

University of Mohamed Lamine Debaghine
Faculty of Literature and Languages
Department of English Language and Literature
Introduction to Applied Linguistics Research
Third Year Classes

Lecture 2

**Terms commonly associated with quantitative and qualitative approaches to research
and focuses of each approach (Nunan,1992:4)**

	Quantitative Research	Qualitative Research
1.Scientific method	Deductive or “Top down” The researcher tests hypotheses and theory with data	Inductive or “Bottom up” The researcher generates new hypotheses and grounded theory from data collected during field work
2.View of human behavior	Behavior is regular and predictable	Behavior is fluid , dynamic , situational , contextual , social and personal
3. Most common research objectives	Description , explanation and prediction Ungrounded , verification-oriented , confirmatory , reductionist , inferential , and hypothetical-deductive	Description , exploration and discovery Grounded , discovery-oriented , exploratory , expansionist , descriptive and inductive
4.Nature of observation	Attempts to study the behavior under controlled conditions and measurements	Naturalistic and uncontrolled observation , study the behavior the context where it occurs
5. Nature of reality	Objective (different observers agree on what is observed) Removed from the data : “the outsider perspective”	Subjective , personal and socially constructed Close to the data : “the insider perspective”
6.Form of data collected	Quantitative data collection is based on precise measurement using structured and validated data	Qualitative data collection is through in-depth interviews , participant

	collection instruments (e.g., tests , closed-ended items , rating scales ,)	observation, field notes , and open-ended questions . The researcher is the primary data collection instrument
7.Nature of data	Variables	Words , images , categories
8.Data analysis	Identify statistical relationships	Search for patterns , themes and holistic features
9.Results	Outcome-oriented Generalisable findings: multiple case studies Reliable and replicable data	Process-oriented Particularistic findings Ungeneralisable : single case studies Valid , real , rich and deep data
10.Form of final reports	Statistical report (e.g., with correlations , comparison of means and reporting of statistical significance of findings	Narrative report with contextual description and direct quotations from research participants

Types of research :

There are many types of applied linguistics research studies and there are also a number of ways in which they may be classified. Studies may be classified according to topic whereby the particular phenomena being investigated are used to group the studies. Some examples of applied linguistics research topics are: teaching methods, language learning , classroom interaction and management , cross-cultural studies etc. Studies may also be classified according to whether they are exploratory or confirmatory.

An exploratory study is undertaken in situations where there is a lack of theoretical understanding about the phenomena being investigated so that key variables, their relationships, and their (potential) causal linkages, are the subject of conjecture. In contrast a confirmatory study is employed when the researcher has generated a theoretical model (based on theory, previous research findings, or detailed observation) that needs to be tested through the gathering and analysis of field data.

A more widely applied way of classifying educational research studies is to define the various types of research according to the kinds of information that they provide. Accordingly, educational research studies may be classified as follows:

Historical research :

Historical research has been defined as the systematic and objective location, evaluation and synthesis of evidence in order to establish facts and draw conclusions about past events (Borg (1963). It is an act of reconstruction undertaken in a spirit of critical inquiry designed to achieve a faithful representation of a previous age. In other words, Historical research generates descriptions, and sometimes attempted explanations, of conditions, situations, and events that have occurred in the past. For example, a study that documents the evolution of teacher training programs since the turn of the century, with the aim of explaining the historical origins of the content and processes of current programs.

Descriptive research:

Many educational research methods are descriptive; that is, they set out to describe and to interpret *what is*. Descriptive research, according to Best, is concerned with:

conditions or relationships that exist; practices that prevail; beliefs, points of views, or attitudes that are held; processes that are going on; effects that are being felt; or trends that are developing. At times, descriptive research is concerned with how *,what is* or *what exists* is related to some preceding event that has influenced or affected a present condition or event. (Best, 1970)

Such studies look at individuals, groups, institutions, methods and materials in order to describe, compare, contrast, classify, analyse and interpret the entities and the events that constitute their various fields of inquiry. For example , a descriptive research of request speech act realization patterns of Algerian and English students to compare and analyse what are the linguistic similarities and differences between the two groups .

Correlational research :

Correlational techniques are generally intended to answer three questions about two variables or two sets of data. First, 'Is there a relationship between the two variables (or sets of data)?' If the answer to this question is 'yes', then two other questions follow: 'What is the direction of the relationship?' and 'What is the magnitude (degree)?'. Therefore , correlational research involves the search for relationships between variables through the use of various measures of statistical association , and describes in quantitative terms the degree to which the variables are related. For example , a research that investigates the relationship between motivation and academic achievements.

Causal-Comparative or EX-POST FACTO research:

This type of research suggests causal linkages between variables by observing existing phenomena and then searching back through available data in order to try to identify plausible causal relationships. In other words , both the effect and the alleged cause have already occurred and are studied by the researcher in retrospect. Kerlinger (1973) defines Ex-post Facto research as : "Systematic empirical inquiry in which the scientist does not have direct control of independent variables because their manifestations have already occurred or because they are inherently not manipulable".

For example, a study of factors related to student 'drop out' from secondary school using data obtained from school records over the past decade.

Some authors categorize Ex-post facto studies into the category of descriptive research.

Experimental research is used in settings where variables defining one or more 'causes' can be manipulated in a systematic fashion in order to discern 'effects' on other variables. For example, an investigation of the effectiveness of two new textbooks using random assignment of teachers and students to three groups – two groups for each of the new textbooks, and one group as a 'control' group to use the existing textbook. Therefore, the primary characteristic of experimental research is manipulation of at least one variables and control over the other relevant variables so as to measure its effect on one or more dependent variables .The variable (s) which is manipulated is also called an independent variable(s), a treatment, an experimental variable(s) or the cause.

Case study research

Generally refers to two distinct research approaches. The first consists of an in-depth study of a particular student, classroom, or school with the aim of producing a nuanced description of the pervading cultural setting that affects education, and an account of the interactions that take place between students and other relevant persons. For example, an in-depth exploration of the patterns of friendship between students in a single class. The second approach to Case Study Research involves the application of quantitative research methods to non-probability samples – which

provide results that are not necessarily designed to be generalizable to wider populations. For example, a survey of the reading achievements of the students in one rural region of a particular country.

Ethnographic or naturalistic research

Usually consists of a description of events that occur within the life of a group – with particular reference to the interaction of individuals in the context of the sociocultural norms, rituals, and beliefs shared by the group. The researcher generally participates in some part of the normal life of the group and uses what he or she learns from this participation to understand the interactions between group members. For example, a detailed account of the daily tasks and interactions encountered by a school principal using observations gathered by a researcher who is placed in the position of ‘Principal’s Assistant’ in order to become fully involved in the daily life of the school.