IMPACT OF MULTIMEDIA ON SOCIETY

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ABSTRACT- Communication is our basic need and we are living in a world where the communication between people is increasing exponentially day by day. As we all know that pictures when delivered with words are much better than words alone. So, illustration or pictorial representation is a technique, if used correctly with written or spoken words gives more impact on the listener or viewer. Learning and communication through multiple channels are more effective in order to negotiate more effectively. Therefore, multiple channel information exchange or multimedia communication is the biggest need in our modern age? This research paper is intended to give an overview of multimedia in different fields in education, life, etc. the motive of this research paper is to discuss different aspect of multimedia and its impact in our lives.

Keywords: Education, Learning, Media, Multimedia, Social Media

INTRODUCTION:

2500 years ago, as the age of writing began, we stand today at the beginning of an age of new information and communication technologies which will have a lasting influence on our culture [1]. Since the man learned how to write, he discovered a new medium of communication. This new discovery lets him to negotiate more easily and impact fully. But as the time passed everything gets old and older or we can say that our expectations and requirements increased day by day and as expected, this writing technique is now not able to fulfill the increasing requirement of people. Now there is a need of new method for communication raised.

So illustration or use of multiple channels for communication replaced the old one technique. Illustration means to create a picture or represent your abstract idea in a pictorial way. This method opened a door to a new dimension in the field of communication. The man had just achieved the ability to use more than one channel at the same time for communication. This was the moment when the man becomes able to communicate through multiple channels and this was the beginning of the use of multimedia.

The literal meaning derives from the Roman word MULTUS, which means multiple or more than one and the 2^{nd} word medium simply means a channel for information exchange [1]. In terms of exchanging information, the word multimedia represent a multidimensional way of communication.

But what is the need of this technique now?

Why it is so important?

What is the reason behind this need?

These are the few questions, which will be answered in this paper.

As we know that the world in which we live in, is getting more and more complicated day by day. In the field of education, communication everything is getting more complex every day and not only this, the exploration rate is also increasing enormously. Conclusively, a thousand of complex concepts are explored every day. It means the volume of learning is increasing and it demands to increase its speed also. According to a survey, the half volume of world's complete medical knowledge becomes outdated after every ten years, and the overall scientists are producing 2000 pages of new data per minute [2]. The above example shows in order to let you imagine the increasing speed of learning. Now imagine the impact when the complexity is multiplied by its exploration speed. In older days the illustration technique was not considered important as compared to nowadays. At that time the concept of a particular field was not very complex, the simple plain text (text without pictures) sufficiently defines those simple concepts. But now we are digging into the core of information, which means an uncontrolled stream of information is flowing. To process this huge and increasing amount of information and to convert this data into meaningful knowledge we need to learn it and understand it very fast. Therefore the learning and communication through multimedia is essential for this information flood age.

IMPACT OF MULTIMEDIA:

The importance of multimedia can simply be understood by its numbers of domains. The most important domains of multimedia that have significant impact on our society are;

1- Impact of multimedia in education: In the field of e-learning:

E-learning is now become the most cost cutting and effective way of learning [3, 4]. In the field of learning from the Internet, multimedia play a very important role for communication. For example, in order to learn a computer program, we must have known how of its basics. The multimedia instruction which is in the form of website or tutorials can be considered as the most important medium of communication. The distance learning is the best scenario for this type of learning method. The e learning is fast as compared to conventional chalk and talk method. The instruction that is delivered through tutorials or websites, etc. contains at least two mediums. The visual part, which is video and the audio part, which is the human voice. These are the two parameters when used together, and then this method gives the same perhaps more impact as the teacher to the student teaching system does [5].

Learning new and abstract concepts:

Another domain, which is important for multimedia usage, is learning and exploring new and abstract concepts of science or medical science. If a teacher is able to imagine an abstract

object in his mind, he would be able to deliver his point to his students more effectively. But in the simple chalk and talk method, a sufficient amount of information is lost due to the lack of imagination, the teacher can imagine, but a student cannot, because the student had never seen that before, the information which is lost maybe it was important for future use. Here multimedia instruction shows its importance. A simple animation or cartoon can be very helpful to let the students understand these new concepts.

Before the use of this multi medium instruction method a sufficient amount of data is lost, but now this method has enhanced the impact on the learner's brain. As we know that, the human brain is more attracted towards visual data, the total amount of information that we perceive from our environment contains 90% of visual data, it means that 90% of our data comes from our eyes, and the rest of our senses are accumulated in the remaining 10%. Therefore, if we perceive our data through multiple mediums then our learning and exploration rate will definitely increase [6, 7].

2- Impact of multimedia on children:

This domain can be divided into two sub-fields, and the discussion goes around these two sub-domains.

The impact of multimedia on children under the age of 10:

This age of the child is also considered as the most learning age of life. The child absorbs almost everything he sees or listens from the environment. Therefore, multi medium instruction method, surely enhances the capability of a child's cognitive learning, reactions on the environment, understanding more complex concepts than before. But this method works in a positive way if and only if when the literature that is delivered to a child is positive. The sufficient amount of data which was lost before at the time of conveying it due to lack of imagination by the child, because the child has never seen the concept visually before. Now by the pictorial representation of the same concept, that sufficient amount of data does not lose and hence the overall amount of data that a child perceives is increased. This increased amount of data must be delivered in a way that the impact of information will be positive. If a child cannot handle this increased amount of data, then the amount of information should be controlled and leveled to learner's brain ability.

