

**Role of Social Media in Students' Engagement: An Empirical Study on Exclusively Women
Universities in Rajasthan**

1. Ms. Preeti Mishra, Research Scholar, College of Business Management, Economics and Commerce, Mody University of Science & Technology, Lakshmangarh - 332311 Distt: Sikar (Rajasthan).

Email: prmishra.fms@modyuniversity.ac.in, Ph.-91-9549015749

2. Dr. Sunita Verma, Assistant Professor, College of Business Management, Economics and Commerce, Mody University of Science & Technology, Lakshmangarh - 332311 Distt: Sikar (Rajasthan).

Email: sunitaverma.cobmec@modyuniversity.ac.in, Ph.-91-9413568807

3. Dr. B.S Rathore, Associate Professor, College of Business Management, Economics and Commerce, Mody University of Science & Technology, Lakshmangarh - 332311 Distt: Sikar (Rajasthan).

Email: bsrathore.cobmec@modyuniversity.ac.in, Ph.-91-9672411943

Abstract:

Education has the preeminence to inflate the growth of the quality knowledge among the students. Indian education is growing at a rapid pace and thus, it requires more center of attention to become finest education system in the world. Social Media act as a very important tool to connect with the people all over the world. Report of (2011) Comscore Digital focus that 73.9 million India's is the third Largest Online Population in the world, second in Asia Pacific. Women aged 35-44 are the heaviest internet users among all age/gender groups. Numerous studies stated that Social Media is a most advanced tool used by the students to have a healthy interaction related to the academics or other activities. In addition to this social media, facilitated communication to meet the standard of the quality education and it is also acting as the important source in the development and engagement of the students. To analyze this study

data has collected from the questionnaire, websites and other secondary sources to cater the relevant information. The data obtained from the questionnaire shows that Co-Curricular Interface, Extra-Curricular Interface, Academic Peer Interface, Social Interface and Teaching Learning Interface have significant relationship. The findings of the study indicate that usage of digital learning has increased in education sector across the globe and higher demands of learners. This study summarizes that internet has enhanced the transformation of the process of learning and exploring new ways of teaching and sharing information.

Keywords: Social Media, Students Engagement, Academic Peer Interface, Teaching Learning Interface, Co- Curricular Interface, Extra- Curricular Interface, Social Interface.

1. Introduction

Over the past decade, communication methods have changed drastically. Country has emphasized on social media to improve the quality of education and to increase the competencies of the students to meet the competitive advantage (Anderson & Weert, 2002). Social media or these networking sites have become very popular and uncommon in today's scenario; it is a virtual organisation where students can interact with their faculty and peers from any corner of the world. Social networking sites such as Twitter, Facebook, LinkedIn and many such platforms does not help in socialization only but also helps the students in their academics and other activities. The importance of the social media has also noticed by the United States of Department Education. In 2010, the National Technology Education Plan has decided to use the technology in the colleges or in entire education system, which has used by the students in their daily lives and professional lives. Social media is playing a major role in the growth of the education sector through which the students can have a better interaction with their faculty and peers. In addition to this, social media tools

also build relationship between them and resolve their problem effectively with the help of these tools.

Social media are increasingly visible in higher education and enhanced the usage of these tools for imparting education to the students, which makes the students smarter and simultaneously creating amazing opportunities. This paper focuses on constant usage of social media and simultaneously builds the ladder for students to achieve their objective. However, empirical evidence has supported academics as well as other activities also. To analyze the concept these factors (academics interface, teaching learning interface, co-curricular interface and extra-curricular interface) were determine to reveals the findings. Students have shown less interest towards social interface, as this may happen because students has been provided with lots of assignments, projects etc. by which students get less time for socialization.

