***This Module goes from 9/16 – 9/22***

***NOTE 1: THERE IS A LOT OF READING, BUT I HAVE BROKEN THEM INTO CHUNKS TO MAKE IT MORE DIGESTIBLE. THE TASKS ARE MINIMAL; IT’S REALLY ABOUT CHOOSING A GOOD RESEARCH TOPIC***

***NOTE 2: THERE ARE TWO (2) PARTS TO THIS MODULE. I HAVE BROKEN THEM INTO TOPICS AND TASKS TO GET US GOING.***

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| **MODULE 3****QUALITATIVE RESEARCH** |

**TOPIC 1**

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| **\*\*Essential Questions\*\*What are the qualitative research approaches?What kind of problems is each intended to investigate?What is the typical design of a qualitative research study?What is the qualitative research process?** |

If you'll remember from last module’s overview of research methods, ***qualitative research***is the collection and analysis of non-numerical data such as values, attitudes, or perceptions.  The purpose is to gain understanding of a specific phenomenon in a particular setting.  Qualitative research may be more intimate, involving a small number of participants - or even a single participant, and more interactive, as the researcher develops and refines the study in progress.

Qualitative researchers begin by identifying a problem of interest, but do not form a particular viewpoint about the problem.  Thus, a qualitative researcher often does not have a hypothesis to test when the study is begun.  Rather, the researcher studies the phenomenon in its natural setting (if possible), collects narrative and visual data over a period of time, and organizes and categorizes the data into patterns.  The results are explained in a descriptive narrative specific to the problem at hand and may be considered subjective or interpretive in nature.

There is an ongoing tension between quantitative and qualitative researchers as to which method is *better* or more *scientific* or more *valuable*.  But the truth is that each method has strengths and weaknesses, and each is more appropriate for certain kinds of studies.   Quantitative studies are more appropriate when phenomena are counted or measured.  Qualitative studies are more appropriate when meanings, definitions, or characteristics are examined.

Here are examples of the kind of questions explored through qualitative research:

* What is the experience of people who survived Hurricane Katrina in New Orleans?
* How do children develop socially acceptable behaviors?
* How do Innuit immigrants adjust to American society in the 21st century?
* What are the characteristics of Sam, a third grader with autism in Topeka?
* How does the culture of teenagers in Bend compare with that of teenagers in Portland?
* How did characteristics such as climate, topography, and location affect the development of culture in southern Nevada?

Note that qualitative research requires *inductive reasoning*, as the researcher seeks to find patterns or themes in order to make sense of data.  Note also that as the researcher discovers or uncovers information, additional questions may emerge that focus on a particular aspect of the problem.  For example, in the Katrina question above, the qualitative researcher may learn during the course of the study that a number of the residents of New Orleans who were displaced after the hurricane have not returned to the city.  The researcher may then want to learn how many residents left permanently and if there is a relationship between that action and some other phenomenon, such as safety or climate.  Because the researcher has gathered a lot of information about the Katrina refugees during the qualitative study, he may form a hypothesis about why the refugees did not return to New Orleans, and would conduct a quantitative study to test that hypothesis.

In this regard, qualitative research - asking a general question to find meaning - may lead to a quantitative study - asking a specific, quantifiable question to test a hypothesis about the problem. The reverse may also occur, as when a questionnaire (quantitative research) provides numerical data that leads to a series of personal interviews (qualitative research) to find out the meaning of the data.  The two methods are complementary, and may even be used in the same study.

There are several approaches to qualitative research; the most common are *narrative*and *ethnographic*.  They are discussed below.

***Narrative research*** collects data about people's lives and tells the story about their experiences and the meanings attached to them.  Narrative research is prominent in the humanities fields such as the arts, history, philosophy, anthropology, education, etc.   In education, topics such as cultural differences, poverty, drug use, teenage pregnancy, and other social issues may be explored and perhaps better understood through the *personal stories*of the teachers dealing with the problems, the students experiencing the problems, or the families coping with the problems.  Those stories, while not necessarily generalizable, provide insight and contribute to the understanding of the complexities of the issues.

Narrative research is highly personal, and the participant(s) in the study must be willing to share their experiences and how they feel about them.  The researcher and the participant engage in a collaboration to tell the story accurately and without researcher bias or judgment, then the researcher analyzes the narrative to produce a description of patterns or themes.

