Use of Social Networking Sites in Higher Education

A case study of Northern Border University

Dr Ahmed M Alenezi

Dean

Deanship of eLearning and Distance Learning

Northern Border University

Ministry of Higher Education

Arar

Kingdom of Saudi Arabia

ahmed.alenezi@nbu.edu.sa, alenezi8@gmail.com

Abstract— SNS (Social Networking Sites) are sought after in almost all societies in the world today due to multiplication of usages. They not only provide best platform and room to meet new and existing friends online to remain connected to them but also help to share photos. Equally is noticeable use of SNSs for other purposes to transform societies into many aspects. Their use for educational purposes is remarkable in current context. It is undeniable that large number of SNSs have privacy, advertisement and subscription related concerns but on the other hands SNSs equally offer flexibility, accessibility, embedding video, two-way communication with no cost at all. The significance of present research lies in that important fact that it adds to our knowledge of subject in numerous contexts of usage. Among learning problems having been discussed in this paper is the extent to which ICT is really integrated in the university education system. Present research attempts to add new brick to enhance complete structure. This research is going to help learn many key factors especially better understanding of current problems faced. Similarly, it focuses on factors such as how students and faculty members of Northern Border University (NBU) take SNSs for various purposes, whether for personal or professional use and their applications in the educational purposes

Index Terms – Social networking sites (SNS), Learning management system (LMS)
Information and communication technology (ICT).

———————————— ◆ ————————————

1 INTRODUCTION

The use of social networking sites has increased immensely from few thousands to millions of users in the last one decade. It has indeed turned into a most crucial and important communication tool amongst the masses [Uzunboylu, Bicen, & Cavus (2011); Ozdamli (2011); Schaal, Grübmeyer, & Matt (2012); Jung & Kazienko (2012)]. With such tremendous use of social networking sites, communication and information sharing has increased between the people in fast pace. Hence, social networking sites may be used in all forms of education in the current context.

Derek Jones , (2010) stated that social networking websites are the tools which can be brought into use by the teachers and students to facilitate education in more conveniently.
According to the latest study, Facebook itself has 985 million members, MSpace has 36.2 million members, LinkedIn has 225 million users while Twitter has 554 million members and quite one billion user visit YouTube daily across the planet as estimated in the present scenario.

Kaplan and Haenlein (2010) defined social networking site as a group of internet–based applications that build on the ideological and technological foundations of Web2.0 and which allowed the idea of creating content and exchange.

When people join a social networking site, they create profiles to meet new friends and or search for their old buddies on their social networks. A profile is an information pertaining to a person's basic personal and professional details such as birthday, hometown, work place, work experience, photograph and personal interests amongst others. SNS provide numerous features and tools to the user members to explore their friends so that they can easily share their thoughts, ideas, messages, photos, videos and chats. As users have unlimited options through SNS they not only allow communication with the friends, colleagues, relatives, but also with strangers to study or strengthen ties between such users.

Undoubtedly, social networking sites offer ample room for the users to avail enjoy countless services of their choice but few of them are notable due to features and applications. Take for example the design component factor from blogging to create pages, encouraging interactions and discussions amongst groups, peers or colleagues and et al where individuals can share ideas to discuss with several other interested groups, or participate in discussions or debates to share views on concerned topics such as the issues of most important concerns from political to economic or social and educational subjects.

All kinds of information can be stored or shared through the means of SNS, and so can the information retrieved back whenever required. Due to such worthwhile features of SNS large chunk of user individuals even like to store their photos and videos in it to access them anywhere and to share with their friends. SNS have several features such as creating specific communities besides encouraging students for their active interactions that might / might not be possible through any other LMS. Unlimited benefits include administrating a blog, posting information to the group of students and or sharing educational videos with them as an extended medium to help them learn while in the go. Most SNS offer such services free of cost whereas LMS is a paid software and therefore require license fee for use. SNS are also helpful to build alumni groups to support various types of career growth opportunities.

It is a proven fact post constant research findings that educators are keen to use such innumerable features of SNS for teaching purposes worldwide. Equally do good number of academicians sense the caveat and therefore assume that use of SNS might have negative affect on the academic performances. It is undeniable that SNS have many challenges as well and most notable ones are privacy issues, advertisement and subscription factors. Large chunk of academicians, researchers or even common users feel the heat that in reality SNS make use of personal information of users for the specific biased benefits without the knowledge of particular user. That is why many users still consider it insecure to put all information in SNS to avoid any future misuse of private data. Take for example the narrowness of SNS when one finds it impossible to control what appears on others profiles. It is vivid from this shortcoming of SNS that in case a friend comment any negative message it can be viewed by other friends in the friend list. Such factors are the main concerns and issues to tackle seriously in the SNS use or application.

