

“HARNESSING THE POWER OF SOCIAL MEDIA IN HIGHER EDUCATION INSTITUTIONS”

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1.0 INTRODUCTION

From day the student joins an educational institute, The institute is responsible for their academic, personal and social growth. To achieve this goal following activities are :

- Class room teaching.
- Practical work in Laboratories.
- Invited lectures from Eminent thinkers, who motivate them , change their attitudes, and groom their personalities.
- Excursion to different sites for exposing them to real life scenarios.

During the above process, the students need to be managed. The Head of the institution, the heads of the departments and teacher, and even the supporting staff do complex task of student management in their own way and in different capacities.

Effective and timely communicating with students, helping them, guiding them , punishing them when they go wrong, communication and statutory compliance with different government and other bodies. Social media can be extremely beneficial in these activities and ignoring power of social media in the dynamic world can be compared with ostrich in the desert storm.

1.1 SOCIAL MEDIA

Social media refers to the means of interactions among people in which they create, share, and exchange information and ideas in virtual communities and networks [1].

Social media is a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content. [2].

Social media differentiates from traditional media in many aspects such as quality reach, frequency, usability, immediacy and permanence. According to Danah Boyd the four properties that differentiate social networking from any other form of communication are Persistence, Search ability, Replicability and Invisible audiences: [3]. These four Properties can be advantage or limitation of the social media.

The students and teenagers use the social media for various reasons few of the can be as follows :

Socializing or “hanging out” with their friends, for the most part friends at school.

- Day-to-day news about their friends, acquaintances, relatives, and peer groups
- Collaborating on school work
- Validation or emotional support
- Self-expression and the identity exploration and formation that occurs in adolescent development
- What sociologists call “informal learning,” or learning outside of formal settings such as school, including learning social norms and social literacy
- Learning the technical skills of the digital age, which many businesspeople feel are essential to professional development
- Discovering and exploring interests, both academic and future professional interests
- Learning about the world beyond their immediate home and school environments
- Civic engagement - participating in causes that are meaningful to them. [4]

2 FORMAL THEORY OF SOCIAL NETWORKS

Social Network :(social sciences) A network (g) is defined as a set of actors (or agents, or nodes, or points, or vertices)

that may have relationships (or links, or edges, or ties) with one another.

Let A be the set $N = \{1, n\}$ of individuals (actors) , who are connected in a network relationship, then

ij represents the link {i, j}

ij g indicates that i and j are linked under network g

$G = \{g \text{ gN}\}$ denotes the set of all possible networks or graphs on N, with gN being the complete network $g + ij$: network obtained by adding link ij to an existing network g

$g - ij$: network obtained by deleting link ij to an existing network g

$N(g) = \{i | j \text{ s.t. } ij \text{ g}\}$: set of individuals who have at least one link in network g

Density = cardinality of (g) / $(n*(n-1))$

In its simplest form, a social network is a map of all of the relevant ties between the nodes being studied. The nodes in the network are the people and groups while the links show relationships or flows between the nodes. Social network analysis provides both a visual and a mathematical analysis of complex human systems[7].

In addition to the use of relational concepts, the following concept or assumptions are important :

- Actors and their actions are viewed as inter dependent rather than independent, autonomous units
- Relational ties (linkages) between actors are channels for transfer or “flow” of resources (either material or non-material)
- Network models focusing on individuals view the network structural environment as providing opportunities for or constraints on individual action
- Network models conceptualize structure (social, economic, political, and so forth) as lasting patterns of relations among actors.
- The unit of analysis in network analysis is not the individual, but an entity consisting of a collection

of individuals and the linkages among them. Network methods focus on dyads (two actors and their ties), triads (three actors and their ties), or larger systems (subgroups of individuals, or entire networks. [7].

Social network analysis has application in diverse fields like sociology, Anthropology, biology, communication studies, economics, geography, information science, organizational studies, social psychology, sociolinguistics etc. social network analysis play a critical role in determining the way problems are solved, organizations are run, and the degree to which individuals succeed in achieving their goals. Of all the applied fields, national security is probably the area that has most embraced social network analysis. Crime-fighters, particularly those fighting organized crime, have used a network perspective for many years, covering walls with huge maps showing links between "persons of interest. [8]. Educational institute can take benefit from the all social network analysis.

2.1 SMALL WORLD EFFECT (SIX DEGREE OF SEPARATION)

Six degrees of separation is the theory that everyone and everything is six or fewer steps away, by way of introduction, from any other person in the world, so that a chain of "a friend of a friend" statements can be made to connect any two people in a maximum of six steps. (i.e. maximum geodesic distance between any two nodes is six. Not a coincidence first social networking site was named as sixdegrees.org

Sr. No	Researchers	Year	Methods	Findings
1	Ithiel, de Sola Pool (political Science) Kochen Manfred (Mathematics)	1978-79	Statistics And graphs	U.S.-sized population without social structure, "it is practically certain that any two individuals can contact one another by means of at most two intermediaries
2	Michael Gurevich	1973	Monte carlo simulations	more realistic three degrees of separation existed across the U.S. population
3	Travers, Jeffrey and Milgram	1969	Small word technique	the mean number of intermediaries observed was greater than five
4	Duncan Watts	2001	Experiments with email,	the average (though not maximum) number of intermediaries was around six.
5	Jure Leskovec and Eric Horvitz	2007	Examination of dataset of 30 billion conversations among 240 million people.	average path length among Microsoft Messenger users to be 6.6
6.	Reza Bakhshandeh, Mehdi Samadi, Zohreh Azimifar, Jonathan Schaeffer	2011	Optimal search Algorithm	an average degree of separation of 3.43 between two random Twitter users
7	Facebook data team			document that amongst all Facebook users at the time of research (721 million users with 69 billion friendship links) there is an average distance of 4.74, 99.91% of Facebook users were interconnected, forming a large connected component.
8	social media monitoring firm Sysomos,	2010		the average distance on Twitter is 4.67. On average, about 50% of people on Twitter are only four steps away from each other, while nearly everyone is five steps or less away
9	Adamic, L. A., Buyukkokten, O. and Adar, E	2003		Small word phenomena exist in online social network
10	Mislove, A., Marcon, M., Gummadi, K. P., Druschel, P., and Bhattacharjee, B	2007		Existence of power law and small world in online social network

