

TEACHING ENGLISH LANGUAGE EDUCATION THROUGH COMPUTER ASSISTED INSTRUCTION

Research Paper

ABSTRACT

Effective teaching in any subject depends largely upon the introduction of newer methods. The Language teachers should be aware of the growing need and make use of media through newer methods or approaches. Indeed, CAI is likely to be successful when there is an openness of mind towards media selection, where the computer is seen as one weapon in the armoury. This paper highlights the impact of media in teaching English Language Education at the B.Ed.level.

INTRODUCTION

Today, school children are well exposed to T.V. shows, computer programs, video games, e-mail based information exchange, internet browsing and many other interesting forms of educative entertainment. Using the experiences of the children as the base to provide further learning experience is a challenging task. Traditional classroom techniques will not do justice to the learners of this generation. They require techniques that will stimulate them to explore, discover and learn by themselves as much as possible and the role of the teacher is to be an effective facilitator. Teachers should have the freedom to innovate, to devise appropriate methods of communication and activities relevant to the needs and capabilities of and the concerns of the community, says the National Education Policy (1986).

The recent and the most striking innovation in the field of educational technology is the application of Computer Assisted Instruction. The main objective of CAI is to provide flexibility required for individualising the educational process. CAI meets the specific needs of the student in a way in which it is almost impossible to do so in a face-to-face student teacher relationship. Computer Assisted Instruction or Computer Based Learning refers to situations in which a computer system is utilized in the learning process.

OBJECTIVES OF THE STUDY

1. To find out the effectiveness of Computer Assisted Instruction in achievement of English Language Education.
2. To find out the Achievement in English Language Education with Experimental group-I and Experimental group-II through Computer Assisted Instruction.
3. To compare the Achievement in English Language Education of the Control group (Traditional Method) with that of the Experimental group-I with discussion (Computer Assisted Instruction) Experimental group-II with discussion (Computer Assisted Instruction).
4. To find out the relationship between Achievement in English Language Education and cognitive correlation.

DESIGN OF THE STUDY

The design of this experimental study is as follows:

Pre-test / Post-test equivalent groups design

$R O_1 \quad X O_2 \quad X \text{ gain} \rightarrow O_2 - O_1$

$R O_3 \quad C O_4 \quad C \text{ gain} \rightarrow O_4 - O_3$

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In this study there are two experimental groups,
(i) Computer Assisted Instruction without discussion (ii) Computer Assisted Instruction with discussion.

The sample was drawn from student teachers with English Language Education as Optional-I, from St. Justin's College of Education, Madurai and from Lakshmi College of Education, Gandhigram. The performance of the student teachers in the Entry Behaviour test was assessed. Based on their performance the student teachers were divided into three groups, the Control group, the Experimental group-I and the Experimental group-II. The selection of the student teachers for control group and experimental groups was based on the "Matching Technique"-matching the subjects (student teachers) within five points (close matching) of the Entry Behaviour Test scores.

The investigator selected 105 student teachers (35 for Control group and 35 for Experimental group-I and 35 for Experimental group-II) based on 'matching' out of 150 students to whom the Entry Behaviour test was administered. To establish the validity of the 'matching', 't' test was applied to find the significance or otherwise between the mean scores of the three groups- Control group, Experimental group -I and Experimental group -II on the Entry Behaviour test.

INSTRUMENTATION

The present study requires an Entry Behaviour Test, a Pre/Post-test and a Criterion test to evaluate the student teachers' mastery of English Language Education. These tests were structured and validated against a sample of B.Ed. student teachers before the commencement of the study. The investigator has also administered the Aptitude in English Language Test, Teaching Profession Perception Scale, and Attitude towards English Language Teaching Scale, Teaching Competency Scale and Cattell's 16PF Questionnaire to the Control group and to the two Experimental groups. The collected data were analysed as follows :

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TABLE 1
CONTROL GROUP VS
EXPERIMENTAL GROUP-I-POST-
TEST WITHOUT DISCUSSION

Unit No	Topic	Mode	Group	Mean	SD	't' value	Level of Sign
1	The Teaching of Vocabulary	CAI	Cont.	6.74	2.73	7.95	0.001
			Exp-I	12.2	3.01		
2	Instructional Aids-I	CAI	Cont.	7.26	2.47	8.6	0.001
			Exp-I	14.03	3.95		
3	Instructional Aids-II	CAI	Cont.	8.74	2.93	4.36	0.001
			Exp-I	12.17	3.61		

From the above table it is evident that there is significant difference between the post test mean scores of the Control group and Experimental group-I (without discussion) in the unit tests as well as in the global.

This may be due to the effective treatment of the topics, "The Teaching of Vocabulary", "Instructional Aids-I" and "Instructional Aids-II" through Computer Assisted Instructional mode.

