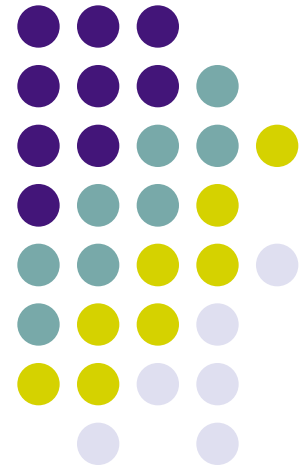# Research Methods
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Non-observational Techniques for Data Collection

# Non-observational Tools

- Data is essentially introspective (i.e., invite personal accounts of events, attitudes and beliefs)
- Encourage respondents to "self-report" on the phenomena under investigation
- Can elicit issues not anticipated by the researcher
- Can provide detailed portrayals of groups or individuals from their own perspectives
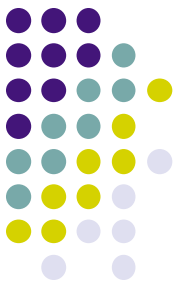
Methods

- **Interviews and discussions**: *face-to-face* personal interactions. Allow specific issues to be discussed from others' perspectives

- **Questionnaires and surveys**: written sets of questions used to gain responses in *non-face-to-face* situations. Questions are usually focused on specific issues

- **Life/career histories**: profiles of individuals' previous life and learning
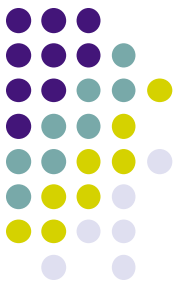
Methods

- Documents and artifacts: e.g., student written work, lesson plans, course syllabi, worksheets

- Rubrics

- Diaries or journals

- Think-aloud protocols: verbalizing the thinking process *while* completing a task

- Simulated recalls: verbalizing the thinking process *after* the event has taken place
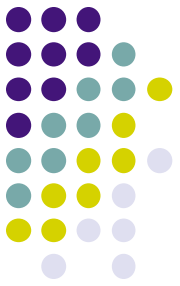
Interviews

- Can be conducted through a variety of participant combinations (among teacher/learner/researcher)

- Audio/video recording (& transcribing); note-taking

- Individual interviews: more time-consuming, but the researcher can follow-up on individual responses in more detail

- Focus group interviews: involve several informants and a moderator. Collects data on group interaction on a topic determined by the researcher. Could be in the form of a classroom discussion
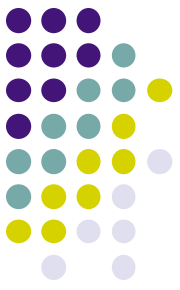
Types of Interviews

- Interviews can be placed on a continuum in terms of their formality.
- Structured Interviews: Like a questionnaire that is administered orally. The researcher goes through a list of questions in a pre-planned order. Close-ended.
- Semi-structured Interviews: Use guidelines to provide a focus for the interview. More open-ended.
- Unstructured Interviews: Free-flowing conversation based on issues or topics of the research. Follows the agenda of the interviewee, rather than the researcher.
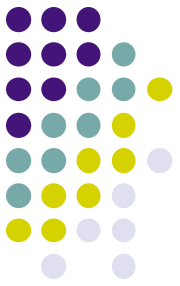
Advantages & Disadvantages

|	Advantages	Disadvantages
Structured interviews		
Semi-structured interviews		
Unstructured interviews		
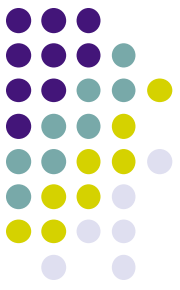
Surveys and Questionnaires

- Questionnaires are a popular elicitation device. They can be widely disseminated (e.g., electronically). Categorical responses to closed-questions can be readily collated and analyzed.

- Construction of a questionnaire is very difficult.

- Questions should be clear and unambiguous.

- Questionnaire should be relatively short so respondents aren't overwhelmed.

- Low return rates are common.

- Important to pilot it first with a small group.

Steps in Carrying Out a Survey

1. Define objectives	What do we want to find out
2. Identify target population	Who do we want to know about?
3. Carry out a literature review	What have others said/discovered about the issue?
4. Determine sample	How many subjects should we survey and how will we identify them?
5. Identify survey instruments	Will the data be collected through questionnaires, interviews, or both?
6. Design survey procedures	How will the data collection actually be carried out?

