

Innovate – Social Media and Open Source in Higher Education

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Abstract

This paper initiates advanced learning and teaching through the Social media tools such as Face book, Twitter, YouTube, Blogs, Google+, Geogebra and etc. This paper describes how it works, where it is going, and why it matters in an emerging country-India particularly. It also supports the teaching and learning community in developing ways to gather evidence of the impact of social media tools innovations and current practices on learning. There is already evidence that teachers are using social media as part of teaching strategies, with the aim of encouraging students to view social networks as less of a pleasurable distraction. With this paper we are trying to integrate social media into the classroom, and focuses on the need to carefully review existing teaching strategies and understandings of social media before making changes. It is a scoping point to reach quality of education and get better results in India.

Keywords: *Face book, YouTube, Twitter, Wiki, Blogs, Learners TV, Khan Academy, Geogebra and iTunes.*

1. Introduction

Social media are online tools and free of cost platform which allows users to create interactions among people in which they share and exchange information and ideas in virtual communities and networks. Actually, Social media tools save time when used effectively. Now the young generation is internet generation, they can access limitless information from fundamental and

related Information. Social Media offer a wide range of benefits for students and lecturers: a potentially cheap and efficient way to link students with their lecturer and vice versa.

The chance to monitor real-time progress on problems and solutions, assignments and projects etc. and the ability to connect anyone from remote parts of the world to share ideas, experience an effective teaching practice. In 2013, India reached the third largest internet user - with China and the US taking the first two, respectively. It is absolutely known that with the present education system in India having second highest population in the world internet plays an important role. According to the survey from UGC (University Grant Commission) in India there are 634 award degree colleges and the growth of student enrolment in 2010-11 it reached to 70, 49,000 in Higher Education. It is observed 337 and 117 Noble Prize winners from United States and United Kingdom have very little populations and India there are only 7. In the *QS Ranking* 2012/2013, No University place top 200 from India. For example the most prestigious universities from India, IIT Delhi (212)

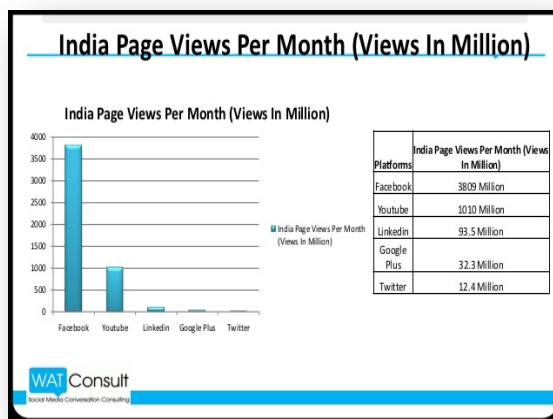


Figure 1 .WAT Consultant Report 2012 December.

From a report from daze info 2013 January, Social media users in India under the age of 35 years are the most active on social networking pages compared to people aged 36 to 49 years. Around 85% of people, less than 35 years of age, claimed they regularly check social media pages – classified into 40% and 45% categories of “Strongly Agree” and “Somewhat Agree” respectively. Female internet users in India are apparently more liberal towards Social media pages as 82% of them claim they check Social media pages regularly against 79% Male respondents. According to the Boston Business Journals May - 2012:Harvard was ranked No. 1 in part thanks to its Harvard Social Media Dashboard; Also ranking in the top 25 from Massachusetts is Emerson College (No. 13), Berkley College of Music (No. 22) and MIT (No.25).

2. Material and Method

A Survey conducted on Social media and open source, we have listed below few top social media and Open source tools which are mostly using by the students and lecturers

1. Face book(Lore)-Social network educational tool
2. Twitter-micro sharing site
3. Wiki-Collaborative encyclopedia
4. Blogs-Blogging tool
5. Learners TV-Free Online Video Lecture Courses on various subjects
6. iTunes and iTunesU-Harvard on iTunes U allows the University to distribute world-class educational content to the world at large
7. YouTubeEDU-Brings learners and educators together in a global video classroom.
8. Skype-Instant Messaging/VoIP Tool
9. (Edu) Glogster - Interactive poster tool
10. Edmodo - Edu social networking site
11. Voicethread - Collaborative slideshow
12. Animoto - Videos from images
13. Google Earth - Virtual globe
14. Voki- Speaking avatar creator
15. Geogebra - Maths software for schools
16. Wallwisher - Online noticeboard
17. Storybird - Collaborative storytelling
18. Khan Academy - Learning platform
19. Quizlet - Flash card and study games website
20. TeacherTube - Edu video sharing site

