

Fundamentals of Graduate Research in Education

January 7, 2004

Catalog Description

Review and critique of research literature, use of library resources for educational research, and introduction to the concepts of research design and data analysis.

Warm-up - Think

Think about what you will learn in this class. What are you expecting? Based on your current knowledge of the course content, list the 10 most important words or ideas you expect to explore more fully this semester. Jot down a thought or two about why each word or idea made your top 10 list.

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Warm-up - Pair

Pair up with a partner. Choose someone you haven't met yet. Introduce yourselves to each other.

After you dispense with the niceties, compare your list of 10 words with theirs. From the 20 words you and your partner have, whittle the list down to 10 again. Don't worry if one person has more on the list than the other. It doesn't matter.

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Dictionary definitions

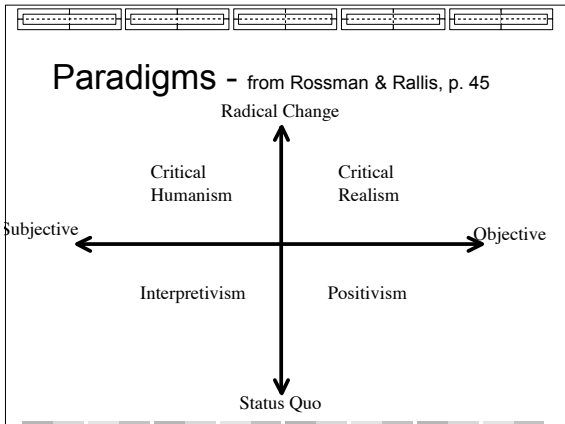
- “1. Scholarly or scientific investigation or inquiry. 2. Close careful study.”
 - American Heritage Dictionary, 4th ed. 2000
- “1. Diligent inquiry or examination in seeking facts or principles; laborious or continued search after truth.”
 - Webster’s Revised Unabridged Dictionary, 1998

What is research?

- Gathering information to solve a problem (Booth, Colomb, & Williams)
- To generate knowledge & improve social condition (Rossman & Rallis)

Why do research?

- According to Rossman & Rallis (2003)
 - To describe (descriptive studies)
 - To compare & contrast (policy or evaluation studies)
 - To forecast (action research)
- Booth, Colomb, Williams (1995)
 - To solve practical problems



SCIENTIFICALLY BASED RESEARCH. - The term ‘scientifically based research’ -

“(A) means research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs; and

“(B) includes research that -

“(i) employs systematic, empirical methods that draw on observation or experiment;

“(ii) involves rigorous data analyses that are adequate to test the stated hypotheses and justify the general conclusions drawn;

“(iii) relies on measurements or observational methods that provide reliable and valid data across evaluators and observers, across multiple measurements and observations, and across studies by the same or different investigators;

“(iv) ensures that experimental studies are presented in sufficient detail and clarity to allow for replication or, at a minimum, offer the opportunity to build systematically on their findings; and

“(vi) has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective, and scientific review.” - from No Child Left Behind legislation