1. Literature Review:

Social Media:

Now a day's nothing is consider as the most important thing than education and every student is attracted towards the new ways of learning i.e. technology. It helps in the growth as well as the development of the students with their advanced channels of communication resources and better way to interact with their faculties, peers and family. Various researchers (Smith & Caruso, 2010) stated that 90 percent of the university students are engage with the technology. To make it more relevance it is necessary to check the influence of the social media on the factors of Student engagement therefore; the dimension clearly examined and found the positive relationship between them. Although, most of the researchers found that it is less appreciated towards the academic point of view and more useful in case of socialization. On the other hand, it is reveal that sense of belonging also help in the better learning outcomes (Kember et al., 2001).

Social media defined by Murphy, Hill, and Dean (2013) "Social media is the collection of websites and web-based systems that allow for mass interaction, conversation, and sharing among members of a network". Social media communication becomes not

just two way but multidirectional, colleagues conversing with each other at the same time as feeding messages up. Information Communication Technology allows several people to generate and disseminate information therefore, this transformation helps in active role of participation between professionals, learners, policy makers, peers etc. (Leach, Ahmed, Makalima & Power, 2005). This active involvement among the participants will meet the learning needs of individual students, to promote equal opportunity, to offer learning material, and promote interdependence of learning among learners (Leach, Ahmed, Makalima & Power, 2005). Chin and Hortin (1994) stated that the faculty clearly must act as the "change agent" in the relationship between technology and the student.

Students' Engagement:

Engagement word make known to us by Alexander Austin in (1984) and defined engagement as "the amount of physical and psychological energy that the students devote to the academic experience". According to (Kuh, 2003) Student engagement is defined as the time and energy that students devote to educationally purposeful activities and the extent to which

the institution gets students to participate in activities that lead to student success. Kuh (2009) stated that student engagement, develop through continuous process such as spending more time by the students' leads to more clarity of the subjects, which is then analyze by the faculties. Afterward, provide feedback to them, which helps in the improvement of the skills related to academics and fosters deep learning. According to Kuh (2009); Pascarella; Terenzini (2005) it comprises of various factors like experience of academics, interaction with faculty and peers and participation in other co-curricular activities in college.

This shows that Kuh 2009 signifies into two parts firstly academics and secondly co-curricular activity. Several studies has inspected by the various researchers like (Junco, 2011; Junco, Heiberger & Loken, 2011; Valenzuela et al., 2009) that social media is a wide source of information and networks where students get an opportunity to interact with their faculties. The literature analyses the role and importance of social media and shows that there is an adverse impact on Students' Engagement; this research focuses on the usage of new trends of social media that helps the students in

their performance. Prasad and Prasad (2012) reveal that nowadays the social networking applications used by many of the universities and provided the opportunity to interact with the faculty and peers. Shih (2011) & webb (2009) focused on the overall of engagement of the students and some of the researchers like Fredricks, Blumenfeld & Paris (2004) revealed that students are engaged with emotional, behavioural and cognitive levels. Therefore, students need to work on these levels as its helps in the learning outcomes. Other researchers have also proposed models of student engagement that comprise academic, behavioural, cognitive and psychological elements (Appleton, Christenson & Furlong 2008).

Students Engagement and Technology:

According to Madden and Zickuhr (2011), social networking sites are very popular among the women and youngsters under age 30 and young adult women ages 18–29 are the power users of social networking. Engagement is a growth-producing activity through which an individual allocates attention in active response to the environment (Csikszentmihalyi, 1990). University, local, national and global factors

and the manner, heavily influences interaction among the students and faculties in a classroom. In addition to this, students and faculties bring their own experiences that relate to previous cultures of learning both inside and outside the classroom. In a critique of the disparity in some students' low level technological participation, Gorski revealed that, "Many students of color, young women, and low-income students are being socialized to see computers more or less as digital flashcards" (2009). To counter this situation, scholars urge educators to engage students authentically and meaningfully with technology to develop youths' habits of mind (Domine, 2010) and cultivate their potential as innovators (Eglash, R., Gilbert, J., Taylor, V., & Geier, S., 2013). It is important for researchers to note how youths navigate their different identities while engaging in digital media and new online tools in their daily lives (Domine, 2010).

