

Review of ReseaRch

ISSN: 2249-894X Impact Factor : 5.7631(UIF) Volume - 12 | Issue - 9 | June - 2023



EFFECT OF INTERACTIVE MEDIA ON THE SCHOLASTIC EXECUTION OF THE UNDERSTUDIES AT AUXILIARY SCHOOL LEVEL

Veena Singh¹ and Dr. Hemant Khandai² ¹Research Scholar, Barkatullah Vishwavidyalaya, Bhopal (M.P.) ²Research Supervisor, Head of Department, Department of Continuing Education and Extension, Barkatullah Vishwavidyalaya, Bhopal (M.P.).

ABSTRACT

Interactive media gear is important for ICT offices. The principal goals of the review were (I) to figure out Effect of media on the scholastic execution of the understudies at auxiliary level. (ii) to survey the utilization of mixed media during the class and their effect on the understudy scholarly execution. Sight and sound is an embodiment of creations. It consolidates countless realized advancements including text, sound, music, photography, and video and bundles them into something new and magnificent. For instance, a show including sound and video clasps would be viewed as a "mixed media show." V.V. Malagi (2013) said sight and sound consolidates



media components, for example, message, designs, video, movement and sound to address and pass on data. Instructive programming that includes livelinesss, sound, and text is designated "media programming." The presentation of media innovation into educating - growing experience not just gives a chance to reevaluate training methodologies to be embraced yet in addition requires such reexamination. It implies reexamination ought to address the chance for advancing the productivity and viability of educational experience using mixed media innovation.

KEYWORDS : Multimedia, Technology, Academic Performance.

INTRODUCTION

Multimedia is a strong technique of education and study within the framework of social work. The five popular technologies contributing to the education process are the narrative media, interactive media, communication media, adaptive media and productive media. There is a multiple interpretation of the idea of multimedia. All meanings agree that multimedia includes in an integrated way documents, images, animations, video and sound. Multimedia thus represents a consolidation of all the technological elements by combining, beside interactive environments, sound, images, video, drawings and texts with high quality. Reactive, proactive and reciprocal interactions exist in multimedia technology.

Multimedia is effective in education because of the interactivity, versatility and integration characteristics of multiple media that can promote learning, take into account differences between learners and increase motivation.

Chalk and its way of teaching, which entails too much speaking, lost their productivity and interest in the teaching of students. It was claimed from online free education that change in education had a significant effect on the field of education. Learning and teaching have been found affected by a variety of new technologies, such as student interactions and scheduled training, which allow space for exploitation that cannot be used in other mediums. Students will be able to learn new knowledge through multimedia facility and education.

Education technology is a research and ethical activity for the production, use and management of technical processes and tools suitable for learning facilitation and performance enhancement. It is described as a number of instruments that could be useful for student centered learning most simply and contentedly. The teachers are called to be 'Side Guides' instead of 'Sage on stage'.

Education technology is also known as 'learning technology'; throughout the teaching and learning cycle, it primarily includes use of technology. In this area, item technology not only requires the use of latest technologies and techniques such as tablets, interactive whiteboards and smartphones; internet, Wi-Fi, YouTube and other technologies also provide powerful and improved control of learning processes, delivery system of information, effective teaching and memory control.

IMPORTANCE OF MULTIMEDIA IN EDUCATION

The improvement of sight and sound advancements for learning offers new manners by which learning can occur in schools and the home. Empowering educators to approach sight and sound learning assets, which support helpful idea improvement, permits the instructors to zero in more on being a facilitator of learning while at the same time working with individual understudies. Expanding the utilization of sight and sound learning assets to the home addresses an instructive open door with the huge and undiscovered capacity to further develop understudy learning.

Interactive media gives ease and instructive offices. With sight and sound practices, new data can be advanced by understudies. Dwyer noticed that understudies can obtain abilities and data that can't be gotten to by and large, and that they have likewise the open door, via sight and sound method, to set up their own items (Dwyer, 1993). The reason for interactive media is to assist understudies with various abilities and styles of mastering could in this way be affirmed. He likewise underscores that sight and sound offers each understudy individual chance to work. It urges an understudy to zero in on the subject(s) that the person needs (Dwyer, 1993). The utilization of sight and sound has two ramifications for understudy training: The huge and straightforward access in schooling to text based and sound substance can make the examples greater and alluring, which can assist with upgrading the educators' capacity to self-produce the substance presented by the data innovation and correspondence innovation. In the evaluation of the English, The Public authority Educator Workstations (2004-2007), with a PC study, expanded their devices access capacities and saved chance to design and plan illustrations (Cunningham, 2006)

Numerous media uses can emphatically affect schooling when appropriately planned contrasted with customary scholarly accomplishments guidance (Akkoyunlu, 2005). Considering the realities gathered from writing, we can reason that Interactive media actuates the student effectively learn with assumptions, yet in addition contributes its own share and makes it more critical to learn science.