Recently we conducted a survey on social media tools and open source in various engineering colleges in India. The survey consisting of two points showing Figure2 and Figure 3

- 1) Main reason driving social media adoption in India
- 2) Students familiarity with social media concept

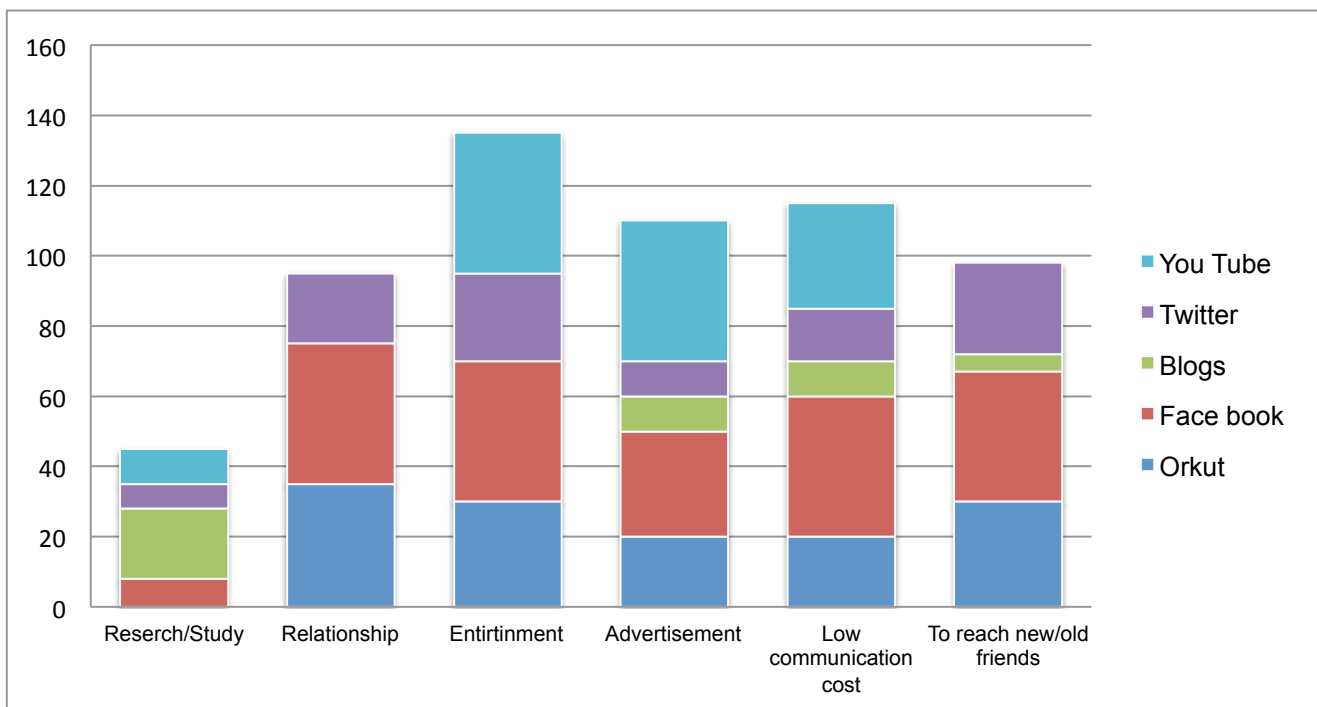


Figure 2. Main Reason driving social media adoption in India

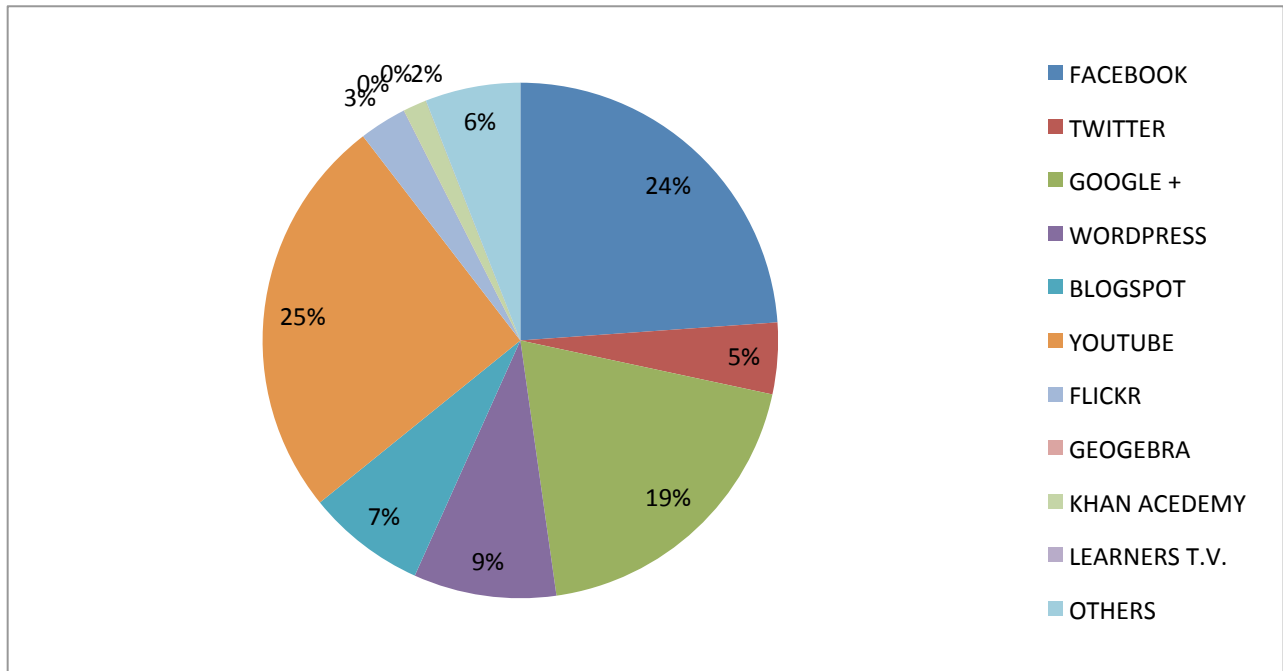


Figure 3. Students familiarity with social media concept

2.1. Face book

Based on the above Figure 1, Face book could be a wonderful tool for building a sustainable and life-long learning social network and building an extended community learning environment. Most of the students already have Face book accounts with their personal profiles setup. On their Face book wall, they have all sorts of information, including photos about themselves and their networking group. The biggest benefit of using Face book as a community learning tool as opposed to using communication tools in CMS is the continuity after the academic semester/school is over. Students will be able to keep in touch with classmates and even become connected with friend's friends. There are 61,499,220 Face book users in the India, which makes it 3 in the ranking of all Face book statistics by Country.

2.2 Lore

There's a new development with another educational social network. India is now in the top second using lore after USA. Taking a page from the early stages of Facebook, Lore is looking to change how teachers and students communicate. Lore wants to be a mixture of Edmodo, Blackboard, Facebook, Twitter, and Google+. Many people are going to flock to Lore in the coming months as it offers a wide and streamlined interface coupled with real academic tools

that could replace ones you're already using. Not bad for the price of free.
<http://lore.com/prasad.enagandula>