TABLE - 2
CONTROL GROUP VS EXPERIMENTAL
GROUP-II - POST-TEST WITHOUT DISCUSSION

Unit No	Topic	Mode	Group	Mean	SD	't' value	Level of Sign
1	The Teaching of Vocabulary	CAI	Cont.	6.74	2.73	7.26	0.001
			Exp-II	12.54	3.86		
2	Instructional Aids-I	CAI	Cont.	7.26	2.47	8.83	0.001
			Exp-II	16.51	4.2		
3	Instructional Aids-II	CAI	Cont.	8.74	2.93	5.36	0.001
			Exp-II	13.91	4.9		

From table 2 it is evident that there is a significant difference between the post test mean scores of the Control group and Experimental group - II (with

discussion) in the unit tests as well as in the global. The post-test performance between Experimental group-II (with discussion) and Control group in all the 3 units is 0.001 level of significance in favour of the Experimental group - II (with discussion).

Observation of this analysis reveals that the performance of the student teachers in the Experimental group-II where Computer Assisted Instructional mode followed by discussion, is more effective than that of the Experimental group.

TABLE 3
EXPERIMENTAL GROUP-I VS
EXPERIMENTAL GROUP-II - POST-TEST

Unit No	Topic	Mode	Group	Mean	SD	't' value	Level of Sign
1	The Teaching of Vocabulary	CAI	Exp-I	12.2	3.01	0.41	N.S
			Exp-II	12.54	3.86		
2	Instructional Aids-I	CAI	Exp-I	14.03	3.95	0.5	N.S
			Exp-II	14.51	4.19		
3	Instructional Aids-II	CAI	Exp-I	12.17	3.61	1.7	N.S
			Exp-II	13.91	4.91		

From the above table it is evident that there is no significant difference between Experimental group-I (without discussion) and Experimental group-II (with discussion). The observation of this analysis reveals that the treatment through Computer Assisted Instruction in "The Teaching of Vocabulary" (unit-1), "Instructional Aids-I (unit-2), and "Instructional Aids-II" (unit-3) makes no difference among the student teachers' performance in the Experimental group-I without discussion and Experimental group-II with discussion.

RELATIONSHIP STUDIES

Null Hypothesis (H_0)

There will be no significant (very high, high, substantial and low positive) relationship between

Achievement in English Language Education (AELE) and the (cognitive correlates) Academic Background Aptitude in English Language (AEL) in the Sample as in each of the subgroups identified in the study.

TABLE 4
RELATIONSHIP BETWEEN ACHIEVEMENT
IN ENGLISH LANGUAGE EDUCATION
(AELE) AND COGNITIVE CORRELATES
ACADEMIC BACKGROUND (AB) AND
APTITUDE IN ENGLISH LANGUAGE (AEL)

S. No	Variables	Control	Exp.-I	Exp.-II	Significance
1	AELE	1	1	1	
2	AB	0.37	0.89	0.89	0.01
3	AEL	0.06	0.85	0.63	0.01

Achievement in English Language Education (AELE) has very high positive relationship with Academic Background (AB) in the Experimental group-I and Experimental group-II and Aptitude in English Language (AEL) in the Experimental group-I, at 0.01 level of significance.

Achievement in English Language Education (AELE) has high positive relationship with Aptitude in English Language (AEL) in the Experimental group-II in the Sample at 0.01 level of significance.

Achievement in English Language Education (AELE) has substantial positive relationship with Academic Background (AB) in the Sample at 0.01 level of significance.

Achievement in English Language Education (AELE) has low positive relationship with Academic Background (AB) in the Control group at 0.05 level of significance.

There is negligible positive relationship between Achievement in English Language Education (AELE) and Aptitude in English Language (AEL) in the Control group.

CONCLUSION

Computer Assisted Instruction has proved to be more effective in teaching English Language Education than the Traditional method. Computer Assisted Instruction followed by discussion has made English Language Education Learning very effective and the achievement of the student teachers is very high. So the teacher educators have to make use of Computer Assisted Instruction in their classroom practice. Further when the student teachers are exposed to the advantages of Computer Assisted Instruction as well as the techniques involved, they will also be motivated to employ them in their classroom work.

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INDIVIDUALITY OF THE CHILD

Your children are not your children.
They are the sons and daughters of Life's longing for itself.
They come through you but not from you,
And though they are with you yet they belong not to you.
You may give them your love but not your thoughts,
For they have their own thoughts.
You may house their bodies but not their souls,
For their souls dwell in the house of to-morrow,
Which you cannot visit, not even in your dreams.
You may strive to be like them, but seek not to make them like you,
For life goes not backward nor tarries with yesterday.
- Kahlil Gibran

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I, S. Sebastian, hereby declare that the particulars given above are true to the best of my knowledge and belief.

S. Sebastian