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Qualitative Research: Overview and Data Collection/Analysis

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1

Qualitative vs. Quantitative Research (Gay et al., 2006, p. 400)

Quantitative (numbers)	Step in Research Process	(words) Qualitative
Description and explanation oriented	Identifying a Research Problem	Exploratory and understanding oriented
Major role. Justification for the research problem/need for study	Reviewing the Literature	Minor role (often because it does not yet exist). Justification for the research problem
Specific and narrow. Measurable and observable data	Selecting Participants / Sample	General and broad. Participants' experiences
Predetermined instruments. Numeric data. Large number of individuals	Collecting Data	Emerging protocols. Text or image data. Small number of individuals or sites
Statistical analysis	Analyzing and Interpreting Data	Text analysis
Standard and fixed. Objective and unbiased	Exploring and Evaluating Research	Flexible and emerging. Reflexive and biased

Introduction

- ◆ Best suited for **initial explorations** of a group or phenomenon.
- ◆ A powerful tool for generating quantitative research questions.
- ◆ Has its origins in the disciplines of sociology, anthropology, and history.
- ◆ Discussion
 - Identify an educational research question(s) that might be studied via qualitative methods.
 - How is this question different from your quantitative research proposals?

3

Features of Qualitative Research

1. Relies on data gathered during intensive field (real world) study.
2. The researcher is the primary evaluation tool or measure. Relatively little standardized instrumentation is used (at least at the outset).
3. Results are descriptive (done with words not numbers).
4. Aims at making holistic (systematic, encompassing, integrated) interpretations.
5. Inductive reasoning. Looks at the whole to understand the parts
6. Participant perspectives emphasized. Explicate the ways people in particular settings come to understand, account for, take action, and otherwise manage their day-to-day situations.

Very complex phenomena/subjects (e.g., how do IEP teams function) are best suited to this type of research. Examples???

4

Characteristics of Qualitative Research

1. A portrait (with words not numbers) of some group of people.
2. Determines how members of a culture function and interact within a natural setting.
3. Does not manipulate variables.
4. Tries to identify variables that occur naturally and to explain how they are interrelated.
5. Variable to be studied are not necessarily identified in advance (**a common mini-proposal mistake is being too specific**).
6. Foreshadowed problems, the general ideas or notions the researcher brings to the study.

5

Qualitative vs. Quantitative Research

◆ Small Group Discussion

- Review the qualitative mini-proposal outline found in the syllabus.
- Compare it to the quantitative mini proposal outline.
- Identify specific ways in which the proposals will be different.
- From your mini-proposal own work...
 - ◆ What are the advantages of a qualitative approach?
 - ◆ What are the disadvantages?

6

Validity (trustworthiness) in Qualitative Research

1. Descriptive Validity
2. Interpretive Validity
3. Theoretical Validity
4. Evaluative Validity

7

Strategies for Ensuring Validity (Guba, 1981)

1. Prolonged participation
2. Persistent observation
3. Peer debriefing
4. Collect a variety of raw data items
5. Check findings with participants
6. Collect detailed descriptive data
7. Develop detailed descriptions of the context
8. Establish and audit trail
9. Practice triangulation
10. Practice reflexivity

8

Strategies for Ensuring Validity (Wolcott, 1994)

1. Talk little, listen a lot
2. Record observations accurately
3. Begin writing early
4. Let readers "see" for themselves
5. Report fully
6. Be candid
7. Seek feedback
8. Write accurately

9

Selecting Participants

1. Who
 - a) Informed of topic
 - b) Real life
2. How
 - a) Stratified purposeful
 - b) Opportunistic
 - c) Convenience
 - d) Typical case
3. How many
 - a) Time, energy, resources dictate
 - b) Rarely more than 20 (as few as 1)
 - Thus sampling is very important

10

Data Collection

- ◆ Observation
- ◆ Interview
- ◆ Record/Document Review

◆ NOTE: Did your mini-proposals use all of these data sources?

