Qualitative Research

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re·search
cu·a·ble adj
in order to gather
about a subject

The basic components of research in the real world

1. There is some form of bahaviour that is **not clearly understood**. **(Doubt)**

2. The baviour is observed and found to be **special** for some reasons. **(Question)**

3. Several possible **explanations** for the unusual behaviours are sought. **(Read and find other previous evidences to support)**

4. One of the possible explanations is considered to be the one that **most probably explains** the behaviours. **(Hypothesise)**

5. To test this hypothesis or answer the research question, more data need to be **collected**. **(Conduct an experiment).**

Research Process

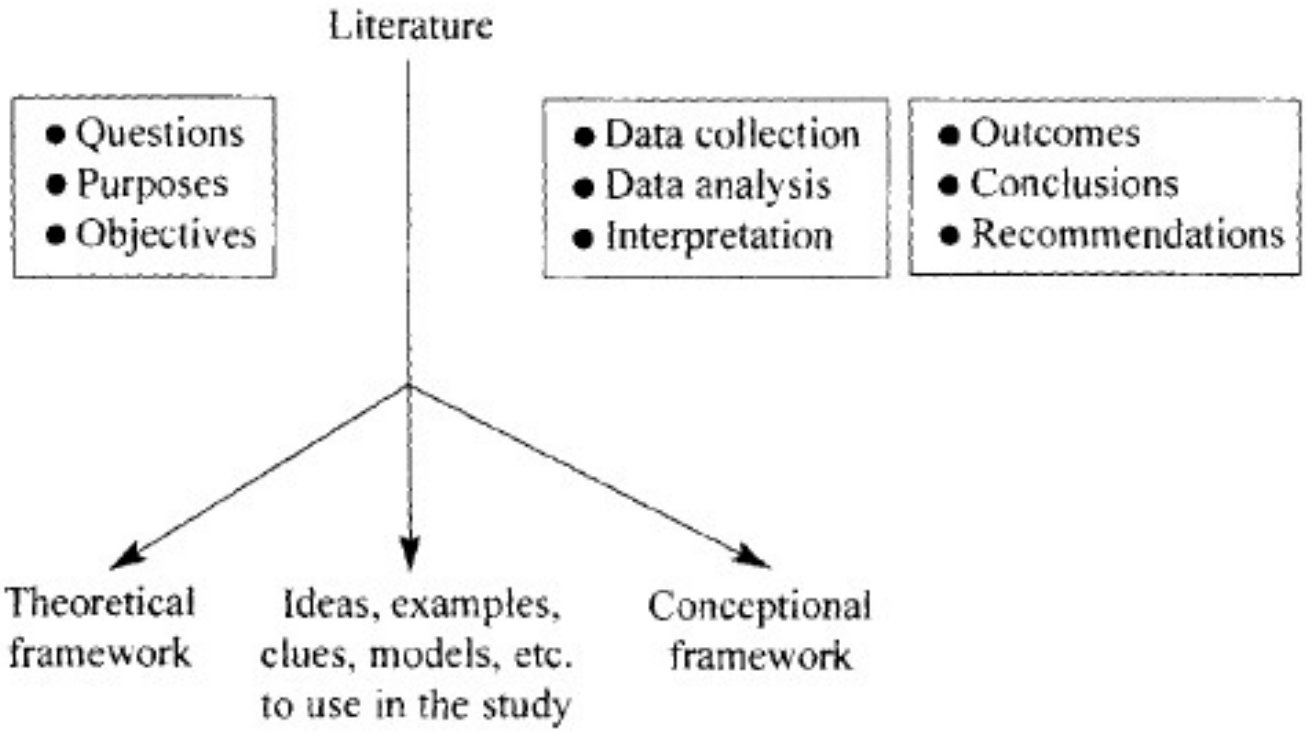


Figure 2.1 Diagram of research design components

Types of language teaching research

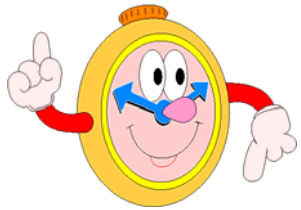
- **Basic or theoretical**
  - the purpose is often to develop a model or theory that identifies all the relevant variables in a particular environment and hypothesizes about their relationship. e.g. universals of relative clauses

- **Applied and Practical** : using the findings of basic research, or developing a product that can be use in real world situations
  - Applied: e.g. order of acquisition
  - Practical: e.g. materials development

