



## DEVELOPMENT OF MULTIMEDIA INSTRUCTIONAL SYSTEM ON COMPUTER EDUCATION FOR B.Ed. PUPIL TEACHERS

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It is our common observation that the theory course is taught by lectures. The teacher educators rarely use other methods of instruction. Instructional materials are also used rarely in teaching learning of the theory courses, which results in memorization for examination purpose and it is also observed that the pupil teachers forget the pedagogy and rarely apply it in their day-to-day in-service career.

Multimedia Instruction System (MIS) is new technique that can be used at B.Ed theory instruction. Development of Multimedia Instruction System has provided new opportunities for delivering instruction in innovative ways. MIS is self-instruction strategy. The use of Multimedia Technology can make learning more interesting and enriching.

### OBJECTIVES OF THE STUDY:

The study was undertaken with the following objectives:

- 1) To plan multimedia instructional system for Computer Education.
- 2) The design and construct multimedia instructional system for Computer Education.
- 3) To test the effectiveness of constructed multimedia instructional system.
- 4) To compare the effectiveness of constructed multimedia instructional system with the conventional system of instruction.
- 5) To validate multimedia instructional system in terms of their effectiveness over conventional system of instruction.
- 6) To equip the pupil-teachers and teacher-educators with reliable system to overcome the difficulties in theory course of Computer Education instruction.

### HYPOTHESES OF THE STUDY:

The study was based on the following null hypotheses: Ho. 1: There is no significant difference between the performances of the pupil-teachers from control and exp. group in pre test. Ho. 2: There is no

significant difference between the performances of the pupil-teachers from control and exp. group in post test. Ho. 3: There is no significant difference between the performances of the pupil-teachers from control group in pre over post testing. Ho. 4: There is no significant difference between the performances of the pupil-teachers from exp. group in pre over post testing. Ho. 5: There is no significant difference between the gains in achievement in terms of scores in pre over post test of the pupil-teachers from control and exp. group. Ho. 6: There is no significant difference between the performances of the pupil-teachers from control and exp. group in retention test.

### DEVELOPMENT AND RESEARCH PROCEDURE AND COLLECTION OF DATA:

- 1) The investigator planned, designed and constructed a multimedia instructional system. The instructional system contained Text blocks, 3-D and 2-D graphics, computer animations, video and audio files.
- 2) Authoring software was selected accordingly and a first working model of the proposed multimedia instructional system with user manual was developed. The system was stored on CD-ROM.
- 3) The internal evaluation of a multimedia application was done within the multimedia development team.
- 4) This was an experimental study. The experimentation was used in testing of the prototype as a small scale tryout of the instructional system and also in full-scale try-out after the improvements in the prototype.
- 5) Pre test – Post test Experimental design was used. The experiment group was of sixty pupil-teachers having thirty boys and thirty girls from College of Education, Barshi. The control group was of sixty pupil-teachers having thirty boys and thirty girls from Dayanand College of Education, Solapur.
- 6) A pre-test was administered to all pupil-teachers from both the groups before the

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implementation of the prototype and the same test was used to all pupil-teachers after the implementation of the prototype. The data on pre-over post test was analyzed and interpreted to collect the information about the effectiveness of the prototype.

#### CONCLUSIONS:

**Conclusion 1:** There is no significant difference between the performance of the pupil-teachers from control and experimental group in pre test.

**Conclusion 2:** There is significant difference between the performance of the pupil-teachers from control and experimental group in post test. Developed Multimedia Instructional System helped the male, female and all pupil-teachers in performing better than the male, female and all 60 pupil-teachers from the control group.

**Conclusion 3:** There is significant difference between the performance of the pupil-teachers from

control group in pre over post testing. Conventional Instructional System helped the male, female and all 60 pupil-teachers from control group in performing better pre over post test.

**Conclusion 4:** There is significant difference between the performances of the pupil-teachers from experimental group in post testing. Developed Multimedia Instructional System helped the female pupil-teachers, male pupil-teachers and all 60 pupil-teachers from experimental group in performing better in pre over post test.

**Conclusion 5:** There is significant difference between the gains in achievement in terms of scores in pre over post test of the pupil-teachers from control and experimental group.

**Conclusion 6:** There is significant difference between the performance of the pupil-teachers from control and experimental group in retention test.

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## REFERENCE

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