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## **Classroom Teaching and related Research Paradigms**

**Prof. Indira Dhull<sup>1</sup>,**

Dean, Faculty Of Education ,  
SGT University, Gurgaon , Haryana

**MS' Sakshi<sup>2</sup>,**

Research Scholar,  
M.D.U. Rohtak

### ***ABSTRACT***

This paper will provide an overview of the characteristics of major Educational Research Paradigms shaping contemporary Educational Research. In this unit, the Paper will examine how and why teachers should be encouraged to reflect and analyse their own Teaching and the Classroom Context. The Paper will present how the notion of Research in ELT has developed, and how a new Paradigm of Reflective classroom- based Research has evolved. The Main purpose is to orient students, faculty and beginning Researchers to the newer Paradigms that enable Researchers to undertake uniquely powerful and insightful inquiries that contribute to transforming the landscape of Education.

**Keywords:** Postgraduate Research, New Paradigms, Teacher Education, Transformation

### **Introduction**

It is assumed that teachers can improve their knowledge and skills, not necessarily by following a particular method or the findings provided by “official” research, but with an enquiring attitude which allows him/her to find out the most adequate techniques in each situation. Because each teaching situation is different and needs to take a range of factors into account, from individual students' characteristics to those of the teacher, the classroom context and the community with its local educational and intellectual traditions. And every language lesson is necessarily different and unique as it is jointly constructed by the teacher and the learners (Allwright 1991).

Nowadays, the theory of constructivism is not only applied to the learning processes, but also to the teaching situations. It is widely accepted that each teacher constructs his/her own 'theory' about teaching and learning. These ideas come from a variety of sources:

- from the teacher's personal beliefs and value system,
- from his/her experience as a learner,
- from training or education,
- and from his/her classroom practice and experience.

## WHAT IS RESEARCH?

All of us often question ourselves about lots of daily life events that we do not quite understand or seek answers to questions that other people make. In this sense, we all become researchers of our daily life when we try to find out explanations for the phenomena happening around us. In doing this, we observe these events and analyse them. We make guesses and adventure hypothesis that we later check till we can be sure that what we initially assumed is true under certain conditions. So, the basic components of research in our daily life can be summarised as follows:

1. In this process, we *make questions* about the phenomenon: Why, how, when, ... does it happen? What's the connection with other events? Etc.
2. Several guesses, answers and possible explanations are anticipated intuitively.
3. One (or some) of the anticipated explanations is/are considered that most probably explain(s) the phenomenon (*hypothesis*).

We check the hypothesis in other situations: *collect more data* and test to what extent the hypothesis can be maintained

Even though we have seen a close connection between scientific research and research in every-day life, there are important differences, as Seliger and Shohamy have pointed out (1989:10):

***The differences between knowledge arrived at through common sense and intuition on the one hand, and scientific research on the other, can be expressed by concepts such as "organised", "structured", "methodical", "systematic", "testable" and specifically by the notion of disciplinary inquiry.***

It is also important to differentiate the type of research we decide to do:

- a) *Basic or theoretical* research: it aims to construct abstract theoretical models which explain second language teaching and learning.
- b) *Applied* research: it applies the theoretical models provided by basic research to different fields of study (e.g. education).
- c) *Practical* research: it makes a practical utilization of a) theoretical research and b) applied research. For example, by testing classroom hypothesis controlling variables, providing pedagogical principles experimented in the classroom, etc. It must be noticed that practical research is based on the premises established by theoretical and applied research and it is influenced by them when it is developed in classroom situations.

***Classroom research*** is normally *practical research* which is centred on the classroom. It aims to explain what actually happens inside the classroom, the direct and indirect influence of internal and external factors related to the student, the teacher and the ELT curriculum. As van Lier points out (1988) we know very little about what is going on in classrooms, so classroom research becomes an important tool to explain the relation between the diversity of variables that continuously interact:

*As yet we know too little about all the variables that play a role in all the classrooms to be able to make rash recommendations about methods of teaching and ways of learning (1988:7)*

On the other hand, classroom research has also been considered one of the most difficult places to do research, hence its consideration as a "black box" as far as the connection between the input received by the students and the output they produce.

