

# DOING GOOD QUALITY RESEARCH ON LANGUAGE TEACHING

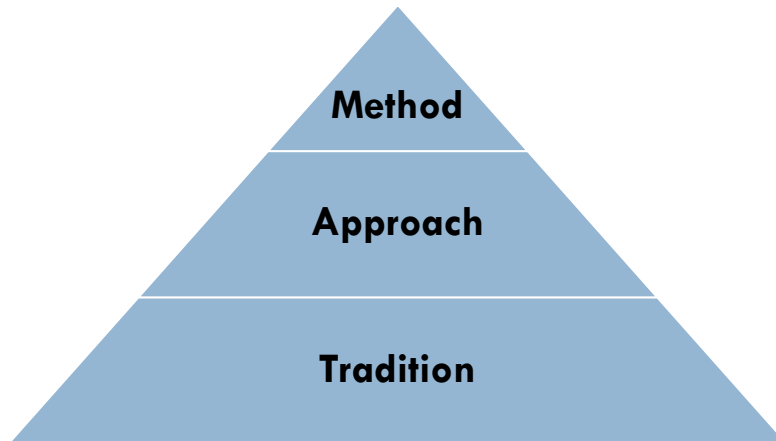


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## RESEARCH

- Planned
- Systematic
- Purposeful
- Empirical
- Made public

## Levels of Research



## Quantitative Research

- Hypothesis-testing
- Numerical data
- Procedural objectivity
- Generalisation
- The search for patterns of association
- Controlling variables

(Hammersley 2013)

## Qualitative Research

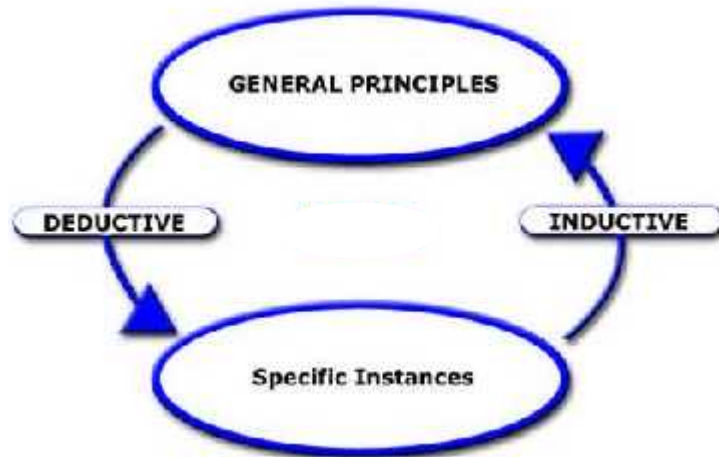
- Unstructured data
- Inductive analysis
- Subjectivity
- Natural settings
- Small number of cases
- Verbal analysis

(Hammersley 2013)

## Quantitative & Qualitative Research



## Inductive vs. Deductive Thinking

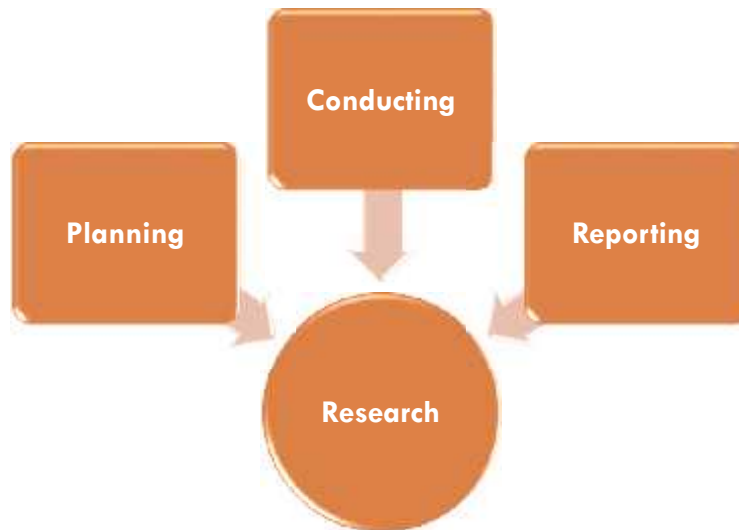


<http://tinyurl.com/lmodydc>

## Approaches to Research

<b>Action Research</b>	<b>Naturalistic Research</b>	<b>Survey Research</b>
<b>Case Study Research</b>	<b>Correlational Research</b>	<b>Experimental Research</b>

