretations, and quality control procedures.



At the Forefront of Effectiveness

- The Cochrane Collaboration
 - <http://www.cochrane.org/>
- The Campbell Collaboration
 - <http://www.campbellcollaboration.org/>
- The What Works Clearinghouse
 - <http://ies.ed.gov/ncee/wwc/default.aspx>



WHAT IS THE WWC?

A TRUSTED SOURCE ABOUT WHAT WORKS IN EDUCATION

WHY

The work of the WWC helps teachers, administrators, and policymakers make evidence-based decisions.



WHAT

The WWC reviews **evidence** of effectiveness of programs, policies, or practices by using a consistent and transparent set of standards. The WWC doesn't rank, evaluate, or endorse interventions.

EFFECTIVENESS STUDIES



WHO

Hundreds of trained and certified **reviewers** rate whether studies meet **standards** and then **summarize** results that do meet standards.



HOW

The WWC creates products that present findings on what works in education, including:



INTERVENTION
REPORTS



SINGLE STUDY
REVIEWS



QUICK
REVIEWS



PRACTICE
GUIDES

WHERE

Summaries of the available research interventions are available at
whatworks.ed.gov

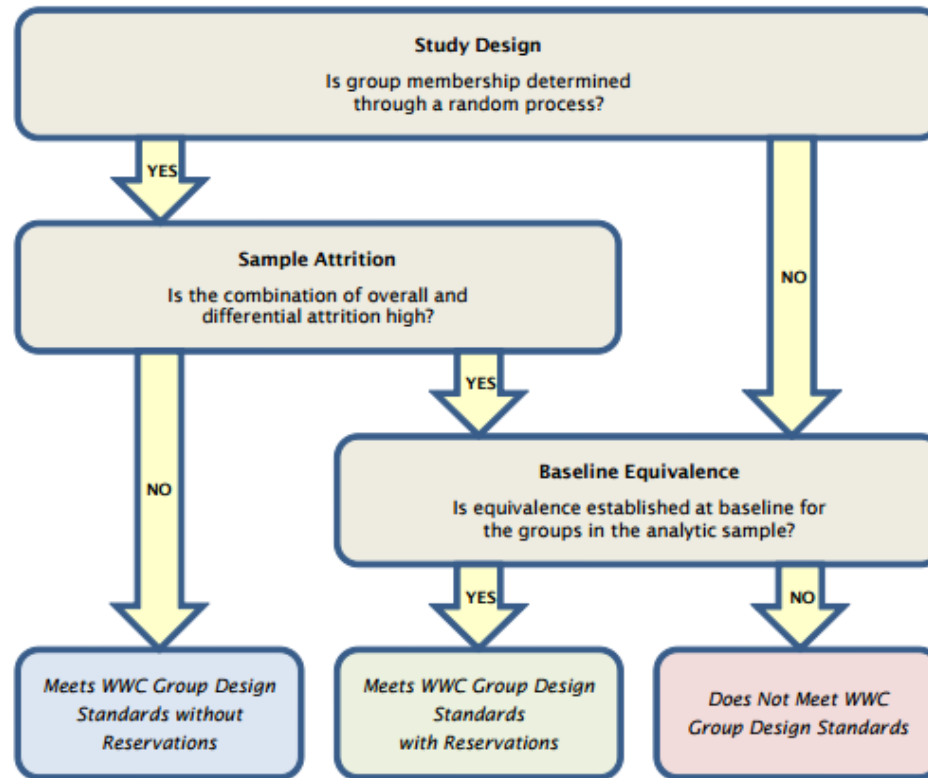


WWC Standards

What Works Clearinghouse

Procedures and Standards Handbook, Version 3.0

Figure III.1. Determinants of a WWC Study Rating



* <http://ies.ed.gov/ncee/wwc/documentsum.aspx?sid=19>



Randomized Control Trials



Methodological Debate



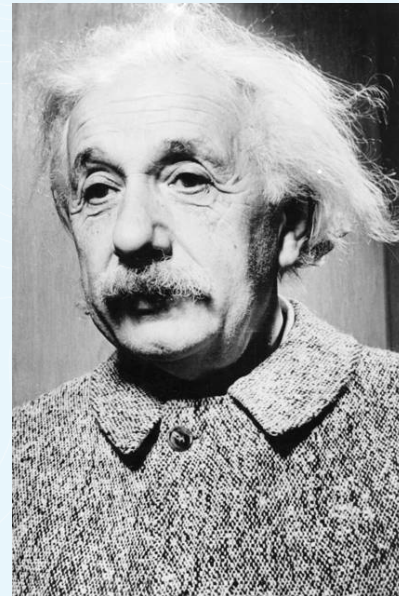
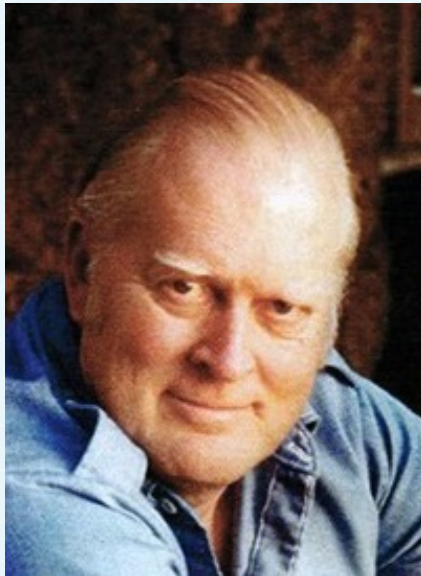
RCTs Golden?