In addition to this, K.E. Howard et al. (2013) argues that there is a need to educate youth as to the ethical use of SNSs rather than letting them try to figure it out on their own. One national survey of adults found that most people use social networks for personal interests, but women of all ages are far less

willing to share information over SNSs due to concern for their personal safety and privacy ("Social media enthusiasts," 2012).

3. Objectives of the study:

- To study the role of social media in students' engagement.
- To identify the different factors of the students' engagement.
- To study the usage of specific social media tools in their daily lives.
- To study the influence of Social Media on students' with reference to their personal characteristics (Demographics).

4. Research Methodology

4.1 Sampling

The data collected from students of exclusive women university of Rajasthan to measure students' engagement in their organisation. 150 questionnaire were circulated and 100 questionnaires were found fit after the survey and were further analysed.

4.2 Survey

A scale comprising of 25 items measures the Students' Engagement practices. The survey instrument used in this study was a self-structured questionnaire for the empirical study before that pilot study has done to finalise the questionnaire. The respondents' view on these items took on 5-point likert scale. The anchors used included: a) 1= Strongly Disagree, b) 2= Disagree, c) 3= Indifferent, d) 4= Agree, e) 5= Strongly Agree.

4.3 Data Analysis

The Statistical Package for the Social Science (SPSS 20 version) used for the statistical analysis. In addition, Cronbach Alpha coefficients computed to investigate

the consistency and reliability of the instrument. For analyzing the data, factor analysis applied through the principal component and Varimax with Kaiser Rotation.

4.4 Reliability

According to Hair et al. (2007), "If the repeated application of a survey instrument results in consistent scores, we can consider it reliable". They also state: "reliability is concerned with the consistency of the research findings". In this research, Cronbach's alpha has used to measure the reliability of the items.

Table 4.1: Reliability

S. No.	Label of Factor	No. of variables	Cronbach's Alpha
1	Academic Peer Interface	5	.862

2	Teaching Learning Interface	5	.798
3	Co-Curricular Interface	5	.909
4	Extra-Curricular Interface	5	.891
5	Social Interface	5	.806

*Authors' own scale

In table 4.1, five factors (separately) with number of variables was put to reliability test. Application of reliability test for factor 1 (Academic Peer Interface) gives 0.862 as value, factor 2 (Teaching Learning Interface) gives 0.798 as value, factor 3 (Co-Curricular Interface) gives 0.909 as value, factor 4 (Extra-Curricular Interface) gives

0.891 as value & factor 5 (Social Interface) gives 0.806 as value of Cronbach's Alpha showing the reliability of data for analysis which is considered as satisfactory.

5. RESULTS

5.1 Factor Analysis

The variables used for the study are 25 in numbers (Table 5.1)

Table 5.1: Statements used in the study

S.no.	Items
Se1	Share study material amongst classmates through social media that add value to our academic knowledge.
Se2	Social media help us to interact with students of India and abroad.
Se3	Social media help us to complete homework assignments and class projects.

Se4	Plan study groups or tutoring sessions through social media.
Se5	Learn about internship and placement opportunities.

Se6	Communicate with faculty or class mentors about courses through social media.
Se7	Discussion and knowledge transfer takes place between faculty members and students through social media.
Se8	Download study material through social media.
Se9	Use social media to put forward our views to Dean or faculty members.
Se10	Get class schedule and study material from faculty members through social media.
Se11	Get information about national and international conferences through social media.
Se12	Share information about workshops, symposia, management fest and seminars through social media.
Se13	Social media help us to form study circle.
Se14	Help to prepare presentations, mock sessions and debate.
Se15	Help to develop communication skill.
Se16	Communicate with faculty about industry visit and guest lectures.
Se17	Communication for alumni meetings takes place through social media.
Se18	Share and communicate information about sports and games to participate through social media.
Se19	Share information about social groups, NGO and academic society.
Se20	Share and communicate information about cultural fest and cultural programmes.
Se21	Provide emotional support to each other and create real help groups via social media.