11

Data Collection: Observation

- ◆ Fieldwork (the time spent observing the group being studied).
 - Field notes (example to follow)
 - Chronological account of events.
 - Memos
 - Reflective note designed to help the researcher focus on the whole.
 - Participant observation
 - Becoming part of the group being observed.
 - Privileged observers
 - Observer, but not a participant.

12

Data Collection: Observation

◆ Discussion

1. What are the pros and cons of being a participant observer?
2. What are the pros and cons of being a privileged observer?
3. How do you overcome the identified "cons" and realize the identified "pros?"

13

SB-O1 Observation

Observation Code Number: SB-O1 (small group seminar field observation)
Person(s) Being Observed: Supervisor B & 8 single subject educational candidates
Observer: Stephen E. Brock
Observation Date: 2/25 to 2/27
Time: Classroom, Room A
Recording Arrangements: Not recorded

GENERAL RESEARCH QUESTIONS:
 This observation was conducted as part of a study of the University teaching program. The general purpose of the study was to learn more about the process of preparing students to become educational teachers.

SPECIFIC OBSERVATION QUESTIONS:
 The small group seminar focuses on the student teaching experiences of its candidates. Questions developed prior to the observation included the following: (1) how does the seminar function?, (2) how does it help to prepare students to become teachers?, (3) in what ways do the different participants actively involvement?

CONTEXT:
 A small group seminar for students currently participating in a student teaching assignment was observed. The seminar was part of a single subject educational program at the University. The observation took place in University Room A on May 3, 1994. The observer entered the observation setting at 2:05. The seminar being observed began at 2:10 and ended at 2:55. The observer exited the observation setting at 2:57. The classroom setting is diagrammed below:

LEGEND:
 ○ Supervisor B
 □ Observer
 ● 1,2,3,4,5
 ● 6,7,8

OBSERVATION STRATEGIES:
 The observer's prior seminar participation experiences, combined with the fact that the seminar had been explained in detail prior to the observation, allowed an observation code to be developed. The code focused on the following activities: (1) teacher talking/questioning, (2) student talking/questioning, (3) transition time during which the class is shifting from one task to another, and (4) the playing of the student teacher videos. Based upon a prior conversation with Supervisor B, the observer was explicitly instructed as to the extent to which the students may be involved in the code. The code was seen as being of interest to both the observer and the students. Applications of field observation and observation intervals are used as an integral part of the sampling procedure. At the end of one minute intervals an activity code was assigned. Announcements and observer comments were the main focus.

OBSERVATIONS:
 Prior to beginning the observation the observer had an activity code with students 3 and 6 to interview them later in the quarter. These assignments had just been completed when the class began. Thus, the observer decided that it would be less distracting to remain where he was seated, rather than get up and move to a less visible classroom location.

Code:
 (1) teacher talking
 (2) student talking
 (3) transition time during which the class is shifting from one task to another
 (4) the playing of the student teacher videos.

Time Code: Announced Notes

2:05 * The observer entered the classroom five minutes early in order to set up interview appointments with two of the class members (students 5 and 6). This scheduling comment meant it was time for the class to begin. As he had previously indicated he liked to do, Supervisor B entered the classroom a few minutes earlier in order to be available for any scheduling interviews to see what interruptions were taking place prior to the start of the class.

2:10 1 The class began with Supervisor B stating out an agenda and introducing the observer to the class. It markedly emphasized to the observer that not present were those students who were part of the year-long student degree program, as they were not involved in a student teaching assignment this quarter. He then seated himself at the head of the classroom and began to review the announcements which were written on the agenda. It's attire is significantly different from that of the students. While he wears a tie, the dress of the students is typical of the college student (i.e., casual).

2:11 1 B is making announcements to the class regarding an upcoming seminar on sexual harassment in the public schools.

2:12 1 B is making announcements to the class regarding an upcoming seminar on student gangs in public schools.

2:13 1 B is making announcements to the class regarding an upcoming demonstration of

SB-O1 Codes

he checks for understanding during lessons.

