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English As Foreign Language (TEFL)

**The Effect of POSS Instruction in Comparison with Conventional Instruction on  
Development of ESP Learners' Parts of Speech Knowledge and Attitude toward CALL.**

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# **Dedicated to**

My parents, for their affection and support

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## **ABSTRACT**

"Parts of speech" or "word forms" knowledge is a key in second language learning and it has a vital role in vocabulary acquisition therefore, its development is of prime concern to language teachers. On the other part, in the century of information and communication technology (ICT), with enormous advancements of computers and internet, increasingly foreign language teachers and learners are employing computers for language teaching and learning. As the computer applications in language teaching enhances, it is crucial to establish research-based indications of the appropriate roles of computer assisted language learning (CALL) in curriculum and instruction. Hence, this study aims at investigating the effectiveness of POSS (part of speech solver) software in acquisition of English parts of speech by Iranian ESP( English for specific purposes) learners in university. In this respect a research was conducted with 60 Iranian learners in Arak University of Technology. The learners were divided into two groups. The control group participated in a conventional ESP class and the experiment group participated in CALL based class. The CALL learners' attitudes toward POSS were determined before and after instruction through two sets of questionnaires. In order to examine parts of speech knowledge by learners they were given a pre- test before the instruction and a post- test after ESP class integration with POSS software program. The data were analyzed both qualitatively and quantitatively to find out changes the students might undergo moving from conventional ESP classes to CALL based classes and get some insights for prospective CALL in Iran. The results of the two tests were compared in order to determine the learner's progress. The investigation showed better improvement of POSS learners after the instruction compared to the learners of the conventional

ESP class. The results showed that the experiment group attitudes towards POSS changed after the instruction positively.

In the light of the findings of the study, it was recommended that TEFL teachers use CALL lessons in their instruction.

**Key words:** Computer Assisted Language Learning (CALL), English for Specific Purposes (ESP), Parts of Speech, Attitude,

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### **LIST OF ABBREVIATIONS**

BALL: Book Assisted Language Learning

CAI: Computer Assisted Instruction

CALL: Computer Assisted Language learning

CBM: Computer Based Materials

CMC: Computer Mediated Communication

DDL: Data Driven Learning

EFL: English as Foreign Language

ESP: English for Specific Purposes

ESL: English as Second Language

ICAL: Intelligent Computer Assisted Instruction

ICALL: Intelligent Computer Assisted Language Learning

ICT: Information Communication Technology

LAN: Local Area Network

NBLT: Net Work Based Language Teaching

OLA: Oral Language Archive

PALL: Pen Assisted Language Learning

PBL: Problem Based learning

PLATO: Programmed Learning for Automatic Teaching Operations

POSS: Parts of Speech Solver

TICCIT: Time-Shared. Interactive, Computer-Controlled Information Television)

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# Chapter One

## Introduction

### 1.1. Foreword

The emergence and development of technology in the last decade has caused a great revolution in information sharing within the “global village” (Kennedy & Davis, 2006). This phenomenon influenced all aspects of human life. The effect of these powerful technological tools has pervaded all aspects of educational, business, and economic sectors of our world (Singhal, 2004). As a result along with all domains, language learning is also affected by the new “information age”. Increasingly, the personal computer is becoming a significant tool for language learning and teaching. Computer potentials to support learning and teaching is undeniable. In the field of language education especially ESL/EFL, computer assisted language learning has acted efficiently to enhance language proficiency. According to Dhief (2004), computers are becoming more appealing to teachers because of their huge capability and extensive effectiveness. On the other hand, we are afraid that technology may dominate us. We have qualms about dehumanization in a subject that is concerned above all with human communication, and we may be afraid of losing our jobs as “English teachers.” Marty (1981) has stated that nowadays few teachers rely on chalk and blackboard. Today, there is a huge amount of foreign language materials in addition to the traditional grammar books and dictionaries. These materials include course books, workbooks, programmed courses, cue cards, charts, newspapers, posters, picture cards, and so on. These are supplemented by other media, such as radio, television, slides, video tapes, games, toys, realia, as well as computers,

multimedia and the internet (Gunduz, 2005). For a more effective teaching, instructors applied various technical inventions. The major difference between computer and the other technological tools is its capability of interaction. The unique property of the computer as a medium of education is its ability to interact with the students. Books and tape recordings can tell a student what the rules are, what the right solutions are, but they cannot analyze the specific mistakes the students have made and react in a manner which leads them not only to correct their mistakes, but also to understand the principles behind the correct solution (Nelson, 1976). Computer owns the unique feature of interaction with the user that has made it a distinct technological tool for educational purposes.

