## Scholarly Research Journal for Interdisciplinary Studies,

Online ISSN 2278-8808, SJIF 2021 = 7.380, <u>www.srjis.com</u> PEER REVIEWED & REFEREED JOURNAL, NOV-DEC, 2021, VOL- 9/68



# IMPACT OF ASSIMILATION OF E-CONTENT IN SCIENCE ON EDUCATION OF ELEMENTARY LEVEL STUDENTS

## Manisha Tathe<sup>1</sup>, Poonam Kadlag<sup>2</sup> & Rajeshree Jaybhaye<sup>3</sup>, Ph. D.

<sup>1</sup>PhD research scholar, SPPU, Pune, tathemanishav@gmail.com

<sup>2</sup>PhD research scholar, SPPU, Pune, pnmsac@gmail.com

Paper Received On: 21 DEC 2021 Peer Reviewed On: 31 DEC 2021

Published On: 1 JAN 2022

## Abstract

In this pandemic situation preceptors' part is largely grueling to make their scholars meet the Minimum educational position. The Kothari Commission report states that if wisdom is inadequately taught and not learned, it is a little more than a burden of dead information. Currently seminaries are closed. In pastoral areas there are lots of walls facing preceptors. To figure out the true concept of wisdom, classical lecture teaching styles must be supplemented by innovative styles. Developing e-content is becoming an innovative system that can help learners to visualize content and thus become creative and productive students. The e-contents are developed with the integration of multimedia factors similar as textbook, audio, videotape, vitality and image which are set to confirm better understanding of wisdom by the scholars. In that way, e-content on Cell structure and microorganisms for 7th standard scholars from Maharashtra Board, class was developed for changing its impact on learners. 67 scholars were taken as a sample. Results revealed that e-content has its positive impact on wisdom literacy among scholars at elementary positions. Econtent is a veritably important tool of education.

Keywords: Primary education, E-content, Science



<u>Scholarly Research Journal's</u> is licensed Based on a work at <u>www.srjis.com</u>

#### **Introduction:**

Numerous motifs in science are more fluently learnt by direct observation than by reading about them. Some abstract marvels come visible through the goods they have. Hence, we do trials related to them<sup>1</sup>. They help to learn the capacities of conclusion and verification. While learning science, these chops are learnt and internalized. The basic idea of wisdom education is to ameliorate tutoring and literacy practices. This is a vital ideal of learning wisdom<sup>2</sup>.

<sup>&</sup>lt;sup>3</sup> Professor, ACCER, Pune, rspmundhe@gmail.com

Science is the conception grounded tutoring- literacy process. The popular part of wisdom education is to give children with the knowledge in drugs, chemistry, biology and mathematics that will give knowledge and chops to scholars. Primary education is the base of education. So it's veritably important to clear all the scientific introductory generalities at this position. About science education, The Kothari Commission report states that if wisdom is inadequately taught and not learned, it is a little more than a burden of dead information<sup>3</sup>.

To give quality of education and scholars can understand the concept fluently, preceptors use colorful styles of tutoring- literacy.

In this epidemic situation the tutoring literacy process goes on online. eContent augments the training experience by planting colorful media for visualization and explanation of abstract ideas. Keeping in view the different requirements of learners, now use of eContent has become a necessary element of the tutoring and literacy processes. eContent is available in large figures through colorful sources, but many of them are planned to have the specified quality in terms of content, pedagogy also as specialized aspects<sup>4</sup>. E-learning modules will give a multi-sensory involvement to the learners. Also the learners will be suitable to fantasize the entire content and attain mastery over the motifs<sup>5</sup>.

Multimedia devices offer a wide range of sensitive stimuli. Remembering the notorious quotation, 'I hear and I forget, I see and I remember, I do and I understand', it realizes the need for technology integration in wisdom education. Robustness, simulations, software packages, speech, music, multimedia networks, image advancements, etc. produce simulated 3-D environments and guests for the learners, which help in making learning a more centrist, focused, useful, and joyous experience and in retaining knowledge for a longer time<sup>6</sup>.

## **Objective of study:**

The aim of the research work is to assess the effect of assimilation of e-content in science on education of elementary level students. The following objectives are to be accomplished:

- 1. To develop an e-content on Cell structure and microorganisms.
- 2. To find out the impact of the e-content on Cell structure and microorganisms.
- 3. To develop an achievement test on Cell structure and microorganisms.
- 4. To actuate the level of performance in pre-test and post-test.

### **Research question:**

Can e-content in Cell structure and microorganisms be effective with students at Primary level?

Copyright © 2021, Scholarly Research Journal for Interdisciplinary Studies

## **Research Methodology and sample:**

Experimental research system with a control design was espoused in this study. Investigators chose 67 scholars as a sample from Zilha Parishad Primary School, Yewalewadi. E-content on Cell structure and microorganisms was developed by the investigator. Based on the material included in the achievement test, developed based on Bloom's guidelines which was validated by the experts. The pre-test was conducted originally for 67 scholars. The scholars were divided into two groups viz. control and experimental group. Division 'A' (32 students) as control group and Division 'B' (35 students) as experimental group. Only the experimental group was treated with-content and a classical approach was espoused for the control group through the drone platform. The investigator clarified their queries, if any, raised by the scholars during the trial phase. Learners were handed a unanimous atmosphere for the trial. Soon after the trial was over, the post-test was conducted for all the 67 scholars.