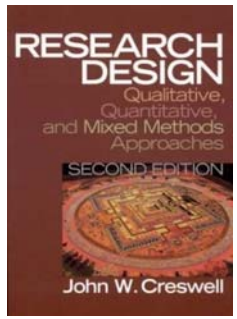
Categorization of language teaching research

- Types of research categorized by the **size of the sample**
  - Case study
  - Small-scale intervention
  - Large-scale experiment

- Types of research categorized by the **duration** of the study
  - Longitudinal study
  - Cross-sectional study



- Types of research categorized by the **design and methodology**
  - Quantitative
  - Qualitative



Characteristics of Quanti. + Quali. Research in the Process of Research

Quantitative	Steps of Process of Research	Qualitative
←	Identifying a research problem	→
	↓	
	Reviewing the literature	
	↓	
	Specifying a purpose	
	↓	
	Collecting data	
	↓	
	Analysing and interpreting data	
	↓	
	Reporting and evaluating research	

Characteristics of Quanti. + Quali. Research in the Process of Research

Identifying a research problem

Quantitative

- A description of trends or an explanation of the relationship among variables

Qualitative

- An explanation in which little is known about the problem
- A detailed understanding of a central phenomenon

Characteristics of Quanti. + Quali. Research in the Process of Research

Reviewing the literature

Quantitative

- plays a major role
- justifies the research problem and creates a need for the direction (purpose, RQ and HP) of the study

Qualitative

- plays a minor role
- justifies the research problem (RQ)

Characteristics of Quanti. + Quali. Research in the Process of Research

Specifying a purpose

Quantitative

- are specific and narrow
- seek measurable, observable data or variables

Qualitative

- are general and broad
- seek to understand the participants' experiences

Characteristics of Quanti. + Quali. Research in the Process of Research

Collecting data

Quantitative

- collecting data using instruments with preset questions and responses
- gathering numeric data
- collecting info. from a large number of individuals

Qualitative

- collecting data using forms with general, emerging questions to permit the participants to generate responses
- gathering word (text) or image (picture) data
- collecting info. from a small number of individuals or sites

Characteristics of Quanti. + Quali. Research in the Process of Research

Analysing and interpreting data

Quantitative

- data analysis consists of statistical analysis
- data analysis involves describing trends, comparing group differences, or relating variables
- interpreting consists of comparing results with prior predictions and past research

Qualitative

- data analysis consists of text analysis (**content analysis**)
- data analysis involves developing a description and themes
- interpretation consists of stating the larger meaning of the finding

Characteristics of Quanti. + Quali. Research in the Process of Research

Reporting and evaluating research

Quantitative

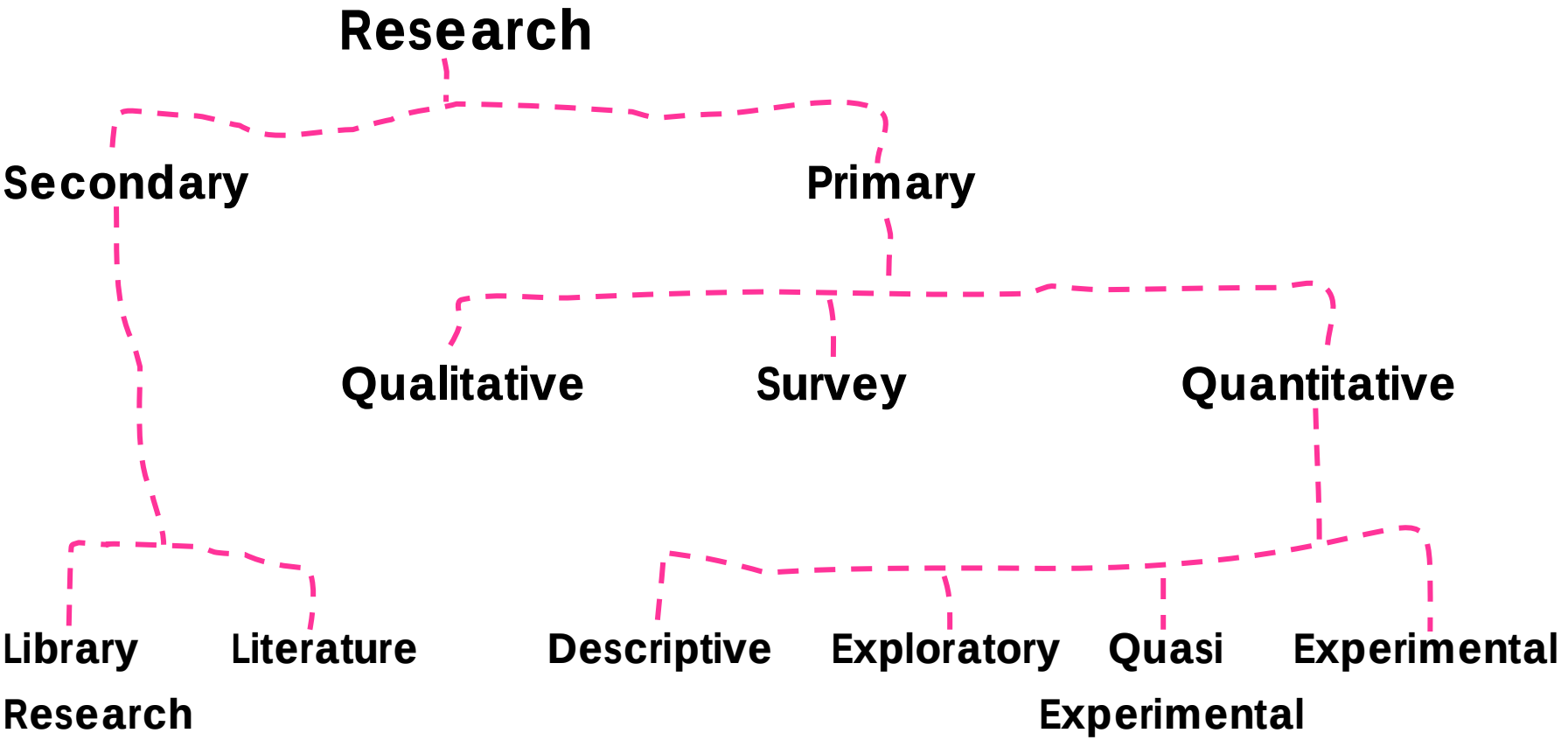
- research reports use standard, fixed structures and evaluative criteria
- researchers take an objective and unbiased approach