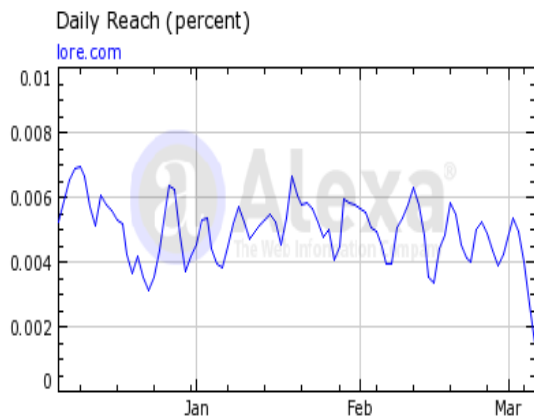


Figure 4. Lore daily visitors in percentage

Table 1. Country wise Lore Views

	United States	37.7
	India	11.1
	United Kingdom	5.9
	Brazil	3.5
	Canada	3.2
	Australia	2.7
	Japan	2.6
	Ghana	2.5
	Turkey	2.1
	Spain	1.8

2.3 Twitter

According to Wikipedia, Twitter is an online social media source and networking service and micro blogging service that enables its users to send and read text-based messages of up to 140 characters, known as "tweets". With this we can compose and share a tweet. Which includes may be URL in which we that you have created notes for example if we type "Prasad enagandula" in twitter search engine we can get the following with URL Prasad enagandula @eprasadsai M1@education .In this way student can access the material notes they can give reply .

2.4 Wikipedia

Wikipedia is another most used widely social media tool which allows its users to add, modify, or delete its content via a web browser usually using a simplified markup language or a rich-text editor. Wiki is one mostly high used tool among students in study .It results the student requirement very fundamental and gives required related information its application where students needs with respective language. It explains the content in 114 languages. We also know and remind that women tend to be more active in social networks than men and social networks are growing rapidly in priority countries such as India and Brazil.

2.5 Blogs

It allows users to create their own blog with beautiful customized template at free of cost. Free weblog publishing tool from Google, for sharing text, photos and video. In our college we have created a blog named pmat07.blogspot.in with the help of Google Docs or Drives and little bit of HTML knowledge. In this we share and publish notes on the website. So, every student can access the material and then can also leave the message. Start a class blog with simple announcements, homework, assignments, Tutorials, and external links. To differentiate, the

advantage is that it allows easy filtering of content for various presentations: by date, category, author, or other attributes.

2.6 You Tube

According to Mashable, YouTube was founded in February 2005 and has become the go-to site for video on the web. One hour of video is uploaded to YouTube every second. Google bought YouTube in 2006 and underwent a significant redesign in 2011. With this we can share videos with friends, family and the world. The Times of India says “over 800 million users visit YouTube every month, over three billion hours of videos are watched every month and over 72 hours of video content is uploaded every minute”.

2.7 YouTube EDU

YouTube EDU is specific tool derived from You Tube. It provides user to learn, create, teach and share content without any cost. With the help of this we can theoretical concepts come alive. Tap our students’ mind of the visual learner. In this we can also find short lessons from top teachers around the world, full courses from the world’s leading universities, professional development material from fellow educators, and inspiring videos from global thought leaders. For example, the following table shows the number of videos uploaded on free open online web and video courses for science and engineering. The statistics might be increasing day by day. In our college we have AV (Audio/Video) classes every week for each section.

Table 2. Number of Videos Uploaded In YouTube EDU

Name of the video browser	Number of videos uploaded	Number of views
Nptelhrd	11,335	9,252,451
UCBerkeley	5,383	6,876,500
MIT	2,616	5,462,761
Stanford University	1,760	4,693,528

2.8 Khan Academy

Khan Academy is a non-profit organization with over 60,000 students worldwide and is a library of videos numbering over 1100. Students are able to leverage a wide range of topics in Mathematics, Statistics, Physics, Chemistry and Biology. Khan Academy videos work through a numerous sets of problems providing the most comprehensive set of teaching videos available. Khan Academy also has sample standardized tests for SATs and GMAT.

Ximarc Studios Inc. is proud to bring us Khan Academy Statistics released on 08 March 2010. Khan Academy Statistics allows students to learn Statistics through various videos which can be downloaded directly on our iPhone or iPod touch and in the future with Compatible with iPhone, iPod touch and iPad. It requires iOS 3.1.3 or later versions. Students can watch the video anywhere, anytime, all the time and NEVER be concerned about having access to the internet while you are going through a Khan Academy lesson.