## The Research Process



## Planning Research

- choose a topic
- review the literature
- define research questions
- decide how to collect data
- recruit participants
- collect data
- analyse data
- interpret the results
- report the study

## A Good Quality Topic

- Timely
- Focused
- Original
- Relevant
- Under-studied

## Review

**FIVE defining  
characteristics of  
educational research**

## Review

### FOUR differences between quantitative and qualitative research

#### Quantitative

- Count
- Controlled
- Deductive
- Fixed
- Objective
- Larger samples

#### Qualitative

- Describe
- Natural
- Inductive
- Flexible
- Subjective
- Smaller samples

## Terminology

Empirical

Disciplined  
subjectivity

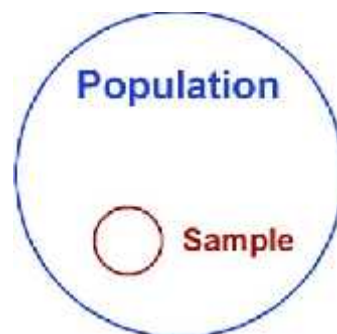
Inductive  
analysis

Mixed methods  
research

Cyclical  
research

Generalizable  
results

## Generalizability



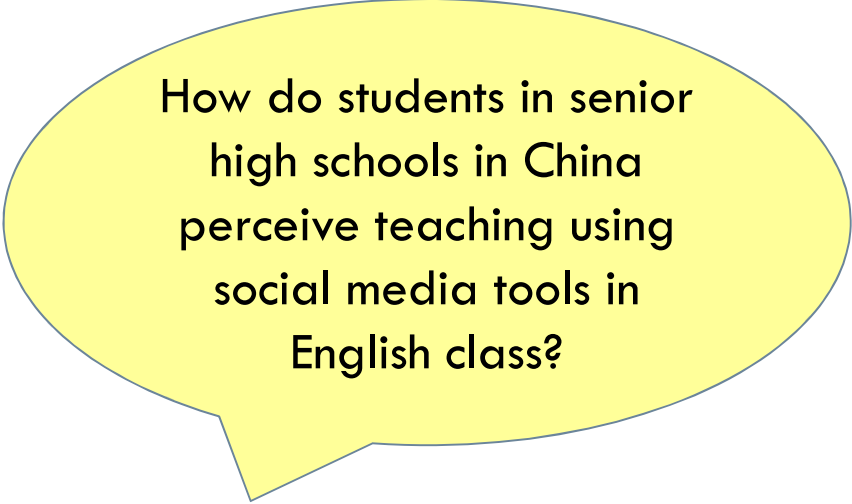
<http://www.simplypsychology.org/sampling.html>



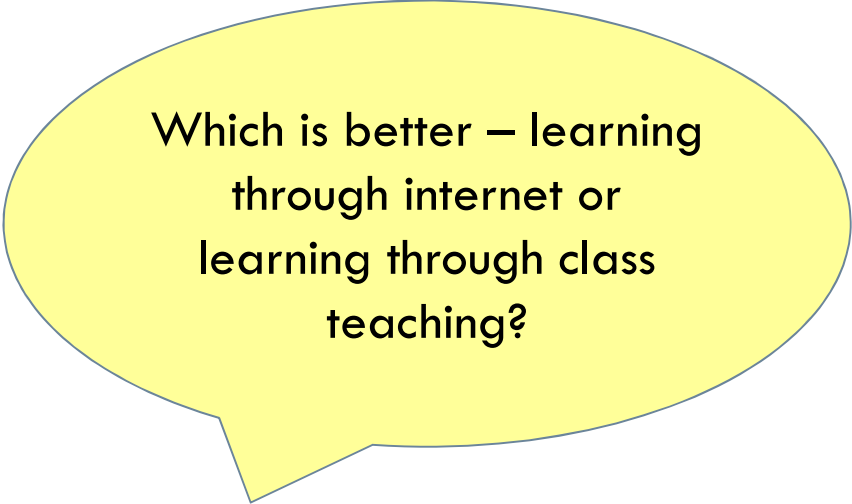
## Research Questions

- Clear
- Specific
- Linked to previous research
- Answerable
- Not trivial
- Interconnected (if more than one)

