

# A Changing Contemplate: Bringing New Media Into School Education

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**Abstract** Mass media have changed tremendously in the past two decades especially in the field of communication. In developing countries like India, the standard of education is found to vary according to the place (rural, urban, city, etc) despite of starting a number of schools with qualified teachers. This may be due to the social background of parents, teachers, students and the access provided for using various teaching tools. With the advent of IT (Information Technology) through Internet, quality teaching could be facilitated using multimedia tools to remote places. Educating children using audio, video, graphics, text, color, animation, etc helps in two ways: clear explanation could be given on the subject, from the teachers end; and is interesting and easy to understand, from the students end. This study aims to study the access and usage of internet by school children and also examines how various forms of new media play a major role in their school education. The methodology used is Survey and in-depth interviews. Girl students are found to be the major internet users for the purpose of their education. Using internet does have both advantages and disadvantages. Schools must take initiative to create awareness about the pros & cons of accessing the internet. Teachers must encourage the students to use technology in education and technology should be made available to remote areas too, so that digital divide will be minimized.

**Keywords** School Education, Learning, New Media, Effectiveness, Internet

## 1. Introduction

Education is imparted to inculcate the thinking process. It helps in developing the ability for reasoning. Even today, traditional way of teaching is practiced in most of the remote villages in India. Most of the schools are using blackboards and chalk as their teaching aids. This kind of teaching is one way, and students are not finding it interesting as it's not interactive. They are mugging up their lessons and reproducing them on their exam papers. Both parents and teachers[1] are exerting pressure on them for performance. Because of their mental stress and pressure laid on them, they find it difficult to understand and they do not perform well in their exams.

Indian education system needs a serious revamping[2]. The concept of education is changing around the world with the development of technologies and India needs to make use of the advanced technology for revolutionizing the country's education and to change the traditional way of learning.

The change could be done by new media such as internet, as it is an ocean of knowledge. With the advent of new media[3], access to information anytime anywhere becomes possible. It is different from the traditional education system

and there is no need of classroom. It provides a strong communication to initiate a new effective model of education across India.

Children in the present generation are more focused towards their career and can take decisions without much confusion as they are not only educated by text books but also through internet. Because they are learning what is happening around them. E- learning is really becoming popular in the present scenario[4], now school students are getting an opportunity to learn online.

The use of information and communication technologies such as computer and internet, in education, makes teaching and learning process effective and interesting[5]. So this study is performed mainly to find the role of internet as an interactive media for school education. To support the present study several literature available were reviewed.

The effectiveness of game based learning among students was studied with an objective of finding the effectiveness of social networking among school children's in order to improve their knowledge and skills for life[6]. Safety and security issues involved with social networking. The school boards should give "thought policies" to students who are using social networking for education. He has emphasized on the need for students to know that learning is embedded in games and it is entertainment oriented. Social networking websites are highly used by students for higher education. He also concludes that the virtual world is going to be the future of education.

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The performance and process analysis with respect to children's internet searching on complex problems is discussed in a research study. According to the author, if the topic is vague then students are using internet to find answers for those topics and they felt better, if the topic is too narrow they find it difficult[7]. They want to find answers by navigating the web pages than using the exact word of the topic given to them; they don't prefer to search in an analytical manner and are looking for wider and diverse information.

An article on using multimedia to enhance problem based learning in elementary school confirms that multimedia enhances computer based Problem Based Learning (PBL)[8].

Interactive videoconferencing from various locations is found to increase the learning opportunities[9]. Motivation among students is increased. Instructor and student communication are possible through IVC. It is useful medium for teaching.

Children's online time has been increased[10]. Each online activity is different and they require distinct analysis. Computer use as changed the balance of cognitive skills from verbal to visual. Web site navigation for books and magazine, contain text and images that require interpretation so they become interactive.

A research with the slum children in New Delhi says that urban children get computer skills without the help of adults[11]. Language or education does not make any difference while using the technology; they are understanding and using the technology fluently without any help.