***Paradigm:***

The term paradigm needs clarification. Willis (2007) explains that: "A paradigm is thus a comprehensive belief system, world view, or framework that guides research and practice in a field" (p.8). From a philosophical perspective, a paradigm comprises a view of the nature of reality (i.e., ontology) – whether it is external or internal to the knower; a related view of the type of knowledge that can be generated and standards for justifying it (i.e., epistemology); and a disciplined approach to generating that knowledge (i.e., methodology). For educational researchers, there are several major paradigms that govern their inquiries into the policies and practices of education. Each paradigm carries related theories of teaching and learning (or pedagogy), curriculum and assessment, professional development, etc

**METHODS AND PARADIGMS FOR CLASSROOM RESEARCH**

As we will see, research questions and topics can be looked into from many different perspectives, by following different approaches and by using different procedures. The approach that we adopt needs to be suitable for the kind of research we want to carry out, for the variables we want to control. In some occasions, an observational process will be enough because the data we want to collect cannot be quantified, but in others we may need to illustrate our findings with figures and a statistic treatment may be necessary. So, the approach we adopt depends on the nature of the research we aim to do. Very often an eclectic position or a combination of paradigms may be necessary. As classroom research is defined primarily by its setting, the classroom provides the focal point for the types of data collected. However, a wide variety of approaches are used to obtain and analyse the data, and the choice of approach depends upon many factors: the researcher's philosophy, the issue to be investigated, the constraints inherent in the situation and so on.

**TRADITIONAL PARADIGMS**

We will not spend much time on these tried and trusted paradigms, as there is a plethora of social science research methods textbooks that serve this purpose. The outlines provided here serve simply as a basis of comparison with the newer paradigms addressed later in the paper.

**First ELT research studies**

The beginnings of a research approach in language teaching can be dated back to the late 19 Century, linked to the development of the language sciences and the scientific movement in education. However, a truly consistent and deliberate research approach in ELT only became apparent from the 1950s, and it is this that we will now look at.

One of the first attempts at systematic research was carried out in 1948 by Agard and Dunkel at the University of Chicago, in which 'new' and traditional methods of language teaching were compared. As a result of this study, Dunkel put together a volume of all the studies on language learning to date (1948). In the same year, a journal with a strong research orientation, "Language Learning", was published by the English Language Institute at the University of Michigan in Ann Arbor. Its director, Charles Fries, had been a key figure during the previous decade in giving language pedagogy a basis in Research .

Nevertheless, despite these early attempts, research into the field of ELT remained thin until the sixties, when a radical change took place, and research began to influence policy issues and the

method debate in second language education. This was due to the fact that during the fifties and sixties language centres with a strong research orientation had been set up, such as the *CREDIF (Centre de Recherche et d'Etude pour la Diffusion du Français)* in France in 1951, or the *CAL (Center for Applied Linguistics)* in Washington, D.C. in 1959, or the Centre for Information on Language Teaching and Research in 1966, plus a number of university centres in applied linguistics, in Britain.

Thus when the Audiolingual method appeared on the scene in the late 1950s, considerable interest was aroused, and a number of major investigations were carried out in an attempt to resolve controversies about its merits over the more traditional grammar translation method.

Two other areas of language teaching which began to be systematically researched from the 1960s on were those of language teaching for younger children, and the effectiveness of immersion teaching programmes.

