Qualitative Data Analysis: Handout

Miles, M. B. & Huberman, A. M. (1984). Qualitative Data Analysis: A Sourcebook of New Methods. California; SAGE publications Inc.

p. 15 Qualitative data are attractive. They are a source of well-grounded, rich descriptions and explanations of processes occurring in local contexts. With qualitative data one can preserve the chronological flow, assess local causality, and derive fruitful explanations. … they help researchers go beyond initial preconceptions and frameworks. Finally, the findings from qualitative studies have a quality of "undeniability," as Smith (1978) has put it.

p. 21 **Data reduction**: the process of selecting, focusing, simplifying, abstracting, and transforming the 'raw' data that appear in written-up field notes. Data reduction occurs continuously throughout the life of any qualitatively oriented project. This is part of analysis.

Data Display: The second major flow of analysis activity is data display. A 'display' is an organized assembly of information that permits conclusion drawing and action taking. The most frequent form of display for qualitative data has been narrative text.
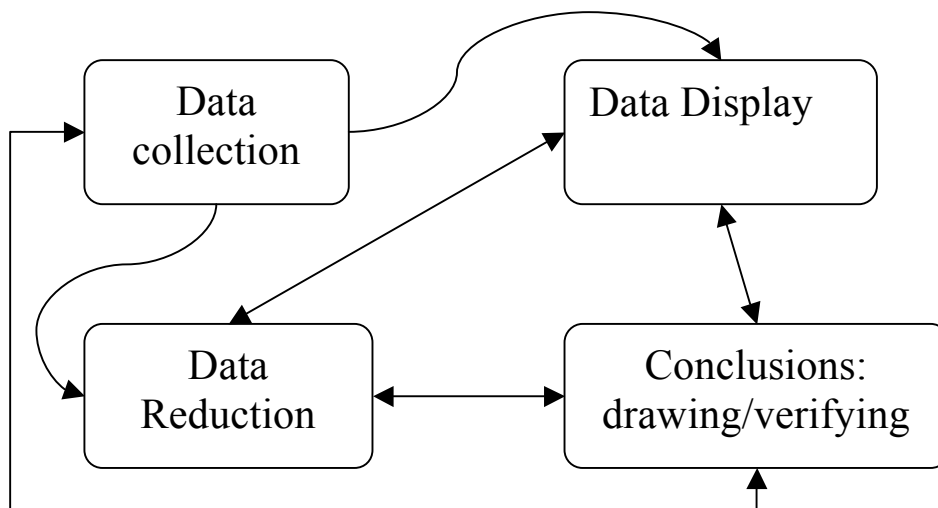
p. 22 **Conclusion Drawing/Verification**: The third stream of analysis activity is conclusion drawing and verification. From the beginning of data collection, the qualitative analyst is beginning to decide what things mean, is noting regularities, patterns, exp0lanations, possible configurations, causal flows, and propositions. Final conclusions may not appear until data collection is over.

Conclusion drawing is only half of the procedure. Conclusions are also verified as the analyst proceeds. The meanings emerging from the data have to be tested for their plausibility, their sturdiness, and their 'confirmability' (validity). Otherwise, we are left with interesting stories of unknown truth and utility.