A case study in which there are sixty participants, five groups and twelve participants in each group and finally they divided them into two groups; for one group they have given text books for another they gave laptop computers; group two who are using laptop showed better results, e-text books accepted and motivated group participation, showed average result in group test and the results are in individual test[12].

The website mathguru.com is for vi to xii standard students. Tutorials are in audio and video format and the complex problems are explained in step by step manner. Usually mathguru.com is designed for CBSE students but it helps the students from other boards as well[13].

Class on the web is another website for Indian school education. It has got unlimited features such as virtual text books, virtual labs, work sheets, getsetgo, search animation and personal tutor[14].

- Virtual text book: It is a text book with animation explaining different concepts in lessons.

- Getsetgo: It is store house of question and answers in a lesson.

- Search Animation: Instant access to animation of any subject.

- Personal Tutor: Unlimited access to clarify subject related queries which may be sent to the Personal Tutor round the clock for which you will receive a response within 24 hours.

Wiziq - education through internet[15] will change the

way we study the subject. There is a great demand for Indian teachers abroad. Indian teachers are teaching languages for foreign students through virtual classroom by two way audio, text, chat, ppt, pdf and video tutorial, wherein we can replay at any time of our convenience.

## 2. Objectives of the Study

- To study the access and usage of internet by 8<sup>th</sup> standard students.
- To find the effective role of new media in their school education.

### 2.1. Methodology

This is a qualitative as well as quantitative research as survey and expert interview were chosen as the research methods. The tool used for data collection is self administered questionnaire. The survey was taken from the school students in Chennai studying 8<sup>th</sup> standard. Purposive sampling technique was used in selected the samples. Age of the students of standard 8<sup>th</sup> varies between 12 and 14 years. It is in this phase of their life, new technologies are been introduced to them and they try to make use of them for varied purposes. Hence students who fall under this age group were selected for the study. The sample size is 100.

Expert interviews were conducted with Ms. Aparna S. Gharpure, child psychologist, Chennai, Mr. Vinoth, web designer & game developer, Info tech, Chennai, and parents of children studying 8<sup>th</sup> standard.

### 2.2. The Study

The Survey was conducted with 100 people in Chennai to find the role of internet in school education. The following is the graphical presentation of data collected from the questionnaires. When asked about the access to computers, whether they have computers at home or not, the response was the following:

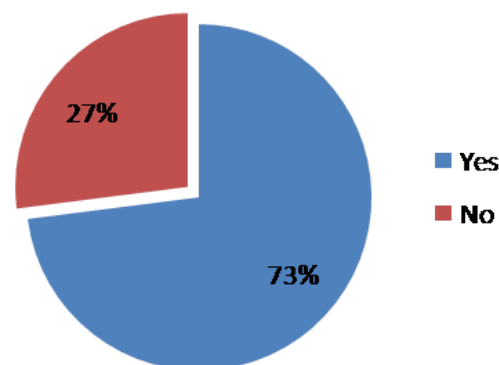


Figure 1. Computer possession

73% of the students have computer at home and 27 % they don't have computer at home. Regarding the accessibility to internet connection, half of them have and half of them do not have the access. When asked about the usage of internet, the response was the following:

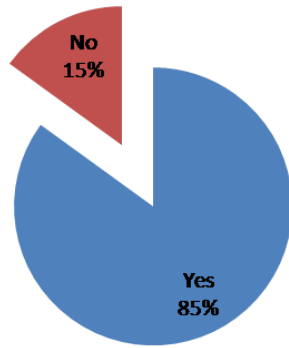


Figure 2. Internet usage

Also, 85% of them use internet and 15% of them do not use internet. Among the 85% of the respondents who use internet, 47% of them use it for education purpose; 12% of them use it to send mails and for chatting; 23% of them use it for playing games; 7% for establishing social networks and 7% for downloading purposes.

