Evaluation on Learning Process

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Evaluating Learning Process qualitatively

- Evaluation on leaning process is a systematic determination of merit, worth, and significance of a learning process by using criteria against a set of standards.

- The primary purpose is to ensure that the stated goals of the learning process will actually meet a required need/skills.

Evaluating the implementation of a learning program

- Evaluations help to measure the gap between what the teacher teaches and what the student learns (Reich, 1983) by determining the value and effectiveness of a learning program. It uses *assessment* and *validation* tools to provide data for the evaluation. *Assessment* is the measurement of the practical results of the training in the work environment; while *validation* determines if the objectives of the training goal were met.

Purposes of evaluation

Bramley and Newby (1984) identified five main purposes of evaluation:

- Feedback - Linking learning outcomes to objectives and providing a form of quality control.
- Control - Making links from training to organizational activities and to consider cost effectiveness.
- Research - Determining the relationships between learning, training, and the transfer of training to the job.
- Intervention - The results of the evaluation influence the context in which it is occurring.
- Power games - Manipulating evaluative data for organizational politics.

Evaluating an instructional design

Evaluation can be performed during the all phases of the ID process:

- Analysis

  What must the learners be able to do in order to ensure the required change in performance? How will the implementation of a design positively impact a the targetted needs or goals?

- Design

  What must be learned by the learners that will enable them to fulfill the required needs or skills?

- Development

  What activities will best bring about the required performance.

- Implementation

  To what extent does implementation fit the predetermined design and serve the predetermined objectives?

- Results

  Have the learners now become performers (have the skills and knowledge to perform the required tasks)?

Evaluating the implementation of a learning program

This should cover:

- ☐ The doer (teachers or lecturers)
- ☐ The process (activities done to implement the program)
- ☐ The learners (i.e. their engagement, enthusiasm, aspiration, satisfaction, etc.)
- ☐ The results (students achievement)

Aspects related to the *doer*

These aspects might cover conditions, like:

☐ The aspiration of the teachers/lecturers about the implementation program.

☐ The levels of teachers'/lecturers' efficacy in implementing the program.

☐ Teachers specific performance in the implementation of the program, i.e the English

Aspects related to the *process*

These aspects might cover conditions, like:

☐ The types of activities done to implement the specified program

☐ The effectiveness of learning activities brought into the classroom

☐ The presents of specified learning principles in the process

☐ The ability of the devised activities to engage the students in the learning and to further sustain the engagement

Aspects related to the learners

These aspects might cover conditions, like:

□ The levels of students' motivation and enthusiasm

□ The levels of students engagement on the learning activities.

□ Learners' aspiration

□ Learners' satisfaction

Aspects related to the results

These aspects might cover conditions, like:

☐ The levels of students' learning achievement

☐ The ability of the learners' to bring the lesson learned into practice

☐ The ability of the learners to perform according the new standards in the desired environme

Qualitative data

☐ Sources of information (all concerned stakeholders, i.e. students, teachers, principals, parents, and event society members. Documents can very often serve as the source of information as well

☐ Data collection techniques (observation *¯ i, interviewes *¯ i, surveys with open-ended questionaires, and sometimes studying documents, researcher journal or diary writing)

Forms of Qualitative Data

- Qualitative data are words rather than numbers. Words describe and explain. Words suggest new perspectives (M&H, 1984. p. 15)

- One observer's description, however precise, may not concur with another's. "It is easy for a qualitative researcher to jump to hasty, partial, unfounded conclusions" (M&H p. 21).