The positivity and negativity of this technique fully depend on the method of conveying it. If the learning ability is improving of a child, then it is a sign that the method is going in a positive way [8].

The impact of multimedia on teenagers:

This age can be considered as the character and personality building age of a human. The data, which is perceived by a human from his environment, is passed through a phase that is called analysis. This analysis is done on the basis of previous learning, past experiences, moral values and personal interests. So, the medium of instruction and the method of delivery should be more responsible, because at this age any change that occurs in human's personality would be permanent. The nature of information and number of mediums can highly alter the personality and behaviour.

If a human see and listen all the positive and motivational behaviour in the medium of information then he would work positively and will give a positive impact on society.

But if the method and the nature of information is negative, then the behaviour would be aggressive, inconsistent, unmotivated and all his/her ability, learning capacity everything will go to pot [8].

3- Role in media:

Electronic and print media:

The electronic media is the core field of multimedia and today media controls the way of thinking of people. Everybody of us has seen many of the program & article on different type of media. Most of the people would agree with that, our brain is more attracted towards a visual data rather than a simple text from the newspaper. There are many sub fields in electronic media, i.e. animations, movies, news, TV programs which contain both entertaining and informative literature. In this domain we see the real impact of multimedia. This information exchange system has a tremendous impact on the human brain. The human's brain is a database, which store the information and memories of the whole life. In which many of the memories and integrated knowledge are the result of media communication.

All the things which we see & listen form media slightly alters way of thinking. It gives a slight impact on the brain frequently. By the passage of time the man thinks what the media want from him. Today media has spread all over the world and its impact is less positive more negative.

Impact on social media:

A society forms when we interact with each other. Either it could be impersonal or distance interaction. The human behaviour is highly dependent on his way of thinking and the social behaviour is all what he/she sees and learns from the environment. Therefore, human brain very much dependent on perceives knowledge and past experiences in which most of them come from the media.

So now can you see the big picture?

It is the hierarchy in which each node is dependent on its parent node. The media controls the mind and use of multiple mediums are the best method to control the media, because when you receives only a few inputs at a particular time you slightly altered from it, but if you receive a lot of input at the same time then you will be highly altered from it [9].

RESULT:

The multimedia consists a lot of sub field and to cover up the entire sub field of it, in only one session is almost impossible. We see a lot of types of it, but we do not completely understand its impact and usage. Animation, movies, news, entertainment and information etc. we can't count it on our fingertips, we are surrounded by multimedia in our daily life. From a simple cartoon to a multimillion dollar movie, each and everything comes from multimedia in the media, and it also helpful for decision making to analyse the complex engineering by its materials [10]. The more you increase the number of mediums the higher will be the impact of your agenda. But still many of us don't accept multimedia as a complete and important field. Many people think multimedia as an unimportant field. They think multimedia should not be included in computer sciences. Many of our institutions do not give importance to the field of multimedia, they emphasize on learning and teaching programming, database administration and networking. Needless to say the multimedia originated from computer sciences.

Whether the people accept it or not as an important field, but it will always be the important part of computer science. But on the other hand, A few number of private institutes offering bachelor and master programs in multimedia, but these institutes are very much expensive and cannot affordable by everybody.

CONCLUSION:

The whole discussion is carried out in a way that to take an overview of some of the sub fields of multimedia and to show its importance in our life and education system. We would wind up our discussion of the most important thing, which we have learned about the field of multimedia.

The field of multimedia is not an unimportant field itself. It is a complete method and a complete tool to express your ideas and thoughts to someone in a better way. Multimedia has a significant impact on our society, and the use of multimedia makes it an instrument or a weapon.

REFERENCES:

- 1. Holzinger A., Multimedia Basics Volume 1: Technology, Firewall Media, pp-5.
- Masood S., The Hidden Truth End of Time Episode-1,www.youtube.com/watch?v=BfKs1C2 2VaU (last access by Sept, 2013)
- Benigno V., and Trentin G., "The evaluation of online courses", J. of Comp. Assisted Learning, 16, 250-269, (2000)
- Musa M. A., and Othman M. S., "Critical Success Factor in E-learning: An Examination of Technology and Student Factors", *Int. J. of Adv. in Engin. & Tech.*, 3(2), (2012)
- Puri G., "Critical Success Factors in E-learning– An Empirical Study", Int. J. of Multidiscip. Res., 2(1), (2012)

- Singh R., Sherjung, and Rani P., "Impact of multimedia in education: A modern approach", *National Conference on Science in Media SIM* 2012, December 3-4, YMCA University, Faridabad, India, (2012)
- Aksoy G, "Effect of Computer Animation Technique on Students' Comprehension of the Solar System and Beyond Unit in the Science and Technology Course", *Mevlana Int. J. of Education*, 3(1), 40-46, (2013)
- Sebastian W. T., "A study on the impact of computer animation on children in three cities of Kerala (Calicut, Cochin & Trivandrum)", *PhD thesis*, Calicut University, Kerala, India, (2011)
- Reeves T. C.," The impact of media and technology in schools", *Rapport de recherche préparé pour la Bertelsmann Foundation*, University of Georgia. Partnership for 21st Century Skills, (2003)
- Mbarika, V., "Using a Multi-media case study approach to communicate information technology concepts at graduate level – The impact of learning driven constructs", *J. of SMET Education*, 4(1), 1-9, (2003)