Se22	Share and communicate information about community services and extend help.
Se23	Find out about sponsored social events and activities.
Se24	Communicate with and remain connected to family and friends.
Se25	Social media facilitate to resolve conflicts amongst students.

Table 5.2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.733
Bartlett's Test of Sphericity	Approx. Chi-Square of Df	1302.163
	Sig.	.000

The result of Kaiser – Meyer – Olkin (KMO) measure of sampling adequacy of statements under study is 0.733 showing that statements can be subjected to factorability.

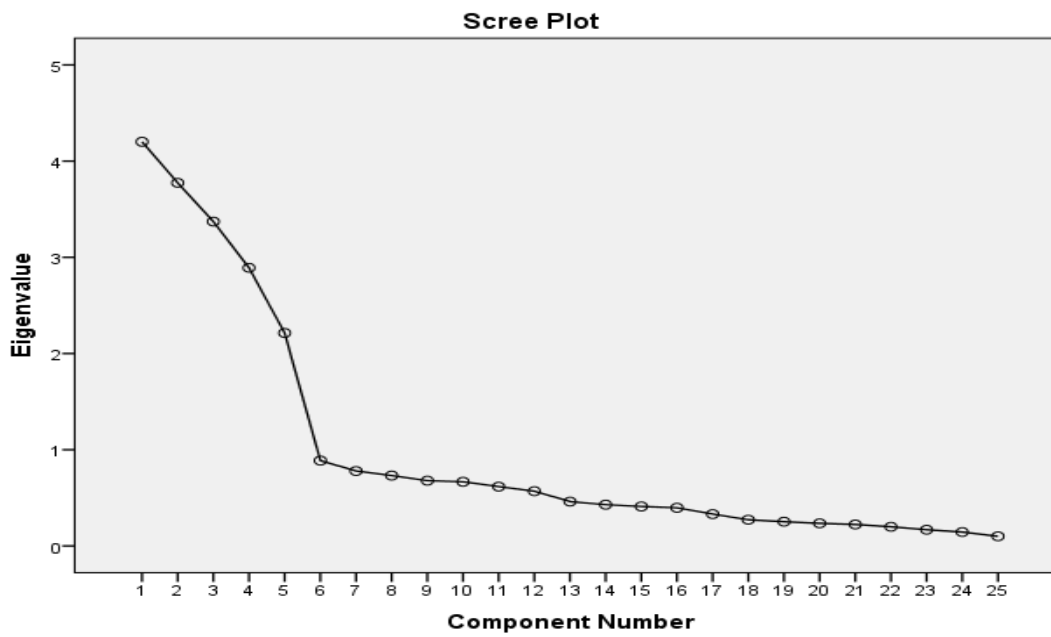
Significance level of Bartlett's test of sphericity is 0.00, which reveals that the variables are significantly correlated and fit for factor analysis.

Table 5.3: Principal Component Analysis

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.201	16.805	16.805	4.201	16.805	16.805	3.809	15.237	15.237
2	3.774	15.097	31.902	3.774	15.097	31.902	3.586	14.343	29.580
3	3.371	13.486	45.387	3.371	13.486	45.387	3.271	13.082	42.662
4	2.891	11.563	56.951	2.891	11.563	56.951	2.927	11.706	54.368
5	2.213	8.853	65.804	2.213	8.853	65.804	2.859	11.436	65.804
6	.887	3.549	69.352						
7	.779	3.116	72.468						
8	.732	2.926	75.394						
9	.678	2.713	78.108						
10	.667	2.666	80.774						
11	.617	2.466	83.240						
12	.569	2.277	85.518						
13	.461	1.844	87.362						
14	.429	1.715	89.077						

15	.410	1.640	90.717						
16	.396	1.586	92.302						
17	.331	1.325	93.627						
18	.272	1.088	94.715						
19	.252	1.008	95.723						
20	.235	.938	96.661						
21	.223	.892	97.553						
22	.199	.795	98.348						
23	.169	.674	99.022						
24	.144	.577	99.599						
25	.100	.401	100.000						

Extraction Method: Principal Component Analysis.



