

ATTITUDE OF HIGH SCHOOL STUDENTS TOWARDS MULTIMEDIA

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Abstract

The aim of the present study is to study the attitude of the high school students towards using multimedia in learning process. The study focusses on the high school student's attitude in learning science through the use of multimedia aided classroom. The samples selected from the population of high school students is about 70 using random sampling method. Survey method is adopted in collecting the data using the multimedia attitude scale (MAS). The instrument was constructed and standardized by undergoing the total internal correlation method and thus by discarding the items with lower correlation. Thus the initial draft of the MAS consists of 40 items and final draft of the tool consist of 35 items after removing 5 items with lower inter-correlation value and modifying 5 items which had r value between 0.02 to 0.26. The study revealed that there is a favorable attitude among the high school students towards the use of multimedia in learning process.

Key words- Attitude, Multimedia, Learning via Multimedia

I. Introduction

The rapid growth of technology has changed the classroom from teacher centered to technology centered education where prime importance is given to the learners. Multimedia enhanced learning environment is no doubted is developing as the need of every teacher and student in the classroom online and offline. The use of multimedia in classroom has proven to have many benefits such as catering the needs of the students with different learning style, assist in deeper understanding of the concepts, improves problem solving skills, access towards variety of information, exploring the different learning environment through internet.

Attitude is a positive; negative or mixed evaluation of an object that is expressed at some level of intensity. Attitudes involve a complex organization of evaluative beliefs, feelings, and tendencies toward certain actions. In order to use a technologically equipped learning platform one should have a favorable and positive attitude towards its usages. In the present study attitude of high school students towards the use of multimedia in learning is studied.

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Multimedia

“Multimedia is characterized by the presence of text, pictures, sound, animation and video; some or all of which are organized into some coherent program” (Phillips, 1997).

Multimedia is the integration of multiple forms of media into one. It includes different medias such as text, audio, video, graphic, animation, sounds etc. Educational software's that uses animation, text files and sound in it is termed as Multimedia Presentation. The term Multimedia approach to teaching learning may be referred to the use of appropriate and careful selected are carefully selected varieties of learning experiences which when presented to the learner through selected teaching strategies, will reinforce and strengthen one another in such a way that the learner will achieve predetermined objectives in an effective way. (Packiam, 1986)

Multimedia approach in teaching learning process carried out through a number of media by using them in such a planned and organized combination with reference to the available teaching learning situations as to have their utmost utilization for achieving he desired ends in a quiet effective way.

II. Review of related literature

Adedamola A. Kareena (2018) says that the learner learns in different mode of learning Students learning process via multimedia aided in higher academic performance. Weng, Funnei., et.al (2018) studied the attitude of the teachers towards the usage of the multimedia in teaching process. The study revealed that the use of technology enhanced environment was very useful, perceived and attitude towards using multimedia environment also created behavioral change in their preference towards the usage.

Kouseogulu, Pinar and Efendioglu, Akin (2015) studied the multimedia tool aided learning performance in complex biological concepts. The result concluded that multimedia enhanced learning environment is found to be more effective than the teacher centered learning environment, Student were found to be excelling in their meaningful learning, academic achievement, motivation etc.

Need for the study

Objectives

The present study aims at studying the following objectives,

1. The main objective of the present study is to study the level of attitude of high school students towards multimedia.
2. To find whether there is a significant attitudinal preference towards multimedia aided learning is existing between the students based on the demographic variables such as gender, locality, parental income, parental qualification, availability of internet, computer, accessibility to internet and computer knowledge

Hypothesis

The hypothesis of the study are as follows,

1. The level of attitude towards multimedia is found to be moderate among the high school students.
2. There is no significant difference exist in the attitude towards multimedia based on the demographic variables such as gender, locality, parental income, parental qualification, availability of internet, computer, accessibility to internet and computer knowledge.

III. Methodology

In the present study on high school student's attitude towards multimedia survey techniques was adopted in the present study. High school students are the population selected for the study. Sample for the study comprising of about 70 students were selected form the two school using the random sampling method.

Construction of multimedia attitude tool

Attitude scale was used to collect the information related to the attitude of students. Initial draft of the tool was prepared with 36 items. The items consist of positive and negative statements with five-point rating.

