

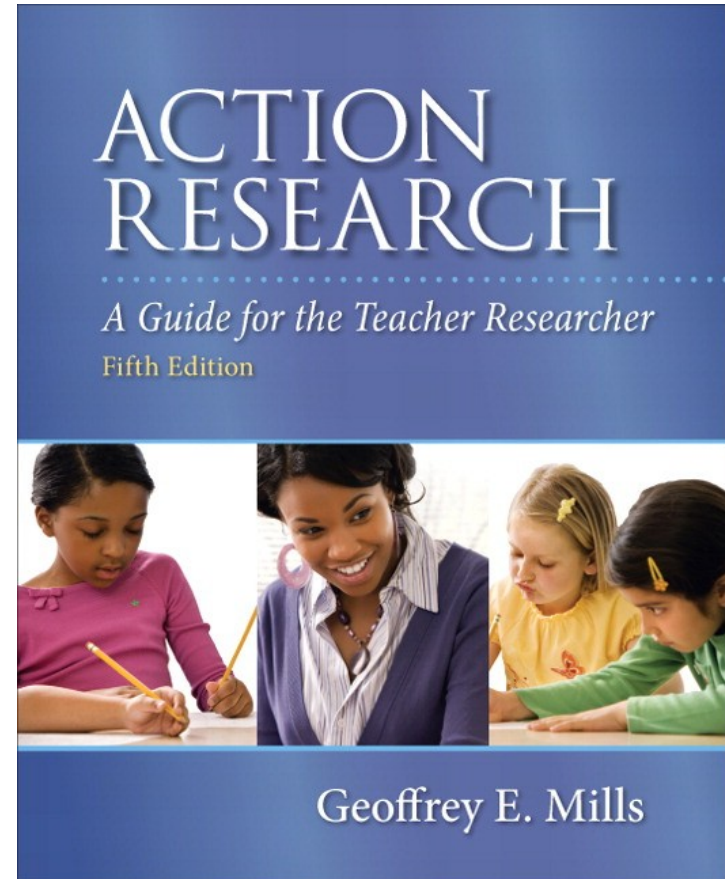
Action Research

A Guide for the Teacher Researcher

Fifth Edition

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Chapter 6

Data Analysis and Interpretation

Ongoing Analysis & Reflection

- Is your research question still answerable and worth answering?
- Are your data collection techniques catching the kind of data you want and filtering out unwanted data?
- Conduct interim analysis
- Avoid premature action

Analysis & Interpretation

- Data analysis
 - summary of data
 - technique determined by type of data
- Data interpretation
 - finding meaning in the data

Organizing Qualitative Data

- Reading/Memoing
 - record initial thoughts
- Describing
 - include context, actions, interactions
- Classifying
 - develop themes

