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 1

Research Does Not Mean Searching for Articles to Write Papers. Probably the most common misconception about research is confusing it with papers we were asked to write back in secondary school or during our undergraduate days at university—projects often referred to as *research papers*. Typically, such assignments mean that students go to the library and (re)search for a number of articles from a variety of sources. Then they integrate the gathered information from these articles through summarizing and paraphrasing into papers addressing issues of importance with correct footnoting and referencing, Fred&Perry (2005).

What is research?

Research is a systematic process of inquiry consisting of three elements or components: (1) a question , problem , or hypothesis , (2) data , (3) analysis and interpretation of data . Any activity which lacks one of these elements (for example , data) is something other than research .Nunan (1992:3)

The American Heritage College Dictionary defined research as "scholarly or scientific investigation or inquiry" or as a verb "to study (something) thoroughly" (2000). Thus, in its most basic and simplest form, research is a way of finding out answers to questions. Mackey & Gass (2005:1)

Research is systematic, because it follows certain steps that are logical in order. These steps are:

- Understanding the nature of problem to be studied and identifying the related area of knowledge.
- Reviewing literature to understand how others have approached or dealt with the problem.
- Collecting data in an organized and controlled manner so as to arrive at valid decisions.
- Analyzing data appropriate to the problem.
- Drawing conclusions and making generalizations.

Research is carried out in order to:

- -get a result with scientific methods objectively, not subjectively.
- -solve problems, verify the application of theories, and lead on to new insights.
- -enlighten both researcher and any interested readers .
- -prove/disprove new or existing ideas , to characterize phenomena (i.e., the language characteristics of a particular population) and to achieve personal and community aims . That is , to satisfy the individual's quest but also to improve community welfare .
- -to discover the cause of a problem , to find the solution to a problem , carry out what is planned , to uncover what is not known , etc. Nunan (ibid:2)

Research in Applied Linguistics is concerned with practical issues involving language in the life of the community. The most important of these is the learning of second or foreign languages. Others include language policy, multilingualism, language education, the preservation and revival of endangered languages, and the assessment and treatment of language difficulties. Other areas of interest include professional communication, for example, between doctors and their patients, between lawyers and their clients and in courtrooms, as well as other areas of institutional and cross-cultural communication ranging from the boardroom to the routines on an answer-phone.

(http://www.linguistics.unimelb.edu.au/about/about.html)

In other words, research in the field of applied linguistics covers a vast domain of topics that deals with just about anything where language relates to society.

Who Is All This Research For?

It is for you, the person who, for whatever reason, wants or needs to gain a better understanding about language issues that are important to him or her. This includes the following:

- Master of Arts students in applied linguistics
- -Teachers of second/foreign languages
- Administrators of second/foreign language programs
- -Parents of students in language programs

Johnson(1992) puts it:

The importance of research is not so much that it supplies definitive answers to questions such as "What is the best way to learn a language?" or "Which is the most effective method of L2 teaching?" It does not. Rather, research can help us gain a richer understanding of the many interrelated factors involved in learning. It can help us see how the ways we organize learning environments can promote or inhibit growth. (p. 5)

So , Research contributes to more effective teaching and learning, not by offering definitive answers to pedagogical questions, but rather by providing new insights into the teaching and learning process. To provide a more comprehensive view of research we examine research from the perspective of what Richards (2003) terms

a paradigm or "a set of basic beliefs" regarding research;

a tradition or an "approach to research covering generally recognized territory and employing a generally accepted set of research methods;" and

a method or "a means of gathering, analyzing and interpreting data using generally recognized procedures" (p. 12).

Research Dichotomies:

Basic Versus Applied Research

One of the most central distinctions made in discussing research is the difference between *basic* and *applied* research.

Basic Research:

The purpose of *basic research* is to design studies that can test, refine, modify, or develop theories. As an example of basic research, Marcia's (1966) research on adolescent identity led to a refinement of one stage of Erik Erikson's psychosocial theory of development. Marcia's goal was not to create a program to address practical ways to help adolescents but, rather, to extend and support the theory. Research that seeks to verify such things as the order that learners acquire grammatical rules or the importance of input in language learning are examples of basic research in the field of SLA. Basic Research may be **explanatory**, **exploratory** or **descriptive**

Applied Reasearch: examines the effectiveness and usefulness of particular educational practices. Here the goal is to determine the applicability of educational theory and principles by testing hypotheses within specific settings. So, the goal of applied research is to demonstrate the usefulness of theories in practice

A great deal of research in the field of Teaching English to Speakers of Other Languages **TESOL** is, of course, applied research. Second language educators, for example, have investigated why some students are reluctant to contribute to class discussions, what is the most effective type of feedback on student essays, and what is the most productive number of vocabulary items to introduce at one time.

The most basic distinction between the two paradigms of research is that basic research is research that has no immediate application, whereas applied research is research that does. However, such

distinctions are somewhat ambiguous as almost all basic research eventually results in some worthwhile application in the long range.

