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(An Autonomous Institute under UGC Act 1956 & Affiliated to Savitribai Phule Pune University)

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SUBJECT - Problem Identification and Design Thinking

Assignment 3

What is Qualitative data?

What is Quantitative Data?

What are methods of data collections?

Describe them in details.

How will you gather information for problem that you defined earlier?

➤ What is Qualitative data?

Qualitative data describes qualities or characteristics. It is collected using questionnaires, interviews, or observation, and frequently appears in narrative form. For example, it

could be notes taken during a focus group on the quality of the food at Cafe Mac, or responses from an open-ended questionnaire. Qualitative data may be difficult to precisely measure and analyze. The data may be in the form of descriptive words that can be examined for patterns or meaning, sometimes through the use of coding. Coding allows the researcher to categorize qualitative data to identify themes that correspond with the research questions and to perform quantitative analysis.

➤ **What is Quantitative Data?**

Quantitative data are used when a researcher is trying to quantify a problem, or address the "what" or "how many" aspects of a research question. It is data that can either be counted or compared on a numeric scale. For example, it could be the number of first year students at Macalester, or the ratings on a scale of 1-4 of the quality of food served at Cafe Mac. This data are usually gathered using instruments, such as a questionnaire which includes a ratings scale or a thermometer to collect weather data. Statistical analysis software, such as SPSS, is often used to analyze quantitative data.

➤ **How will you gather information for problem that you defined earlier?**

There are many different methods of information gathering that people have used to good advantage and here are a few:

1. Questionnaires, surveys and checklists
 - Used when you want to collect a lot of information from people in a non-threatening way.

2. Personal interviews

- Used when you want to fully understand a person's opinions or point of view or to get additional information to a questionnaire.

3. Documentation review

- Used when you want to gather information on current practices without interrupting the program by examining program monitoring reports, program statistics, learner progress reports, annual reports, performance appraisals, board evaluations, written policies and procedures, memos, minutes, financial records, etc.

4. Observation

- Used to watch the program in operation to gather information about what actually happens day-to-day.

5. Focus group

- Used to explore a topic in depth with key stakeholders to learn what the common understanding is on various issues.

6. Case Studies

- Used to depict experiences, processes or practices with a view to developing understanding through examination and cross comparisons.