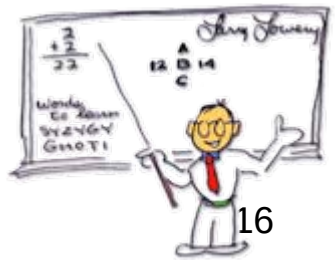
Qualitative

- research reports use flexible, emerging structure and evaluative criteria
- researchers take a subjective (reflexive) and biased approach

What are research designs associated with qualitative research?

Categories of Research





Quantitative

Quant: *what, where*, and *when* of **natural phenomena**

- develop and employ mathematical models, theories and hypotheses pertaining to natural phenomena

- involve large samples of subjects; deal with cause/effect

- associated with **positivism**: that objective truth can be known with certainty, that it can be gained through rational methods

Qualitative Research

- *why* and *how* of **human behaviour**
  - Work with a range of models, theories, pertaining to human phenomena
  - Involve small groups of participants; interpretation & reflection
  - Speech and texts, and their interpretation are very important
  - People's accounts of their actions significant
  - **Not** Positivist: no objective truth; different interpretations; no final certainty in knowledge

Qualitative research designs

1. The case study

2. Ethnography

3. Grounded theory

4. Phenomenology

5. Participatory research

Case Study

- Interest is in an individual case rather than in a method of inquiry
- Data may be quantitative or qualitative
- Focus on what can be learned from the individual case
- A ‘case’ may be simple or complex
  - Single child
  - Class of children

Case Study

- a research strategy, sometimes likened to an experiment, a history, or a simulation, though not linked to any particular type of evidence or method of data collection

- an in-depth, longitudinal examination of a single instance or event

- investigates a phenomenon within its real-life context
  - Source: Wikipedia

Ethnography

- "The study and systematic recording of human cultures; *also* **:** a descriptive work produced from such research

- Field work; observation, interviews, questionnaires, producing description

- Often related to **social constructivism**: how do people make sense of their world; how do they accomplish things through their practice?

- Emic (observer perspective) vs. etic (actor perspective)

Grounded Theory

- Rooted in social sciences
- Emphasises the development of theory
- Which is grounded in data systematically collected and analysed (constant comparative analysis to produce substantive theory)
- Theory must be faithful to the evidence
- Looks for generalisable theory - by making comparisons across situations
- Focus is on patterns of action and interaction