Item Analysis

Item analysis of the attitude scale was performed with 50 students. Data collected are scored and item analysis was performed. Total item correlation was performed and those items which has lower correlation less than 0.27 was discarded and the items with the higher correlation more than 0.27 were retained. As the result of item analysis through total correlation 4 items which had less correlation are discarded and the final draft was prepared. The instrument was constructed and standardized by undergoing the total internal correlation method and thus by discarding the items with lower correlation. Thus the initial draft of the MAS consists of 40 items and final draft of the tool consist of 35 items after removing 5 items with lower inter-correlation value and modifying 5 items which had r value between 0.02 to 0.26.

Statistical analysis

Table – 1.1

Attitude of Students towards Multimedia

N	Low		Moderate		High	
	Count	%	Count	%	Count	%

35	06	17.14	25	71.43	04	11.43
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From the above table, it can be seen that 17.14% of the sample have low level of attitude, 71.43% of sample have moderate attitude and 11.43% of sample have high attitude towards multimedia.

The findings clearly suggest that there is a notable difference exist between the higher and lower attitude level on attitude towards learning via multimedia, it is also seen that majority of the students belong to the moderate level group. Thus the investigator comes to the conclusion, that student's attitude level towards multimedia is moderate

Table – 1.2

Attitude of Students towards Multimedia based on demographic variables

	Group	N	Mean	Std. Deviation	t-value	Sig
Gender	Male	42	112.19	13.19	0.517	NS
	Female	28	110.64	8.97		
Locality	Rural	30	110.60	14.74	0.575	NS
	Urban	40	112.25	8.76		
Computer Availability	Yes	29	114.24	9.63	1.66	NS
	No	41	109.61	12.63		
Android phone availability	Yes	32	111.37	15.28	0.101	NS
	No	38	111.66	7.53		
Internet accessibility	Yes	29	111.10	15.78	0.255	NS
	No	41	111.83	7.68		
Basic Computer Knowledge	Yes	10	102.70	21.05	2.708*	S
	No	60	113	8.68		

From the above table (1.2) it could be concluded that the t value calculated (2.708) for the students based on the basic computer knowledge is found to be more than the table value 1.96 at 0.05 level of significance. There is a significant difference in the attitude towards multimedia based on the computer knowledge of students.

From the above table it could be concluded that there is no significant difference exist between the high school students in their attitude towards higher education based on gender, locality, computer availability, android phone usage, internet accessibility.

Thus the null hypothesis based on gender, locality, availability of computer, android phone and internet is accepted. The null hypothesis based on Basic Computer Knowledge is rejected and the alternate hypothesis is as follows,

There is significant difference in the attitude of high school students towards the multimedia based on the computer knowledge.

IV. Findings of the study

The finding the study are as follows,

- The above study concludes that there a favorable attitude exists predominantly among the high school students towards the multimedia usage in learning process.
- The high school students do not differ significantly in their attitude towards multimedia based on their gender, locality, computer availability, android phone usage, internet accessibility.
- There is significant difference in the attitude of high school students towards the multimedia based on the computer knowledge.

V. Conclusion and Recommendations

From the above study it is clear that the about 71 percent of the sample showed a favorable attitude towards learning through the use of multimedia in learning process. It was also found the computer knowledge plays at important role in the student attitude towards multimedia.

It can be suggested that the technology equipped classrooms should be increased in the schools as it increases the academic performance of the students. Students should give proper assistance to learn the computer skill from the early stage of schooling which helps them to explore the wider learning opportunities available in the internet. This also helps the students to have a positive attitude towards learning different subjects via computer and internet.

Reference

1. Best, J.W., & Kahn, J.V. (2006). *Research in Education (9th ed)*. New Delhi: Prentice Hall of India
2. Kothari, C.R. (2007). *Research Methodology Methods and Techniques*. New Age International Publishers, New-Delhi.
3. Ahmad, Jasim. (2009). *Teaching of biological sciences*. PHI Learning private limited. New Delhi. ISBN: 9788120337183.
4. Mangal, S.K. (2008). *Advanced Educational Psychology*. PHI Publication Limited. New Delhi