## **EXPERIMENTAL RESEARCH**

Here the researcher exerts a high degree of control and purposefully intervenes in the setting, to determine the effect on intervention. It is important to note, however, that "intervention" is by no means a negative thing. It is simply a technical term which refers to the "treatment" administered to some subjects (the "experimental group") in order to test a hypothesis about a cause-and effect relationship. This treatment is withheld from other subjects in the study (typically called "the control group"). If the researchers are careful in setting up the study, these two groups can be presumed to be virtually identical in all respects, except that one gets the treatment (teaching method, materials, for example) and the other does not. After the treatment has been implemented, a test of some sort is usually administered to both groups and their results are compared. Then various mathematical procedures are used to determine whether or not there are statistically significant differences in the test scores of the two groups. From the results, the paradigm claims, we can infer that the treatment either did or did not cause a measurable change in behaviour or learning (the hypothesis effect).

In experimental research, there are some preparatory stages or phases that are currently followed. These stages include the following steps (Seliger and Shohamy, 1989):

- 1) Formulating the general question or the problem which will be solved. This usually emerges from the researcher's experience, from research paradigms or from sources outside the second language field.
- 2) Feasibility of the research work we aim to carry out to solve the problem.
- 3) Deciding on the objectives that will be achieved.
- 4) Formulating the research plan and hypothesis to be tested.

In addition to that, research has to be contextualized. According to Seliger and Shohamy it means (1989:85):

- selecting a research problem,
- to broaden the perspective of the research,
- a revision of the existing literature on the topic,
- to create a rationale for the study,
- to help the researcher narrow down the research question in preparation for conducting the research.
- to describe the different sources for locating the literature:
  - references to existing material, such as indices, computer searches, and bibliographies,

- and the actual material such as journal articles and reviews.
- to describe the criteria for determining the relevance of the material to the research topic,
- and suggestions on ways of organizing and reporting the literature Review .

Another key stage of research begins after the research question or hypothesis has been developed. Planning the research takes place after the researcher has identified the focus or objective of the research. In *synthetic* or *analytic-deductive* research, planning requires the careful development of a plan in which those factors to be controlled or manipulated are identified: the independent, dependent, subject, and extraneous variables.

The **dependent variable** is the means by which any changes are measured. The **independent variable** is the factor the researcher manipulates in order to see what effect the changes introduced will have. For example, if we want to study the relationship between the students participation and their degree of extroversion in their final results, we may start the research plan by thinking that classroom participation and extroversion encourage good results in SLL (hypothesis). The degree of participation and extroversion are independent variables and the student's achievement is the dependent variable.

Research which focuses on variables, makes predictions and tests hypothesis is primarily of the *deductive* type. *Heuristic* research approaches the research context from a different perspective, without preconceptions, with the aim of generating hypothesis but not to test them, using qualitative methods.

## **CLASSROOM OBSERVATION**

When the teaching and learning of a foreign language takes place in a formal setting, it is necessary to observe and analyse systematically what is going on in order to understand such teaching and learning processes. Classroom observation has been used with different purposes: to compare teaching methods, to study the most efficient classroom techniques, to evaluate teachers and materials, etc. All these topics are fundamental components of classroom research. So, observation becomes one of the most important techniques to study what actually happens inside the classroom in a systematic way. In addition to direct observation, there are other procedures for classroom research. These include surveys and self-reports. Self-report data are obtained by conducting surveys, usually through interviews or written questionnaires. Even though questionnaires are not always filled out truthfully and their validity may be relative, the data obtained are important to form hypothesis that can be tested later on. Another problem with observation checklists and with surveys is that items have to be decided in advance and sometimes some irrelevant aspects are not included and no feedback is obtained. This problem can be solved with very open questions where the surveyed subjects can mention anything that seems relevant to them. This desire not to prejudice the importance of potential relevant events has led some researchers to explore the procedures and techniques of ethnography as a viable approach to classroom research (see van Lier 1988, Watson-Gegeo, 1988, Erickson 1981, Green and Walle 1981). For example, van Lier (1988) considers ethnographic techniques the most suitable to study classroom events. He states that to understand what happens in classrooms, we must ask about the meanings that the participants give to the successive classroom phenomena.