2. SOCIAL MEDIA IN EDUCATIONAL INSTITUTES

According to survey conducted by Comscore [5] in July 2010, There are more than 33 Million internet users in India, out which 84 % visit social networking sites, Most of the user are between age group of 15 to 24. Some institute allow free usage of social networking sites while most of the institute does not allow social media using through institute infrastructure. However students are surfing these sites either at their residence, through mobile or portable devices. Some students even go to the bypassing or

breaking the security barrier like firewall etc. Not allowing usage of social networking altogether is not solution. Social media has become a part of teenage life, what is need is to the benefit of social media while overcoming its challenges.

When it comes to social media , it is important to avoid the extremes. Allowing full access with no restrictions is dangerous. However banning social media is also bad decision , it will create new risk as the users will find ways to do it without the IT staff's knowledge or protection. [6].

Institute should educate the students and employees about what they should do and should not do on social media. Teach them about potential benefits and dangers of social media. Institute can develop its own social media policy, as it exists in many universities, government and business organizations. Realizing the power of social media, Department of Information Technology, Ministry of Communication and Information Technology, Government of India, Formulated Framework and guidelines for use of social media in government organization in September 2011 in order to encourage and enable government agencies to make effective and efficient use of this use of Social Media by government agencies.

Educationist and researcher in different parts of world, have conducted survey regarding social networking sites usage amongst students, the common finding were, More than 60% of the student spent more than 2 hrs per day on these sites [9,10, 11,12], these sites were used for more for social communication, relationship building as compared to Academic communication and Learning, [9,10,,10,12, 13, 14].

4. CURRENT RESEARCH

In the current research a survey instrument was designed in Google forms to extract information about use of social media in education during the period . This questionnaire was mailed to 1200 respondents, and they were asked to forward this questionnaire to their references, snowball sampling was used 92 responses were received. The URL of the site of questionnaire was posted on the wall of two social networking Sites Face book and LinkedIn., the 7 persons responded.

The 99 respondents can be categorized on the basis of their demographic profiles as follows :

TABLE 2 : DEMOGRAPHIC PROFILES OF THE RESPONDENTS

			No of respondents
Demography of users	Profession of the user	Teacher	43
		Student	29
		Industry	27
	Educational background	UG	34
		PG	59
		PhD	6
	Gender	Male	70
		Female	29
	Age	Young	91
		Old	8

THE OPINIONS GIVEN BY THE DIFFERENT GROUPS OF USERS ARE GIVEN IN TABLE NO 3

		Should youth use social media		Should student and teacher be friends on Social media	Can Social media be used in education?
		Yes	No		
Profession of the user	Teacher	Yes	31	21	33
		No	7	6	2
		cant say	5	16	8
	Student	Yes	15	17	22
		No	6	4	33
		cant say	8	8	4
	Industry	Yes	18	19	24
		No	6	4	2
		cant say	3	4	1
Education	UG	Yes	20	17	25
		No	7	7	5
		cant say	7	10	4
	PG	Yes	43	38	49
		No	8	7	2
		cant say	8	14	8
	Phd	Yes	3	2	5
		No	2	0	0
		cant say	1	4	1
Gender	Male	Yes	46	48	58
		No	11	5	4
		cant say	13	13	8
	Female	Yes	20	9	21
		No	6	9	3
		cant say	3	15	5
Age	Young	Yes	61	52	71
		No	15	13	7
		cant say	15	26	13
	Old	Yes	5	5	8
		No	2	2	0
		cant say	1	1	0
All users	Yes	66	57	79	
	No	17	14	7	
	Cant say	16	28	13	

From the above we can conclude that most of the users are positive opinion about use of social media in education.

5. SUGGESTIONS FOR USING SOCIAL MEDIA FOR THE BENEFITS OF THE ORGANIZATION

There are different stake holders in educational institution, social media can be beneficial for each of them. These stake holders can utilize the social media in way suggested in Table No 4.

Stake-holder	Suggestion	Benefits benefits Derived
Administration (Management)	Creating Institute own social media page This page/channel should be Managed and administered by public relations or communication department of the institute, Trust or Institute	Institutions 's Brand Building in low cost Attracting Potential students Student Relation Management (SRM-Alumnis) Recruitment Getting feedback/complaints from students, staff, parents etc Finding potentials of current employees, Innovation Competitive advantages Collaboration with other organization, Institutions, NGO & Govt agencies
Teachers/ Faculties	Use of Social media by teachers in teaching and communication Separate Professional account should be maintained and must not be mixed with personal accounts	Multi-Modal Teaching Student Mentoring Creativity & Innovation Distance education Informal communication Connecting with researchers and Professionals in the respective domain
Students	Use of social media as an educational and communication Students must be made aware about the potential benefits and threats before actually using social media.	Self Learning (students learn on their own how to manipulate this media) Network Learning (communicating in such a way so as to support one another's learning) Sharing of Educational and other resources Facilitates inter culture and intra cultural communications Customized to suit learners' learning style Improved student teacher & student student Communication Employment opportunities Working on collaborative Projects (diminishing time and space barriers) Encouragement of self expression (for those who cannot express) Improvement of learning outcome Helpful for students with learning difficulties Exposure to global culture

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