Phenomenology

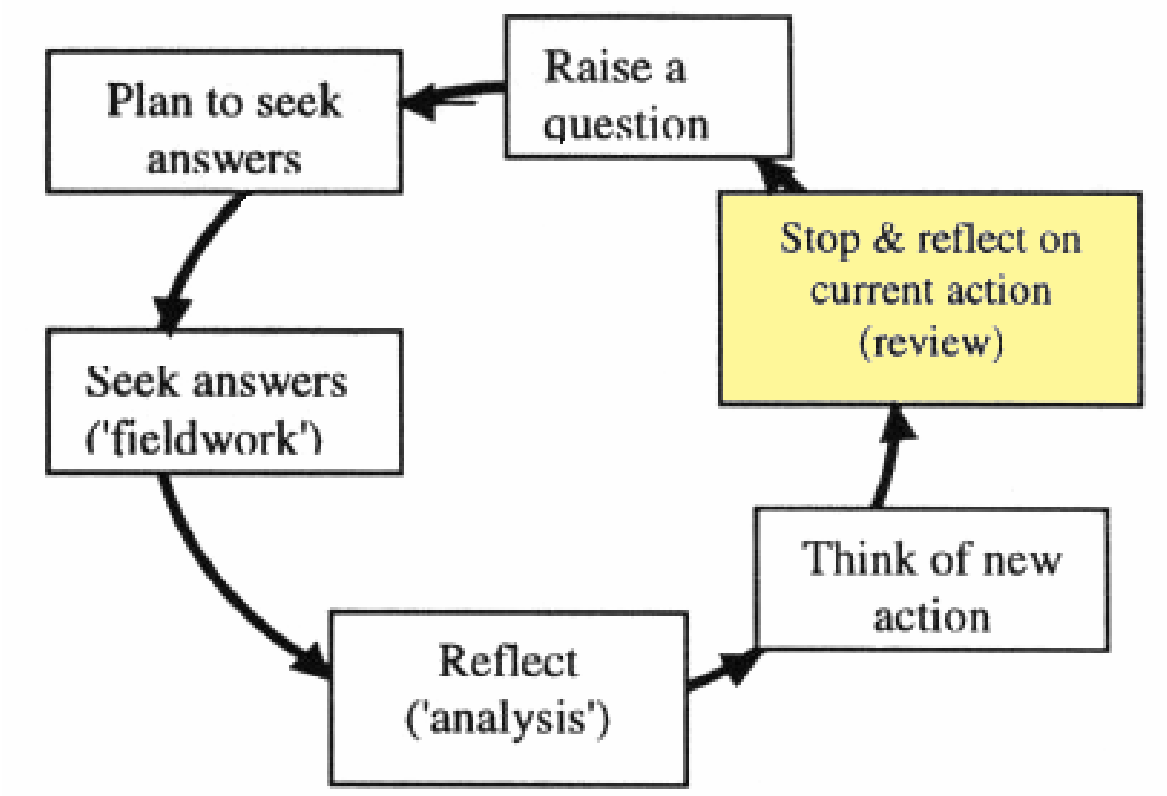
- Rooted in philosophy
- Central question: what is the meaning, structure, and essence of the lived experience of this phenomenon for this person/group of people?
- How is each individual's subjective reality applied to make experiences meaningful?
- Analysis of the language used

Participatory Action Research

- a cycle of posing questions, gathering data, reflection, and deciding on a course of action

- Participatory action research:
  - collaborative & political,
  - involving all stakeholders;
  - critical reflection on the historical, political, cultural, economic, geographic and other contexts which make sense of it.

Participatory Action Research Cycle



Source; http://www.communitysolutions.com.au/papers/LMpartnerships.html#alr

Sampling in qualitative research

- Purpose of qualitative research
  a. Produce information-rich data
  b. Depth rather than breadth
  c. Insight rather than generalisation

- Conceptual rather than numerical considerations
  Choose information-rich sites and respondents

Common sampling approach

- Purposive sampling
  - Not haphazard
  - Select information-rich cases
  - Not the same as convenience sampling

Purposive Sampling Strategies

- Deviant case sampling
  - Information rich cases that are unusual (e.g. in search of excellence)

- Intensity sampling
  - Excellent examples of the phenomenon of interest but not highly unusual cases

- Heterogeneous sampling
  - Sample people with diverse characteristics to see whether there are common patterns

- Homogenous samples
  - Describe a particular sub-group in depth
- Typical case sampling
  - To describe and illustrate what is typical to a particular setting
- Snowball sampling
  - Through informants identify others who know a lot about the issue
- Opportunistic sampling
  - Taking advantage of on-the-spot opportunities

Ethical considerations

- Informed consent
  - Possible risks and benefits
  - Voluntary participation
  - Assurances of confidentiality
  - Purpose of the research
  - Data collection procedures
  - Whom to contact with questions and concerns

Research Instruments

Research 1

Appropriateness of Vocabulary

Chosen from Thai-English Electronic

Dictionaries in Writing

Research Questions

This study aims to find out the answers to the following research questions:

- Do students use translated equivalents chosen from Thai-English electronic dictionaries correctly? If not, why not?