Junco, Heiberger, and Loken (2011) lead a research study to determine the use of specific tool Twitter in a context like how it has been impacting student engagements besides affected student scores. Students were divided into two groups: one is a controlled group who did not use Twitter while the other group use Twitter as a tool for the discussion submit reactions to the readings and observations on other students tweets. Results of such comparisons proved amazing with the outcomes. Student using Twitter had a better grades than controlled group students. The researchers therefore strongly felt that social networking sites' features help the educational institutes to reach the higher educational outcomes without investing on LMS and similar other e-Learning technologies.

The use of Internet has grown rapidly and in fast pace in Saudi Arabia in the last couple of years. A research survey conducted by the Communications and Information Technology Commission titled "Computer and Internet Usage in the Kingdom of Saudi Arabia" indicates that more than 50% of the KSA citizens have Internet connection. Such increase is actually due to the increased need to access information, to communicate and last but not the least the availability of affordable broadband connections in this country. In case of the higher educational institutes of Saudi Arabia, most of them already have their broadband connections and so do they own latest web technologies to run operations.

It is obvious that for the students of NBU Internet plays pivotal role due to it becoming an inevitable entity in university circles in accordance to most daily activities performed these days. Students therefore communicate with each other and also make new friends all over the world besides playing games or chatting on Internet. It is supposed that they use Internet to the similar extent in their classrooms for educational purposes. However, this is not the case in all circumstances. Computer equipment is made available in most educational institutions in Saudi Arabia and so has NBU procured many advance technology tools to facilitate modern education opportunity to its students.

Trainings for faculty members and students are also facilitated through SNS. It is ironical though that even though there is presence of advance technology and infrastructure the integration of SNS inside most of the Saudi Arabian institutions of higher learning are still at low level and in infancy. In other words, it is perceived that large chunk of Saudi Arabian students still don't integrate all the available aspects of technology into their learning programs. More precisely, they do not use internet to take the online courses or even do some researches required in the classroom-based instructions. They still continue with going to the libraries instead of using the digital libraries available beforehand. Present research paper is an attempt to find out whether there is a relationship between the students' approaches towards Internet or not.

It is therefore important to examine how SNS are widely used in the higher education institutions in the Kingdom of Saudi Arabia in general and in Northern Border University (NBU) campuses across the northern region of the country in particular. Furthermore, the analysis should also be for the extent of teaching fraternity using SNS to connect with their students to facilitate teaching and learning resources for successful outcomes. We plan to use this idea to review the origins and evolution of SNS and its technology into our social communications. We are also documenting various ways and means of SNS uses in higher education currently to facilitate maximum benefits to teaching fraternity as well as student community. Next, we also examine the outcomes of research and offer some ideas like how SNS might *be utilized to enhance student*

success. An important focus of this study is also to address numerous challenges and opportunities which SNS present with its fast and increased popularity and prevalence within the higher education institutions and amongst the teaching fraternity as well as students.

Key research questions of this study include a refurbishing study of multiple questions with special focus on the most important social networking sites which faculty members as well as students bring into use on regular intervals and why do they prefer such sites? How do you balance your personal and professional uses of social networking sites? What are the challenges faced by the faculty members and student during browsing SNS? The participants were male and female, students and faculty members from Deanships and College at Northern Border University (NBU) besides the students enrolled in many streams in the Departments and Colleges of NBU. The sample of 300 students and more than 250 faculty members were randomly picked from various majors and streams are chosen through using the stratified sampling methods. As an instrument we used these questionnaires to collect the data to find out whether there was any relationship between approach and technology use investigated in through this study.

This research helped us to understand the niche issues of notable problems which both faculty members and students face while they use SNS for all purposes. Furthermore, we have also tried to suggest the possible opportunities which SNS can offer to educators and students to tackle various new challenges besides going with the comprehensive education management options. Following are the key objectives of SNS which can unquestionably enhance both teaching and learning experiences at NBU amongst its academicians and students:

1. SNS offer two-way communication option without incurring any expenses and so are they perfectly used as communication tools
2. SNS are turning into the most suitable choice of use as Notification as well as Announcement tool
3. The most notable feature to mention is that SNS carry similar functionalities which one can find in LMS and LCMS tools

2 LITERATURE REVIEW

Alexander (2006) brought together a variety of social networking sites' features and therefore explained how they could be useful in the higher education as well. Yet, he also challenged the educators to put forward "a complex, contradictory mix of openness and restriction, public engagement and cloistering" for its full-fledged application (p.42).

