STUDY OF STUDENT TEACHERS' ACHIEVEMENT THROUGH CAI PROGRAM

Sujata Adamuthe, Ph. D.

Arihant College of Education, Pune

Abstract

For learning in short period & with own speed, it is necessary to learn with the help CAI program. To give experience of self learning with the help CAI program to student teacher & to study the effectiveness of self learning through CAI program & teaching through traditional method on learning achievement of student teacher, researcher need to do research. Researcher used mixed method for research. Pre-post equivalent group design in reseach. Achievement Tests & Self learning Record Chart are used for data collection. Mean, t test & F test are used as statistical tool. Self learning through CAI program is more effective. Student teachers gave good response about CAI program.

Keywords: *CAI Program ,Self learning record chart, Health Education, Social Health*

Need

Teacher has no time to give personal attention for student. Students waste their time for searching the learning unit on internet. For learning in short period & with own speed, it is necessary to learn with the help CAI program.

To give experience of self learning with the help CAI program to student teachers & to study the effectiveness of self learning through CAI program & teaching through traditional method on learning achievement of student teacher, researcher need to do research.

Statement

To develop CAI program for the selected unit in the subject Health Education under D,Ed. Syllabus & to study the effect of self learning through CAI on student teachers' achievement.

Objectives

1. To develop CAI program for selected units.
2. To give developed CAI program for self learning to experimental group & teach to control group through traditional method.
3. To study the effectiveness of self learning through CAI program & teaching through traditional method on learning achievement of student teacher in selected unit.

4. To Study the effectiveness of self learning through CAI program on learning achievement of student teacher in selected unit with regard to student

   teachers' subject faculty on higher secondary school.

5. To analysis student teachers' response   towards CAI program.

Assumption

There is compulsory computer practical of 60 marks in D.Ed. second year syllabus ,So student teacher have necessary computer handling skill for self learning through CAI program.

Scope

CAI program developed by researcher is related to student teachers who will study through Marathi medium.

Limitations

1.The study is not considered the student teachers attitude towards health education & their knowledge about health education which they received through communication medium, society, home or private coaching class.

2. The results in this study are depends on the student teachers response to achievement tests.

Delimitations

1. Research is limited to only for D.Ed. second years' student teachers who are learning through Marathi medium in Bhor City.

2. Research is limited to only for two units (Health Education & Social Health) in the subject of Health Education from D.Ed. syllabus.

Methodology

Type of Research Applied Research

Research Method   Mixed method

Mixed Research Method	
Analysis Method	1. Analysis the content in selected unit. 2. Analysis the student teachers' response towards CAI program.
Product Method	Development of CAI program.
Experi-mental Method	Study of effectiveness of self learning through CAI program on student teachers' learning achievement.

Design   Pre-post equivalent group design.

Variables

Independent variable CAI Program developed by researcher.

 Dependent variable Student teachers' achievement in unit test.

Attribute Variables

Student teachers' subject faculty in higher secondary school (Arts, Commerce, Science).

Population All student teachers learning in second year of D.Ed. colleges (Marathi Medium) recognized by N.C.T.E. & M.S.C.E.R.T...

Sampling

Selection of college: Sou. Nirmalatai Thopate D.Ed. college, Bhor is selected by purposive Method.

Selection of student teacher: 182 student teachers (D.Ed. second year) are selected from selected colleges by cluster method.

Research Tools

Data collection Tools	Achievement Tests
	Self learning Record Chart
Statistical Tools	Mean
	t test
	F test

Achievement Tests Two achievement tests developed by researcher on two selected units are used for data collection.

Self learning Record Chart Student teachers noted information related with the help of following points in Self learning Record Chart developed by researcher.

        Required time for self learning through CAI program, problems in self learning, expected changes & good things in CAI program.

Mean M is calculated from student teachers score in achievement test & used for t calculation.

t test t test is used for testing the significant difference between mean of experiment & control group.

F test F test is used for testing the significant difference between means of student teachers' score with regard to student teachers' subject faculty in higher secondary school.