Khan Academy Statistics From Tech Cocktail (Jan22,2013)

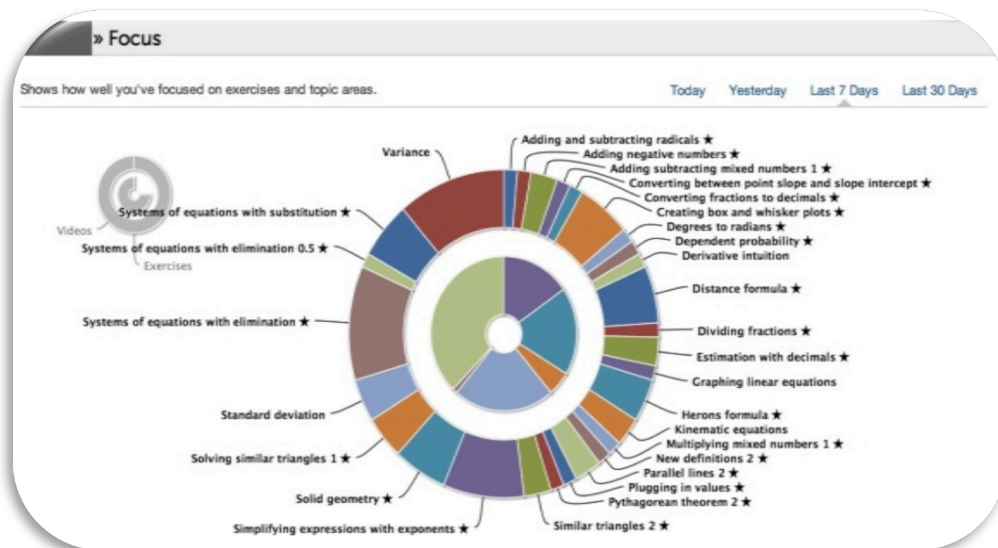






Figure 5. Khan Academy visitor and their areas of interest

2.9 Learners Tv

This is a comprehensive site providing thousands of downloadable Video lectures, Animations, study notes, Online Test, Presentation, Magazines, Live Online Tests in the fields of Biology, Physics, Chemistry, Mathematics, Computer Science, Engineering, Medicine, Management and Accounting, Dentistry, Nursing, Psychology, History, Language Training, Literature, Law, Economics, Philosophy, Astronomy, Political Science etc .This site provides free video and audio lectures of whole courses conducted by faculty from reputed universities around the world. It supports with Flash player 9.0.115 to view some of the videos. To view the videos full screen you need to have Flash Player 9 installed Science Animations provide students with fun and innovative ways of learning. Free live timed online tests with instant feedback and explanations will help you refine your test taking skills. Most of the materials offered are licensed by the respective institutes under a Creative Commons License. Video Lectures, Video Courses, Science Animations, Lecture Notes, Online Test, and Lecture Presentations. Saturday, March 09, 2013 Video, Lectures: 29352 Live Animations: 410. India got the highest percentage of visitors followed by USA

Table 3. Country wise Learners TV Views

	India	23.5
	United States	8.4
	Russia	5.6
	France	4
	Pakistan	3.4
	Germany	3.2

2.10 iTunes U

Harvard University is the oldest institution of higher learning in the United States. Harvard University is devoted to excellence in teaching, learning. Harvard on iTunes U allows the University to distribute world-class educational content to the world at large. iTunes U is a part of the iTunes Store featuring free lectures, language lessons, audio books, and more, which you can enjoy on your iPod, iPhone, Mac or PC. Explore over 350,000 educational audio and video files from top universities, museums and public media organizations from around the world. We can add to your collection anytime, 24/7.

According to The Times of India Careers (Feb 28, 2013, 08.16PM IST) iTunes U courses with over 2, 50,000 students enrolled in them. Top universities like Duke, Yale, Cambridge, MIT and Oxford have enrolled more than 1, 00,000 students in single iTunes U courses. Stanford and The Open University have seen 60 million content downloads on the mobile.

According to the iTunes U (The Open University on iTunesU) and its impact as shown below, explains the geographical breakdown of downloads from 5 Feb-11 March 2013.