Total Variance Explained

Factor Analysis gave five factors explaining 65.804% of variance (Table 5.3). The Total Variance Explained (Table 5.3) explained the Eigen values associated with each factor (linear components) before extraction, after extraction and after rotation (Field, 2000). Before extractions, there are 25 components, which are all variables, listed. From the initial Eigen values from data factor 1 explains 16.805 % of total variance, factor 2 explains 15.097 %, factor 3 explains 13.486

%, factor 4 explains 11.563% and factor 5 explains 8.853 %. Next under the Extraction Sum of Square Loadings only factor with Eigen values more than 1 is listed, the result is only five factors. In the last part of the table, the Eigen values of the factor after rotation displayed. After rotation, the factor 1 account for only 15.237 % of variance, not a big difference from the others.

Table 5.4: Rotated Component Matrix

	Component				
	1	2	3	4	5
CCI2	.917	-.007	.070	.008	-.017
CCI4	.846	.076	.036	.088	.024
CCI3	.836	.042	.033	.020	.015
CCI5	.832	.002	.031	.048	-.085
CCI1	.826	.073	.071	-.019	-.070
ECI4	.038	.894	-.039	.020	-.083
ECI5	.061	.866	-.007	-.036	-.001
ECI1	.046	.854	-.052	.004	.029
ECI3	.049	.808	.010	-.096	.023
ECI2	-.006	.733	.102	-.011	.044
API4	.101	.054	.846	.072	.078
API2	-.112	.092	.842	.010	-.009
API3	-.025	-.007	.832	.050	.084
API5	.184	-.241	.754	-.050	-.032
API1	.117	.076	.716	.028	.154
SI1	.047	-.047	.109	.805	.040

SI5	.030	-.068	.051	.786	.092
SI4	-.123	-.031	.043	.765	-.081
SI2	.016	.070	-.059	.694	.107
SI3	.191	-.051	-.026	.661	.207
TLI3	-.036	-.014	.071	.030	.861
TLI5	-.047	.046	.115	.107	.787
TLI1	.027	.078	.069	.153	.703
TLI4	-.171	-.022	.013	-.161	.664
TLI2	.095	-.072	.005	.254	.657

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Table 5.5: Factor analysis of the variables

S. No.	Factor labels and variables	Rotated factor loadings
F 1	Co-Curricular Interface	
Se12	Share information about workshops, symposia, management fest and seminars through social media.	.917
Se14	Helps to prepare presentations, mock sessions and debate.	.846

Se13	Social media help us to form study circle.	.836
Se15	Help to develop communication skill.	.832
Se11	Get information about national and international conferences through social media.	.826
F 2	Extra- Curricular Interface	
Se19	Share information about social groups, NGO and academic society.	.894
Se20	Share and communicate information about cultural fest and cultural programmes.	.866
Se16	Communicate with faculty about industry visit and guest lectures.	.854
Se18	Share and communicate information about sports and games to participate through social media.	.808
Se17	Communication for alumni meetings takes place through social media.	.733
F 3	Academic Peer Interface	
Se4	Plan study groups or tutoring sessions through social media.	.846
Se2	Social media help us to interact with students of India and abroad.	.842
Se3	Social media help us to complete homework assignments and class projects.	.832
Se5	Learn about internship and placement opportunities.	.754
Se1	Share study material amongst classmates through social media that add value to our academic knowledge.	.716
F4	Social Interface	

Se21	Provide emotional support to each other and create real help groups via social media.	.805
Se25	Social media facilitate to resolve conflicts amongst students.	.786
Se24	Communicate with and remain connected to family and friends.	.765
Se22	Share and communicate information about community services and extend help.	.694
Se23	Find out about sponsored social events and activities.	.661
F5	Teaching Learning Interface	
Se8	Download study material through social media.	.861
Se10	Get class schedule and study material from faculty members through social media.	.787
Se6	Communicate with faculty or class mentors about courses through social media.	.703
Se9	Use social media to put forward our views to Dean or faculty members.	.664
Se7	Discussion and knowledge transfer takes place between faculty members and students through social media.	.657

