Choosing a Method

Factors to consider when choosing a method

- What questions are you trying to answer?
- What type of findings does your stakeholder(s) prefer?
- What will be accepted as sufficient evidence?
- Who is your targeted group for assessment?
- What resources (time and money) do you have?
- What methods are typically found in the literature on such topics?

The answers to the questions above help guide the decision making process on what methodology is best to assess or research your inquires. Quantitative and Qualitative data are not mutually exclusive but share some similarities and are complementary to each other; often times, this is realized in a mixed-methods approach. However, there are conceptual differences between the two methods that are commonly understood.

| Quantitative |
|--------------|
|--------------|

- Based on meanings derived from numbers
- Collection results in numerical and standardized data
- Analysis conducted through the use of diagrams and statistics
- Can generalize to greater
 populations with larger samples

Examples: Survey, usage numbers, rubrics with scales, tracking numbers

Qualitative

- Based on meanings expressed
 through words
- Collection of results in nonstandardized data requiring classification into categories
- Analysis conducted through the use of conceptualization
- More depth/robustness

Examples: Interview, focus group, portfolios, rubrics that are descriptive, photos, field notes

| Area | Qualitative | Quantitative |
|---------------------|---|--|
| Purpose of Research | Description/ Understanding/Meaning | Quantity, examine relationships, predict outcomes |
| Research Paradigm | Post-positivist, Process-focused | Positivist, outcome-focused |
| Sample Selection | Small, purposeful | Large, random or non-random |
| Data | Field notes, people's words | Measures, counts and numbers |
| Methods | Observations, documents, stories | Experiments, surveys |
| Instruments | Researcher, tape recorder, pictures | Surveys, analytics |
| Data Analysis | On-going, inductive | Statistical |
| Findings | Comprehensive, holistic, descriptive | Precise, numerical, graphs |



Direct vs. Indirect Measures

Direct Methods – Process employed to gather data which requires students to <u>demonstrate</u> knowledge, behavior, or thought processes.

Provides evidence of student learning.

Indirect Methods – Process employed to gather data which asks students to <u>reflect</u> <u>upon</u> their knowledge, behaviors, or thought processes.

Provides evidence of students' attitudes, perceptions, and experiences.

Validity and Reliability

Validity

The extent to which a measure captures/represents the phenomenon you claim it does.

Examples:

External validity—ability to generalize results of the study to the population/other circumstances, etc.

Construct Validity—pertains to how well you operationalized your concept

Reliability

The extent to which a measure consistently captures/represents the same information over time.

Examples:

Inter-rater reliability—do multiple raters score the same results similarly?

Test-retest reliability—in multiple administrations of the measure under similar circumstances are the results the same?



Alternative Methods of Data Collection

Existing Data

What data are already available? Have you asked your colleagues or the Assessment & Research office if the data you desire is already accessible?

Focus Groups

Great way to gain rich insight on a specific topic, take a preliminary step, or pilot test. Typically structured, conversational, non-judgmental, confidential, and safe for dialogue. Used to better understand a specific population.

Interviews

One-on-one setting, in-depth, and with individuals who are good representatives of the target population you are studying.

Observations

Gather data by watching behaviors and events occur in the target population's natural setting. Focused on population's behaviors, interactions, relationships, and dialogue. Use field notes and structured observations to create methodologically sound results.

Classroom Assessment Techniques

One-Minute Assessment

Brief, written, and anonymous participant response to a class, training, session, program, or workshop.

Photo Journaling

Create guidelines for a structured method of self-reflection on learning and development. Analyze photos for common themes to demonstrate outcomes.

Concept Maps

Students draw or diagram the mental connections they make between a major concept and other concepts they have learned.

Annotated Portfolios

Students assemble a very limited number of creative work examples and supplement with own commentary on significance of examples.

Application Cards

Students generate examples of real-work applications for important principles, generalizations, theories, or procedures.

ACPA Student Affairs Assessment Institute. (2014). ACPA Commission for Assessment and Evaluation.

Angelo, T.A. and Cross, K.P. (1993) *Classroom Assessment Techniques* 2nd edition. San Francisco: Jossey-Bass Publishers.