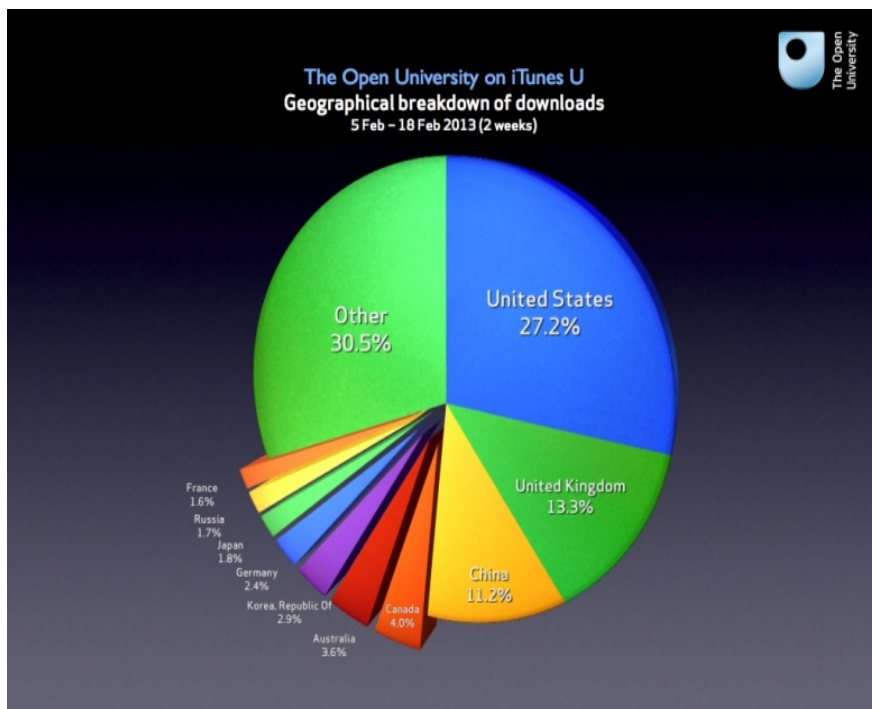


Figure 6.iTunes users in throughout the world

2.11 Geogebra

GeoGebra is free dynamic mathematics software for all levels of education that joins geometry, algebra, graphing, and calculus. Most parts of Geogebra are free software and GeoGebra 4.2.21.0: Flexible and free mathematical software. India ties with geogebra report gives India Hits 255898, Files 207965, kBf 11437010, kB In 511, kB Out 0

Table 4.Geogebra monthly report
Table 5.Country wise Geogebra

Monthly Statistics for February 2013	
Total Hits	38056317
Total Files	28837814
Total Pages	7898439
Total Visits	1354108
Total kB Files	2503550059
Total kB In	26548
Total kB Out	0
Total Unique Sites	1250380
Total Unique URLs	62950
Total Unique Referrers	145096
Total Unique Usernames	34
Total Unique User Agents	45375

Country	India
Hits	255898
	0.67%
Files	207965
	0.72%
kB f	11437010
	0.46%
kB In	511
	1.93%
kB out	0
	0.00%

3. Implementation and Results

As lecturers in an engineering college we personally feel working in collaboration environment, in order to prepare students, academia has to follow suit in its learning methods. In a world of digital information and continual information exchange, projects are now not only marked based on content, but group dynamics and teamwork. To facilitate this concept in education, tools including [Google docs](#), Skype, social networks and wikis are implemented in our institution. we prepared a blog named pmat07.blogspot.in; in this blog we post students lecture notes, assignment, exam schedule with the help of Google docs and html code and keep monitoring their responses in class .in our institution we were implemented audio and video class with one hour /per week .with the help of [YouTube EDU](#) .We download corresponding lecture video and we play it. After a video we provide web link.

4. Discussion and Conclusion

The developing social media tools and open resources that we have discussed in this paper are existing free resources among students. We should take advantage of this resource to make

learning more accessible. Students feel free and comfortable to use the tools that they already know. Using Social media we can have Communication, Public Relation, Intelligent adoption of social media tools can engage students in interactive learning, which is the key to a successful education.

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