- What are their reasons for their word choices?

Research 2

Research title:
Affective Factors in Foreign Language Learning

The purpose is to explore salient factors affecting the language learner while learning Japanese in Japan.

There is no specific RQ → Hypothesis-driven

Research instrument(s): ??

Using Diaries

"a first person account of a language learning or teaching experience, documented through regular, candid entries in a personal journal and then analysed for recurring patterns or salient events". (Bailey, 1990, p. 215)

Using Diaries

Analysing diary data:

1. **Frequency of mention**
2. **Distribution of mention (across writers, when several diaries are being examined)**
3. **Saliency: the strength of the expression with which a topic is recorded.**

Using Diaries

Simple Concordance Programme

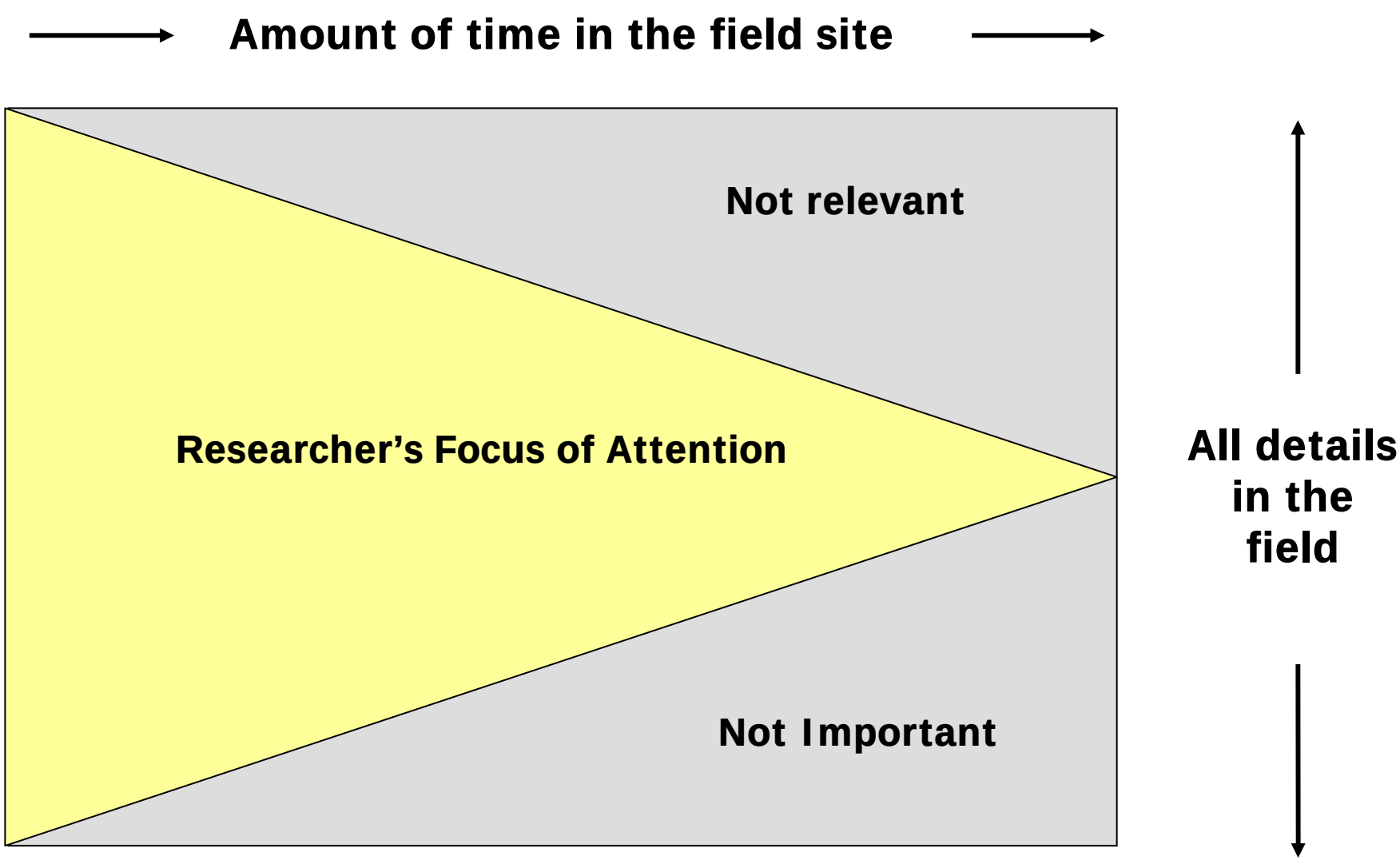
http://www.textworld.com/scp/

Observation

- Purpose of observation
  - Describe the setting
  - First-hand experience – assists with analysis
  - See what is normally taken for granted or not easily spoken about
  - Confirm perceptions of respondents
- Requires training, preparation and discipline
- Develop an observation checklist