Analysis & Interpretation of collected data

Analysis of qualitative data From Self learning Record Chart, required average time for self learning to each student teacher is calculated.

No.	Unit	required average time for self learning to each student teacher
1.	Health Education	04 hr.
2.	Social Health	03 hr. 15 minutes

Also from analysis of Self learning Record Chart, it is clear that student teachers had no any problem in self learning through CAI program & not expected any changes in CAI program & they like learning through CAI program.

Analysis of qualitative data

Ho$_1$ There is no significant difference between means of student teachers' score in unit test (Health Education) after self learning through CAI program (experimental group) & traditional teaching (control group).

Ho$_2$ There is no significant difference between means of student teachers' score in unit test (Social Health) after self learning through CAI program (experimental group) & traditional teaching (control group).

Table 1. t value (Experimental & Control Group)

Unit	Group	r	df	M	D (M_1-M_2)	S.D.	Calculated t value	t value from table (0.05 level)
Health Education	Experimental	0.15	90	12.75	2.65	2.85	7.09	1.99
	Control			10.1		2.60		
Social Health	Experimental	0.10	90	16.37	2.57	2.62	6.51	1.99
	Control			13.8		2.99		

Observation & Interpretation From the above table 1,it is clear that calculated t values for both the unit are more than t values from table at 0.05 level & so the difference between mean of experimental & control group for both the unit are significant at 0.05 level, so null hypothesis Ho$_1$ & Ho$_2$ will be rejected.

Ho$_5$ There is no significant difference between means of student teachers' score in unit test (Health Education) after self learning through CAI program (experimental group) with regard to student teachers' subject faculty on higher secondary school.

Ho$_6$ There is no significant difference between means of student teachers' score in unit test (Social Health) after self learning through CAI program (experimental group) with regard to student teachers' subject faculty on higher secondary school.

Table 2. F value (with regard to student teachers' subject faculty on higher secondary school)

Unit	Subject Faculty	Total students	C	S^2b (df = 02)	S^2w (df = 88)	Calculated F value	F value from table (0.05 level)
Health Education	Arts	51	14786.81	6.14	735.05	0.25	1.95
	Commerce	06					
	Science	34					
Social Health	Arts	51	24396.70	5.06	618.24	0.24	1.95
	Commerce	06					
	Science	34					

Observation & Interpretation From the above table 2,it is clear that calculated F values for both the unit are less than F values from table at 0.05 level & so the difference between mean of student teachers' subject faculty on higher secondary school(Arts, Commerce & Science) for both the unit are not significant at 0.05 level, so null hypothesis Ho$_5$ & Ho$_6$ will be accepted.

Conclusions

1. Self learning through CAI program is more effective than traditional method for the student teachers' achievement in the unit Health Education.

2. Self learning through CAI program is more effective than traditional method for the student teachers' achievement in the unit Social Health.

3. There is no significant difference between student teachers' achievement in unit test (Health Education) after self learning through CAI program (experimental group) with regard to student teachers' subject faculty on higher secondary school.

4. There is no significant difference between student teachers' achievement in unit test (Social Health) after self learning through CAI program (experimental group) with regard to student teachers' subject faculty on higher secondary school.

5. Student teachers required average time 4 hrs. & 3 hrs.15 minutes for self learning the unit Health Education & Social Health respectively. They gave good opinion about CAI program. They like learning through CAI program, they have no any problem in learning & they do not expected any change in CAI program.

Educational Implication

CAI program developed by researcher is useful for the D.Ed.teacher educator & student teacher.

Selected References

Aggarwal,J.C.(2006).EducationalTechnology and Management.Agra:Vinod Pustak Mandir.

Garret,Henry E.(2006). Statistics in Psycology and Education.First Indian Print Delhi:Surjit publication.

Mangal, S.K.(2008). Statistics in Psycology and Education. (Second Edition).New Delhi:Prentice,Hall of India Private Limited.

Rao,Usha.(2001).Educational Technology .(4[th]Edition). Mumbai: Himalay Publishing House.

http://www.educationinindia.net /download /Research_ Abstracts.pdf.