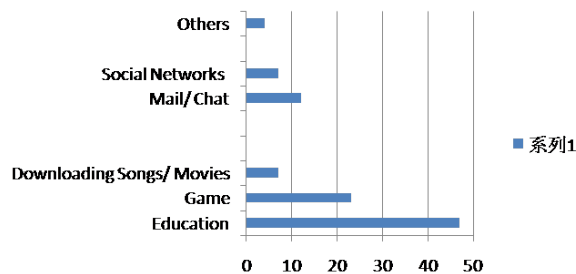


Figure 3. Purpose of Using Internet

When asked about the place where they access internet, 37% of them access it at their own house; 33% of them in the browsing centres; 15% of them in their friend's place and 11% of them in their school as shown in the figure below.

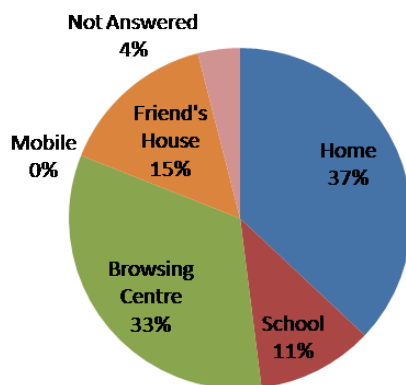


Figure 4. Internet access place

Regarding the content they look for in a website, 44% of them look for some kind of an information or the other; 32% of them look for education related content; 12% of them look for entertainment aspects and 3% of them look for social content.

Majority of the respondents (43%) use internet for school related work only once a week. 24% of them use internet for

school work rarely; 13% of them daily and 13% of them at least once a month. When asked them about the hours spent on internet per day, 37% of them use it for one hour; 25% of them use it for two to three hours and 24% of them use it for less than an hour as shown in the figure below.



Figure 5. Hours Spent On Internet Per Day

Majority of the respondents started using internet at the age group between 10 and 13 years as shown in the figure below.



Figure 6. First Internet Experience

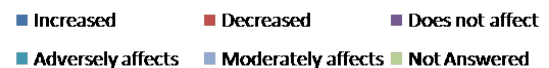


Figure 7. Time Spent On Book Reading

For the question, whether the time spent on book reading is affected by internet, majority of the respondents (54%) said no, as shown in the figure below.

37% of the respondents use internet at home for Education related work; 24% of them for playing games; 11% of them for entertainment aspects and 10% of them for movies and songs.