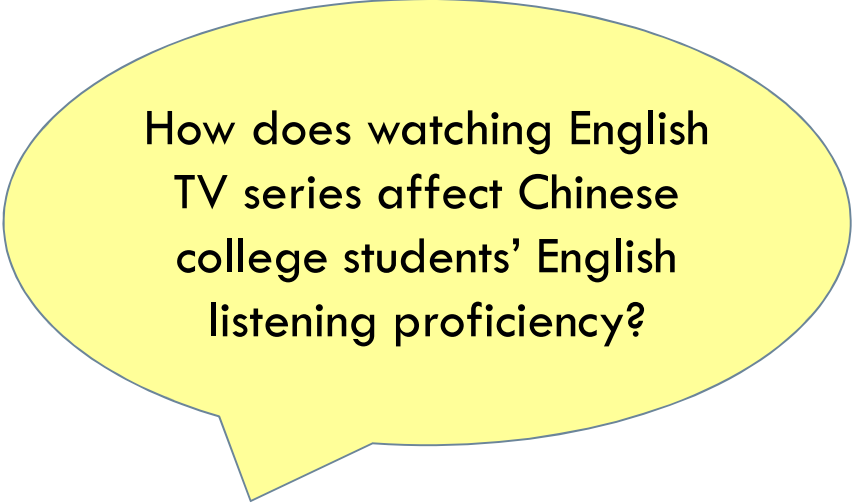
How can we use on-line learning to improve College students' writing ability?



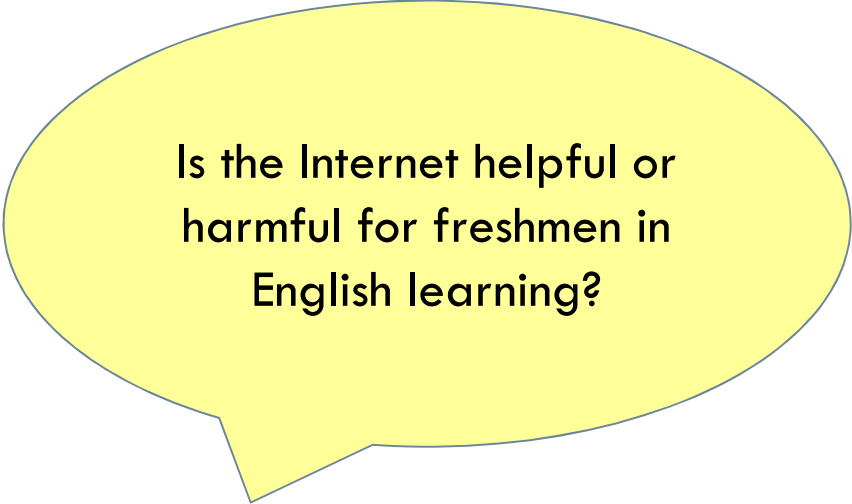
How do students in senior high schools in China perceive teaching using social media tools in English class?



Which is better – learning through internet or learning through class teaching?



How does watching English TV series affect Chinese college students' English listening proficiency?



Is the Internet helpful or harmful for freshmen in English learning?

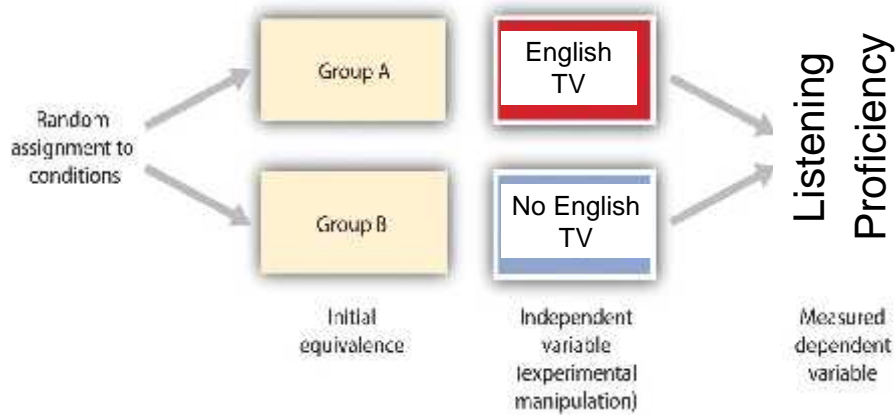
## A Good Literature Review

- logically organized
- range of sources
- synthesizes material
- critical
- clear
- purposeful

## Approaches to Research

<b>Action Research</b>	<b>Naturalistic Research</b>	<b>Survey Research</b>
<b>Case Study Research</b>	<b>Correlational Research</b>	<b>Experimental Research</b>

## Experimental Research



Adapted from <http://2012books.lardbucket.org/books/beginning-psychology/s06-02-psychologists-use-descriptive-.html>

## Sampling

- Who will our participants be?
- How will they be chosen?
- Why will they be chosen in that way?