2:24 7 responds to B's feedback. Then B brings the class to a close by asking if they want any additional comments about 7's teaching. Six fourth comments were made.

2:55 B ends the class. All students give 7 their written comments regarding the video just viewed. B asks to clap for 7 and the rest of the class joins in.

2:56 The class leaves the room.

2:57 * Before B leaves the room he apologizes for the lighting difficulties.

* No activity codes given as these observations took place either before the start of or after the end of class.

Code Descriptions:
 At the end of 2:10 of the one minute intervals B was talking.
 At the end of 2:11 of the one minute intervals one of the students was talking.
 (NOTE: 5% of the student participation, or 17% of the total, was 7 talking.)
 At the end of 2:12 of the one minute intervals the class was transitioning.
 (NOTE: All of these transitions involved exiting the video.)
 At the end of 2:13 of the one minute intervals the video of 7 teaching was playing.

OBSERVER COMMENTS:
Design: Specific research questions number one and two asked what questions. How does the seminar function and how does it help to prepare students to become teachers? The observational data reveal that the seminar is primarily facilitated by B. He provides the agenda for the class and creates the learning materials (i.e., the video tapes of student teachers). The viewing and discussing of video give class participants chances to see their peers in action as if they were in the classroom. The video with student interview tapes the students awareness of instructional strategies and possibilities. It will also give the individual students prepared in the video a chance for self-reflection and peer feedback. In addition to being presented verbally during the seminar, all students present their feedback in written comments regarding the sample lesson.
Attention: Specific research question number one asked how the seminar functioned. Observational data suggests that it does so in a fairly routine manner. It operates at 2:27 as an example of a relatively informal atmosphere. Additionally, attention is being very positive with these students. On at least two occasions, I commented on how well the all students did during the video taped lessons. The students made suggestions that these comments were well received. The five with student interview tapes that I reported that if he were the principal there are more of his students that it would not have. The pictures displayed in his office (and previous students) suggest he has a genuine affection for and/or sense of pride in these preservice teachers.
Authenticity: Specific research question number one asked how the seminar functioned. Observational data reveals that B is clearly in charge of the seminar. He begins the seminar by asking the students to give their feedback on the video. He was in charge of the class agenda which he appears to have written. His authority is further illustrated by the fact that it was he who began the class (by passing out the agenda and reviewing it for the class), and he who ended the class. Although it would appear that he did consult with 7 regarding what would be shown in the class, it was clearly in charge of the video. Not only did he film it, but he was responsible for coding it to the desired position. During class, it was the only unique participant to leave his seat. When the end of the class resumed, B stood while the video was playing. Additionally, one sampling suggests that B dominated discussion. It is significant to note that on the one occasion where a disagreement over something 7 had said came up (at 2:17 7 mentioned that he hadn't been doing any and teaching (viewing and) and student (possibly B) was the one to speak. However, it was B who led away from the point the evening as it very important. An interesting observation made on the raw field notes which maximized the power relations in this class were the fact that during the seminar B is filling the same role that 7 is with his public school students in the video demonstration.

Participation: Specific research question number three asked to what extent are the different participants actively involved? Results of the observation suggest that the students in this seminar do not appear to be active participants. B dominated the discussion. 7 did speak frequently in response to questions from B and other students. However, when 7 is excluded from the student taking time sample, only 11% of the observations found a student to be talking (as compared to 37% for B). Additionally, it would appear that several students used nothing during the seminar. In particular the observer noted that the two students (7 and 6) who will be interviewed did not participate in the discussion at all.
Agency: Comments made by B at 2:18 and 2:53 appeared to be an attempt to lessen the natural student students must feel of seeing these videos above in front of their peers. Despite this, 7's anxiety was never shown through on at least two separate occasions. The first was at 2:21 when he made a subtle comment about some of the students lighting during the video and the second at 2:44 when he said words to the effect that the lesson only got worse beyond the point where the video was stopped.
Health: Several of the student teachers looked very young. 7, for example, looked no older than the students he was teaching in the video. Given this it seems logical that he had some initial difficulties with preparation.
Summary:
 An agenda prepared by B was passed out and reviewed by B. A video of 7 teaching lesson was presented and discussed. It seemed to dominate the discussion. 7 was also a frequent participant. Several students made no comments during the seminar.
FOLLOW UP:
 It was very difficult to keep track of all that went on during the seminar. While a video would be preferable it would probably be too intrusive/expensive. Perhaps an audio tape might help to be a better record of the activities without being too disruptive.
 The lights being turned off for the first part of the video presentation made it difficult to take notes.
 Both of my upcoming interviews did not talk during the seminar. Perhaps it would be more preferable to wait until after an observation and then select one participant who did talk in the video for the interviews. This may not be a representative sample of this seminar participants. A question to follow-up on is how Supervisor B selected these students for