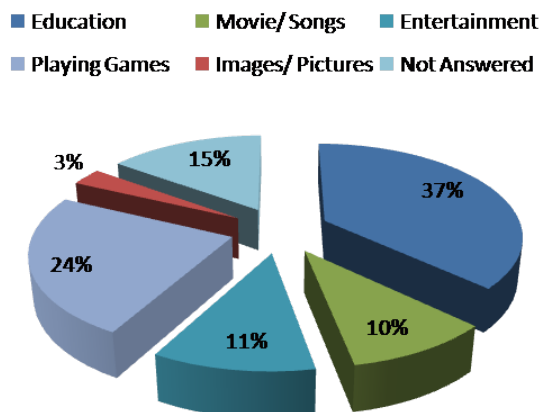


Figure 8. Purpose Of Using Internet At Home

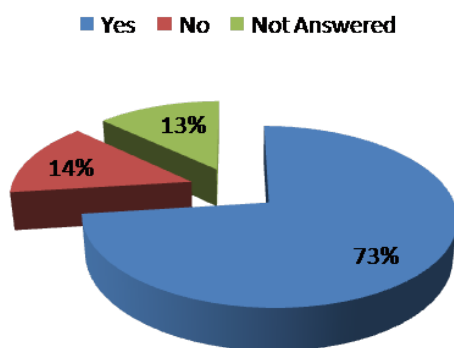


Figure 9. Parents Allow Children To Use Internet

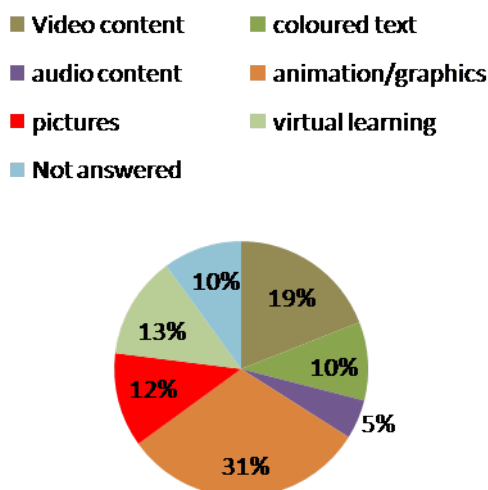


Figure 10. Medium That Attracts You

When asked them whether its usage affects your interaction with family members and friends, 70% of them said no. Also, 71% of them said that the content in Internet is helpful for their school education. When asked them whether the parents allow them to use internet, 73% of them said yes.

Only 14% of them were not allowed as shown in the figure below.

From the multimedia content over the internet, 31% the respondents feel that the content incorporated with graphics and animation gives them a good understanding. 19% of them say that the video content makes them to understand better. Almost equal percentage goes to coloured text, pictures and virtual learning in terms of having a better understanding over the subject. Only 5% of the respondents feel audio content gives them a good understanding as shown in the figure below.

### 3. Findings

From the study, it is seen that 59% of the students prefer internet to search for specific topics. 71% parents watch their children while they are using internet and nearly 34% of the parents allow their children to use internet for only one hour. 59% of the students like it, and want their parents to guide them when they are using internet.

From the survey, majority of the respondents have computer and equal number of the respondents have internet connection in home. They are using it mainly for education purpose. In certain situation education through internet is affected by the socio economic status and the educational background of the parents.

Teaching method is different from the traditional method of learning, as it uses multimedia. It gives more information that is easily available and we can use it when ever we want it. Education through internet is easy to learn, understandable and doubts can be clarified immediately. It is not possible to refer a drawing or a sum in math that is written in a blackboard every time because once it is rubbed we can't able to refer it. Carrying books to schools can be avoided.

"Learning depends on how the brain process. Traditional method of teaching is one way and the students are not receiving it properly because sometimes the teaching is not reached to every students so there is a gap that is developing between the teacher and the student, in order to overcome this we should include technology in school education basically internet. The teacher should be an expert and know the positives and negatives of internet while using it. So then only they can teach the students in the right way" says Ms. Aparna S. Gharpure, Child Psychologist in Chennai. "Children are getting the virtual view of what they are learning through interactive white boards. Visualisation about the topics related to science and other subjects is increased among students. Complex problems could be made easy because of interactivity", she adds.

"As the content is related to children, design should be attractive and colours should be selected properly. The subjects can be embedded in the form of game like puzzles and the main importance is given to the content" says Mr. Vinoth, Web Designer & Game Developer of Infotech in Chennai.

One of the parent of a child studying 8<sup>th</sup> grade said that

online tuitions help them to gain knowledge. It helps them to get more information about the topic rather than books. Also, the idea of creativity is increased among students.

Thus complex problems could be made easy because of interactivity. The teacher should be an expert and know the positives and negatives of internet while using it.

While designing a website we have keep in mind about the content and the design. Design should be done in an attractive manner. Design is given more importance in an educational website. The idea of creativity is increased among students.

## 4. Conclusions

From the survey results, it is found that, girls are the highest users of internet than boys, they are using mainly for education purpose. Most of them need information when they are searching. Most of them are accessing internet in home and some of them are accessing in friends house, but they are not using mobile internet service for searching. Some students are using internet every day for general searching. They give more preference for education when they use internet at home. Time spent on book reading is not affected by internet.

Highly used search engine is Google. Even today teachers use blackboard and chalk for teaching in some places. In today's world most of the students are using internet for searching on specific topic. Online tuitions and tutorials are helpful to children, because there is someone to guide them. In the online tutorials, videos and animation plays a major in educating students.

Technology should be made available to remote areas too, so digital divide will be minimized. Computer literacy is becoming almost as important as basic reading literacy. School must take initiative to create awareness about the pros & cons of accessing the internet. So that students could able to learn about it and use it in their day to day life. Teachers must encourage the students to use technology in education.

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