The influence of computer on language learning and teaching is observable in all language courses, skills and sub skills. The extensive use of various computer applications has created diverse opportunities for language learners. Computer applications to develop students' proficiency and achievement in a foreign or a second language goes back to the earliest days of computer-assisted language learning (CALL). Significant use of CALL began in the 1960s. Since then, the development of CALL applications has followed the changes in teaching methodologies (Hah, 1996). CALL software is used here to refer to computer programs and accompanying content that have a recognizable instructional purpose, or a teaching presence (Hubbard & Bradin Siskin, 2004) and language learning objective. Some of CALL programs are course wares or tutorial programs from multi-skill commercial products such as Tell Me More, Rosetta stone or large scale single skill compilations such as Randall's Cyber Listening Lab to individual language exercises, including those created with CALL specific authoring templates like Hot Potatoes.

The present study intends to show the positive or negative results of integrating POSS (parts of speech solver) in ESP classes. In the first chapter of the study after a short background of the issue, the main problems and purposes of the study will be stated. After that the research questions will be stated and the related hypothesis will be formulated. Then, the significance of the study will be explained and some of the existing limitations enumerated. A number of new key terms will be explained later and an outline of general structure of the study is given in the last part of this chapter.

## **1.2. Statement of the Problem**

It is quite obvious that the role of computers in education will become more significant and inevitable in current century (Chapelle, 1997). Along with the information revolution and scientific achievements in the 21st century around the world, there is a trend in all aspects of life; education is also no exception. Integrating computers in education has been common from the last quarter of the twentieth century.

The use of CALL makes language teaching more progressive and can meet individual learning needs. Inspired by the rapid development of technology from 1980s, computer has now become an influential component of second language learning pedagogy. Educators recognize that utilizing computer technology can be convenient to create both independent and collaborative learning environments and provide students with language experiences as they move through the various stages of second language acquisition (Kung, 2002).

It is worth probing the effectiveness of such CALL programs on the learners' performances. In this way, it can be seen how effective these technological advancements might be and how teachers can benefit from them to be successful in reaching their educational goals. Due to many

problems not to be discussed here some countries like Iran still remain unaccustomed to applying technology in large scales in academic institutions. If we consider the fact that learning with computer programs will be very joyful, learners may be motivated while working with them in class or at home and spend more time on learning languages.

In the present study, we have employed technology to assist language learning by the aid of a software called POSS (short for Parts Of Speech Solver). It is an English language learning software, totally devised by the research and intended to teach parts of speech or word forms to the foreign Language learners especially ESP students. It is programmed in Delphi 2010 by a student of computer programming and the software is designed for Windows XP. POSS includes different components such as pretest, posttest, exam, lesson and intelligent POSS solver.

Although most people are in favor of technology, the outcome might not always be what we expect if it is misused. As a result, integration of CALL with textbook should be based on research on how CALL can help learners develop their language. In this regard the research project described in this thesis worked towards the goals described below. The main purpose of this study is to investigate whether technology in general and POSS in particular can distribute as an additional course material for ESP classes to improve learning “parts of speech.”

### **1.3. Significance of the Study**

Warschauer and Healey (1998) have suggested buying software programs to provide an integrated teaching. Providing a great amount of practice could be mentioned as one of the great advantages of CALL integration to the language courses. Another benefit of software programs is their ability to record what the student has done, along with an evaluation and they are available at any time and require no additional pay. Computers can help learners to develop



different language skills by various activities. Warschauer and Healey (1998) indicate that computers are useful in helping language learners develop reading oral skills.

In practice, CALL is used routinely in language instruction only in highly developed countries, such as the USA, Japan, and Western European countries to provide supplementary practice in the four skills writing, reading, speaking and listening, as well as grammar and problem solving (Snyder, 2000). As Chappelle (1997) points, instructors need to understand how CALL can best be used to offer effective instruction to language learners.