Data Analysis Techniques

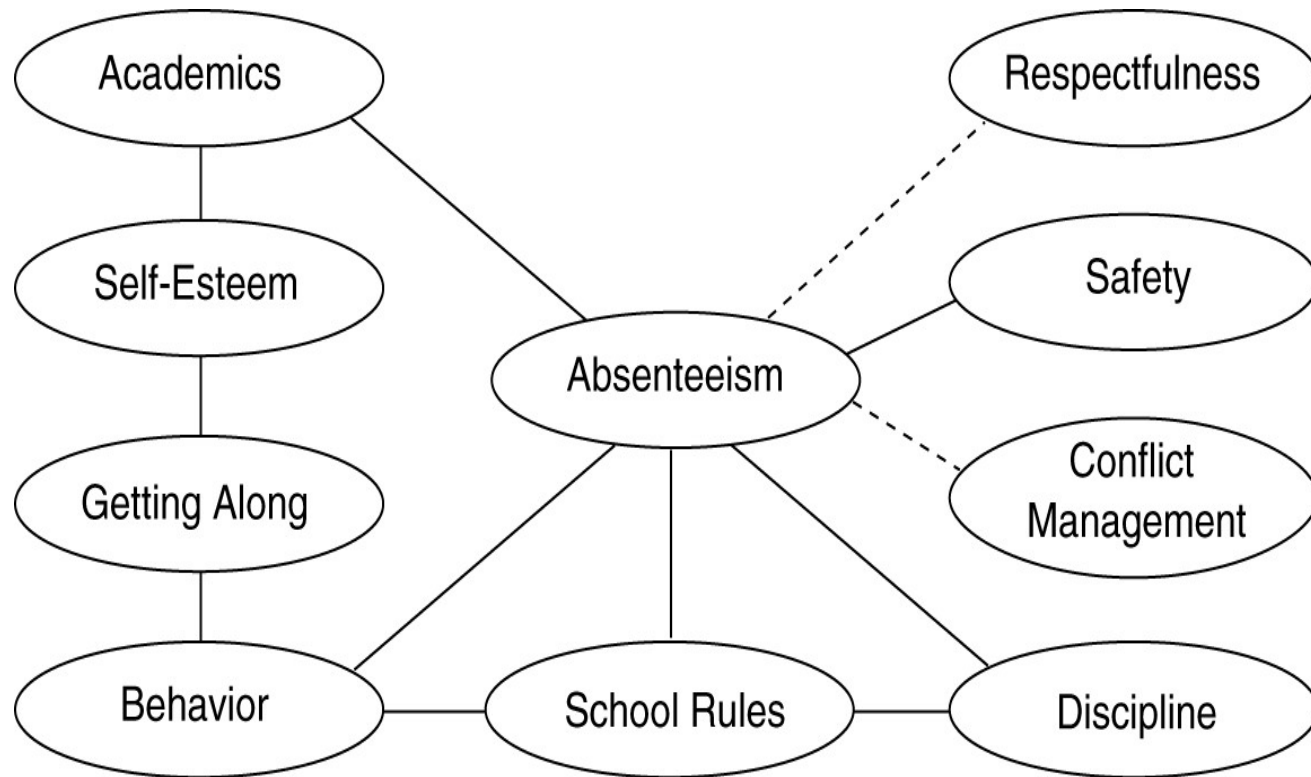
- Identify themes
 - work inductively
- Code surveys, interviews, questionnaires
 - try to find patterns, meaning
- Analyze interviews
 - annotate and identify themes
- Ask key questions

Data Analysis Techniques

- Organizational review
 - vision & mission, goals & objectives, structure of organization, operation, problems, issues, & concerns
- Develop a concept map
- Analyze antecedents, consequences
 - identify causal relations

Data Analysis Techniques

■ Concept map



Data Analysis Techniques

- Display findings
 - matrixes, charts, concept maps, graphs, figures, audiovisual media
- State what's missing
 - avoid making unwarranted assertions

Choosing Analysis Software

- Are you analyzing large amounts of data?
- Are you adequately trained?
- Do you have resources to purchase a program?
- Do you plan to capture specific quotes from a large database?

Computer Software for Data Analysis

- Handy, extremely fast labeling & retrieval tools
 - NVivo 9.0
 - complex data
 - The Ethnograph v6
 - text files
 - HyperRESEARCH 3.0
 - text, graphics, audio, video

Preparing Quantitative Data for Analysis

- Scoring procedures
- Tabulation and Coding Procedures

Analyzing & Interpreting Quantitative Data

- Descriptive statistics
 - shorthand way of giving lots of information about a range of numbers
 - count what counts!
 - be careful not to over interpret

Analyzing & Interpreting Quantitative Data

- Descriptive statistics
 - central tendency
 - mean (average)
 - median (middle)
 - mode (most frequent)
 - variability
 - standard deviation (spread)

Analysis in Mixed Methods Designs

Qualitative Data Interpretation

- Extend the analysis
 - raise questions
 - note implications that *might* be drawn, without actually drawing them
- Connect findings with personal experience
- Seek advice of “critical” friends
 - take time to build relationships

Qualitative Data Interpretation

- Contextualize findings in literature
- Turn to theory
 - link to broader issues
 - search for abstraction
 - provide rationale, sense of meaning
- Know when to say “when”
 - if you don’t feel comfortable offering an interpretation, don’t!

Sharing Interpretations Wisely

- Connect interpretations closely to data and analysis
- Avoid being evangelical