Instructors required mostly devices to assist students with better comprehension the subject they are contemplating. Empowering educators to get to computerized learning devices that lead to the formation of a significant thought, empowering the instructor to focus more on educating and empowering understudies exclusively to figure out this subject. Media advancement likewise assists with making learning more straightforward by permitting understudies to learn at school, yet additionally in the home. This will assist with fostering the acquiring abilities of understudies. It gives a vivid educating and opportunity for growth with the assistance of interactive media components, including text, designs, video, sound and activity. Likewise, mixed media can be seen in learning and preparing as genuine and shifted. Semerci (1999) brings up that the message is passed on by media and subsequently gives beneficiaries a rich learning climate. The subjects educated ought to be communicated so different techniques like webbased sound, video and movement can't legitimately be

shown in homerooms. It will guarantee a nearby association with truth and complete learning (Semerci, 1999). Mixed media likewise assists with illuminating outwardly and not outwardly composed content on information use, access, trade and transport Sight and sound additionally gives a recognizable, mind boggling, inancial and sensible instructive environment (Yünkül, 2014). The ascent in the scholastic outcome of understudies is likewise a mechanical guide to training.

The mixed media program works on the scholastic execution of understudies instead of regular educating. The utilization of media emphatically influences training when it is all around arranged regarding scholastic outcome conversely, with traditional learning (Akkoyunlu and Yılmaz, 2005). Sight and sound is comprised of computerized stages where sound, visual and liveliness media are conveyed to composed media, superior quality media and diagrams are set (Maddux et al., 2001).

Different peculiarities and cycles can be clearly addressed, complex material repeated and disconnected at different levels with the assistance of sight and sound. It assists with being honest and significant. Interactive media is especially helpful for understudies whose inspiration is poor and with low earlier capabilities (Singh, 2003).

Sight and sound is a computerized media framework that invigorates a few faculties on occasion. Educators have some control over the material and stream of data utilizing the intelligent plan. Sight and sound use in Pakistan is extremely restricted in light of multiple factors in homeroom educating. Those incorporate high consumptions for programming, gear and other related administrations and deficiency of instructors and qualified specialists on a PC premise. Another issue is the job of instructors with regards to their utilization.

For conversation, mixed media can be utilized. Propensities in refreshing and creating educational techniques are related with the development of intelligent showing techniques, the development of dynamic imaginative educating and the combination, as per their complementarity, of a productive and relevant blend of the strategies formal and casual, regular and new systems. Understudies will embrace the utilization of mixed media by profoundly qualified educators.

REVIEW OF RELATED LITERATURE

Patel. R. (2001) [11] directed an investigation of learning through PC helped learning material comparable to choose creation factors and contiguity and it was found the situation with the Quiet as far as creation variable and contiguity versus accomplishment has been very higher, expect on a couple of showing places where there was need to develop illustrations, method of show, and liveliness and so forth.

Dalwadi N. (2001) [4] concentrated on the improvement of PC helped guidance in science for the understudies of standard ninth. The investigation discovered that PC helped guidance (CAI) to be a successful individualized educational method for showing science and was found understudies as well as instructors have a positive assessment towards the PC helped guidance.

Suwana. R. (2004) directed a concentrate on viability of PC helped guidance for elementary school understudies: an exploratory review. The review uncovered that the PC helped guidance created by the analyst were fundamentally compelling in learning five subjects of Thai subjects to the understudies.

Anshu (2006) [1] concentrated on near adequacy of single medium and sight and sound on learning gains of ninth graders in science at various degree of scholastic accomplishment and knowledge. The outcome is that the sight and sound is just about as viable as conventional technique for helping in science to foster the information and grasping space of the understudies.

Mehra, Vandana (2007) [7] directed a concentrate on educator's demeanor towards utilization of PC for arising innovation execution in instructive organizations. The discoveries of the review uncovered that the educators had genuinely uplifting outlook towards PC utilizes however greater part of the instructors should be given preparation to involving PCs in educational settings.

STATEMENT OF THE PROBLEM

The present study was focus on finding out the impact of multimedia on the academic performance of the students.

RESEARCH OBJECTIVES

The main objectives of the study were:

- 1. To find out Impact of multimedia on the academic performance of the students at secondary level.
- 2. To assess the application of multimedia during the class and their impact on the student academic performance.

