

# The effectiveness of using technology in teaching English as a Second Language

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## **Introduction**

With the spread and growth of English around the globe, it has become widely used as a second language (SL) in colonized countries like Sri Lanka (Punchihetti, 2008). In this modern information age, the use of technology has entered many areas of the academic field allowing the learners as well as the teachers to explore vast knowledge. This is particularly true in tertiary education where undergraduates and teachers have access to computer laboratories and the internet within the university. While there are different ways of facilitating learners to become proficient in English, technology is of critical importance because of the growing interest both from the public schools and universities across the country and because of the possibilities it offers compared to traditional teaching methods implemented for years in ESL classrooms (Gottlieb, 2006)<sup>4</sup>. Therefore, it is vital to conduct an in-depth analysis of the use of technology in the language classroom. In this light, attention has to be focused on different methods in language teaching which incorporate the use of technology in order to avoid the monotony and boredom of the curricula and activities provided in the traditional classroom. The primary aim of this study is to identify the effectiveness of the use of technology (multimedia projectors, videos, and PowerPoint presentations) in teaching English as a Second Language (ESL) for undergraduates studying at the Business Communication Unit, Faculty of Management Studies and Commerce of the University of Sri Jayewardenepura, Sri Lanka.

## **The Research problem**

According to Irshad (2015), the University of Sri Jayewardenepura is the leading institute in Sri Lanka for Management studies but the level of English proficiency of the First year undergraduates is very low. This can be highlighted through the scores of the placement test which was conducted at the beginning of every academic year. Therefore, it is evident that undergraduates who enter government universities, especially those who enter Faculties of Humanities and Social Sciences and Management and Commerce, lack a sound knowledge of English. When considering all the above issues, management undergraduates low proficiency of English and teaching large ESL classes in the tertiary level have been identified as the research problem that needs to be addressed through the

current study. Thus, the primary aim of the current study is to examine the enhancement of English teaching and learning process through multimedia technology in the Faculty of Management Studies and Commerce, University of Sri Jayewardenepura.

### **Purpose of the study**

The broad aim of this study is to investigate the extent to which multimedia technology can contribute to the enhancement of learners' proficiency in the English language. The researcher intends to explore whether the university students' proficiency in English can be enhanced by using multimedia technology in the ESL classroom. Overall the following aspects could be highlighted as objectives of this empirical study which examines the use of technological tools when compared to the traditional teacher-centred classroom.

- I. To identify the effectiveness of multimedia technology as an instructional tool on first-year students' proficiency in English.
- II. To identify the improvement of attitudes of students towards learning English through multimedia tools by comparing the responses of the students.

Along with these major objectives the researcher aimed to examine the participants' class attendance throughout the study. It was intended to identify the use of technological tools in teaching English as a Second Language could enhance the students' class attendance. These aims/objectives led to the following research questions.

### **Research Questions**

Q1. To what extent does the use of multimedia technology play a role in improving students' English language skills?

Q2. What perceptions do students have regarding the use of technology in the language classroom?

### **Hypothesis**

Null Hypothesis to RQ01: There are no significant differences in the scores of the proficiency test in English of the experimental group and the control group before and after treatment;

Alternate Hypothesis to RQ01: There are significant differences in the scores of the proficiency test in English of the experimental group and the control group before and after treatment;

Null Hypothesis to RQ02: There are no significant differences in the attitude of the experimental group and the controlled group before and after the treatment;

Alternate Hypothesis to RQ02: There are significant differences in the attitude of the experimental group and the controlled group before and after the treatment.

## **Literature Review**

### **The Growth / historical background of ELT through Technology**

Though there exists a significant body of theoretical and anecdotal literature on the potential benefits of utilizing technology in teaching and learning, few rigorous and systematic studies that investigate the effectiveness of such technologies in teaching and learning the English language have been identified by the researcher. According to Johnson (1996), the lack of research into the effectiveness of technology is due to an inappropriate focus on programmed instruction and poor research design and execution.

In the early stages, the most important tool was to use the blackboard which connects the teacher with learners and was known as “one-way transmission of information” (Warschauer, M., &Meskill, C. (2000). As a result of many researchers inclined to go beyond this one way of information transfer since the teachers used to rely heavily on the blackboard which ultimately resulted in archer-centred classrooms. According to Warschauer, M., &Meskill, C. (2000)“ the blackboard was later supplemented by the overhead projector, another excellent medium for the teacher-dominated classroom, as well as by early computer software programs which provided what were known as "drill-and-practice" (or, more pejoratively, "drill-and-kill") grammatical exercises”.

Gradually new methods came into play as shown by Warschauer (2000) “audio tape was the perfect medium for the audio-lingual method which emphasized learning through oral repetition". Thus again during the 1970 and at the beginning of the 1980s teachers as well as learners have identified the drawbacks of language labs that use audio – tapes.

