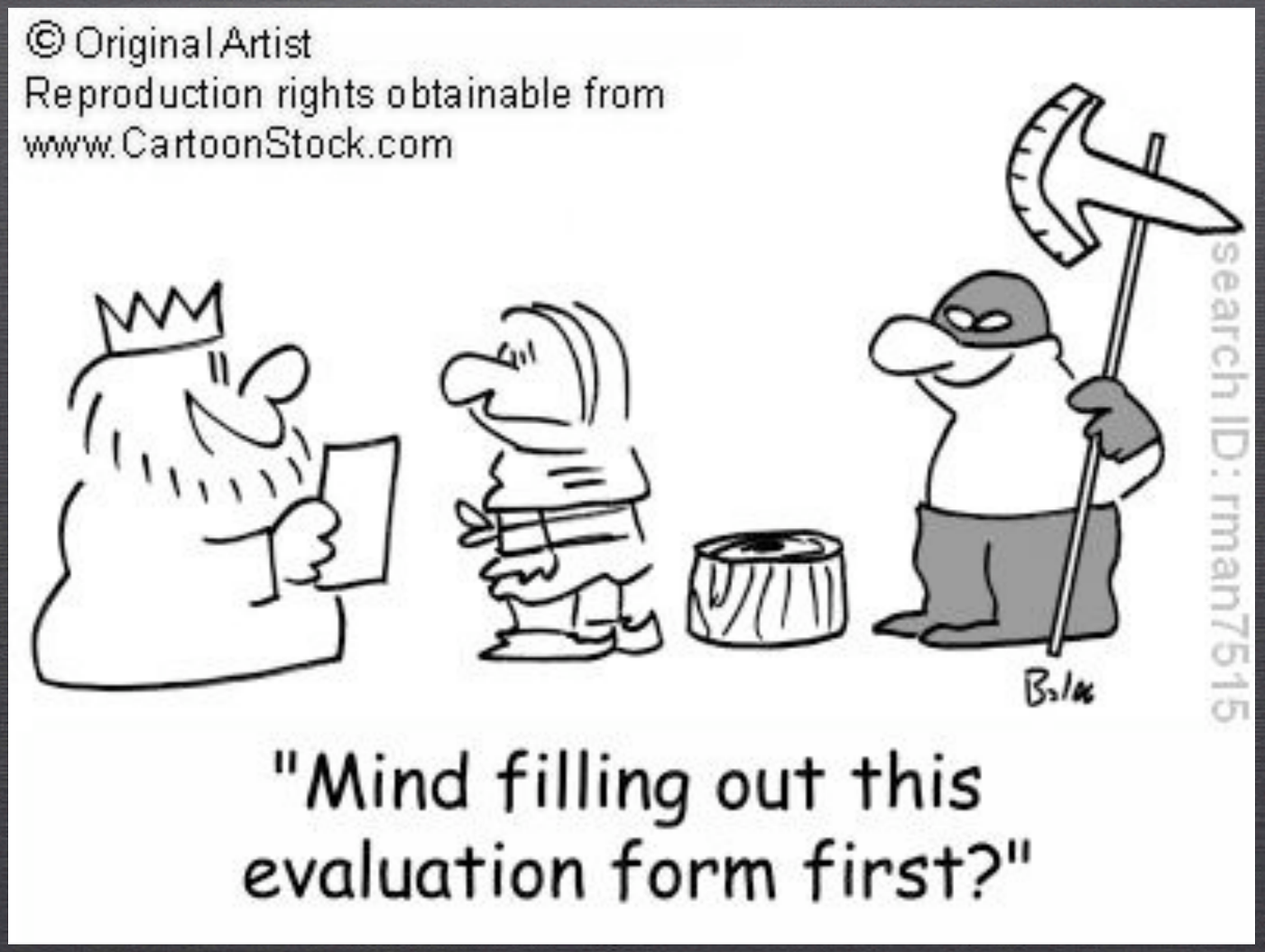
Aligning Questions to Methods

Dr. Richard E. West
Brigham Young University



Announcements

- Updates on next Tuesday?
- Reading assignment adjustment online
- Final presentation day / time
- new data collection chief?
- Permission forms
- Gospel insights: Jacob
    - Next: Loraine
- Today: Data collection

Reflections?

Reflections?

Reflections from our meeting with the client on Tuesday?

Reflections?

Reflections from our meeting with the client on Tuesday?

What thoughts did you have from today's reading in the textbook?

Evaluation Questions

Evaluation Questions

- Divergent phase: Create a list of potential questions without judgment

Evaluation Questions

- Divergent phase: Create a list of potential questions without judgment
    - (List questions on the board)

Evaluation Questions

- Divergent phase: Create a list of potential questions without judgment
    - (List questions on the board)
- Convergent phase: Select the most important questions to consider and their criteria

Evaluation Questions

- Divergent phase: Create a list of potential questions without judgment
    - (List questions on the board)
- Convergent phase: Select the most important questions to consider and their criteria
    - Red=1; Green = 2; Pink = 3

Aligning Methods to Questions

Questions	For whom?	Methods?	Why?	Timeline?
1. Over time, did eMath students outperform non-eMath counterparts?	Federal and state DOE	CRCT/BAM tests; matched groups quasi-experimental design; HLM analysis	CRCT tests recall of information, BAM tests conceptual understanding, quasi-experimental design meets NLCB mandates, HLM looks at nesting issues	Yearly analysis during the summer, and then longitudinal analysis after three years
How was eMath typically implemented?	DOE, trainers, teachers	EOY survey, observations of model lessons and training	Understand how well the program is being taught, and then how it is affecting teacher pedagogical change	Survey at the end of the year, observations throughout the year at a purposive sample of events

Describing Methods

Methods	Sampling	DC	DA	Credibility	Personnel	Cost
1. CRCT stats	Matched groups according to SES, performance	20K test scores from state DOE	ANOVAs, HLM, post-hoc analyses	validity / reliability checks	Grad student	$10k
EOYS / observations	Experimental group only; observations purposively sampled to gain variety	EOYS electronically administered; follow-up emails	Descriptive, thematic (constant comparison coding)	Triangulation between EOYS and observations; trainer reports	Grad students	survey=$1K Observations =$$$

Some Tips

- Observation protocols should have some specific areas, but then also space to notice anything interesting
    - Notice facial expressions, mouse clicks, emotions, conversation with others, muttering to one's self, the surrounding, timing, etc.
- Interviews should be dominated by the participant, not you. Focus on questions that get them to "tell their story".
    - Consider overview and then dive; highlight the most important questions to get answered
    - Consider rapid 5-minute interviews if that's all you have
    - Avoid focus groups unless you have a reason for them
- Pretest/posttest—strive for uniformity. If this is impossible, document possible confounding effects
- Recognize survey's limitations

Instrument Development

Group A:
Group B:
Group C:

I'll hover and be available for questions

Next Steps

- Observation protocols
- Interview protocols
- Pretest/posttest administration protocols
- technological issues prepared
- Anything else?
- Practice through the protocols with a child if you have one available and fix any kinks

Sources

- Fitzpatrick, J. L.; Sanders, J. R.; & Worthen, B. R. (2004). *Program Evaluation: Alternative Approaches and Practical Guidelines*. Boston: Pearson Education.
- Otherwise as cited