Narrative research may be conducted through personal interviews, biographies, personal documents, oral histories, autobiographies, and ethnobiographies.  The characteristics of this research method are as follows:

* A focus on individuals' experiences
* A chronology of events and experiences
* Incorporation of context
* A collaborative approach between the researcher and the participant(s)
* "Re-storying," a technique of gathering stories, analyzing them for key points, and rewriting the stories in a chronological sequence, and
* An attempt to answer why a certain phenomenon occurred for a given participant (single story), or why the phenomenon occurred for certain people (collection of stories).

***Ethnographic research*** studies the cultural patterns and perspectives of participants in their natural setting.  It involves *observation* of participants over time for the purpose of understanding their shared beliefs, behaviors, attitudes, values, and/or practices. The three board categories of questions in ethnographic research are:

* What are the existing conditions of the group?
* What does the group routinely do, say, think, feel?
* Why does the group do what it does?

An ethnographic study in education may be to learn about and describe what the drug culture looks like in a given school, or what the environment is in a given TAG classroom, or how a staff develops a "school climate" in a brand new school.  Three types of ethnographic research are seen most often in educational research:

* *Realist ethnography* - an objective study describing, analyzing and interpreting cultural categories such as school life, family life, social networks, status systems, etc.
* *Critical ethnography* - a study advocating against inequalities in society
* *Ethnographic case study* - describing the patterns of a given group over time.

Other types of ethnographic research include *confessional ethnography* (a report of the researcher's own experiences in the field), *micro-ethnography* (focusing on a particular aspect of a group), and *life history* (studying one individual in the context of the culture).

The characteristics of this research method are:

* A natural setting
* The context of history, society, politics, and culture
* A small number of cases, or even one case
* Interaction with the participants
* Multiple methods of data collection, such as observations, interviews, document review, and artifacts examination
* Exploration of the nature of a particular social phenomenon
* Interpretation customs, behaviors, and beliefs using evidence from observations and other data collection methods, rather than from numerical data.

As you learned last module, the ***research process*** for quantitative and qualitative research is the same, but the assumptions and emphases at each step may be different.  Again, the typical steps are:

1. Identifying a research problem
2. Reviewing the literature
3. Selecting participants (the sample)
4. Collecting data
5. Analyzing and interpreting the data
6. Reporting and evaluating the data

Here are the characteristics of *qualitative* research that apply to each step of the process:

1. Identifying a research problem - *exploratory*
2. Reviewing the literature - *a minor part of the research, sufficient to justify the study*
3. Selecting participants (the sample) - *a small number of participants with specific knowledge about or experiences with the study topic*
4. Collecting data - *emerging protocols, narrative or visual data, small number of locations*
5. Analyzing and interpreting the data - *text analysis, description and analysis of patterns or themes, looks for larger meanings*
6. Reporting and evaluating the data -*reflexive, emerging, may be subjective*

In summary, qualitative research makes the assumptions that reality is socially constructed and the variables are complex and difficult to measure.  The subject matter is more important to the research than the methodology, and the researcher's role is to be empathic and personally involved in the process.

Professors and researchers have posted numerous articles and papers about qualitative research and the comparison between qualitative and quantitative methods. Here is a nice list of the "classical debate" between the two: <http://wilderdom.com/research/QualitativeVersusQuantitativeResearch.html>.  If you are interested in more detailed information that is given in this presentation or the link, you should conduct a search of your own.  (The keywords "characteristics of quantitative and qualitative research" yield around 329,000 references from which to choose.)

***TOPIC 1 TASKS***

None. ☺

**TOPIC 2**

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| **\*\*Essential Questions\*\*How does a researcher analyze qualitative data?What are some of the qualitative data analysis methods and how are they used?** |

In our discussions about quantitative research, we noted that there is really only one procedure for analyzing data:  statistics.  In contrast, there are several ways to analyze qualitative data.