RESEARCH QUESTIONS

The research questions of the study were:

1. How does the multimedia impact secondary school students' academic performance?

2. When the application of multimedia and their impact on academic performance of students are assessed during the course.

Significance of the Study

The study will contribute to improving the teachers' potential to use computer courses for multi-day use. The study will charm the Government by applying various methods to boost the recital of the students. This type of study helps differentiate the various factors, making it likely that programs are being used. According to the following questions, the significance of topic analysis is:

RESEARCH METHODOLOGY

Methodology

The idea of the concentrate plainly demonstrates that the current examination depends on the homeroom instructing including both the instructor and the understudies. The exploratory technique was generally appropriate for the current examination and was taken on by the examiner. In the current review the free factors were strategies for educating, which were controlled by the examiner. For the exploratory gathering, the free factor was Mixed media where concerning the benchmark group; the autonomous variable was 'Conventional Technique.' Subordinate variable was scholarly accomplishment. The scores got by the students in the post test.

Research Design

Description and survey form were the nature of the analysis.

Sample of The Study

The sample of the study comprised of 20 government schools. Furthermore, the sample included 40 heads, 80 teachers and 80 students of secondary schools.

Sample Technique

Simple random sampling technique is used in this research because it guarantees that the sample chosen is illustrative of the population.

Research Instrument

The questionnaire was used as a research instrument. Survey is used as a research instrument. The main objective of the analysis is to find out the impact of multimedia on the students' academic performance at the secondary level. For validity purpose, the questionnaires were filled by 2 heads and 5 teachers and 5 students for improvement, refinement and for the purpose of acquiring accurate and correct data collection.

Data Collection

To collect data, personally visit to different schools and have collected the data from heads, teachers and students, so that careful data should be collected.

Data Analysis

Data obtained through questionnaire is presented, interpreted and analyzed in the light of the objectives of study in the application of frequency and percentages. In this way, statistical analysis percentages were applied for generalizing the significance of responses.

RESULT AND DISCUSSION

The study suggested the following according to the results which showed that multimedia was successful compared to conventional teaching methods: Multimedia's rapid development provides unprecedented incentives for students to participate. In the learning process, multimedia tools should be used carefully. For debate, multimedia can be used. Trends to upgrade the teaching approaches and expand them are subscribed to the enhancement of the multi-media teaching approach, the development of active and innovative teaching, the combination of formal and informal approaches in a multitude of educational strategies, modern and new approaches focused on complementarity, benefits and mutual benefit requirements. Students should be assisted by highly qualified teachers in the use of multimedia. They need to direct and build relevant and successful learning approaches for students during the education process. The use of educational multimedia, like the use of textbooks, fosters educational teaching techniques, where the role of teachers is not just a provider of knowledge but a guide.

Research demands involve a thorough analysis of the problems to find a workable solution. The main aim of the study is to know the impact of multimedia on the academic achievements of secondary school students. The survey was conducted to get the respondents' opinions on this. The nature of research is survey based as well as descriptive analysis. The methods of proportion are simple and viable to use for studying performance; boldness and features are given in the counters as follows.

FINDINGS

- 1. It was found that majority of heads, teachers and students favoured the use of multimedia in their schools to improve the school performance.
- 2. It was found that majority of heads, teacher and students shared that multimedia facility is not provided to students
- 3. Majority respondents were agreed that that multimedia is beneficial to students for their knowledge, skills and ability.
- 4. The majority of heads, teachers and students, 90%, 93% and 87% respectively, responded that multimedia classrooms made me feel more comfortable learning. While 10%, 7% and 13% were not in agreement with the statement.
- 5. Mostly heads, teachers, and students i.e. 90%, 90% and 85% respectively, replied that it would be good if students had a class in a multimedia course, while 10%, 10% and 15% disagreed with the assertion.
- 6. It was also found that government do not take interest in providing multimedia to schools.
- 7. It was also found that there is a dearth of IT teachers at government secondary schools.

CONCLUSION

The following conclusions have been drawn after examining the whole process. It is concluded that the main reason of not using multimedia is lack of resources.

- 1. The majority of the heads who had a master's degree, while the number of teachers had academic qualifications at the undergraduate level.
- 2. The results of the study found that there was a smaller number of BCS and MCS IT teachers.

