**SP\_IRS :** Research in Inclusive and Special Education

Lecture :Data collection Methods.

Presented By: Mr. S. Kumar Lecturer Education



#### **Presentation Outline**



- Introduction
- Qualitative/ Quantitative data collection *methods*
- Activities
- Conclusion



# Qualitative Data Collection Techniques

- Narratives
- E.g. interview transcripts, observational notes, journal entries, or transcriptions of audio- or videotapes or as existing documents, records, or reports

#### Observations

- Involve carefully watching and systematically recording what you see and hear going on a particular setting
- According to Babbie (2004: 282; 2005: 296), observation is an appropriate method to study attitudes and behaviors best understood within their 'natural setting'. It is natural since as Creswell (2007) put it that the researcher tends to do data collection in the field at the location where participants are experiencing the issue which is being studied.

 In order for the researcher to arrive at useful and reliable results, the researcher will collect data in natural setting by way of observing what students experience in a particular situation. The observer will act as a nonparticipant.

Observation Date Time	OBSERVATION	OBSERVERS comments

#### Structured observation

- Typically require the observer to do nothing else but observe, looking for specific behaviors , reactions or interactions.
- Unstructured or Semi structured observations
- Allow the teacher researcher the flexibility to attend to other events or activities occurring simultaneously in the classroom.

#### Interview

- An alternative to observing people is to directly ask them questions. This can be accomplished in several ways. Interviews are conversation between the teacher- researcher and participants in the study.
- Interview guide

#### Structured Interview

 The researchers begins with an interview guide consisting of a specific set of predetermined questions

#### Semi-structured in-depth interview

 According to Denzin and Lincoln (2003), interviews generate useful information about lived experience and its meanings. They added that, through interviews the researcher obtains rich and in-depth experiential account of an event. This is one of the reasons why this method is selected because it can obtain real information based on participant's real experiences.

 The in-depth interview method has great advantages to collect data in research. Sarantakos (2005) and Angrosino and Perez (2003) argued that interview method has a great advantage and valuable where it will give opportunity for researcher to explore the insights and perceptions of participants as well as to observe nonverbal behaviors of participants during interview.

#### Reflective journal

 According to Metler (2012) students/ teachers journal can gain you "sense of students thoughts, perceptions and experiences". Any issues or ideas will be reflected at the end of each day and noted in the reflective journal.

#### Reflective Journal will be filled by the researcher and the teachers

Description of an			
lssue:	 	 	
Thinking and			
feeling	 	 	
•••••••••••••			
Commenting	 	 	
Planning	 	 	

# Quantitative Data Collection techniques

- Numerical
- Anything that can be quantified
- Quantitative data collection techniques include
- □*Surveys*
- Questionnaires
- **Q**Rating scales

#### Surveys

- The term surveys refers to a collective group of quantitative data collection techniques that involve the administration of a set of questions or statements to a sample of people
  Can be administered verbally
- Uhich then make them a type of interview

#### Questionnaires

 Surveys that are administered in written form , where the researcher ask participants to answer a series of question or respond to a series of statements and then return their responses to researcher.

### Two types of questionnaires

- Open ended questionnaires
- >Individuals provide their own responses.
- provides limitless number of responses
- For example: What is your favorite subject in your school ?Here we will get a wide variety of responses.
- Researcher analyses the data by grouping similar items together and then tallying the number of responses in each category

#### Closed response question.

Statement provides the respondent with a number of choices from which to select
For example: What is your favorite subject
Mathematics
English
Science

#### Rating scales

- Used when asking individuals to respond to a set of questions where their response indicates the strength
- Can be used very effectively to measure students attitudes, perceptions or behaviors
- There are two types of Rating scales
- 1. Likert scale
- 2. Likert-type scale

#### Likert scale

- Begins with a statement and then ask students to respond on an agree/ disagree continuum.
- 5- point scale with the 5 points
- 1= strongly disagree
- 2= disagree
- 3= no opinion
- 4 agree
- 5= strongly agree

#### Portion of a Rating Scale Instrument Depicting a Likert Scale

Student Evaluation of teachers when dealing with bullying cases at school.

The purpose of this questionnaire is for you to help teachers to improve. Several statements about how your teacher deals when students are bullied are listed below. Please circle the number, using code below that describes how much you agree with each statement. Your response will be anonymous; please respond to each statement as honestly as you possibly can and by circling only one number for each statement.