Role of the observer

- Complete observer
  - Behind one-way mirror, invisible role
- Observer as participant
  - Known, overt observer
- Participant as observer
  - Pseudo-member, research role known
- Complete participant
  - Full membership, research role not known


Amount of time in the field site
Not relevant
Researcher's Focus of Attention
Not Important
All details in the field

Key features for Observation

Setting: space – activities

People: actors- relationship – interactions – feelings

System: formal – informal

Behaviour: time- routines – processes - events

Observation

Structured observation

Unstructured observation

Practical considerations in approaching structured observation

1. Research questions:
2. Focus: e.g. learning strategies, T's questions
3. Setting: e.g. Classroom
4. Observation instruments: category system
5. Observation procedure: When? How often? No. of observer?
6. Analytical procedure: e.g. frequency count
7. Presenting of finding: e.g. summary tables

Possible categories in observation task

Observation topic:

Location:

Date and time:

Lesson Learned:

Points to work on:

Personal reflections:

Literature (connections/ideas):

Verbal Report

Verbal report has been regarded “in the field of psychology as a method of uncovering the subjects’ cognitive states in processing information” (Matsumoto, 1993:32).

Due to the limitation of classroom observation to observe what happens inside the “black box” (Long,1993), in the studying of learner strategies, verbal report has been used up to tap the conscious mental processes involved in language learning (Cohen, 1987b).

Verbal Report

I. Before the experiment:

a. objectives of the research

b. general process of the experiment

c. equipment: tape recorder, cassettes, video camera

d. time and room arrangement

Verbal Report

ll. During the experiment:

a. warm-up activities:

- name 20 animals
- mathematical calculation
- tasks similar to the actual tasks

b. experiment:

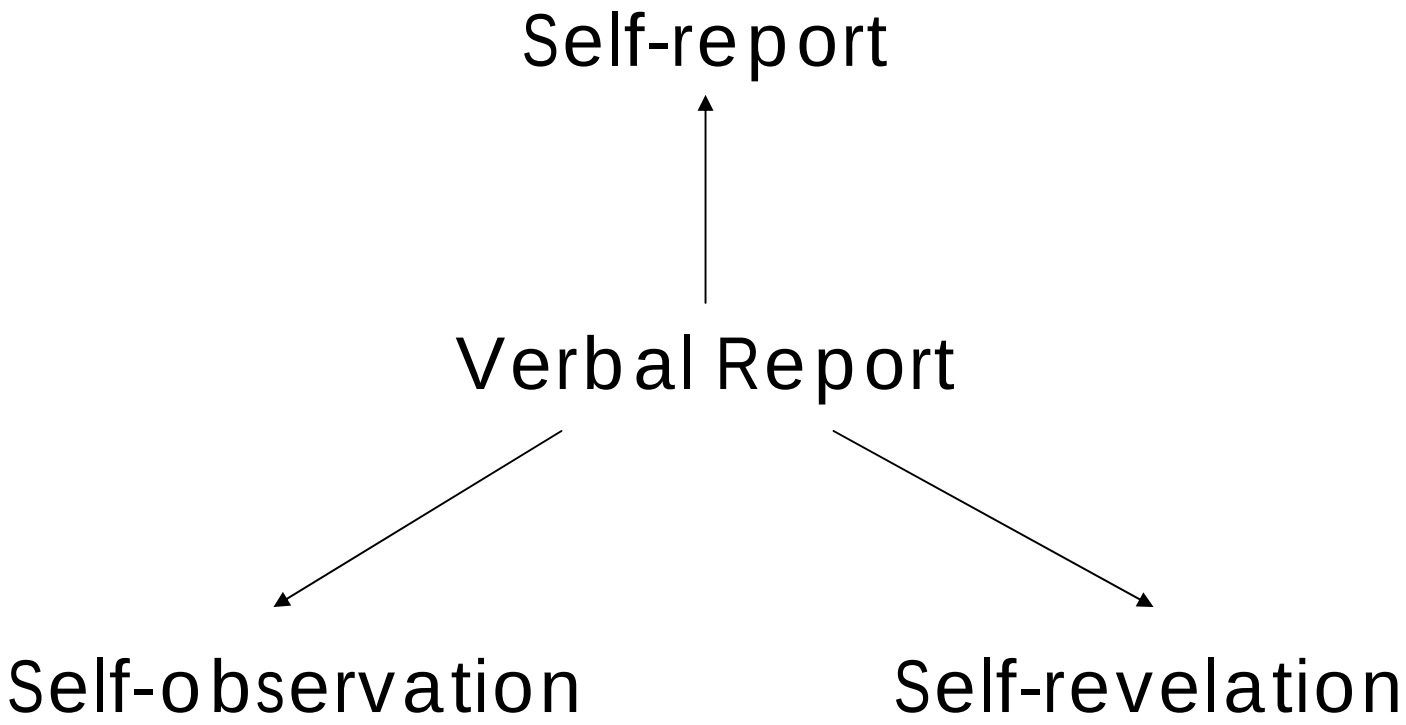
- observation checksheet
- clear and logical instructions