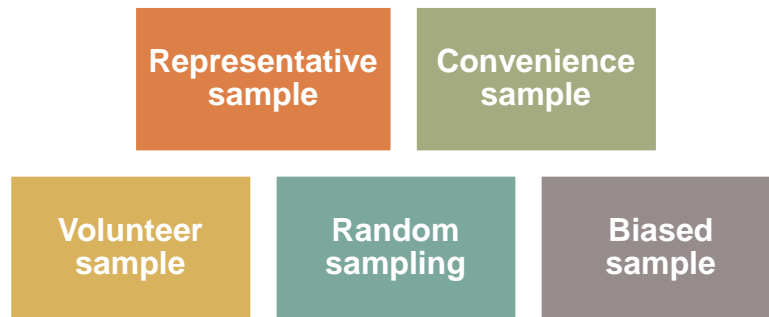
## Sampling

- **Population** – the larger group the researcher is interested in.
- **Sample** – the individuals from the population who participate in the study.
- **Probability** Sampling = Random
- **Non-probability** Sampling = Not Random

## Sampling

- **Probability** Sampling = Random
  - *Simple*
  - *Systematic*
  - *Stratified (proportional)*
- **Non-probability** Sampling = Not Random
  - *Purposive*
  - *Convenience*
  - *Snowball*

## Terminology



## Terminology

Research which uses both qualitative and quantitative research.

## Terminology

When findings from one context apply to other contexts that were not studied.

## Terminology

Surveys can be conducted using questionnaires or structured \_\_\_\_\_.



## Terminology

Another name for  
random sampling is

\_\_\_\_\_.

## Terminology

The approach to  
sampling normally used  
in qualitative research.

## Terminology

A detailed study of one individual or group is called a \_\_\_\_\_.

## Terminology

Most experiments in education are not true experiments but \_\_\_\_\_ experiments.

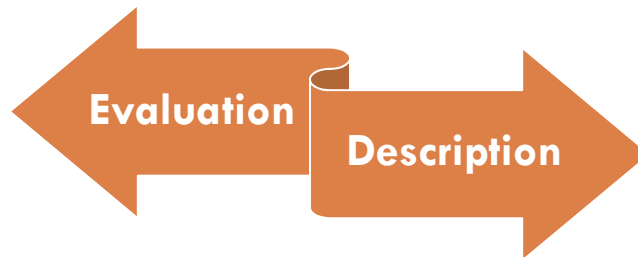
## Ethics

How do we make our research ethical?

## Ethics

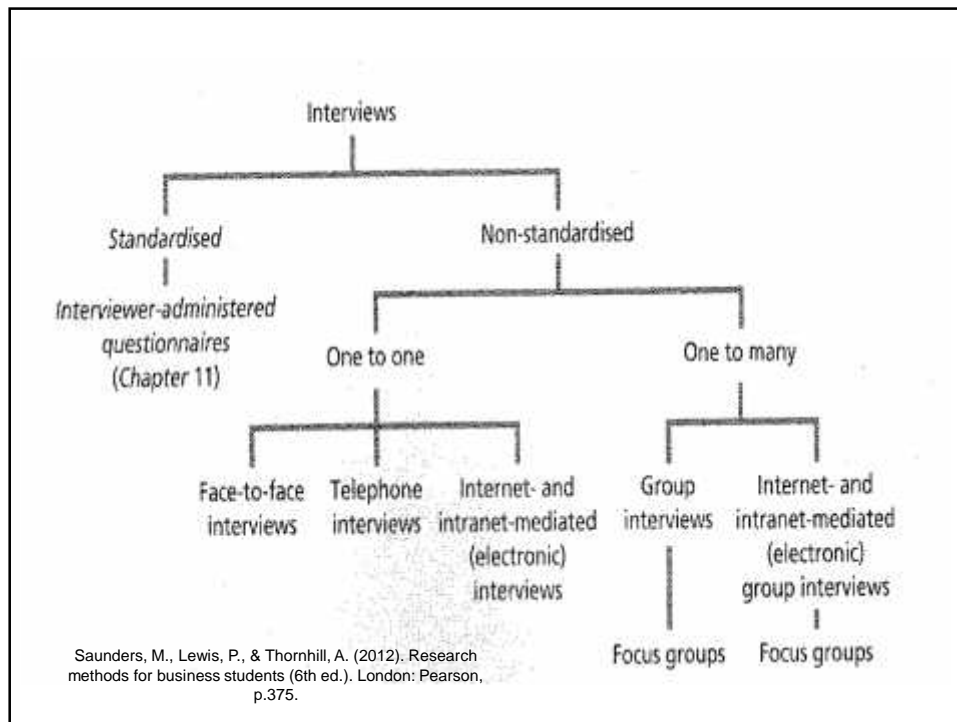
- Obtaining informed consent
- Avoiding harm
- Maintaining confidentiality
- Maintaining anonymity
- Avoiding deception