Observation in the classroom and ELT research began to be used in the 1960s in connection with

teacher training to provide the trainees with feedback about their performance in class during their teaching practice or after the short periods of microteaching with their college peers. In most cases, the main objective was to investigate what constituted effective teaching in order to select those reflective teaching techniques and become competent to use them in the future, in similar situations. But the teaching and learning processes have proved to be so complex and unpredictable that this technological conception of education has taken other directions.

### **Interaction analysis**

One of the earliest and most popular observation model was developed by Flanders (1970). He developed a list of categories of teacher and learner behaviour associated with successful teaching. His taxonomy is called FIAC (Flanders' Interaction Analysis Categories) and contained the following groups of categories:

#### **TEACHER TALK**

##### **Indirect influence**

- Accepts feeling
- Praises or encourages
- Accept or uses ideas of student
- Asks questions

##### **Direct influence**

- Lecturing
- Giving directions
- Criticizing or justifying authority

#### **STUDENT TALK**

- Student-talk response
- Student talk-initiation
- Silence or confusion

To codify the behaviour used during a teaching unit the observer marks every time a different category. When the same category is repeated, the observer records this category every three seconds. All the tallies are registered in a matrix which thus show a graphic picture of the lesson. By analysing the matrix, some teaching patterns can be discovered.

Flanders model was soon criticized by those who considered classroom behaviour too complex to be reduced to ten categories and other models soon emerged. It was Moskowitz (1976, 1971) who produced the most widely used modification of Flanders' model. She called her taxonomy "FLint" (Foreign Language Interaction) and included the following categories:

TEACHER TALK

**Indirect influence**

- Deals with feelings
- Praises or encourages
- Jokes
- Uses ideas of students
- Repeats student response verbatim
- Asks questions

**Direct influence**

- Gives information
- Corrects without rejection
- Gives directions
- Directs pattern Drills
- Criticizes students behaviour
- Criticizes students response

STUDENT TALK

- Student response, specific
- Student response, choral
- Student response, open-ended or student initiated
- Silence
- Confusion
- Laughter

Moskowitz's taxonomy was used as a research tool and as a feedback instrument in teacher training. She trained student teachers to analyse their teaching behaviour using her taxonomy for them to have a more objective picture of themselves as potential teachers. It was also used as a reference of what constitutes good and efficient language teaching.

Fanselow (1977) made another important contribution with his FOCUS (Foci for Observing Communication Used in Settings). It was also an observation schedule developed for language teacher training but it is applicable for classroom research. As we can see in the following table, Fanselow's model does not have separate categories for teachers and learners, but instead has general categories which define five characteristic of communication in settings:

- Who communicates?
- What is the pedagogical purpose of the communication?
- What mediums are used to communicate?
- How are the mediums used to communicate areas of content?
- What areas of content are communicated?

The model we Propose, (Madrid, 1998a, 1998b) is related to the **communicative approach**, too, but it is primarily based on the **communicative competence** construct, defined as the integration of five basic sub-competences (see Canale, 1983; Savignon, 1983; Kohonen et al. (1985), Bachman, 1990):

- a) Linguistic or grammatical sub competence
- b) Sociolinguistic or illocutionary sub competence
- c) Sociocultural sub competence
- d) Discourse competence
- e) Strategic (and procedural) competence

So, we aim to analyse the attention paid to these sub competences in the classroom; that is, the time that the teacher and the students spend developing each one, in isolation or integrated in different

teaching and learning situations. These sub-competencies include the categories presented below that must be observed and codified in a systematic way every minute:

**a) Linguistic or grammatical sub competence:**

- Grammar
- Lexicon (vocabulary)
- Phonetics

**b) Sociolinguistic or illocutionary sub competence**

- Communicative functions
- Appropriateness of grammatical forms

**c) Sociocultural sub competence**

- Cultural concepts, attitudes, values, ...

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