Process of qualitative data analysis

Triadic process in QDA

- ❖ Noticing things
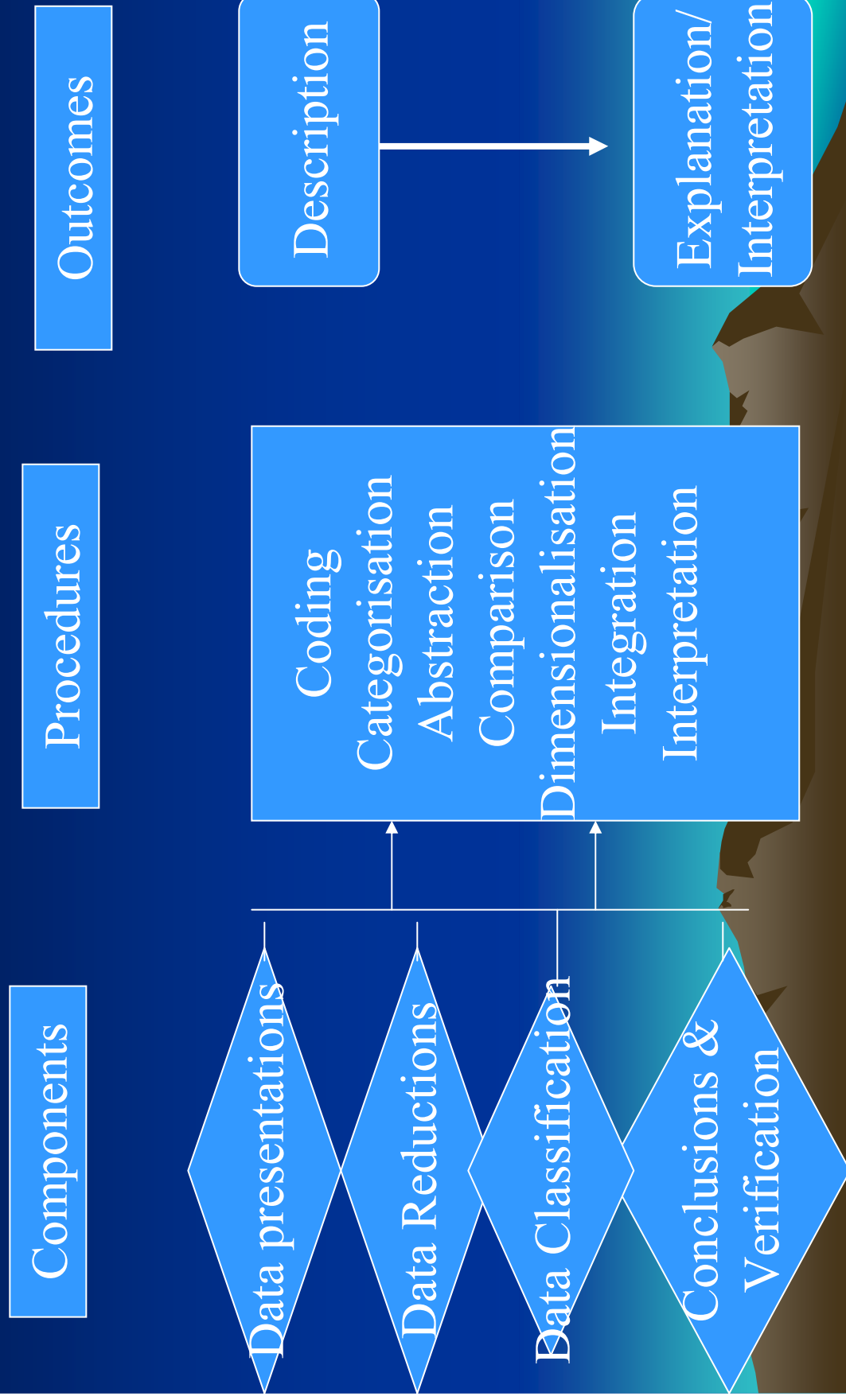- ❖ Collecting things
- ❖ Thinking about things

Characteristics of QDA Processes

- **Iterative and Progressive:** The process is iterative and progressive because it is a cycle that keeps repeating.

- **Recursive:** The process is recursive because one part can call you back to a previous part. For example, while you are busy *collecting* things you might simultaneously start *noticing* new things to *collect*.

- **Holographic:** The process is holographic in that each step in the process contains the entire process. For example, when you first *notice* things you are already mentally *collecting* and *thinking* about those things.

The Qualitative Analytical Process

(Adapted from descriptions of Strauss and Corbin, 1990, Spiggle 1994, Miles and Huberman, 1994)

Outcomes

Description → Explanation/ Interpretation

Procedures

Coding
Categorisation
Abstraction
Comparison
Dimensionalisation
Integration
Interpretation

Components

Data presentations
Data Reductions
Data Classification
Conclusions & Verification

Data presentation

- Data display is a key element in qualitative data analysis. Better displays are a major avenue to valid qualitative analysis.

- All displays are designed to assemble and organize information in an immediately accessible, compact form, so that the analyst can see what is happening and either draw justified conclusions or move on to the next-step analysis which the display suggests may be useful.

Data reduction

- The major challenge in practical qualitative research is data reduction. Everything looks important, especially at the outset, and the analyst wants to get it all.

- However, thousands of pages of interviews and observations must be reduced to a short report.

Data Classification

- This step can be done by coding and naming

- It is here that you carefully read your transcribed data, line by line, and divide the data into meaningful analytical units (i.e., segmenting the data). When you locate meaningful segments, you code them.

- Coding is defined as marking the segments of data with symbols, descriptive words, or category names. * _|

Conclusion drawing

Drawing and verifying conclusions is the essence of data analysis. However, it is not an isolated activity. When we start summarising our data in compilation sheets, flowcharts, matrices or diagrams, we continuously draw conclusions, and modify or reject quite a number of them as we proceed.

Qualitative Data Management Tools

- QSR NUD*IST (Non-numerical unstructured data indexing, searching and theorising)

- Nvivo (NUD*IST Vivo)

- Enables efficient data management by supporting the processes of indexing, searching and hence data theorising

- Creates an environment to store and explore data and ideas, it does not determine the research approach.

- The major advantage of the package is that it enables an efficient and flexible approach to rigorously and systematically analysing qualitative data.

QSR NUD.IST & NVivo

- The QSR NUD.IST and Nvivo software tools are incorporated into two interlocking systems; a document system and an index system

- **Document Database**

  Enables text to be stored, edited and retrieved; memos to record ideas can be attached to text; and word and phrase searches can be conducted on the documents

- **Index Database**

  Enables the researcher to: code the data; conduct multiple concept or coded category searches thereby providing responses to research questions and theory development; and provides the means to record ideas about the data through memos attached to the various indices

References

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- Barney G. Glaser and Anselm L. Srauss (1967), *The Discovery of Grounded Theory: Strategies for Qualitative Research*, Hawthorne, New York.

- Susan Spiggle (1994), "Analysis and Interpretation of Qualitative Data in Consumer Research," *The Journal of Consumer Research*, Vol. 21 (3).

- Anselm Strauss and Juliet Corbin (1990), *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*, Beverly Hills, CA: Sage.

GOOD LUCK !!

Skills needed by teachers in RSBI

One main skill needed by teachers, especially those teaching Math and Sciences is their ability to speak English for classroom. When we break down the language, we will come to two main types of English. English for subject matter and Classroom English.

Kinds of English

- English for subject matters
- Classroom English

1) English to