The domain of CALL in Iran is in need of further research. A few studies about CALL implications to EFL Iranian language learners in Iran have been conducted, let alone parts of speech. And despite some researches in the field, integrating this software to the academic level is only a few. So it is preferable for Iranian teachers and academic institutes to make use of authentic and research-based software.

#### **1.4. Research Questions**

The key research questions under investigation in this study are as follow:

1. Is there a statistically significant difference between the students' achievement mean scores in classes taught "parts of speech" by CALL and conventional ESP classes?
2. Is there a statistically significant difference between students' attitudes towards POSS before and after CALL?

#### **1.5. Null Hypothesis**

Based on the above research questions, the following null hypotheses were put fourth:

Ho1: There is no statistically significant difference between the students' achievement mean scores in parts of speech taught by CALL and conventional ESP classes.

Ho2: There is no statistically significant difference between students' attitudes towards POSS before and after CALI?

## **1.6. Definitions of Some Key Terms**

The important key terms used throughout this study are as follow:

### **Computer Assisted Language Learning (CALL)**

Levy (1997) defined CALL as "the search for and studies of applications of the computer in language teaching and learning" (p.19). In this study, CALL refers to the method of instruction used for experimental group using computer as a teaching aid for leaning.

### **Computer Based Materials (CBMs)**

CBMs for language teaching and learning can be viewed as the software applications within the field of Computer Assisted Language Learning (CALL) which (Levy, 1997, p.1) defines as "the search for and study of applications of the computer in language teaching and learning"

### **Parts of Speech**

According to ESP book classifications, words are grouped into categories like nouns, verbs, adjectives, etc. "There is actually a good solid scientific basis for this categorization. Ideally, we want to be able to talk about what kinds of words appear indifferent positions in a sentence. We can only do this if we have ways of talking about what the "kinds of words" are. For this, we are going to borrow a set of names from traditional grammars. These are the parts of speech (also

called syntactic categories) the most important of which are noun, verb, and adverb adjective" (Carnie, 2001, p.28).

### **Parts of Speech Solver (POSS)**

An innovative new software produced by the researcher to deal with different “parts of speech”, used as an additional course material in ESP classes for teaching “parts of speech”.

### **Attitude**

Attitude may be thought of as opinions, beliefs, ways of responding, with respect to some set of problems. They may be formed from haphazard experience, or they may be the result of deliberate thought. They may conform to cultural or peer-groups norms or not. They may exert considerable control over a learner behavior in numerous ways, and therefore may be related directly or indirectly to levels of achievement (Johnson & Johnson, 1988).

In this chapter the purpose and significance of the study is explained and the research questions and the hypotheses are formulated.

Chapter two, Review of the Literature, contains some explanations regarding the history of CALL in different decades from the view point of researchers. Some CALL programs are also introduced the effective role of CALL and ICT besides the way they can help learners and teachers is gone through. Teachers and learners’ different roles in a CALL class as well as the learner’s autonomy and motivation are discussed as an important purpose in CALL. Lastly some advantages and disadvantages of CALL are enumerated.

## **Chapter Two**

### **Review of Literature**

#### **2.1. Introduction**

As Chapelle (1997) stated, Computer Assisted Language Learning has been used since 1960s and 70s; therefore, it is not a new development in language teaching. However, it still lacks research methods and a clear theoretical foundation. In the present study the development of CALL and its benefits in language teaching and learning will be described. Moreover, its advantages and disadvantages will be elaborated on.

In this chapter, the definition and history of CALL from the viewpoint of some researchers will be explicated. Then, some of the issues such as multimedia and the internet are defined and exemplified. The definition of Information and Communication Technology (ICT) that contains audio-video aids, its goals and uses in language teaching and learning, and its relations to language arts will also be discussed.

How teachers can apply CALL in language teaching and learning will be considered and will be followed by some points about the teachers and students' roles and duties and problems they may face while applying CALL. Advantages and disadvantages of CALL will be pointed out before conclusion. With the help of these issues the benefits of applying ICT and CALL in language teaching compared to the traditional methods will be underlined.