Data Collection: Interview

- ◆ Unstructured
 - ◆ Semi-structured (example to follow)
 - ◆ Structured
-
- ◆ Recording and transcribing the interview.

16

University of California, Davis
Collaborative Research on Preparing New Teachers
Semi-structured Interview Outline

Prior to Beginning the Interview

1. *Introduce* (me): The interviewer should introduce him or her self to the interviewee. Provide background information necessary to facilitate an effective rapport.
2. *Motives and Intentions*: Explain to interviewee that the interviewer gained access to the teacher training program via membership in EDU 203. The interview is part of a larger research effort designed to better understand how the UCD teacher training program works.
3. *Protection of respondents*: Explain to the interviewee that the identities of all participants in the study will be protected via the use of pseudonyms.
4. *Review Statement of Consent Form*: Obtain the interviewee's signature on this form.
5. *Logistics*: Determine the availability of the interviewee and establish how long the interview will last.

Note: Qs 2 & 3 from Mariani (1987).

Interview Questions

Personal Questions

1. Interviewer's name and credential program?
2. What lead to your interest in becoming a teacher?
3. What lead you to choose the UCD teacher training program?

Programmatic Questions

4. What activities have you engaged in as part of your preparation to become a teacher at UCD?
5. How were these tasks organized/overseen?
6. How have your preparation tasks changed as the year progressed?

Rewards and Challenge Questions

7. Which of these activities have been most/least helpful in providing you the skills needed to become an effective teacher?
8. What turning points – either positive or negative – did you experience in your work with the program this past year?
9. What activity(ies) contradicted/were consistent with your initial teacher training program expectations?
10. What activity(ies) were the most rewarding/challenging/frustrating?
11. How did these rewards/challenges/frustrations change over time?

Relationship Questions

12. How would you characterize your relationship with other people involved in one way or another in the teacher preparation program (i.e. other student teachers, university supervisors, cooperating teachers, K-12 students)?
13. What has gone well or poorly for you with each of these relationships?
14. What aspects of these relationships would you like to alter if you had this year to do over again?

Evaluative Questions

15. In what ways did the design of the program help or hinder your preparation to become a teacher?

17

1. Knowing what you do now, how might you redesign your training program experience to better prepare you to become an effective teacher?
2. In general, what changes would you like to see in how teacher preparation programs in general are organized?
3. Is there anything else about the university teacher training program that you would like to share with me?

Questions About the Future

4. What are your goals for the future?
5. Ten years from now, what do you hope to be doing?
6. Personally speaking, is there anything else that the teacher training program could do for you to better assist you in obtaining your goals?

After Completing the Interview

1. *Protection of respondents*: Remind interviewees that their identities will be hidden.
2. *Feedback*: Let interviewees know that they will be given feedback regarding what was learned from this research project.

18

Interview Transcript

Interview Code Number: SB-12 (interview with male single subject credential candidate)
 Person(s) Being Interviewed: Student 6
 Interview Setting: Empty classroom
 Interviewer: Stephen E. Brock
 Interview Date: May 10, 1994
 Time: 1:15 to 2:00
 Place: University Rooms A (1:15 to 1:40), and B (1:40 to 2:00)
 Recording Arrangements: Recorded with the consent of Student 6

GENERAL RESEARCH QUESTIONS:
 This interview was conducted as part of EDU 203's study of the University teacher training program. The general purpose of this study was to learn more about the process of preparing students to become credentialed teachers.