During the 1980s and 1990s, it is evident that there is a shift toward communicative language teaching, where linguists found out that learning a language is an individual psycholinguistic act which was broadly discussed under the cognitive approach to language learning. From this perspective, “language learners construct a mental model of a language system, based not on habit formation but rather on

innate cognitive knowledge in interaction with comprehensible, meaningful language” (Chomsky, 1986).

At the same time, linguists were able to identify the social cognitive theory which emphasized learning a language as a process of apprenticeship or socialization into particular discourse communities (Schieffelin & Ochs, 1986; Gee, 1996). With the advent of these two approaches computer as well as internet became intrinsic components in the language classroom since both these tools provided learners with “maximum opportunity for authentic social interaction, not only to provide comprehensible input but also to give students practice in the kinds of communication they will later engage in outside the classroom”(Warschauer, M., & Meskill, C. (2000). As a result, multimedia which incorporates text, audio, graphics, animations, or real video (Stemler, 1997) crept into English lessons. "The old text-based approach to learning is being superseded by an approach which combines audio and colour video in a much more exciting way" (Barker & Tucker, 1990).

Many scholars have expressed their views on utilizing this multimedia factor effectively in teaching.

“Interactive multimedia is one of the most promising technologies of the time and has the potential to revolutionize the way we work, learn and communicate” (Macromedia, 199; Staub & Wetherbe, 1989).

### **Research Design and Methodology**

This experimental study consisted of pre-test and post-test that have been administered to the participants before and after the teaching sessions. Scores of both these tests were entered into SPSS and the mean value is calculated. At the same time, the researcher used a structured questionnaire to collect data from the participants. The data were generated from these questionnaires.

Moreover, Semi-structured interviews were used because they are flexible, interactive, allow for deeper understanding of second language learning issues, and a greater exploration of learners’ attitudes.

### **Sample**

For this study 93 first-year undergraduates, out of a total of 1298 students, and five(05) lecturers from the Business Communication Unit of the Faculty of Management Studies and Commerce were chosen as the sample. These participants were selected based on the purposive sampling method. These students were following the Business Communication I (BCC 1340) compulsory credit course where they have to pass the course to complete their degree programme. For research purposes, these two classes were categorized as the Experiment Group – (Group A) and Control Group – English (Group B). The English Group

A received the treatment. They were given the maximum multimedia exposure by utilizing the language lab and videos. The English Group B was not exposed to language study in the language lab or to multimedia -enhanced instructions.

### **Test Instrument**

The control group students were not given specific language laboratory exposure since they were taught in a traditional classroom set-up without videos and power-point presentations and were given the same series of pre and post -tests as the Experiment Group. A structured questionnaire was developed which consisted of both open-ended and close-ended questions. In the current study, students were surveyed in few areas: learners' demographic information, their use of modern technological tools, the frequency of using such instruments in relation to learning English and their exposure to multimedia enhanced teaching sessions. An attitude related questionnaire based on a Likert scale with 16 statements was used to analyze the undergraduates' opinions on the use of multimedia tools towards learning English.

### **Data Analysis & Discussion**

Scores of the pre-test and post-tests of the Experiment Group and Control Group were compared after performing the Independent Sample Test. P-value of Pre- Test scores of Experiment(**26.55**) and Control Group (**27.56**) indicated that there was no statistically significant score difference. But the P-value of Post-test scores of Experiment Group (**33.02**) and Control Group (**29.46**). With regard to attitude of students there exists only a slight difference between the mean values of Experiment Group participants' and Control Group since at the end of the treatment both groups have shown a slight increase in mean value; Experiment Group  $M = 4.2273$  –  $M = 4.2743$  and Control Group  $M = 3.8375$  and  $M = 3.8681$ . In addition, with regard to classroom attendance, In the Experimental Group, 45 students have attended more than 15 sessions out of the total number of 21 sessions. They have participated in more than 70 % of the classes held during the semester. Whereas, Control Group participants have displayed a low attendance rate where only 27 participants have attended more than 15 days (more than 70 %) out of the total number of 21 sessions. Importantly, 6 students have attended less than 10 sessions and among them, 5 students have attended less than 6 sessions.

Therefore, the above results highlight the fact that multimedia based language teaching can enhance students' English language proficiency and attitude towards learning English. Test scores show the improvement of students' performance when compared with traditional classroom teaching practice. At the same time, the

use of multimedia technology can improve students' positive attitudes towards learning English since it affects successful learning experience.

### **Conclusion and Recommendations**

In summary, through the above results and literature, the researcher assumes that multimedia technology is more effective for the cognitive and attitude development of the students than when they learn through the traditional classroom teaching method. Finally, positive attitudes towards what they learn could affect the overall performance of the learners at proficiency tests. It was recommended that to conduct an in-depth study analyzing the four skills (Reading, Writing, Listening and Speaking skills) separately before and after the treatment. Further studies should be carried out with the participation of a larger population since the current study employed 93 subjects out of whom only 84 students remained towards the completion of the study.

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