Components of Data Analysis: Flow Model

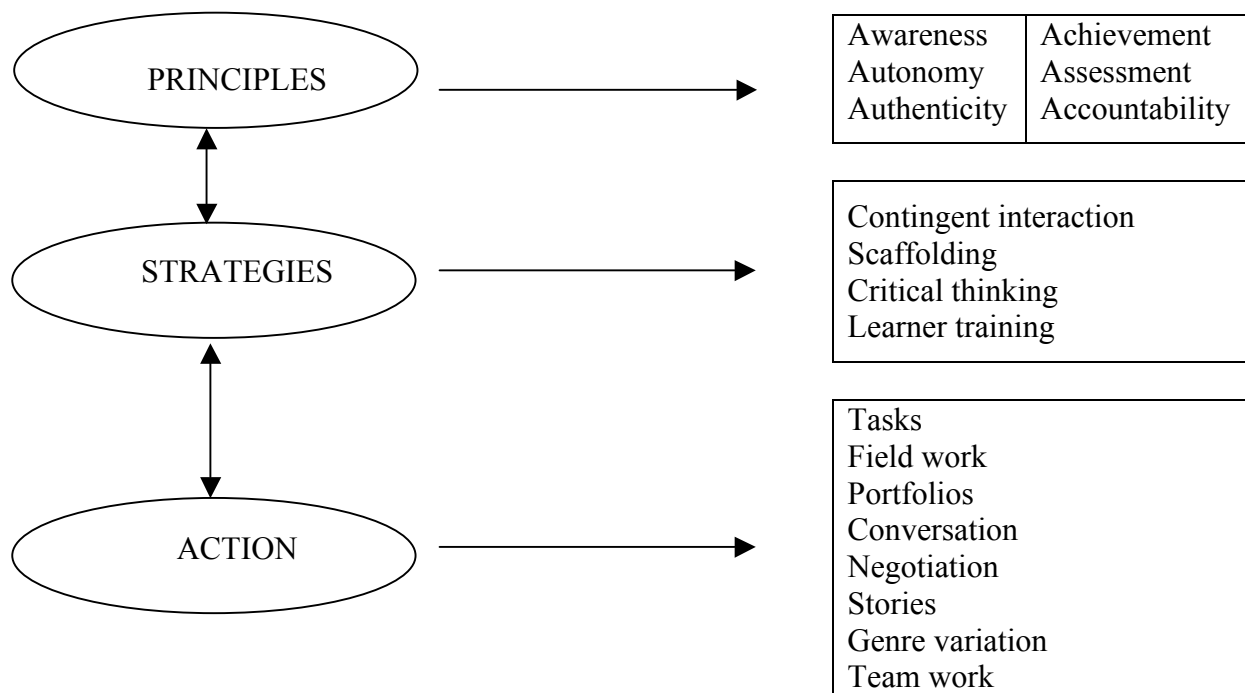|	Data collection period		
Anticipatory	Data reduction		**= Analysis**
	Data displays		
	Conclusion drawing/verifying		

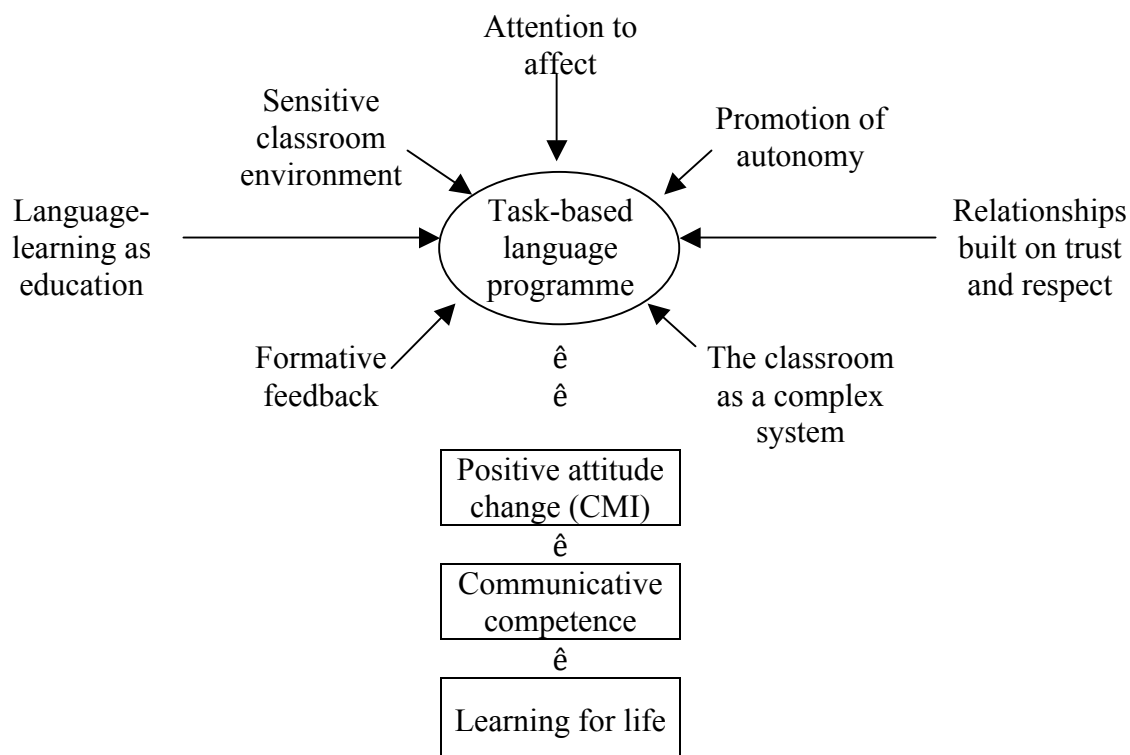p. 23 Components of Data Analysis: Interactive Model

p. 28 Building a Conceptual Framework

Theory-building relies on a few general constructs that subsume a mountain of particulars. {We have to} decide which dimensions are more important, which relationships are likely to be most meaningful, and what information should be collected and analyzed.