SPECIFIC INTERVIEW QUESTIONS:
 A semistructured interview outline was used to help guide this interview.

CONTEXT:
 A male student (code number 6) in a single subject credential program at the University was interviewed. The interviewer had previously had contact with student 6 on two occasions. The first was when 6 attended an in-service on suicide prevention that the interviewer had given 4 weeks earlier. The second contact was when the interviewer observed 6's small group seminar. These prior contacts were judged by the interviewer to have been neutral. The interviewer had no formed any specific preconceptions about 6 before the interview. The interview took place in University Rooms A and B. Room A is the classroom in which the interviewer had observed the small group seminar (which student number 6 is a student in) one week earlier. It was comfortable and quiet. The interview began in Room A at 1:15 and was moved into Room B at 1:40. The change in interview locations was necessitated by the fact that at approximately 1:35 students began to arrive for the 2:00 small group seminar. Room B is a graduate research room, which at the time of the interview was empty. This room was also judged to have been comfortable and quiet. The change in interview locations did not appear to have an adverse effect on the student being interviewed. The interview ended at 2:00.

PRE-INTERVIEW:
 Before turning the tape recorder on, the general purpose of the study was described to 6. In addition, he was assured that his participation was voluntary, that his confidentiality would be protected and that his name would not be used in the reporting of any of the study's results. He was also told that the information learned from the study would be shared with him via a personal report. Finally, his signature was obtained on a "Statement of Consent". With 6's permission, the tape recorder was then turned on. What follows is a word-for-word transcription of the interview that then took place.

TRANSCRIPT CONVENTIONS:
 [] are used to insert interviewer comments and observations (i.e., to report laughter, nonverbal gestures, sighs, changes in voice volume etc.)
 ||] are used to indicate the insertion of pseudonyms to protect the identity of participants.
 E. at the end of an incomplete response, followed by a verbalization from the other interview participant, followed by ... at the beginning of the next verbalization by the first interview participant is used to indicate instances where both subject are talking at the same time. For example,
 SB: Do you agree with me when...
 6: Uh huh
 SB: ... I told you liked student teaching.
 would indicate that 6 said "Uh huh" in the middle of one of the interviewers questions.
 between two words indicates that the words were said simultaneously, as if they were one word.

INTERVIEW TRANSCRIPT:
 SB: OK, why don't we start by, um, you telling me something about what lead to your interest in becoming a teacher.
 6: What lead to my interest in becoming a teacher?
 SB: [nods yes]
 6: I don't know. It's kinda a hard thing to say because... I liked teaching when I was in high school, I mean ever since I was been, I can't remember, I've been helping other students
 SB: um hum
 6: So I mean I've always had this background of liking to help people.
 SB: Even when you were a high school student yourself.
 6: Junior high, OK.
 SB: Junior high, OK.
 6: And so... That was kinda an interest of mine? but when I went to college I started off as an engineer because both my dad and step dad were engineers and type of thing. So I just went to college thinking I was just become an engineer they make money stability...
 SB: um huh
 6: ... every type thing. But then when I got to college I, I got some jobs, I was a resident assistant and then I was like a orientation counselor so I worked with a lot of students on a, on a counseling level and, you know, sometimes I'd help them with homework or whatever and I always just, I liked that feeling, I liked doing that. So I ended up switching out of engineering and in to something I figured I, I could teach and math was not only something I always felt comfortable with, but also something that I had a lot of units towards [imites, almost laughs as he says this]. And that...