In Table 5.5 based on Principal Component Analysis, five factors extracted. Table 5.5 clearly depicts that statement with factor loading more than 0.650 considered significant. Factor one has higher factor loading for statements se12 (0.917), se14

(0.846), se13 (0.836), se15 (0.832), se11 (0.826) was labeled as **Co-Curricular Interface**. Factor two has higher loading for statements se19 (0.894), se20 (0.866), se16 (.854), se18 (.808), se 17 (.733) was labeled as **Extra- Curricular Interface**. Similarly

factor three has higher loading for statements se4 (.846), se2 (.842), se3 (.832), se5 (.754), se1 (.716) hence labeled as **Academic Peer Interface**. Factor four has higher loadings for se21 (.805), se25 (.786),

se24 (.765), se22 (.694), se23 (.661) labeled as **Social Interface**. Factor Five has higher loadings for se8 (.861), se10 (.787), se6 (.703), se9 (.664), se7 (.657) labeled as **Teaching Learning Interface**.

Chi- Square:

The first objective explains the qualitative nature i.e. personal characteristics of the students and because of that, the associative analysis Chi-Square test was used to analyze the relationship between age and impact of factors on students' Engagement. Chi-Square analysis reveals that, at the 95

percent confidence level, there is significant relationship between students' age and impact of factors on students' engagement.

Hypotheses:

- Null Hypotheses: There is no relationship between age and students' engagement towards social media.

Table 5.6:

	Age	API	TLI	CCI	ECI	SI
Chi-Square	77.420 ^a	60.400 ^b	44.400 ^c	43.200 ^b	34.520 ^c	26.540 ^c
Df	2	19	18	19	18	18
Asymp. Sig.	.000	.000	.001	.001	.011	.088

Since p value is less than 0.05, we can conclude that there is a relationship between age and all the factors of students' engagement except Social interface as it is more than 0.05; this may happen because students may use social media tools mostly for their engagement purpose rather than socialization therefore, null hypotheses is rejected.

Table 5.7

	Time spend	API	TLI	CCI	ECI	SI
Chi-Square	12.560 ^a	60.400 ^b	44.400 ^c	43.200 ^b	34.520 ^c	26.540 ^c
Df	3	19	18	19	18	18
Asymp. Sig.	.006	.000	.001	.001	.011	.088

Since p value is less than 0.05, we can conclude that there is a relationship between time spend and all the factors of students' engagement except Social interface as it is more than 0.05; as students may spend most of the time on social media tools for their academic learning as they are required to work on projects, assignments, presentations etc. therefore, null hypotheses is rejected.

Conclusion:

This paper shows the relevance of social media on only female students of Rajasthan. There are many ways to being an engaging institution (Kuh et al, 2005) and how its help in the improvement of the overall education sector. Future studies could have focus on

both the gender and beyond the geographical limit, which will give, more generalize information. The data analysis has carried out with factor analysis and chi-square Test. The demographic factors like age and time spent has taken in the consideration to check its impact on the factors of the students' engagement. With the help of this study, we can conclude that the social media tools have really a positive impact on the factors discussed. Social interface factor found less significant as compared to other factors in the study. However, it helps to know the overall contribution of these factors in the student engagement of the university.

References:

- Anderson, J. & Weert, T.: Information and Communication and Technology in Education. A *Curriculum for Schools and Programme of Teacher Development*. Division of Higher Education, UNESCO (2002).
- Appleton, J.J., Christenson, S.L., & Furlong, M.J. (2008). Student engagement with school: Critical conceptual and methodological issues of the construct. *Psychology in the Schools*, 45, 369-386.
- Astin A. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel* 25, 297–308.
- Chin, S., & Hortin, J.A. (1994). Teachers' perceptions of instructional technology and staff development. *Journal of Educational Technology Systems*, 22 (2), 83-98.
- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper Perennial.
- Domine, V. (2010). How important is technology in urban education? In J. L. DeVitis & L. Irwin-DeVitis (Eds.). *Adolescent Education: A Reader*, 379-388. New York: Peter Lang. Reprint.
- Eglash, R., Gilbert, J. E., Taylor, V. & Geier, S. R. (2013). *Culturally Responsive Computing in Urban, After-School Contexts Two Approaches*, *Urban Education* 48 (5), 629-656.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74 (1), 59-109.
- Gorski, P.C. (2009). Insisting on digital equity: Reframing the dominant discourse on multicultural education and technology. *Urban Education*, 44 (3), 348-364.