Brief Description. A conceptual framework explains, either graphically or in narrative form, the main dimensions to be studied – the key factors, or variables – and the presumed relationships among them. The can be rudimentary or elaborate, theory-driven or commonsensical, descriptive or causal.
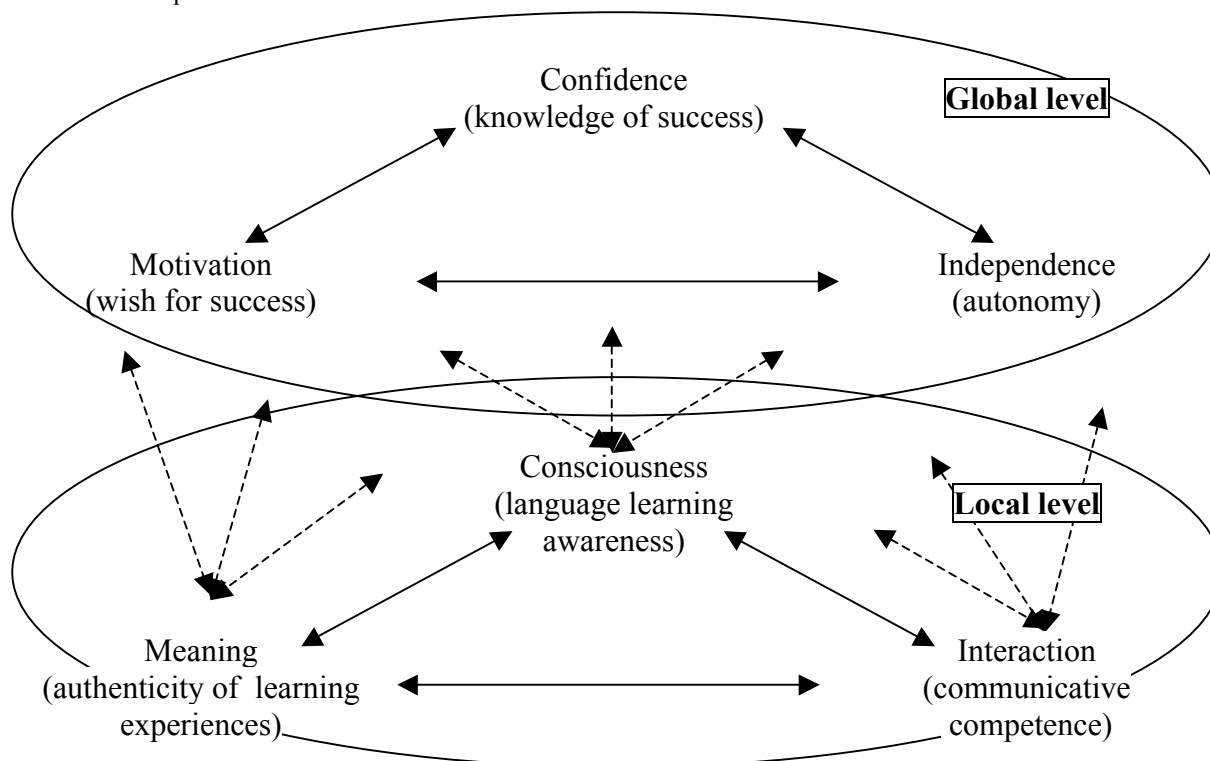
PRINCIPLES →	Awareness	Achievement
	Autonomy	Assessment
	Authenticity	Accountability

STRATEGIES →	Contingent interaction
	Scaffolding
	Critical thinking
	Learner training

ACTION →	Tasks
	Field work
	Portfolios
	Conversation
	Negotiation
	Stories
	Genre variation
	Team work

CURRICULUM DESIGN (VAN LIER 1996:189).