19

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 SB: um hum
 6: So I mean I've always had this background of liking to help people.
 SB: Even when you were a high school student yourself.
 6: Junior high, OK.
 SB: Junior high, OK.
 6: And so... That was kinda an interest of mine? but when I went to college I started off as an engineer because both my dad and step dad were engineers and type of thing. So I just went to college thinking I was just become an engineer they make money stability...
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20

Interview Log

Interview Code Number: SB-13 (interview with female single subject credential candidate)
 Person(s) Being Interviewed: Student 5
 Interview Setting: Research Room
 Interviewer: Stephen E. Brock
 Interview Date: May 15, 1994
 Time: 1:15 to 1:45
 Place: University Room B
 Recording Arrangements: Recorded with the consent of Student 5

GENERAL RESEARCH QUESTIONS:
 This interview was conducted as part of study of the University teacher training program. The general purpose of this study was to learn more about the process of preparing students to become credentialed teachers.

SPECIFIC INTERVIEW QUESTIONS:
 A semistructured interview outline was used to help guide this interview.

CONTEXT:
 A female student (code number 5) in a single subject credential program at the University was interviewed. The interviewer had previously had contact with student 5 on one occasion. This contact occurred when the interviewer observed 5's small group seminar. This prior contact was judged by the interviewer to have been neutral. The interviewer had no formed any specific preconceptions about 5 before the interview. The interview took place in University Room B on May 15, 1994. Room B is a graduate research room. This room was judged to have been comfortable. However, it was noisy as some of the other graduate students who are in this office were having a conversation in the room at the time of the interview. The interview ended at about 1:45.

PRE-INTERVIEW:
 Before turning the tape recorder on, the general purpose of the study was described to 5. Also, she was assured that her participation was voluntary, that her confidentiality would be protected and that her name would not be used in the reporting of any of the study's results. She was also told that the information learned from the study would be shared with her via a personal report. Finally, her signature was obtained on a "Statement of Consent". With 5's permission, the tape recorder was then turned on. What follows is a word-for-word transcription of what was said during the interview at one minute intervals. Interviewer comments summarize gist of the conversation between these intervals.

LOG CONVENTIONS:
 [] are used to insert interviewer comments and observations (i.e., to report laughter, nonverbal gestures, sighs, changes in voice volume etc.)
 "" When quotation marks ("") appear within brackets a direct quote is being reported. Typically, this is done to back up the interviewer comments and observations, which appear within brackets ([]).
 ||] are used to indicate the insertion of pseudonyms to protect the identity of participants.
 within a response and at the end of a sentence are used to indicate an incomplete sentence.
 E. at the end of an incomplete response, followed by a verbalization from the other interview participant, followed by ... at the beginning of the next verbalization by the first interview participant is used to indicate instances where both subject are talking at the same time. For example,
 SB: Do you agree with me when...
 6: Uh huh

21

S: Uh-huh
SB: If I said you liked student teaching, would indicate that S said "Uh-huh" in the middle of one of the interviewers questions, between two words indicates that the words were said simultaneously, as if they were one word.

INTERVIEW LOG
Minutes Speaker Quotes and Interviewer Comments

00:00 SB OK, why didn't we just get started by you telling me something about what JW to your interest in becoming a teacher. The beginning in other words, but it sounds like you always knew you would like
01:00 SB but it sounds like you always knew you would like
S Yes...
SB ...teaching...
S Uh-huh

[S's interest in becoming a teacher cannot be traced back to any one event. She started out at University as a chemical engineering student. It sounds like she just sort of fell into becoming a teacher. Regarding her choice of University, it would appear that she chose it because of its familiarity "I was here already". She also knew and liked Supervisor B. She indicates that she really didn't want to move. "In fact this was the only place I applied")

02:00 SB ...telling me about some of the activities you have engaged in during the course of the program.
[S describes her course of study as involving a placement in a school where she student teaches in two separate classes and aids in a third. She also indicates that journal writing, and small and large group seminars have been part of her preparation.]

03:00 S ...LEP, LEP and a [youse] this quarter is, wait interviewing and, its kinda like four sections, ones been interviews, ones been [pause] resumes, ones been, um, sexual harassment, um, and today, a, is gangs.