Basically, the process of qualitative data analysis (QDA) involves making*formal records* of the data collected - field notes, observations, interviews, documents, etc. - then *categorizing* the records in order to find patterns, themes, and/or regularities.   The process is commonly referred to as  "noticing, collecting, and thinking" or as "collecting, coding and categorizing."  The process has been systematized by various researchers and professors; this model by Ellen Taylor-Powell and Marcus Renner at the University of Wisconsin is as good as any: <http://learningstore.uwex.edu/assets/pdfs/G3658-12.PDF>

Step 1. Get to know your data - organize it, make copies of it, transcribe it, read it

Step 2. Focus the analysis - consider what you would like to learn and if you have collected the data you need to be able to learn it

Step 3. Categorize information - use a system to make decisions about what is important to the analysis

Step 4. Identify patterns and connections within and between categories – analyze

Step 5. Interpret - bring it all together, attach meaning, describe it to others.

In order to make valid and reasonable interpretations - and perhaps to increase credibility and/or decrease subjectivity – the *categorizing* piece is in itself often formalized.  This is called *coding*, and the method of analysis is often called ***Grounded Theory***.

Let's say you are conducting a study about female students who are majoring in engineering at a particular university.  You would like to know who they are and why they chose that major and that institution.  You conduct interviews, look into student records, and investigate the program in which the students have enrolled.

You read the transcriptions of the interviews and note some students mention having a family member in the engineering profession.  You decide to *code* that piece of information as "FM" for "family member."  You also note comments about scholarships, so you code that data "S."  You continue labeling data and begin to see patterns emerge.  Could you make some statements about frequency?  Could you make connections or comparisons about the different coded categories?  Could you look for correlations?

Yes.  And the analysis of the categories may lead to other questions, other ideas, and eventually perhaps, answers.

Notice that the researcher will not make assumptions before reading the data.  The themes or codes emerge through the exploration of the data.  Often, a single category will emerge as dominant and the other categories will either be subsets of that one category or will be in some way related to it.  The coding must then be structured in such a way as to reflect the relative positions and importance of the categories.

Another way to think about coding - and an important way to consider if a researcher intends to use computer software to assisting in finding patterns and themes - is to use common *keywords* or *strings* as the labels: <http://www.eval.org/Resources/QDA.htm>

It should also be noted that data coded in this way may or may not be *constructs*, as used in quantitative research.   Here is the difference: Data defined as *constructs*, you will remember, become *categorical* (nominal) variables, and statistics can be used to find *frequency* (mode).  If the qualitative data are defined as constructs by a researcher for the purpose of finding frequency, statistics will be used for that part of the research (sometimes called *quasi-statistics*).   If the data are coded to facilitate understanding of the data, the codes are considered *tools* for thoughtful interpretation of their meaning and importance.

Another method of qualitative data analysis, developed in the 1930's, is called ***Analytic Induction.***This is a sort of trial-and-error method, in which the researcher first notes a particular piece of data and forms a hypothesis about it.  The researcher then looks for a similar piece of data to see if it supports or does not support the hypothesis.  The hypothesis is then adjusted to accommodate both pieces of data.

The researcher will continue analyzing each piece of data as it is encountered in relationship to the hypothesis, and will continue revising the hypothesis until eventually a hypothesis that reasonably accounts for all the data is developed.

Here is a simple example of Analytic Induction.  Suppose a researcher is observing the behaviors of an autistic child and keeps notes for a period of thirty days.  When reading the transcripts of the field notes, the researcher notices the following (only the relevant notes are copied here):

Day 1, Monday - student is disruptive in the lunchroom, refuses to eat, throws apple (hypothesis - the change in routine from eating meals at home on the weekends and eating in the lunchroom at school on Monday is a factor in disruptive behavior?)

Day 4, Thursday - school assembly in the morning

Day 4, Thursday - student is disruptive in the lunchroom, refuses to eat, throws apple (hypothesis - change in routine in morning, both leaving home on Monday and school assembly on Thursday, are factors in disruptive behavior?)

Day 11, Monday - no disruption (hypothesis above doesn't hold)

Day 12, Tuesday,  - student is disruptive in the lunchroom, refuses to eat, throws apple (hypothesis - student doesn't like apples?)

There are a number of other qualitative analysis methods, developed by researchers over the years.  Some methods overlap others; some are variation of others.  A few of the more common methods are described below, in order to help you identify them when you read the terms in the literature.