Attention to affect

Sensitive classroom environment

Promotion of autonomy

Language-learning as education → Task-based language programme ← Relationships built on trust and respect

Formative feedback

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The classroom as a complex system

Positive attitude change (CMI)

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Communicative competence

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Learning for life

A FORMATIVE LEARNING PROCESS

*dotted lines represent various interactions between levels.

Confidence
(knowledge of success)

Global level

Motivation
(wish for success)

Independence
(autonomy)

Consciousness
(language learning
awareness)

Local level

Meaning
(authenticity of learning
experiences)

Interaction
(communicative
competence)

THE CMI CURRICULUM (Finch, 2000)

p. 35 Formulating Research Questions

The formulation of research questions can precede or follow the development of a conceptual framework, but in either case represents the facets of an empirical domain that the researcher most wants to explore. Research questions can be general or particular, descriptive or explanatory. They can be formulated at the outset or later on, and can be refined or reformulated in the course of fieldwork.

p. 36 Sampling: Bounding the Collection of Data

Choices must be made. Unless you are willing to devote most of your professional life to a single study, you have to settle for less.

Settings have subsettings (schools have classrooms, groups have cliques, cultures have subcultures, families have coalitions), so that fixing the boundaries of the setting in a non-arbitrary way is tricky.

How does one limit the parameters of a study?
   o Qualitative researchers usually work with smaller samples of people in fewer global
      settings than do survey researchers.
   o Qualitative samples tend to be more purposive than random.
   o Samples in qualitative studies can change.

p. 37 Qualitative research is essentially an investigative process, not unlike detective work. One makes gradual sense of a social phenomenon, and does it in large part by
   o contrasting,
   o comparing,
   o replicating,
   o cataloguing, and
   o classifying the object of one's study.

These are all sampling activities.
Sampling involves not only decisions about which people to observe or interview, but also about
- o settings,
- o events,
- o actors,
- o and social processes.

p. 49 Analysis During Data Collection
Method 1: Contact Summary Sheet.
After an intensive field contact has been completed and field notes have been written up, there is often a need to pause and consider. What were the main themes, issues, problems and questions that I saw during this contact?

A contact summary sheet is a single sheet containing a series of focusing or summarizing questions about a particular field contact.

Deciding on the questions. The main thing here is being clear about what you need to know quickly. E.g.
o What people, events, or situations were involved?
o What were the main themes or issues in the contact?
o Which research questions did the contact bear most centrally on?
o What new hypotheses, speculations, or guesses about the field situations were suggested by the contact?
o Where should the fieldworker place most energy during the next contact, and what sorts of information should be sought?

p. 51 Document Summary Form
Documents are often lengthy and typically need explaining or clarifying, as well as summarizing. One needs a clear awareness of the document's significance: what it tells us about the site that's important.

It helps to create and fill our a document summary form, which can be attached to the document it refers to.

p. 54 Codes and Coding
A chronic problem of qualitative research is that it is done chiefly with words, not with numbers. Words are fatter than numbers, and usually have multiple meanings. This makes them harder to move around and work with. Worse still, most words are meaningless unless you look backward or forward to other words.

p. 56 A common solution is that of coding field notes, observations and archival materials. Codes are categories. They usually derive from research questions, hypotheses, key concepts, or important themes. They are retrieval and organizing devices that allow the analyst to spot quickly, pull out, then cluster all the segments relating to the particular question, hypothesis, concept, or theme. Clustering sets the stage for analysis.

MOT	Motivation
CONF	Confidence
IP	Innovation Properties
EC	External Context
IC	Internal Context
AP	Adoption Process

ORG/PRAC	Effects on Organizational Practice
CLASS	Effects on Classroom Practice
PROBS	Implementation Problems
EXT	External Interventions
RULE	Rules
PATT	Recurrent Patterns
QU-!	Surprises
QU-Q	Puzzles
T	Teacher
S	Student

pp. 64-65 Reflective Remarks
(When writing up results), reflections of several sorts typically swim into awareness. For example:
- o What the relationship with the respondents was like
- o Second thoughts on the meaning of what a respondent was saying
- o Doubts about the quality of data being recorded
- o A new hypothesis explaining what was happening
- o A mental note to pursue an issue further in the next contact
- o Cross-allusions to something in another part of the data
- o Own feelings about what was being said or done
- o Elaboration or clarification of something said or done.

