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DEVELOPMENT AND EFFECTIVENESS CAI PROGRAMME ON ACHIEVEMENT OF STUDENTS

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Abstract

When a computer is used to present programmed or other kinds of instructional Material, the process is called computer assisted instruction (CAI). Anyone who has recently purchased a new word-processing program, for example, has the option of doing a built-in set of tutorial exercises to introduce the features and capabilities of the software. Educational Research and Statistic course is important in M.Ed. syllabus. For preparing research proposal and further research unit 'Research problems, Variables, Hypothesis, Population and Sampling' is very important. It affects directly on their research work.



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1. Introduction:

Educational Research and Statistic course is important in M.Ed. syllabus. For preparing research proposal and further research unit 'Research problems, Variables, Hypothesis, Population and Sampling" is very important. It affects directly on their research work.

Computer Assisted Instruction –

When a computer is used to present programmed or other kinds of instructional Material, the process is called **computer assisted instruction (CAI)**. Anyone who has recently purchased a new word-processing program, for example, has the option of doing a built-in set of tutorial exercises to introduce the features and capabilities of the software.

Computer users who follow the tutorial are able to work at their own pace through

Small units intended to teach specific skills and applications. The tutorials require overt responding and active engagement with the materials. Help is available at the touch of a button, and feedback is immediate. Not only can the computer be used to present instructional material but also it can evaluate how well that material has been learned. After a segment of a program has been completed, the computer can give an achievement test. Thus, the computer provides not only immediate feedback during the learning process but also the immediate results of achievement tests to both the students and the teacher. Depending on how students perform, the teacher can determine how well the instructional material is working and take whether corrective measures that may be necessary. This step cannot be done as easily when a textbook and lectures are used to present the material and a midterm and final examination are used to evaluate student learning. By providing immediate feedback, personal attention, exciting visual displays, and a game-like atmosphere, CAI can motivate students to learn in ways that traditional instruction may not. (Mathew and Hergenhahn, 2010).

2. Need and Importance:-

- 1. "Population and selecting the sample" is very important unit of M.Ed. course for preparing the research proposal.
- 2. Some abstract concepts are abstract in this topic, so it must be understand to the student.

Importance:-

- 1. The student can get the idea for selecting the population and sampling methods through learning of CAI programme.
- 2. Through CAI programme student can decide selecting of sample for their further research as well as proposal.

3. Statement of problem:

To develop and study effectiveness of CAI programme on students achievement of Educational Research Methodology.

4. Operational definitions:

CAI programme: Multimedia Programme on the topic 'Research problems, Variables, Hypothesis, Population and Sampling'.

Educational Research Methodology: "Research problems, Variables, Hypothesis, Population and Sampling" topic in Educational Research Methodology from Savitribai Phule Pune University.

Achievement: Students achievement in the form of scores.

Students: M.Ed. students from Tilak College of Education, Pune for the academic year 2014-15.

5. Objectives:

- 1. To develop CAI programme on one unit in the subject of Educational Research Methodology for M.Ed. students studying of Savitribai Phule Pune University syllabus.
- 2. To study the effectiveness of CAI programme in terms of achievement of students of experiment group.

6. Assumptions:

- 1. Students have knowledge of operating computer.
- 2. 'Research problems, Variables, Hypothesis, Population and Sampling' topic is useful for research work to the students.

7. Hypothesis:

Null hypothesis: There is no significant increase in the achievement of students when Research problems, Variables, Hypothesis, Population and Sampling taught by CAI programme.

Research hypothesis: There is significant increase in the achievement of students when Research problems, Variables, Hypothesis, Population and Sampling taught by CAI programme.

8. Scope and Limitations:

8.1 Scope-

1. This study is related to all M.Ed. students of affiliated to Savitribai Phule Pune University.

8.2 Limitations-

Conclusions of the study are depended on the responses of the students.

8.3 Delimitations:

- 1. The present research was limited to 25 students of Tilak college of Education, Pune 30.
- 2. The present research was limited to only one topic of "Research problems, Variables, Hypothesis, Population and Sampling" in Educational Research Methodology of M.Ed. Course.
- 3. It is limited to only researcher made achievement test.

9. Research methodology:

Experimental research method was used by researcher for study.

"Pre-test and Post -test single group research design" is used.

10. Population:

All M.Ed. students from Savitribai Phule Pune University.

11.Sample:

25 M.Ed. students of Tilak College of Education, Pune, by purposive sampling method.

12. Data Collection tool:

Achievement test.

13. Statistical technique:

Researcher has used 't' test for data analysis.

Analysis and interpretation of data:

	Mean	Standard	Calculated	't' 't' value at level of
		deviation	value	significance
Pre test	76	6	4.615	At $0.05 = 2.06$
Post test	79	5.8		At $0.01 = 2.80$

The values of 't' at the 0.05 and 0.01 level of significance are 2.06 and 2.80 respectively. Calculated' value is greater than these two values so 't' value is significant at both the level that is why null hypothesis is rejected and research hypothesis is accepted.

14. Conclusion

Conclusion drawn by the researchers was CAI programme has been found to effective in teaching the topic "Research problems, Variables, Hypothesis, Population and Sampling" to student.

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