Verbal Report

III. After the experiment

Researchers might need to interview subjects for complete information.

Verbal Report



Verbal Report

Verbal report can be classified into two forms:

1. Concurrent report: verbalisation is done while a specific task is given and information reported still stored in the short-term memory (STM).

2. Retrospective report: verbalisation is given after the completion of the task. It thus involves retrieval of information from the long-term memory (LTM).

Verbal Report Methodology

Subjects' characteristics:

- the educational background
- their knowledge of the task
- their motivation to do the task
- level of language proficiency (especially in the case of L2 studies)
- and their age should be indicated.

Verbal Report Methodology

Characteristics of the materials:

Example: If it is reading task.

It would be helpful if the investigator specified the genre of the material, its topic, its length, and its difficulty level.

Verbal Report Methodology

Criterion task: Provide

- a clear indication of the tasks that the respondents were asked to perform (e.g. in reading research, whether it was free recall, recognition, question answering, summarization, or some combination of these)
- the directions given to the subjects

Verbal Report Methodology

Guidance in verbal reporting:

Instruct respondents in how to provide verbal report, as well as to coach them as they are providing it (e.g. requesting that they not report on the basis of what they usually do, but rather that they stick to what they are actually doing at the given instance).

Verbal Report Methodology

Methods of analysis:

Include details as to the development of the categories and coding schemes used in interpreting the verbal report data that were obtained. It may also be beneficial to include the codes and symbols used in the transcriptions of the verbal report protocols – for example, symbols for suprasegmental features, such as tone of voice.

Verbal Report Methodology

Interrater reliability checks:

It would be advisable to run interrater reliability checks to determine the extent to which the investigators are using similar criteria in arriving at scores. Information about such interrater reliability checks should be provided in the research report.

Verbal Report Methodology

The Validity of Verbal Reports:

Once the data are collected, the analysis procedures also have direct impact on whether the data measure what they purport to measure – i.e. the rationale for the construction of the analysis categories and then the actual process of data analysis. Did the raters understand and properly use all of the rating categories? With regard to interrater reliability, if there is more than one rater, a low interrater reliability coefficient would call into question not only the reliability of the ratings but their validity as well.

Interviews

- insiders' perspectives
- beliefs and worldviews
- identity of the interviewee
- personal views
- biographies

Interviews

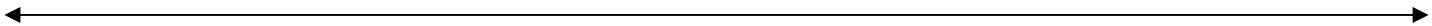
Collecting interview data by:

- notes
- audio recording
- video recording

Interview

Structured

Unstructured



Semi-structured

Interview

Structured interview:

- aim to maximize comparison across responses to interview questions
- pre-set list of questions asked in a fixed order
- e-mail interview
- large number of subjects

Interview

Unstructured interview: ‘conversation with a purpose’

- no pre-prepared lists of questions
- begin the interview with general ideas of the topic
- aim to solicit as much information as possible
- a case study, biographic or narrative info.
- shape the questions posed and direction

Interview

Semi-structured interview:

- a list of pre-prepared questions (but used it as a guide)
- open to important but unforeseen info. or points of discussion
- never be repeated in exactly the same way with each interview

Interview

Generating ‘good’ interview questions?

- unambiguous
- one-question questions
- non-leading
- culturally sensitive and ethically informed

Interview

Unambiguous questions

= can interpret them in many ways

What can you teach children now that will be useful to them as adult?