## **Development of Econtent:**

E-content is developed with the integration of multimedia factors similar as textbook, audio, videotape, vitality and image with the help of powerpoint which will give multi-sensory experience to the learners.

The following are the different way to be espoused for the development of an e-content **Selection of Content:** 

Science involves explaining abstract generalities and frequently calls for visualization of bitsy objects/ organisms or gigantic processes. These challenges are met effectively by using plates, robustness and simulations on computers. Use of technology increases productivity so as to grease the educational process. Indeed, technology is used to give openings for scholars to apply the knowledge gained from active participation, disquisition and adaptation in the real world. Thus the selection of the content has to be done keeping the following points in mind, It must pave the way to give a multi-sensory experience to the scholars, Assess whether the pupil finds difficulty in understanding and learning the content through classical approach, insure the content is delicate to be explained through chalk and talk styles and insure the content which may bear virtual reality.

#### **Designing Econtent:**

In this study, the investigator decided to develop thee-content in HTML format grounded on the objects. At this stage, the sub motifs were formed and applicable images, robustness, and vids were collected.

The script was precisely planned and prepared clinging to the morals. The visual part of the script shows all shots that will explain the processes involved in the named content.

Editing was done with the help of experts. The video coverage of the topic, cell structure and microorganisms was done by the programmer. The e-content in HTML format, contains images, text, video and animations. The investigator prepared the video and animation to explain the concept according to the instructional objectives and carefully edited it. The investigator used Adobe Premiere software for video editing. After the editing the total video was validated by the experts.

#### **Result and discussion:**

Table 1: Showing mean score of control and experimental group in Pre and Post test

Group	N	Pre - test		<i>t</i> -value	Post - test		<i>t</i> -value
		Mean	SD	_	Mean	SD	
Control group	32	60	10	0.90	90	09	5.1
Experimental group	35	58	8	_	80	07	

It can be planted from Table 1, Mean difference from pre-test between control and experimental groups are 2 (60-58) and t- value is0.09 at the0.05 significance position with df is 65, t- value isn't significant. That means scholars in both control and experimental groups don't differ in their pretest performance which shows parity of both the groups in their entry as far as their performance in wisdom literacy was concerned.

It's heartening to note that the experimental group which was given treatment was one-content. Mean difference frompost-test between control and experimental groups is 10 (90-80) and t- value is 5.1 at the 0.05 significance position with df is 65. Since the value attained is lesser than the t- value in the specified table, the t- value attained is significant and respectable. From these results it's inferred that-content integration into wisdom literacy was plant effective.

scholars linked creativity and originality in the development of-content. It's heartening to note that all the scholars felt that the whole-content is easy to read with applicable use of fountain size, pellets and bold for headlines and heads.

In pastoral areas there's a lack of mobile vacuity so thise-content allows inflexibility in terms of time, place and pace of literacy. Use of multimedia in the content elicited good

feedback from the scholars. All the scholars revealed that the photos, plates, audio and videotape were applicable and created interest.

#### **Conclusion:**

With tutoring and literacy-with-content scholars get the proper knowledge of generalities and humans can integrate information from different sensitive stimulants into meaningful gestures<sup>7</sup>. This empirical study proved that-content enhances the achievement of the scholars. It can be used numerous times till scholars don't get the point. So Econtent is veritably useful for slow learners as well as for critical motifs which are veritably delicate for preceptors to explain via traditional styles. Eventually, Econtent is a veritably important tool of education.

#### References

- Text book: General Science class 7th retrieved form http://cart.ebalbharati.in/BalBooks/pdfs/703020012.pdf (Assessed on: 18.10.2020)
- K. E. Ayse and B. Giray. The effect of guided-inquiry instruction on 6th grade Turkish students' achievement, science process skills, and attitudes toward science. International Journal of Science Education. [Online]. retrieved form http://www.ingentaconnect.com/content/routledg/tsed/2014/0000003

#### 6/00000001/art00004

- Kothari Commission Report on Indian Education: A Critical Review retrieved form http://banipurbedcollege.org/e-learning-goutam-patra/kothari%20commission.pdf
- Guidline for development of e-content for school and teacher education retrieved from https://ciet.nic.in/upload/Guidelines\_eContent\_v1.pdf Assessed on: 21.10.2020)
- S. Amutha, "Empowerment of science teaching competence of B.Ed trainees in the rural areas through e-content with a metacognitive instructional design," Ph.D Dissertation, Department of Educational Technology, Bharathidasan University, India, 2010.
- S. Emanuel. (2010). Integration of Information Technology in Teaching Learning Process. Retrieved form http://www.educationinindia.net/download/ Shamsha-emanuel.pdf
- S. B. Benjamin, Taxonomy of Educational Objectives, Boston, MA: Allyn and Bacon, 1956.
- B. C. Buckley and C. J. Boulter, "Analysis of representations in model-based teaching and learning in science," in R. Paton et al., (eds.), Visual Representations and Interpretations, Springer.