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| Method | Description |
| Typology | A classification system in which the categories are all subsets of an overarching criterion such as a belief system, a culture, a behavior, a setting, or an activity.  All the categories are underlying characteristics.  Lofland and Lofland developed a conversion typology with three possible characteristics:  self-conversion, personal mystical conversion, and situational conversion. |
| Taxonomy | A classifying system that does not necessarily explain data.  A theory about the data may be developed because of the way in which the classifications are labeled. Durkheim's taxonomy of the types of suicide (egoistic, altruistic, anomic, and fatalistic), for example, includes a theory about why people commit suicide. |
| Hermeneutical Analysis | Less interpretative than other methods.  Requires telling the story of the participants, using their words, not the words of the researcher.  Uses the context of the situation to understand what happened specifically in the study itself.  The researcher's intent may be invisible in this method. |
| Content Analysis | Written data read to find themes.  A beginning theory tends to direct the search. Data are categorized. A particular size of data to be examined (sentence, paragraph, time frame, etc.) is chosen at the beginning and used throughout the analysis.  This method was first used to analyze newspaper articles for bias.     |
| Narrative Analysis | The verbal version of content analysis.  Studies a participant's speech for themes about how the participant presents self. |
| Domain Analysis | The process of identifying and organizing information used in developing systems, including the commonalities and variabilities.  The systems could be cultural, social, or cognitive. |

Of course, in qualitative research, the ***interpretation***is more than categorizing and counting data. Without a systematic approach to analyzing data, interpretation is more like guesswork.

The *interpretation* of qualitative data includes such processes as synthesizing, attaching meaning, learning lessons, and understanding.  The qualitative researcher will not just report the results of the*analysis*, he/she will*tell the story*, acknowledging that the story may very well be unique to the study and its particular participants, but a story nonetheless that may have value in the greater understanding of the research topic.

Analyzing and interpreting qualitative data is in many ways more difficult than analyzing and interpreting quantitative data because it requires so many individual decisions about inclusion of evidence, assigning importance to data, making valid comparisons, and reaching accurate conclusions.  The most common errors are the failure to provide *evidence*for the evaluating the dependability of the results (reliability), the failure to show *credibility*of the analysis (validity), and reaching *conclusions* beyond the scope of the research (inappropriately generalizing).

Fair or not, qualitative research is often considered less worthy than quantitative because it does not have the mathematical precision or objectivity that is valued in the arena of science.  But the power of qualitative research lies in the interpretation of the meaning of events, circumstances, or systems that are not possible in quantitative research.  As we learned in the beginning weeks of this course, quantitative research often answers *what*, while qualitative research looks for *why*.

***TOPIC 2 TASKS***

Similar to last module, you will summarize at least ***one (1)*** qualitative articles and propose a qualitative study in your field.

***1.*** Review your portfolio of research reports and find the ones that used qualitative methods.  (You need a minimum of ***one (1)*** for this assignment, so if your portfolio is lacking, you will have to conduct a further search of the literature for more studies – or see me for alternate arrangements.)   For each of at least two research reports, write a paragraph that identifies the problem in the study, the purpose of the research, the research method, and why you think that method was appropriate for the kind of information desired.  Also, write a sentence of two about the analysis methods and the interpretation of the data.  As always, use APA style for each full citation, and place your narrative as an indented, single-spaced paragraph under the citation.

***2.*** Describe a qualitative research study in your topic area that you might want to conduct.  Be practical.  Be realistic.  Include all the components discussed so far, such as the research questions(s), the setting, the kind of qualitative study it would be, and what kind of data you would be looking for.  Do NOT hypothesize what the results might be or what the data might show (this will be the most difficult part).  Do not even discuss themes or patterns.  Ask questions; don't offer possible answers.  Keep it short and to the point!

Email me your ***one (1)*** article summaries and study idea by ***9/21***. My email address is ttwyman@pacificu.edu.

***3.*** I have started this thread on our site: Why is qualitative research often considered less useful or scientific than quantitative and what can a qualitative research do to overcome the negative bias.  You are expected to search for resources - print or web - to inform your thinking.  Please cite any sources you consult or quote, using appropriate APA citation style.

***4.*** Remember these steps. We will practice them in analyzing your personal journal for your Journal Analysis paper in your Critical Perspectives class. ☺