

A study of YouTube as an effective educational tool

Dr Trishu Sharma¹, Shruti Sharma²,

¹Professor & Director, University Institute of Media Studies, Chandigarh University, Mohali, Punjab, India.

²Student, University Institute of Media Studies, Chandigarh University, Mohali, Punjab, India.

ABSTRACT

Social media has deeply penetrated into spaces of our lives. Our every little necessity is now just a click away which has made our lives comparatively much easier and convenient. Social media provides a new dimension to artists and learned people to share their art and knowledge. It covers update and knowledge of everything like health, politics, discovery, invention, science, mathematics and education. Since education is the sector which is largely influenced by social media tools, this research focuses on the how social media tools are harnessing education and learning process particularly 'YouTube'. It is an inevitable fact that human brain processes images 60,000 times faster than text and the 90% of information transmitted to brain is visual. YouTube has proved to be an effective educational tool as it connects academicians, educators and researchers from all over the world and provide interesting, knowledgeable and engaging content which has added a new dimension to education by making it innovative as well as creative. The research method will be a study of focus groups divided in four categories i.e. elementary students, High school students, Graduation and academicians and educators.

Keywords: *YouTube and education, New trends in education, multimedia learning, social media and education*

1. INTRODUCTION

YouTube was invented in 2005 and purchased by Google in 2006. It now works under the Google as one of its subsidiaries. It is a video sharing service where people across the world can upload, like, share and comment a video. On YouTube a person can discover things of his choice like songs, comedy, cooking, news, science, astrology, home décor, study material and life hacks etc. One can subscribe celebrity or vlogger of their choice and get connected to him by getting updates. YouTube has billions of user and minimum 300 hours of footage is uploaded every minute. [1]

YouTube and education:

Black board and chalks who used to rule the education system has successfully handed over the charge to smart learning techniques. In the modern world of information the tradition learning methods have failed to survive and with this YouTube emerged as a good digitised pedagogical tool to meet the demands of generation Z. YouTube has wide variety of content from entertainment to education. [2] Its audio visual quality has made it an effective educational tool. Since many educators, resource people and academicians have their own

channels where they upload videos on topics related to study and 'how-to' videos to make education for interesting and engaging. Mere reading from text books and then remembering it is not a good idea, without knowing the practical application of any concept it will be injustice with knowledge imparting system. Students spend their school and college life by memorising the concepts by rote learning techniques but YouTube has somehow managed to bring it to an end. YouTube with its innovative style of visual learning has made education easy and conceptual. It is also used in classroom because of its potential learning benefits. From preschool children's poems, rhymes and drawing to the high-school children's digestive system, political science and geometry are all available on YouTube. [3] Also the engineering subjects like working of motors and IIT lessons to all topics of arts are covered in YouTube Education. It has facilitated the learning process by adding a new dimension to the existing system. Sometimes we are unable to understand things from one teacher or vlogger, in this case YouTube gives us pocket full option of educators.

With the help of advanced technology teachers have made class room learning more intriguing. Video lecture to supplement the words of teacher for better understanding in classroom is one of the plus factor of YouTube. [4] The most appreciated and viewed educational channels on YouTube are TED-Ed, Smarter Every Day, Vsauce, Asap SCIENCE, National Geographic| Science, exploration and adventure.

2. REVIEW OF LITERATURE

1. In an article 'IBL in higher education: A literature review' [5] the YouTube is providing new platforms and options to change and transform learning and faculty focused approach and bringing out collaborative modern teaching learning methods. It has replaced the traditional education method by the modern teaching skills.
2. In an article 'YouTube a valuable educational tool, not just cat videos'[6] stated that schools and universities are integrating YouTube learning into classroom. Also the content produced is teachers/ Lecturers using webcam, Apart from this after YouTube realised the need of on demand education. It launched an easy to navigate playlist 'YouTube Edu' which partnered with 300 universities in the same year.
3. In a research paper 'YouTube in the classroom: Helpful tips and student perceptions' [7] stated that people have a positive perception of using YouTube for education. It stimulates differentiated approach for learning new material. YouTube has a novelistic way to convey classroom learning content through real life situations and examples. With the advancement technology and time, YouTube has come up as a unique teaching pedagogy which to promote scientific concepts. YouTube is a perfect education tool to bring diversity of content in classroom.
4. According to a research 'Video as a new teaching tool to increase student motivation' conducted by Edna Bravo, Beatriz Amante and Pep Simo, video has positive impact on student's perception on learning. Also the concept of audio/video teaching promotes the dynamics in class. This technology raised the level of learners who run away from big paragraphs and prefer short videos.[8]

3. OBJECTIVES

The objective behind the research is to understand

- How YouTube is harnessing the education and classroom teaching.
- Does it really prove to be beneficial?
- Which category among the 4 feel it is very beneficial as an educational tool.

4. METHODOLOGY

The qualitative research method will be used by dividing the participants in 4 categories i.e. Elementary, High School, Graduation and Academician and educators. Based on interviews A sample size of 50 participants in each category will be studied. After studying all the 4 categories individually a collective conclusion will be drawn.