22

Data Collection

- ◆ Record/Document Review
 - Archival Documents
 - Journals
 - Maps
 - Video and audio tapes
 - Artifacts

23

An Example

- ◆ Topic: The education of children with ADHD
- ◆ Initial formulation
 - Researcher bias
- ◆ How would you collect qualitative data about this topic?

24

An Example

- ◆ Data collection
 - Interviews with all stakeholders (parents, teachers, students, support staff).
 - ◆ Semi structured Interview Questions:
 - How are ADHD children best served?
 - What modifications should be made?
 - When are special education programs needed?
 - What is the role of general education?
 - Fieldwork
 - ◆ Privileged observer.
 - Documents
 - ◆ Cumulative files
 - Standardized testing
 - Teacher comments
 - ◆ Teacher training materials

Threats to Validity

- ◆ Observer Bias
 - How do pre-existing beliefs about the topic affect the data?
- ◆ Observer Effect
 - How does the researcher's physical presence affect the data?

Leaving the Field

- ◆ Data driven
- ◆ Resource driven
- ◆ Ideally determined by data redundancy
 - You feel that you understand the phenomena
 - You feel that you can predict the results of any future data collection
 - ◆ You know what people will say
 - ◆ You know what you will observe

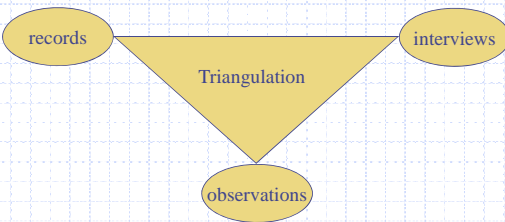
Data Management

- ◆ No universally agreed upon procedures.
- ◆ Use common sense.
- ◆ Be as organized as possible
 - Label, code, categorize

28

Data Analysis

- ◆ During data collection
- ◆ After data collection



29

Steps in Data Analysis

1. Reading/Memos (whole)
 - Write/read memos about field notes, transcripts observations to the an initial sense of the whole
2. Describing
 - Through/comprehensive descriptions of participants, setting, phenomenon in all its rich complexity
3. Classifying (part)
 - Break down data into smaller parts

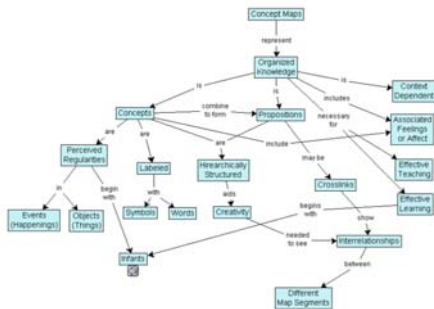
30

Data Analysis Strategies

1. Identifying themes
2. Coding qualitative data
3. Asking key questions
4. Doing an organizational review
5. Concept mapping
6. Analyzing antecedents and consequences
7. Displaying findings
8. Stating what's missing

31

Example of a Concept Map



32

Example of a Concept Map

IEP Team decisions

Develop a concept map for how you think (from your own participant observations) IEP teams work. This is actually an "initial formulation," but will give you the idea of this kind of data analysis.

33

Data Interpretation

- ◆ What is important in the data?
- ◆ Why is it important?
- ◆ What can be learned from it?
- ◆ So what?
 - An orientation similar to when we determine the effect size in quantitative research

34

Ensuring Credibility

- ◆ Are the data based on one's own observations?
- ◆ Is there corroboration from others of your observations?
- ◆ In what circumstances was an observation made or reported?
- ◆ How reliable are those providing data?
- ◆ What motivations might have influenced a participant's report?
- ◆ What biases might have influenced how an observation was made or reported?

35

Mixed Methods

- ◆ QUAL-quant Method
 - Qualitative study followed by quantitative investigations
- ◆ QUAN-qual Method
 - Quantitative study followed by qualitative investigations
- ◆ QUAN-QUAL Method
 - Both methods undertaken at the same time

36
