



## REVIEW OF RESEARCH

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### EFFECTIVENESS OF CONTENT ENRICHMENT PROGRAM OF ANATOMY AND PHYSIOLOGY THROUGH MULTIMEDIA PACKAGE ON ACHIEVEMENT OF B.P.ED. STUDENTS

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#### ABSTRACT :

*Multimedia and presentation software are popular in education. They offer a unique blend of formats for displaying and organizing information. Both applications display information in many different formats that can be arranged in a variety of helpful combinations. Multimedia attributes (e.g. animation, recorded speech, graphics, video, music) accommodate a variety of learning styles.*

**KEYWORDS :** *Multimedia and presentation software , displaying and organizing information.*



#### INTRODUCTION

In the context of global education, higher education in Indian education is now becoming modern. There arise a new methods and techniques of teaching learning. These techniques enhance the quality of higher education. Some of the innovative techniques are brain based learning, brain storming, panel discussion, use of computer assisted instructional system, use of multimedia package etc.

Today's young generation is most familiar with these techniques. Teachers are also trained for applying these techniques while teaching. In B.P.Ed. topics of Solapur University, Solapur, there is syllabus of Anatomy and Physiology which includes the following topics.

Skeleton System, Digestive System, Respiratory System, Nervous System, Circulatory System, B.P.Ed. Pupils are matured for learning by using self instructional package. Researcher felt that self support material for self learning is important to enhance the quality of learning and conceptualization. Hence, researcher has decided to develop content enrichment program through multimedia package.

#### MULTIMEDIA AN OVERVIEW

The word "multimedia" comes from the Latin words "multus" which means middle or center. More recently, the word media (singular medium) started to convey the sense "intermediary". Multimedia therefore means "multiple intermediaries" or "multiple means". The word "multimedia" may be used as a noun and as an adjective. Multimedia, in the general sense, therefore, means "multiple intermediaries" between the source and sink of information or "multiple means" by which information is stored, transmitted, presented or perceived. The multiple means by which we can perceive information are the following:

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1. text (e.g. book chapter, newspaper article)
  2. image (e.g. photograph)
  3. graphics (e.g. sketch, diagram)
  4. sound (e.g. speech, music)
  5. video (e.g. T.V. program, movie clip)
  6. animation (e.g. animation clip)

### STATEMENT OF THE PROBLEM

The statement of the problem for research on hand is, therefore, stated in the following words.

Effectiveness of Content Enrichment Program of Anatomy and Physiology through Multimedia Package on Achievement of B.P.Ed. Students

### OPERATIONAL DEFINITIONS OF THE TERMS

The operational definitions of the terms used in the statement of the problem are defined for the sake of clarity and also for delimiting the scope of study as follows

#### 1) Content enrichment program

It means a program is developed through the multimedia by selecting the topics from Anatomy and Physiology subject.

#### 2) Anatomy and Physiology:

These are the subject for the study purpose to the B.P.Ed. Student of Solapur University, Solapur.

#### 3) Multimedia Package:

A system designed for and dedicated to instruction i.e. human instruction is an instructional system. An instructional system is defined as an integrated set of methods, media, and equipment and personae performing efficiently, the system functions required for accomplishing one or more instructional objectives. The term multimedia refers to the integration of multiple media such as visual, text, video, sound and animation, which together can multiply the impact of message. Multimedia instructional system is an instructional system developed through multimedia technology.

### OBJECTIVES OF THE STUDY

1. To develop content enrichment program of Anatomy and Physiology through multimedia package.
2. To implement content enrichment program and to find its effect on learning achievement.
3. To suggest innovative techniques and programs for content enrichment of Anatomy and Physiology

### HYPOTHESES OF THE STUDY

The study is based on the following research hypotheses:

1. Null Hypothesis - There is no significant difference of implementation of content enrichment program based on Anatomy and Physiology.

### SCOPE AND DELIMITATIONS OF THE STUDY

1. This study is limited to Anatomy and Physiology topics only.
2. This study is restricted to the units from Anatomy and Physiology topics in B.P.Ed. revised syllabus of Solapur University, Solapur.
3. The development of multimedia instructional system is restricted to Marathi medium colleges of education only.
4. The experiment is restricted only to the pupil teachers admitted in College of Education, Barshi affiliated to Solapur University, Solapur.
5. The development of content enrichment program through multimedia included designing, developing and evaluating stages. The evaluating stage includes large-scale try-out of the multimedia package, but

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the study is confined to experimental try-out in one College of Education. The results of the evaluation of developed content enrichment program through multimedia are limited to this institute only.

### SIGNIFICANCE OF THE STUDY

Multimedia application promotes a constructivist approach to learning by encouraging complex interactions between learners and content. Constructivism involves learning in context, whereby learners construct much of what they learn and understand as a function of their experiences. Use of presentation software such as Power-Point can transform students from being mere recipients of knowledge to active learners who make decisions about how to direct their learning. Presentation applications also facilitate the development of research skills and encourage co-operative learning and problem solving.

### RESEARCH METHODOLOGY

#### 1] Research Method

Experimental method was selected for the present research study

#### 2] Sampling

Researcher selected samples of 55 students of B.P.Ed. faculty from college of Education, Barshi by random sampling method.

#### 3] Tools :-

Researcher developed content Enrichment Program of Anatomy and Physiology for students and implemented on B.P.Ed. Students.

#### 4] Research Design :-

Researcher selected single group Pre - test Post - test experimental design for present research study.

The research design is as follows.

R      O<sub>1</sub> → X → O<sub>2</sub> →

Where R - Group, O<sub>1</sub> - Pre-Test, X - Treatment, O<sub>2</sub> - Post – Test

#### 5] Statistical Terms :-

Researcher used mean, S.D. and t-test for analyzing and interpreting the conclusions.

### RESEARCH PROCEDURE

In the research procedure first of all researcher administered the pre test on B.P.Ed. Students about Anatomy and Physiology topics. Then prepared the content enrichment program based on students poor performance in pre test. Then researcher implemented the content enrichment program and took the post test and analysis and interpretation was done and conclusions are putforthed.

### CONCLUSIONS

1. Content enrichment program can be developed for the topics of Anatomy and Physiology and can be effectively presented through multimedia package.
2. Content enrichment program can be implemented effectively for the better achievement of the pupil teachers of the B.P.Ed.
3. Content enrichment program, E-Book, E-content, and Power Point Presentation can be developed for the better achievement in Learning Anatomy and Physiology.
4. Teachers should prepare content enrichment program for better result of teaching learning process.

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**RECOMMENDATIONS:-**

1. Teachers should be well trained in preparing E-content, Power Point Presentation.
2. Teachers should prepare content enrichment program for other subjects also.
3. University should prepare syllabus related to the Multimedia.

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