## Observation



## Observation

Is intrusive and causes reactivity.



## Questionnaires

Efficiency in terms of:

1. Research time
2. Research effort
3. Financial resources
4. Ease of processing
5. Versatility

(Dörnyei 2002: 9-14)

## Questionnaires

- Simplicity & superficiality of answers
- Unreliable & unmotivated respondents
- Respondent literacy problems
- Social desirability bias
- Fatigue effects

(Dörnyei 2003: 10-14)

## Common Design Problems

- 1 • Overlapping categories
- 2 • Leading questions
- 3 • Too many open questions
- 4 • Double-barrelled questions

## Questionnaire Design

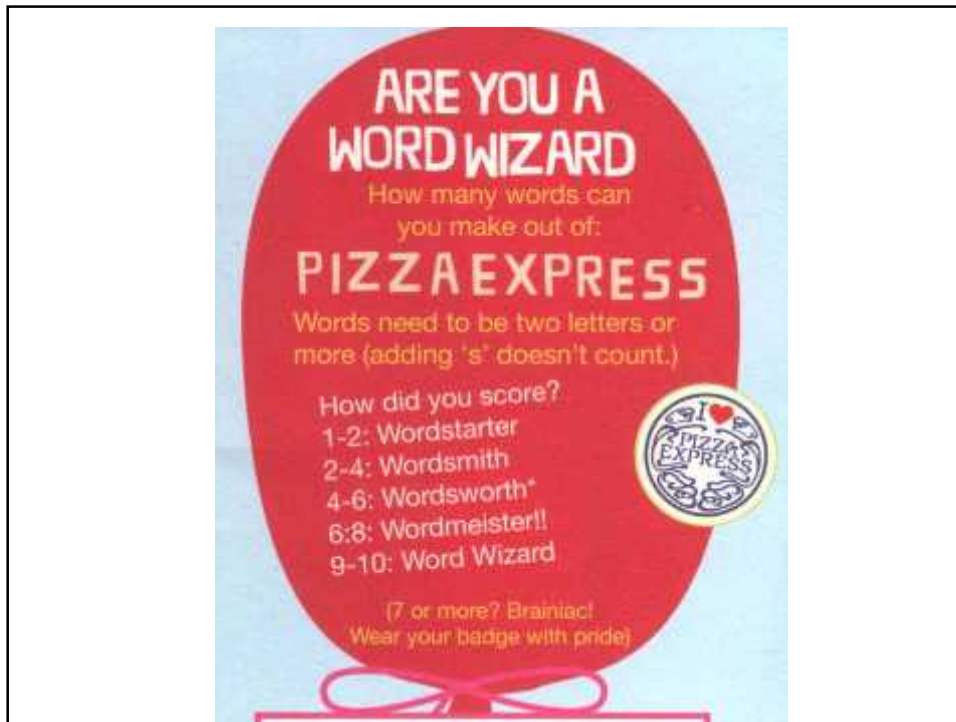
- Keep the questionnaire or survey short and focused
- Write brief questions
- Phrase questions positively (no double negatives)
- Avoid leading questions
- Eliminate jargon from items
- Match the complexity of words and ideas to the reading level of the audience

Dunn, D. S. (2013). *Research methods for social psychology* (2nd ed.). Hoboken, NJ: John Wiley & Sons.