- Hair, J.F., Black, B., Babin, B., Anderson, R. & Tatham, R.L. *Multivariate data analysis, 6th edn.* Englewood Cliffs, NJ: Prentice Hall, 2007.
- Howard, K. E., Curwen, M. S., Howard, N. R., & Colon-Muniz, A. (2013). Attitudes Toward Using Social Networking Sites in Educational Settings with Underperforming Latino Youth: A mixed methods study. *Poster session at the annual conference of the California Council on Teacher Education.* San Jose, CA.
- Junco, R. (2011). The relationship between frequency of Facebook use, participation in Facebook activities, and student engagement. *Computers & Education, 58*, 162–171.
- Junco, R. (2011). Too much face and not enough books: The relationship between multiple indices of Facebook use and academic performance. *Computers in Human Behaviour, 1-12*
- Junco, R., Heiberger, G., & Loken, E. (2011). The effect of Twitter on college student engagement and grades. *Journal of Computer Assisted Learning, 27* (2), 119-132.
- Kember, D., Lee, K. & Li, N. (2001). Cultivating a sense of belonging in part time students. *International Journal of Lifelong Education, 20*, 326-341.
- Kuh, G. D. (2003). What we are learning about student engagement from NSSE: Benchmarks for effective educational practices. *Change, 35* (2).
- Kuh, G. D., Kinzie, J., Schuh, J. H., Whitt, E. J., & Associates. (2005). *Student success in college: Creating conditions that matter.* San Francisco: Jossey-Bass.
- Kuh G.D. (2009). What student affairs professionals need to know about student engagement. *Journal of College Student Development, 50*, 683–706.
- Leach, J., Ahmed, A., Makalima, S., & Power, T. (2005). *DEEP Impact: An Investigation of the Use of Information and Communication Technologies for Teacher Education in the Global South.* Open University.
- Madden, M. and Zickuhr, K. (2011). *65% of online adults use social networking sites.* Washington, DC: Pew Internet and American Life Project.
- Murphy, J. Hill, C.A., & Dean E. (2013). *Social Media, Sociality and Survey Research.* Wiley.
- National Survey of Student Engagement. (2005). *Exploring different dimensions of student engagement—annual survey results.* Bloomington, Indian: Center for Postsecondary Research.

- Pascarella E.T. & Terenzini P.T. (2005). *How College Affects Students: A Third Decade of Research*. Jossey-Bass, San Francisco, CA.
- Prasad, E., & Prasad, R. (2012). Social media in teaching and learning. *International Journal of Computer Science and Communication Engineering*, 10-13.
- Shih, C. (2011). *The Facebook era: tapping online social networks to market, sell, and innovate*. Upper Saddle River, NJ: Prentice Hall.
- Smith, S. D., & Caruso, J. B. (2010). Research Study. *ECAR study of undergraduate students and information technology*, 6, Boulder, CO: EDUCAUSE Center for Applied Research.
- Valenzuela, Sebastian, Namsu Pak & Kerk F. Kee (2009). Is There Social Capital in Social Network Site?: Facebook Use and College Students' Life Satisfaction, Trust, and Participation, *Journal of Computer-Mediated Communication*, 14, 875-901
- Webb, E. (2009). *Engaging students with engaging tools*. *Educause Quarterly*, 32 (4), 1–7.
- <http://www.webchanakya.com/importance-of-social-media-for-education-institution/>
- <http://indiafacts.in/statistics/digital-social-media-mobile-internetstatistics-india/>