- 3. The result of the study found that their monthly income was low, and it was difficult for them to bear their school costs.
- 4. Most of the heads, teachers and students have been found to be in support of enhancing school performance using multimedia in the classroom.
- 5. Most of the heads, teachers and students were affected by a shortage of multimedia facilities.
- 6. Most of the respondents accepted that students benefit from multimedia due to their knowledge, abilities and skills.
- 7. Most of the heads, teachers and students used to make me more confident learning with digital lessons. But they did not comply with the declaration.
- 8. Mostly the heads, teachers, and students were told that it would be good if the students had a multimedia class.
- 9. It was also found that the government is not interested in providing multimedia to schools.
- 10. It has also been found that IT teachers in government secondary schools are much less available.

REFERENCES

- 1. Albirini AA (2006) Teachers' attitude towards information communication technology. Journal of computers and education 47: 373-398.
- 2. Aloraini, S. (2005). Distant education. Riyadh: King Fahd's National library.
- 3. Altherr, S., Wagner, A., Eckert, B., & Jodl, H. J. (2004). Multimedia material for teaching physics (search, evaluation, and examples). European Journal of Physics, 25, 7-14.
- 4. Anshu. "Comparative effectiveness of single medium and multimedia on learning gains of 9th graders in Chemistry at different level of academic achievement and intelligence" Ph.D. Education, C.C.S. University, 2006.
- 5. Badarch, D. (2013). Information and communication technologies in education: monograph. Moscow: Institute of UNESCO on information technologies in education, RL: http://iite. unesco. org/pics/publications/ru/files/3214728. pd f (date of the application: 20.11. 2017).
- 6. Bagui, S. (1998). Reasons for increased learning using multimedia. Journal of educational multimedia and hypermedia, 7, 3-18.
- 7. Bruce, Levin. Roles for new technologies in language arts. The hand book for research on teaching the language, 2001.
- 8. Chiniwar S Prabha. Effectiveness of CAI among the 8th standard towards English grammar and their achievement in English grammar, Edutrack 2013; 13(1):37.
- 9. Cunningham GB (2006) The relationships among commitment to change, coping with change and turnover intention. European Journal of work and organizational psychology 15: 29-45.
- 10. Dalwadi N. "Development of computer assisted instruction in science for the students of standard 9th". M.S. University of Baroda as a part of the M.Ed. degree, 2001.
- 11. Daniels, S. (1995). Can Pre-school Education Affect Children's Achievement in Primary School?. Oxford Review of Education, 21(2), 163-178.
- 12. Dwyer, C. A. (1993). Innovation and reform: Examples from teacher assessment. Construction versus choice in cognitive measurement: Issues in constructed response, performance testing, and portfolio assessment, 265-289.
- 13. Fari SA (2010) Application of ICTs in Information Sharing Among Academics in Nigeria. UMYU Journal of Educational Research 2: 185-190.
- 14. Gay, L. R. (2009). Educational research: Competencies for analysis and application (5th ed.). Islamabad: National Book Foundation.
- 15. Inceday, N. (2018). The impact of using multimedia technologies on students' academic achievement in the Bakirköy Final College. International Journal of Humanities Social Sciences and Education (IJHSSE), 5(1), 40-47.
- 16. Junaidu, S. (2008). Effectiveness of multimedia in learning & teaching data structures online. Turkish Online Journal of Distance Education, 9(4), 97-107.