- American Evaluation Association DISAGREED!



Michael Scriven

“To insist we use RCTs is simply bigotry ... not pragmatic and not logical. In short, it is a dogmatic approach that is an affront to scientific method.” (Scriven, 2009)



Claremont Evaluation Debate

Determining Causality in Program Evaluation &
Applied Research: Should Experimental
Evidence be the Gold Standard?

Mark W. Lipsey, Michael Scriven, Stewart I. Donaldson



Michael Quinn Patton

"The issue of what constitutes credible evidence isn't about to get resolved. And it isn't going away. This book explains why. The diverse perspectives presented are balanced, insightful, and critical for making up one's own mind about what counts as credible evidence. And, in the end, everyone must take a position. You simply can't engage in or use research and evaluation without deciding what counts as credible evidence. So read this book carefully, take a position, and enter the fray." (Patton, 2009)



Quantitative Tidbits



Lies, Damned Lies and...



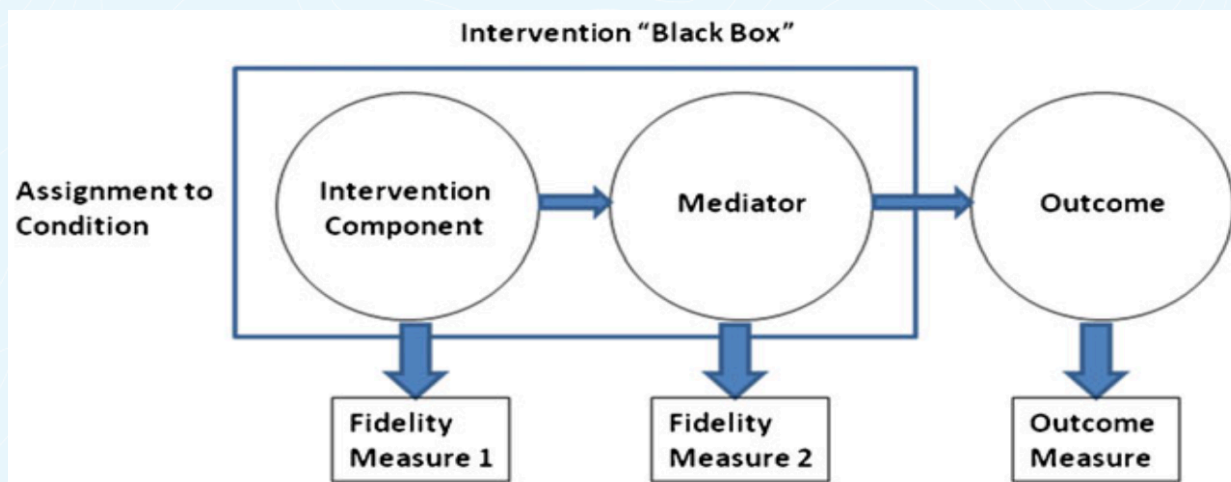
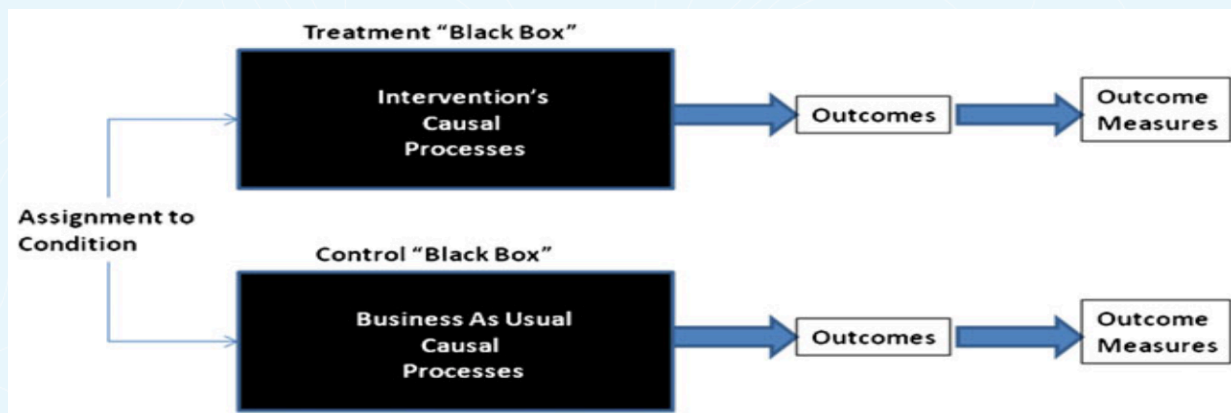
Hang on... We must be doing something wrong...
How does the saying go again?