Interview

one-question questions

What reading strategies are most important to teach young children and where these skills taught best: at SALC or in class?

Interview

non-leading questions:

Are you demotivated when you have learned grammar in class?

Interview

Culturally sensitive and ethically informed questions:

- question wording → respect and do not insult to interviewee

Interview

Question types:

- closed questions
- open-ended questions

Interview

Interview configurations:

- One-to-one interview
- Small-group interview/focused-group interview

Data Analysis

Typical Process of Content Analysis Research

1. Theory and rationale
2. Conceptualizations
3. Operationalizations
4. Coding schemes
5. Sampling
6. Training and pilot reliability
7. Coding
8. Final reliability
9. Tabulation and reporting

Typical Process of Content Analysis Research

1. Theory and rationale:

- What content will be examined, and why?
- Are there certain theories or perspectives that this particular message content is important to study?

Library work is needed here to conduct a good literature review.

- Will you be using an integrative model, linking content analysis with other data to show relationships with source or receiver characteristics?
- Do you have research questions? Hypotheses?

Typical Process of Content Analysis Research

2. Conceptualizations:

- What variables will be used in the study, and how do you define them conceptually (i.e., with dictionary-type definitions)?

Remember, you are the boss!

There are many ways to define a given construct, and there is no one right way. You may want to screen some examples of the content you're going to analyze, to make sure you've covered everything you want.

Typical Process of Content Analysis Research

3. Operationalizations (measures):

Your measures should match your conceptualizations (this is called internal validity).

- What unit of data collection will you use?

You may have more than one unit (e.g., a by-utterance coding scheme and a by-speaker coding scheme).

- Are the variables measured well (i.e., at a high level of measurement, with categories that are exhaustive and mutually exclusive)?

An a priori coding scheme describing all measures must be created. Both face validity and content validity may also be assessed at this point.

Typical Process of Content Analysis Research

4. Coding schemes:

You need to create the following materials:

a. Codebook (with all variable measures fully explained)
b. Coding form

Typical Process of Content Analysis Research

5. Sampling:

- Is a census of the content possible?
  (If yes, go to #6.)
- How will you *randomly sample* a subset of the content?

This could be by time period, by issue, by page, by channel, and so forth.

Typical Process of Content Analysis Research

6. Training and pilot reliability:

During a training session in which coders work together, find out whether they can agree on the coding of variables.

Then, in an independent coding test, note the reliability on each variable. At each stage, revise the codeboook or coding from as needed.

Typical Process of Content Analysis Research

7. Coding:

Use at least two coders, to establish intercoder reliability.

Coding should be done independently, with at least 10% overlap for the reliability test.

Typical Process of Content Analysis Research

8. Final reliability:

Calculate a reliability figure (percent agreement, Scot's pi, Spearman's rho, or Pearson's r, for example) for each variable.

Typical Process of Content Analysis Research

9. Tabulation and reporting:

See various examples of content analysis results to see the ways in which results can be reported. Figures and statistics may be reported one variable at a time (univariate), or variables may be cross-tabulated in different ways (bivariate and multivariate techniques). Over-time trends are also a common reporting method. In the long run, relationships between content analysis variables and other measures may establish criterion and construct validity.

Typical Process of Content Analysis Research

http://academic.csuohio.edu/kneuendorf/content/

Validity and Reliability

Validity

How do you validate the accuracy of your finding?

Validity

1. Triangulation is the process of corroborating evidence from different individuals, types of data or methods of data collection, and theme in qualitative research.

Validity

Triangulation

- Methods – interviews, observations, document analysis
- Sources – public/private, over time, different perspectives
- Analysts – multiple analysts, independent analysis and compare findings
- Theories – to understand how different assumptions affect findings, illuminate inconsistencies

Validity

2. Member checking is a process in which the researcher asks one or more participants in the study to check the accuracy of the account

Validity

3. External audit is the process in which a researcher may ask a person outside the project to conduct a thorough review of the study and report back, in writing, the strength and weaknesses of the project.

Checking Reliability

Intra-reliability check =
A researcher analyses the data and checks his own analysis more than one time.

Inter-reliability check =
Research A and Research B analyse the data and discuss the result.

Checking Reliability

Subject	Researcher	Inter-rater	Agreement
A	8	6	7
B	9	9	9
Total	17	15	16

Checking Reliability

Formula

$$\frac{\text{No. of agreement}}{\text{No. of researcher}}$$

$$\text{Coefficient} = \frac{16}{17} = 0.94 > 0.7 \checkmark$$