- 17. Kaur Puneetinder. Multimedia instructions on environmental awareness impact on elementary teacher training students, M. Phil. Education, CDLU.
- 18. Kulasekara Learner Perceptions on Instructional Design of Multimedia in Learning Abstract Concepts in Science at a Distance, Open Learning 2011; 26(2):113-126.
- Maddux, C., Cummings, R., Liu, L., & Newman, J. (2005). Aids and cautions in planning, developing, and delivering online instruction in higher education. Innovate: Journal of Online Education, 1(4), 6.
- 20. Malagi VV. A study on effectiveness of multimedia method of teaching on Achievement and attitude towards science among 8th standard students, Research analysis and evaluation, 2013, 47-49.
- 21. Malik, Ishan Z. Effects of Multimedia-Based Instructional Technology on African American Ninth Grade Students' Mastery of Algebra Concepts, Dissertation, University of Phoenix, 2011.
- 22. Mayer, R. E. (2005a). Cognitive theory of multimedia learning. In R. Mayer (Ed.), Cambridge handbook of multimedia learning (pp. 31-48). New York, N.Y.: Cambridge University Press.
- 23. Mayer, R. E. (2005b). Principles for managing essential processing multimedia learning: Segmenting, pre training, and modality principles. In R. E. Mayer (Ed.), Cambridge handbook of multimedia learning (pp. 169-182). New York: Cambridge University Press.
- 24. Mayer, R. E. (2005c). Introduction to multimedia learning. In R. Mayer (Ed.), Cambridge handbook of multimedia learning (pp. 1-16). New York, N.Y.: Cambridge University Press.
- 25. Mehra, Vandana. Teacher's Attitude towards Computer use Implications for emerging Technology Implementation in Educational Institutions, 2007.
- 26. Nimavathi V. Effectiveness of Multimedia for the development of scientific attitude, EDUTRACKS. 2013; 13(4):42-44.
- 27. Ololube NP (2007) The relationship between funding, ICT, selection processes, administration Planning and the standard of science teacher education in Nigeria. Asia-Pacific Forum on Science Learning and Teaching V: 8.
- 28. Patel. R. "A study of learning through computer assisted learning material in relation to select production variables and contiguity." M. S. University of Baroda as a part of the M.Ed. degree, 2001.
- 29. Phillips, R. (1997). The developer's handbook to interactive multimedia: A practical guide for educational applications. London: Kogan Page.
- 30. Rolfe, E. V., & Gray, D. (2011). Are multimedia resources effective in life science education? A metaanalysis. Bioscience Education, 18(3).
- 31. Sangai Garg. "Assessing the effectiveness of electronic media for B.Ed. student." Indian journal of open learning. 2009; 19:161.
- 32. Schulmeister, R. (2003). Taxonomy of multimedia component interactivity. A contribution to the current metadata debate. Studies in Communication Sciences. Studi di scienze della communicazione, 3(1), 61-80.
- 33. Semerci A (1999) Ögretim Amaçlı Bir Çoklu Ortam Yazılımı Gelistirilmesi, Uygulanmasıve Degerlendirilmesi (Yayınlanmamış Yüksek Lisans Tezi). Ankara Üniversitesi, Ankara.
- 34. Singh, V. K. (2003). Does multimedia treally improve learning effectiveness? Paper presented at The Asia Pacific Conference on Education: Re-envisioning Education: Innovation and Diversity. Retrieved from http://www.youblisher.com/p/34202

Annexures Analysis of Demographic Variable:

Table 1. Respondent of Heads Academic Qualification

Heads Academic	Respondents of Heads (n=40)	
Qualification	N	%
B.A / B. Sc.	08	20
M.A / M. Sc.	24	60
M. Phil	08	20

Above table reveals that B.A / B.Sc has 20% heads. The M.A / M.Sc. is 60% heads in their educational preconditions with the criteria and 20% have M. Phil.

Table 2. Respondent of Teacher Academic Qualification:

Teacher Academic	Respondents of Teachers (n) = 80	
	Respondents of Teachers (II) = 80	
Qualification	N	%
B.A / B. Science	48	60
M.A / M. Science	20	25
M. Phil	12	15

The above table indicates that 60% of teachers are B.A / B.Sc., 25% are M.A / M.Sc. In their education criteria, M. Phil has 15 percent.

Table 3. Numbers of Information Technology Teachers

Information Technology	Respondents of Teachers (n) =80	
Teachers	Number	(%)
B.CS	52	65%
M.CS	28	35%

Table indicates that the 65% of IT teacher have B.CS degree and 35% have M.CS degrees.

Table 4. Finding Monthly Income for Students Whose Children are Surveyed

Monthly Income for Students	Respondents of Student Family (n) =80	
Family	Number	(%)
Rs. 8000 – 9000	30	75
Rs. 9000 -10000	22	55
Rupees. 10000 to 12000	18	45
Rs. 12000 – 15000	06	15
Rs. 18000 – 24000	04	10

The table above shows that 75 percent of persons once-a-month pay is up to 8000, 55 % of people revenue is up to 9000, 45 % out of a hundred have up to 12000, 15 % out of a hundred have up to 15000 and 10 percent people monthly returns is overhead 24000. The countersign post that common of persons are deprived.

Parent Professional of	Respondents of Parent Professional (n) =80	
Students	Number	(%)
Overseas	40	50
Agriculture	20	25
Militaries	12	15
Government Servants	08	10

Table 5. Parent Professional

The table above shows that 50% of students are Abroad, 25% are farmers, 15% are in forces , 10% are administration retainers.

Level of Education of	Respondents of Education (n) =80	
Students	Number	(%)
Illiterate	20	25
Middle level	16	20
Secondary level	14	17
Intermediate level	12	15
Bachelor level	10	13
Master level	08	10

Table 6. Level of Education of Student

The above table shows that 25 % students are ignorant having no education 20 % students have middle education level, 17 % students have Secondary level, 15 % have intermediate level of education, 13% have Bachelors level and only 10 % have Masters level.

Veena Singh

Research Scholar, Barkatullah Vishwavidyalaya, Bhopal (M.P.)