Sampling
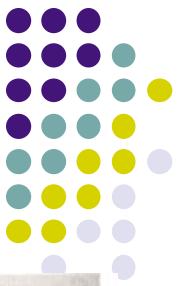
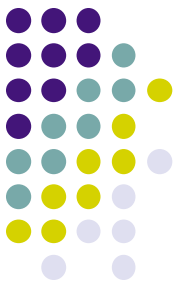| Strategy	Procedure
1. Simple random samples	Select subjects at random from a list of the population.
2. Systematic sampling	Select subjects in a systematic rather than random fashion (e.g., select every twentieth person).
3. Stratified sampling	Subdivide population into subgroups (e.g., male/female) and randomly sample from subgroups.
4. Cluster sampling	Restrict one's selection to a particular subgroup from within the population (e.g., randomly selecting a school from within a particular school district rather than the entire state or country).
5. Convenience sampling	Choose the nearest individuals and continue the process until the requisite number has been obtained.
6. Purposive sampling	Subjects are handpicked by the researcher on the basis of his/her own estimate of their typicality.

Question Types

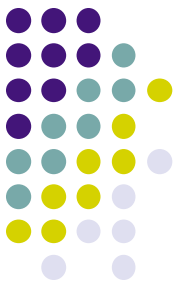| Question Type	Example
1. List	Indicate your qualifications by circling any of the following that apply to you: Certificate, Diploma, B.A., M.A., Ph.D.
2. Category	Indicate the grade you achieved on the Use of English Examination A, B, C, D, E, F
3. Ranking	Rank the following from 1 to 4 in order of preference. "In class, I like to learn best by studying . . ." _____ with the whole class. _____ in small groups. _____ in pairs. _____ by myself.
4. Scale	Circle one of the following phrases to indicate your attitude to the following statement: "In class, I like to learn by having the teacher explain everything to me." Strongly Agree, Agree, Disagree, Strongly Disagree
5. Quantity/frequency	Circle one of the following answers. How many hours did you spend practicing English outside of class last week? 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or more
6. Grid	How many students of the following age groups are enrolled in the four levels of the Intensive English Program?

Level/Number	18–24 years old	25–30 years old	31–40 years old	41–50 years old
Level 1				
Level 2				
Level 3				
Level 4				

Diaries, Journals and Life Histories

- Student diaries or journal responses are a good source of introspective data. Can be included as a classroom task.

- Participant histories can be built over time from participant records, interviews, casual conversations, classroom documents. They can help us understand better some actions/ behaviors/responses from participants

Documents

- Readily accessible sources of data – they exist in the instructional environment and usually are not produced for the purposes of the research. Examples are:
  - Lesson plans
  - Student work
  - Tests and examinations
  - Rubrics
  - Class worksheets
 - Textbook units

artifacts

rubrics

Informal Essay Rubric

Features	4 Expert	3 Accomplished	2 Capable	1 Beginner
Quality of Writing	• Piece was written in an extraordinary style and voice • very informative and well organized	• Piece was written in an interesting style and voice • Somewhat informative and organized	• Piece had little style or voice • Gives some new information but poorly organized	• Piece had no style or voice • Gives no new information and very poorly organized
Grammar, Usage & Mechanics	• Virtually no spelling, punctuation or grammatical errors	• Few spelling and punctuations errors, minor grammatical errors	• A number of spelling, punctuation or grammatical errors	• So many spelling, punctuation and grammatical errors that it interferes with the meaning

Think-aloud & Simulated recall
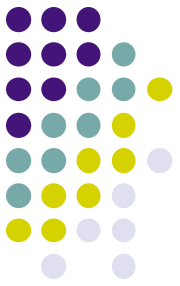
- Think-alouds: Students complete a task or solve a problem, and verbalize their thought process while doing it.

- Simulated recalls: The researcher uses data collected during the event (e.g., a videotape) to stimulate the recollection of the participants. The participants then verbalize their thought processes after the vent has taken place.
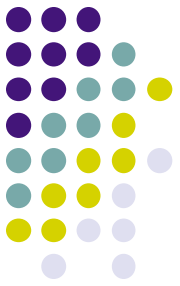
Advantages & Disadvantages
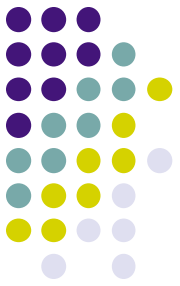
|	Advantages	Disadvantages
Think-alouds		
Simulated recalls		

Group Sharing

- Change groups
- Share your research question(s) with your new group members
- Discuss:
  - What type of data collection methods would be helpful for your studies?
  - Would it be beneficial to use non-observational techniques?

Group Presentations

- Group D: Critical Analysis of Rincon & Clavijo-Olarte (2016)

- Group E: Critical Analysis of Ulate (2014)
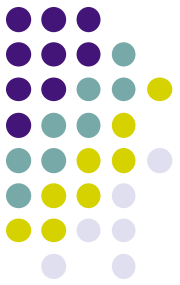
Afternoon Tasks

Online assignment *(send via email by Friday, May 5):*

- Research Site & Participants (3)
- Data Collection Methods (4)