Applied research is one type of research that is used to answer a specific question that has direct applications to the world. This is the type of research that solves a problem.

Basic research is driven purely by curiosity and a desire to expand our knowledge. This type of research tends not to be directly applicable to the real world in a direct way, but enhances our understanding of the world around us. So the real difference between the two types of research is what they will be used for. Will the research be used to help us understand a real world problem and solve it, or will the research further our general information?

http://study.com/academy/lesson/basic-research-and-applied-research-definitions-and-differences.html

Secondary & Primary Research

There are two major sources of data that both basic and applied researchers can gather while conducting research

Secondary Research (Literature Reviews):

In using secondary data, researchers examine what others have discovered about a particular topic. For example, if teachers want to know about the advantages and disadvantages of using peer review in a writing class, they can investigate what others have written on the topic. As McDonough and McDonough (1997) point out, when secondary data is used, "the outcome of the research is the establishment, publicizing, or utilization of something that somebody—not the researcher or the person commissioning it—already knows" (p. 37).

One example of a study using secondary data is Silva (1993). In this study Silva summarized the findings of 72 empirical research studies that compared L1 and L2 writers with regard to their composing processes and the features of their written texts. He then discussed what these findings suggest in general for designing an effective L2 writing program. Studies such as these are termed *literature reviews*.

Primary Research :In using *primary data, researchers gather original data to answer a particular* research question. As McDonough and McDonough (1997) note, when researchers gather first-hand data, "the outcome is knowledge nobody had before" (p. 37).

e.g.,we gather data directly from students who are learning a language rather than from secondary resources (books about students who are learning a language)

Inductive Vs Deductive Reosoning in Educational Research

Inductive reasoning: is often referred to as a "bottom-up" approach to knowing in which the researcher uses particular observations to build an abstraction or to describe a picture of the phenomenon that is being studied. Inductive reasoning usually leads to inductive methods of data collection where the researcher (1) systematically observes the phenomena under investigation, (2) searches for patterns or themes in the observations, and (3) develops a generalization from the analysis of those themes. So the researcher proceeds from specific observations to general statements— a type of discovery approach to knowing.

Deductive reasoning: uses a top-down approach to knowing. Educational researchers use one aspect of deductive reasoning by first making a general statement and then seeking specific evidence that would support or disconfirm that statement. This type of research employs what is known as the

hypothetic-deductive method, which begins by forming a hypothesis: a tentative explanation that can be tested by collecting data. For example, one might hypothesize that small classes would result in a greater amount of student learning than large classes. This hypothesis would be based on a **theory or a knowledge base composed** of the results of previous research studies.

The humanistic theory of education emphasizes strong teacher-student relationships as part of effective learning. Previous research studies have shown that such relationships are more common in small classes. Therefore, based on the humanistic theory and these previous studies, a researcher hypothesized that small class sizes will result in better student learning based on humanistic theory and previous studies. He collected data, and made a decision based on the data to either accept or reject the hypothesis or prediction.

The inductive and hypothetic-deductive approaches to knowing represent two general routes to knowledge used in educational research. Inductive reasoning is most closely associated with **Qualitative approaches to research** and deductive reasoning is related to **Quantitative approaches to research**

Quantitative Vs Qualitative Approaches (traditions)

Qualitative research is a research in which the focus is on naturally occurring phenomena, i.e, It collects and summarizes data using primarily narrative or verbal methods: observations, interviews, and diaries, and data are recorded in non-numerical form.

e.g., a diary study in which a student keeps track of her attitudes during a year-long Japanese language course (the analysis is interpretive rather than statistical).

Quantitative approaches: summarize data using numbers. Hypotheses and methods of data collection in quantitative research are created *before the research begins*. Hypotheses or theories are then tested, and when supported, these hypotheses or theories are typically considered to be **generalizable**: **applicable to a wide range** of similar situations and populations. i.e,

Quantitative research generally starts with an experimental design in which a hypothesis is followed by the quantification of data and some sort of numerical analysis is carried out (e.g., a study comparing student test results before and after an instructional treatment).

As a novice researcher, it is important that you consider which approach best captures your own assumptions about how the world works.

Mixed-methods approach to research:

In some studies researchers use both qualitative and quantitative methods to answer their research questions. For example, Pragmatic researchers propose that even within the same study, quantitative and qualitative methods can be combined in creative ways to more fully answer research questions.

Longitudinal Vs Cross-sectional research

The main differences between **Longitudinal** and **Cross-sectional** studies concern the role of **time** in what is being investigated .

Longitudinal studies involve collecting data from the same individuals or groups at different points in time, with the researcher collecting data regularly over many weeks, months, or even years to examine how a particular individual or group changes over time. A typical **longitudinal** study might seek to compare one group of learners' performance of knowledge of a particular linguistic structure at times A, B, and C.

Cross-sectional studies on the other hand , data are typically collected at a single point in time , with the researcher looking for relationships or patterns in the data . For example , a cross-sectional study might examine learners' knowledge of a linguistic structure by looking at data collected at one point in time from beginning , intermediate and advanced learners .