

## Gathering SoTL Evidence: Methods for Systematic Inquiry into Student Learning

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## Evidence Gathering

- Focus Groups/Interviews
- Protocol/Think Alouds
- Observation

## Focus Groups

- Focus groups involve free-flowing discussion among an invited group of individuals (usually 6-12 people) regarding a broadly defined topical area.
- Focus groups are led by a **trained** moderator who is responsible for guiding the flow of the discussion.

## Practicing Focus Group Questions

- Develop a set of focus group questions to ask a set of faculty to gather evidence to answer the following question:
  - What is the role of group-centered learning in U.S. higher education classrooms?

## Role and Responsibilities of Focus Group Moderators

- Moderators are responsible for:
  - Initiating the group session and getting participants comfortable.
  - Posing key questions to stimulate discussion of relevant issues.
  - Soliciting input from quiet focus group members.
  - Ensuring that highly vocal members do not dominate the session.
  - Asking probing questions to follow up on insightful comments from participants.

## Focus Group Questions

- Questions used in focus groups should be open-ended with follow-up probes
- Guidelines for 'good' questions can be drawn from guidelines for good 'survey' questions
- Questions should follow a relevant organizational pattern

## Focus Groups

- **Political Focus Group**
- What are advantages/disadvantages to focus groups for gathering evidence?
- Would focus groups be a good way to collect evidence for your SoTL project? If so, who would you include? What kinds of questions might you ask?

## Advantages and disadvantages of focus groups

- **Advantages:**
  - Can be a rich source of information with potential "a-ha" moments.
  - Can be very helpful in the early stages of qualitative research to set the stage for later quantitative research.
  - Very good for feedback on new ideas.
- **Disadvantages:**
  - Heavily dependent on the skill of the moderator.
  - Observations and outcomes may not generalize to the broader population.
  - Fairly expensive and difficult to set up.
  - Peer influence may prevent (or overly encourage) certain communication



## Protocol Analysis

## Performing a Protocol

- Partner with another person. Have one person "think aloud while mentally performing this task"
- Multiply 36 x 24
- **Why** would you use this method?

## Protocol Analysis

- Method for eliciting verbal reports of thought sequences
    - 'Think aloud' while performing a task
      - Multiply 36 x 24
- OK, 36 times 24, um, 4 times 6 is 24, 4, carry the 2, 4 times 3 is 12, 14, 144, 0, 2 times 6 is 12, 2, carry the 1, 2 times 3 is 6, 7, 720 144 plus 720, so it would be 4, 6, 864

## Protocol Analysis

- Participants are NOT asked to describe or explain how they solve the problem, but to remain focused on solving the problem and merely to give verbal expression to those thoughts that emerge in that process
- Would this work for your SoTL project? Is so what would you ask the student to explain or describe?

## Observational Evidence

## Observational Evidence

- Systematic recording of the activities of students or instructors.
- Draws heavily from ethnographic research, used extensively in anthropology and other social sciences.

## Obtrusive vs. Unobtrusive Observation

- With visible observation, students or instructors are aware that their behavior is being observed by researchers or recording devices.
- Often after a period of time, consumers become "de-sensitized" and behave naturally.

## Unobtrusive Observation

- Researchers might observe students in their natural habitat (classroom) through one-way mirrors, or by sitting in the class.
- Afterwards, these researchers will typically take notes regarding their observations.

## Nonstructured vs. Structured Observation

- Nonstructured observation: When researchers don't know what to expect, they will take notes with the eventual hope of creating a systematic category coding system of behaviors.
- Structured observation: When the behavior to be observed is well defined, researchers may use a coding sheet and merely "check off" how often certain phenomena occur.

## Observation

- Would this method be useful for gathering evidence for your SoTL question? Why? How would you do it?

## Reflection and Application

- What types of evidence do you want to/need to gather?
- Can you use any of the evidence gathering tools/techniques that we have discussed over the past few days?
- Any final questions or issues?

## Overall Summary

- Orientation to SoTL Research
- Methodological Orientations
- Types of Questions
- Forms of Evidence
- Tools for, or Methods of, Gathering Evidence
- Working on your evidence-gathering plan