A Note on Fidelity



Fidelity



**Nelson et al., 2012*



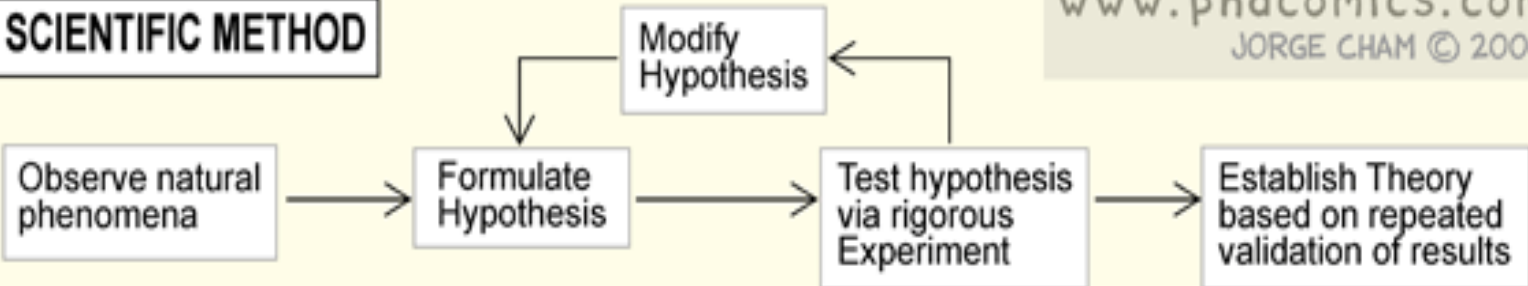
Moving Forward



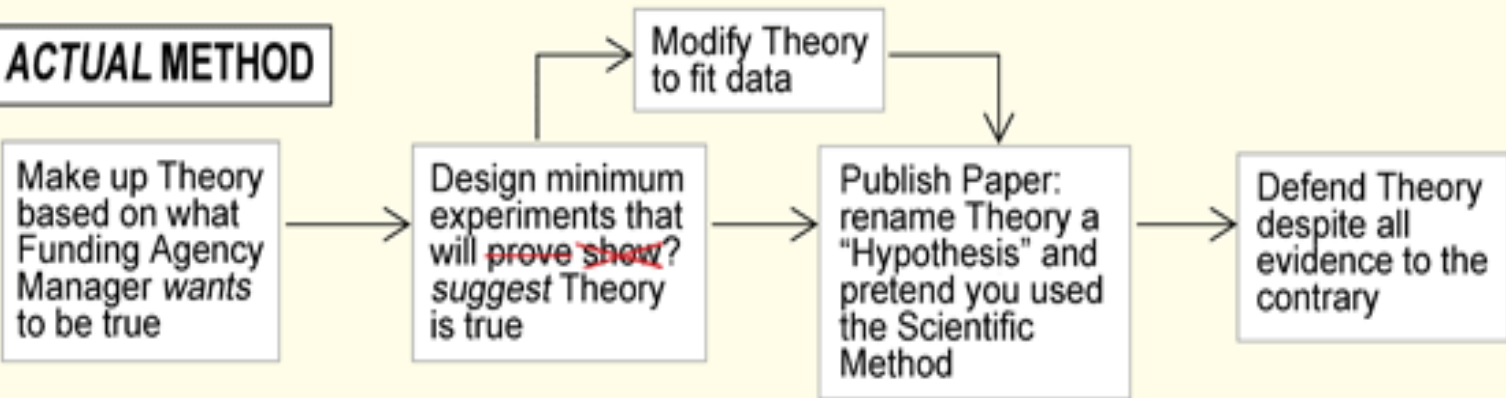
What Now?

www.phdcomics.com
JORGE CHAM © 2006

THE SCIENTIFIC METHOD



THE ACTUAL METHOD



So, I should consider...

- *Methodological Appropriateness* as Rigor
- Context is important
- **Empirically** Based Practices



Critical Decisions

- **Credible Evidence** should be priority #1!
- Stakeholder Involvement and Expectations
- Methodological options
 - DESIGN, DESIGN, DESIGN
 - Data Integrity
 - Quantitative (and Qualitative) Methods
- Dissemination





Thank You