## Questionnaire Design

- Do not write double-barreled questions
- Provide respondents with opportunities to answer 'I don't know' or 'no opinion'.
- Use filter questions as needed
- Never draw unnecessary conclusions about respondents
- Do not use 'all-or-nothing' types of questions
- Place demographic questions at the end of the questionnaire or survey
- Lead into sensitive or controversial topics gradually

Dunn, D. S. (2013). *Research methods for social psychology* (2nd ed.). Hoboken, NJ: John Wiley & Sons.

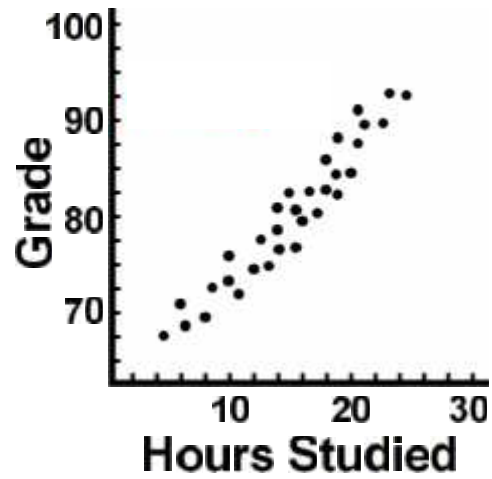


## Quantitative Data Analysis

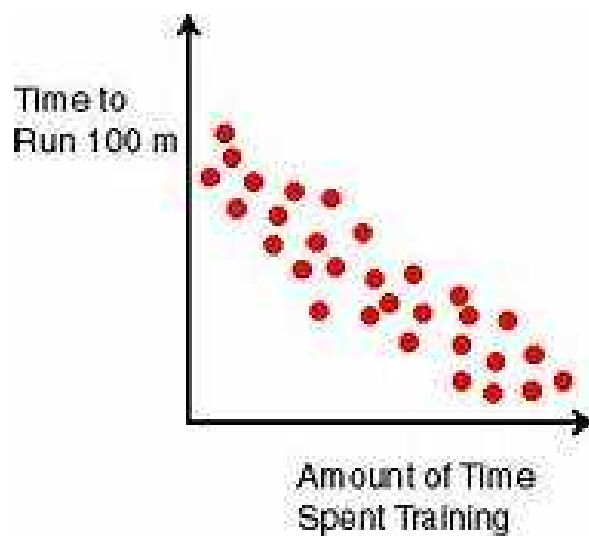
- Descriptive statistics
  - *Frequency distribution*
  - *Dispersion (range & spread)*
  - *Central tendency (mean)*
- Correlations
  - *Relationships among variables*
- Comparing means
  - *Differences between groups*



## Positive Correlation



## Negative Correlation



## Inductive Data Analysis

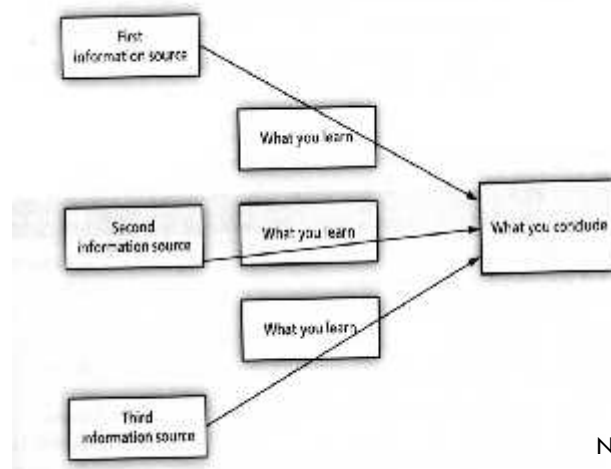
“Inductive analysis means that patterns, themes, and categories of analysis come from the data; they emerge out of the data rather than being imposed on them prior to data collection and analysis”. (Patton, 1990: 390)



## Qualitative Data Analysis

- Looking for **THEMES** in the data
- **CODING** data
- Developing **CATEGORIES**
- **INDUCTIVE** analysis
- **Summarizing**
- Using **QUOTATIONS**

## Triangulation



Newby (2010:123)

## Enhancing Research Quality

- Plan carefully
- Use the literature effectively
- Design instruments carefully
- Collect sufficient data
- Analyze data systematically
- Base conclusions on evidence
- Acknowledge limitations
- Be ethical
- Be transparent

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