When something like this arises in your mind, it is useful to enter it directly into the write-up. A good convention is to mark off the remark with double parentheses.

p. 65 Marginal Remarks
As coding proceeds, if you are being alert and non-routine about what you are doing, ideas and reactions to the meaning of what you are seeing will well up steadily. These ideas are important: They suggest new interpretations, leads, connections with other parts of the data – and they usually point toward analytic work, like pattern codes.

p. 66 Storing and Retrieving Text
Every research study needs a systematic way to store coded field data, and a way to retrieve those data when they are needed during analysis.

Generally speaking, it pays to consider the basic structure of our storage and retrieval system.
- o Physical formatting
- o Indexing of data
- o Cross-referencing

p. 67 Pattern Coding
Pattern codes are explanatory or inferential codes, ones that identify an emergent theme, pattern, or explanation that the site suggests to the analyst. They act to pull a lot of material together into more meaningful and parsimonious units of analysis. They are a sort of meta-code.

p. 68 For the qualitative analyst, pattern coding has four important functions
1. It reduces large amounts of data into a smaller number of analytic units.
2. It gets the researcher into analysis during data collection, so that later data collection can be more focused.
3. It helps the researcher build a cognitive map, an evolving schema for understanding what is happening locally.

4. When several researchers are engaged in individual case study work, it lays the groundwork for cross-site analysis by surfacing common themes and causal processes.

Themes
- o PATT
- o RULE

Causes/Explanations
- o EXPL
- o SITE-EXPL
- o MET (Metaphor)

Relationships Among People
- o NET (Social network)

Theoretical Constructs
- o BSP (Basic social processes – negotiating, etc.)

p. 69 Memoing

pp. 215-229 Drawing and Verifying Conclusions.
Tactics for Generating Meaning

1. Counting
2. Noting patterns, themes
3. Seeing plausibility
4. Clustering (Classifying)
5. Making metaphors
6. Splitting variables
7. Subsuming particulars into the general
8. Factoring
9. Noting relationships between variables
10. Finding intervening variables
11. Building a logical chain of evidence
12. Making conceptual/theoretical coherence

pp. 230-242
Tactics for Testing or Confirming Findings

1. Checking for representativeness
2. Checking for researcher effects
3. Triangulating
4. Weighting the evidence
5. Making contrasts/comparisons
6. Checking the meaning of outliers
7. Using extreme cases
8. Ruling our spurious relations
9. Replicating a finding
10. Checking out rival explanations
11. Looking for negative evidence
12. Getting feedback from informants

Workshop

FRESHMAN SYLLABUS DESIGN ISSUES (BASED ON BREEN & CANDLIN 1980:93-4).

Syllabus design issues

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i) What communicative knowledge – and its affective aspects – does the learner already possess and exploit?

ii) What communicative abilities - and the skills which manifest them – does the learner already activate and depend upon in using and selecting from his/her established repertoire?

iii) Can the performance repertoire of the learner's first language be employed?

iv) Can existing knowledge of and about the target repertoire be used?

v) What is the learner's own view of the nature of language?

vi) What is the learner's view of learning a language?

vii) How does the learner define his/her own learning needs?

viii) What is likely to interest the learner both within the target repertoire and the learning process?

ix) What are the learner's motivations for learning the target repertoire?

Sample Issues for action Research:

- How much time do I spend talking in the classroom?
- How do I correct errors?
- How much feedback do I give to the learners?
- How do I provide this feedback?
- How much time do I allow for my learners to interact with each other?
- How much of my lessons do I spend in teacher-fronted activities?
- How can I improve my classroom management skills?
- How much attention do I give to individual learners?
- How do certain tasks promote collaborative work?
- How do learners carry out the same task in different ways?
- How difficult do some learners find certain types of test?
- How is it that certain classroom materials work better than others?
- Why are learners are better motivated in some classes than in others?
- How can I combine grammar and interaction?
- How can I incorporate performance assessment?

    (Rea-Dickins & Germaine 1992: 65, 69)

Sample data:

http://www.finchpark.com/videos/research/index.htm
http://www.finchpark.com/videos/research/index1.htm
(Especially the teacher insterviews)
(Also the summaries)

Software for qualitative data analysis: NVivo:

http://www.qsrinternational.com/products_nvivo.aspx

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