Data analysis and findings

The focused groups were interviewed and the data analysis is as follows:

Elementary (Class 1 to 8)



- Students in many schools have the facility of digicom boards, a system in which audio/ video lectures on topics from syllabus are shown. These boards are used in understanding difficult and complicated scientific and mathematic concept.
- Other than this children like to study using innovative, engaging and conceptually strong methods of education.
- They feel learning and retaining subjects is difficult but once they see the entire process, it makes the learning process authentic.
- We get to know how things actually get executed.

High School (Class 9 to 12)

In India typically classified as ‘CBSE/ ICSE board year’, these classes have a lots of pressure of scoring good marks. 9th and 10th result decides, where to go in 11th and 12th. Later 12th result declares in which field you can pursue your degree. So these classes have comparatively complex concepts in every subjects.

- Students approach prestigious institutes like Aakash, Fiiitjee, Allen, Helix etc. These institutes besides teaching also provide online study material to students via Aakash itutor.
- For student in medical stream, YouTube is a boon as it has made learning medical procedure so easy and lively. Complicated theoretic transplantation of hearts, working of body system, various surgeries can be understood in video lessons easily.

- For non-medical students, understanding chapters like carbon and compounds, unit vectors had become easy with the help of illustrative drawings and shapes. You can actually visualise how rectangles become two triangles.
- For commerce students it is good for understanding practical use and organisation of finance and business.
- For arts student, memorising history, geography and political science terms has become easy.

Graduation:

- Students in graduation use YouTube for developing technology and making it advance.
- They also use it to learn automobile designing and making working models like autocars, working motor, dispensers etc.
- The aspirants of government jobs use it, for learning techniques to solve tricky questions in exams. Easy do tricks for reasoning and shortcuts to calculations are provided by educators on YouTube. Also coaching institutes for the same upload video lectures like Gyanm, Chanakya and Brain Tree India.
- Students also use YouTube as a bucket full of Current Affairs and General Knowledge. Now a days, almost every news channel or newspaper has its own YouTube channel where they upload news every day and also debate shows.[7]

Academicians and Educators:

- The Academicians use YouTube to bring diversity of content in classroom and making it a fun experience.
- There are few students in class who concentrate less when teacher is giving a lecture but, pay more attention to visually stimulating activities.
- Sometimes there are complex theories or topics, YouTube gives us an alternative pedagogic tool to teach the students and obtain effective results.
- There are certain topics in which teacher needs to give a reference or show something practically, YouTube helps them do that for better conceptual understanding.
- Visual content adds weight to the words of teacher in class and acts like supplement to the traditional teaching method by boosting the impact of knowledge deliverance.
- Educators who are physically handicapped or cannot move out of house due to any reason can start a teaching channel on YouTube, where they can upload their video content and also earn.

5. CONCLUSION

The YouTube has a great impact on education and learning experience of the students. It helps adding a new innovative and interesting dimension in the traditional education system. From students to teachers, YouTube has made the learning and teaching method easy. The topics with hard concepts and complex theories become fun with audio/ visual content. The educators from across the world are uploading content on YouTube which gives students an opportunity to learn the world view about the topic. The teaching, concepts, ideas, information from across the world is available on the world. With YouTube you are not limited up to the knowledge of one teacher or one way of teaching but, you have several options in regard to the educators and ways of teaching. The old way of rote learning is replaced by conceptual and visual learning. This pedagogic method engages students and helps them to memorising things by knowing how actually anything happens.

6. REFERENCE:

- [1] S. June, A. Yaacob, and Y. K. Kheng, "Assessing the use of youtube videos and interactive activities as a critical thinking stimulator for tertiary students: An action research," *Int. Educ. Stud.*, vol. 7, no. 8, pp. 56–67, 2014, doi: 10.5539/ies.v7n8p56.
- [2] Othman, "YouTube as engagement and learning tool in higher education," *J. Fundam. Appl. Sci.*, vol. 10, 2018.
- [3] J. Qiao, "Make Youtube a learning tool," *Adoloscent Learn. Urban Context*, 2016, [Online]. Available: <https://wp.nyu.edu/urbanyouthnyu/2016/10/25/make-youtube-a-learning-tool/>.
- [4] T. Sharma, "Women and media: An analysis of role of women journalist in Indian media," *Int. J. Innov. Technol. Explor. Eng.*, vol. 8, no. 9 Special Issue 3, 2019, doi: 10.35940/ijitee.I3307.0789S319.
- [5] P. Yadav, Rajan & Tiruwa, Anurag & Suri, "No Title," *J. Int. Educ. Bus.*, vol. 10, 2017, doi: 10.1108/JIEB-10-2016-0035.
- [6] M. Lynch, "YOUTUBE A VALUABLE EDUCATIONAL TOOL, NOT JUST CAT VIDEOS," *Online*, 2016. <https://www.thetechadvocate.org/youtube-valuable-educational-tool-not-just-cat-videos/>.
- [7] B. K. B. Fleck, L. M. Beckman, J. L. Sterns, and H. D. Hussey, "YouTube in the Classroom: Helpful Tips and Student Perceptions," *J. Eff. Teach.*, vol. 14, no. 3, pp. 21–37, 2014.
- [8] E. Bravo, B. Amante, P. Simo, M. Enache, and V. Fernandez, "Video as a new teaching tool to increase student motivation," *2011 IEEE Glob. Eng. Educ. Conf. EDUCON 2011*, pp. 638–642, 2011, doi: 10.1109/EDUCON.2011.5773205.