1	2	_3	_4	5
Strongly				
Disagree	Disagree	No Opinion	Agree	strongly Agree

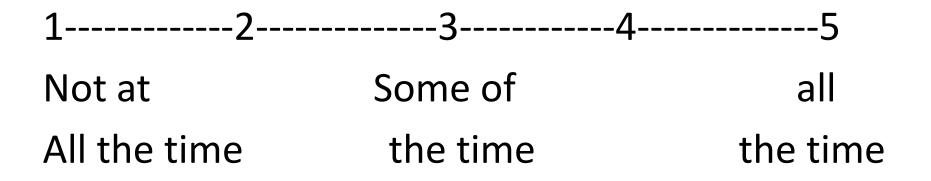
1. My teacher deals bullying as soon as its reported or as he/she notices	1	2	3	4	5
2. The bullies are taken to tasks	1	2	3	4	5
3. Both the bullies and bullied parents are called	1	2	3	4	5
4. My teachers ignores bullying	1	2	3	4	5
5. My teachers supports bullies	1	2	3	4	5
6. My teacher never ever makes bullying happen in school or in class	1	2	3	4	5

#### Likert -type scale

- This type of scale, also exist on a continuum, but something other than extent of agreement is being measured.
- For a example, a likert-type item might require participants to respond on a scale that examines quality (Excellent to poor0
- Frequency of occurrence (always.... Never)
- Level of comfortable (very comfortable ---not at all comfortable)

## Portion of a Rating scale instrument Depicting a likert –type scale

- Teacher Assessment of student adjustment to school
- Directions: Please list all students and rate each student on the eight characteristics listed as they relate to the beginning of school. Use the numbered scale listed below. In addition, feel free to add any comments that would aid in describing the adjustment of the students



#### Adjustment indicators

Student name	Fearful	Relates well to others	Complains of illness	Cries easily	Exhibits self confidence	frustrated	intimidated

#### Checklists

- A checklist is a list of behaviors ,characteristics, skills, or other entities that a researcher is interested in investigating.
- An example of Checklist for Bullying Behavior at Primary level.
- Bullying Check list
- Students Name:
- Class:\_\_\_\_
- Date:

Bullied behaviors	Observed	Not Observed
1.Student is often scared to participate in the class		
2. Spends recess time and lunch time alone		
3. Is always sad and have a poor self esteem		
4. Does not participate in group work		
5. Does not interact with students		
6. Poor assertiveness skills in the child		
7.Physical differences in the child		
8. Learning difficulty in the child		
9. The child is hyper -active		
10. Is the child being laughed at school/class		

## Tutorial

- Describe what might you see as the benefits of collecting both qualitative and quantitative data as part of your research study. Do you envision any potential negative aspects or weaknesses associated with collecting both as part of the same study?
- Why it is important for researchers in general and specifically for teacher- researchers, to take measures to ensure the quality of their collected data?

 Making good sound observations typically requires some training, or at least practice. Find a location with numerous peoples and spend 30 minutes of observation on what you see and hear. Include any observers comments as you deem appropriate during your period of observation. After 30 minutes of observation, reflect on the experience. What do you think and how did you feel? How could you improve your observation and note taking skills for your next observation session?

#### Workshop

• Think of a topic of your own interest to you and appropriate for a research study. Develop a semi structured interview guide for a 15 minute interview with an individual. Be sure to include in your guide any optional probing questions. Next, interview someone using your guide. Next interview some one using your guide. After wards reflect on your experience as an interviewer. What did you think, and how did you feel? How could you improve your skills for your next interview?

 Using the same topic you identified as before , develop a 15 item survey or rating scales that targets a specific audience. Remember that a rating scale will use either a Likert or a Likerttype scale. Administer your instrument to at least five individuals (within your groups). Afterward, ask them to provide you with feedback on the instrument. Reflect on the process of instrument development and administration

 Can you think of any existing documents or records that would support an investigation of your topic? What are they? How difficult would it be to gain access to them?

## Conclusion

- Qualitative data are narratives appearing primarily in words
- Observations, interviews journals existing documents and records
- Quantitative Data are numerical and include just about anything that can be counted, tallied or rated

□*Surveys* 

Questionnaires

**Q**Rating scales/ checklist

### Looking ahead



#### **MAKING SENSE OF DATA**

