Causation, Agency, and Inventor’s Irritation

A presentation to

Monitoring the Progress of the Response to Intervention Movement: A Leadership Forum

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Two Parables

• Everett Rogers and “Those darn farmers . . .”
• Don Saari and “It’s how you play the game . . .”

Stories told to me while preparing, The Handbook of Design Research Methods in Education (Kelly, Lesh & Baek, 2008), an NSF-funded project

Field Report 1

• Farmers are men.
• Men don’t read directions.
• Men won’t ask for help.

“The darn farmers are applying the fertilizer full strength. . .”

• The problem is not in the fertilizer, but in the infertile minds of men . . .
• Solution: Pre-dilute the fertilizer.

Field Report 2

“These darn tractors . . .

do not have speedometers!”

Field Report 2

Perceptions by
Teachers and students
Teachers and administrators

Parable 2

• Don Saari and “It’s how you play the game . . .”

Perception and the Diffusion of an Innovation

• **Diffusion** is the process by which an innovation is communicated through certain channels over time among the members of a social system (Rogers, 1995).
• Adoption is a multi-year, multi-stage process of observing and judging an innovation, involving information, persuasion, conviction and decision...
Successful Innovations have Persuasive Relative Advantage:

- **Compatibility.** The level to which an innovation is perceived as consistent with the existing values, past experiences, and needs of potential adopters.
- **Complexity.** The degree to which an innovation is perceived as relatively easy to understand and to use.
- **Observability.** Are the results of an innovation visible? Positively related to its rate of adoption.
- **Triability.** Can the innovation be "tested out" on a limited basis? A factor positively related to its rate of adoption, given that...

Is RTI Compatible with Practice and Complex to Implement?

- **Applies to all students**
- **"Data-based decision making is the essence of good RTI practice..."**
- **"Screening tools must be reliable, valid and demonstrate diagnostic accuracy ..."**
- **Benchmarks and cut-scores must be set ...**
- **Progress monitoring may include data from "tests of cognition, language, perception, and social skills"**
- **Changes in instructional intensity "can involve changes in instructional time, "level," frequency, group size, or involve outside help**

To the extent that RTI is like Formative Assessment...

"Formative assessment is of little use if teachers don't know what to do when students are unable to grasp an important concept; . . .

validity research about how formative assessment can be used to improve student learning—must be embedded in rich curriculum and must at the same time attempt to foster instructional practices consistent with learning research.

Lorrie Shepard... *Educational Measurement: Issues and Practice* Volume 28, Issue 3, pages 32–37, Fall 2009

In other words . . .

RTI as currently conceived may present teachers and their support staff with the demands of **design-based research** while being held to the assumptions of **experimental research** and the standards of rather **sophisticated psychometrics**

For long-term success, RTI must consider the **roles, resources, support, expertise demands of and costs to each player** in the adoption-of-RTI process

"But, it works! p<.05!"

Remember about Causation...

In the physical world, it is a relentlessly imperative. **In the social world, it is a lifestyle choice . . .**