Duffy and Bruns (2006) introduced the use of WWW tools such as blogs, wikis, and RSS feeds in the educational environments, stating that the educational content delivered on social and mobile must match with what they will come across after the graduation of students. They even suggested that educational institutions should prepare students for their future through developing their collaborative communication competencies (Duffy & Bruns, 2006).

Ozkan and McKenzi (2008) contend that educators must use technology to engage learners through the social networking technologies (Selwyn, 2009). A student who has developed self-confidence (Bosch, 2009) can contact his / her teachers outside the classrooms as well.

Bardy, Holcomb, and Smith (2010) elaborate about it that higher educational institutions are still very slow in adapting SNS into blended learning. Many non-commercial SNS like Ning in education, provides exciting and innovative alternative for the commercial SNS for educators. Researches in the recent past have already revealed that for most of the students, SNS provide significant e-Learning benefits in their studies, and they simply need to incorporate such concepts into blended learning environments.

Johnson (2007) said that blogs are highly customizable and can be used for many purposes beyond the personal blog entries. In higher education, blogs are used by admissions to enlist currently enrolled students to blog about their lives to attract future students to their colleges. Faculty blogs are mainly about various research projects and courses they teach, which also attract currently enrolled students to their courses or area of researches, and many prospective students from that particular college to go ahead with that. Even some college presidents' blogs, despite the perceived risky nature of such venture, prove crucial in education sector.

Boyd and Ellison (2008) describe that SNSs, as web-based services, remain impactful for the users to create public profiles for which they are facilitated multiple options. Such well-organized features are available within specific system itself and so does it provide the opportunity for further explorations like offering room to other users with anybody and everybody with home one maintains association through sharing connections. Furthermore, it also provides option to the users to take initiatives for various types of navigations which ease maintaining own connections as well as thorough monitoring those connections which others have created within the system for multiplied communication channeling

SNS are extremely flexible options to use and expand opportunities for socialization purposes. SNS allows the users to search for other students in their respective disciplines, keep up with the old friends and make new ones, flirt and gossips, complain about the classes, and post unlimited number of

photos if they like. Social networking empowers the users with low technological sophistication in using the Web to manifest their creativity, engage in the social interactions, contribute their expertise, share content, and disseminate information and propaganda or to network among the business peers out of the unlimited choices available beforehand.

Integration of Information and Communication Technology (ICT) is highly related to the educational reforms. Internet technology in particular is remarkably considered by the educators as an effective medium that has been increasingly used in the educational domain (Peng, H., & Tsai, C., & Wu, Y., 2006). But do our universities actually integrate such technologies while imparting educational process? Do teachers apply such tools and media being purchased by the university administrators for such important purposes? And do students prefer using them as and when they get opportunities? Do faculty members and students use SNS for all sorts of educational purposes? Such crucial elements must be analyzed and investigated for a new dawn.

The problem addressed in this research is that Saudi college and university students use Internet to an increasing extent for the general purposes from their involvements in communicating with each other to chatting, making friends, playing games and so forth. However, a controversy arises as they do not use such tools for educational purposes yet. As thus, the level of ICT integration into education has not been increased in Saudi societies. As Professor Al Jarf (2006) has concluded in her experimental study on the impact of online instruction on the awareness of Saudi EFL students, distance learning is not applied on a wide scale and e-courses are not integrated in Saudi universities or colleges, particularly in the remote districts, as a supplement to traditional instruction.

Kirschner & Karpinski (2010) Study done on Facebook investigates the negative effects it can bring on the users. For example, inappropriate photos which students share could leave a damaging impact on them and their grooming. Other studies connect the time students spend on Facebook with the dropping of performance levels in their lessons.

Youths and teenagers use internet for several purposes at present time. They mostly use it for communication and also to build relationships worldwide. Youth and teenagers may also develop online friendships and the possibility for romantic relationships can't be ruled out. Use of Internet has popularly increased amongst the youngsters who are normally students at schools or colleges (Thayer & Ray, 2006). But the use of Internet for educational purposes is something quite different and therefore must be understood in that perspective only. Internet is different learning environment. Students may not get accustomed to it. It is worth to research and study to get

more information about whether there is a correlation between the different attitudes of students towards Internet in general and Internet as an educational medium in particular.

A review from the research paper by L., Schlenkrich and DA., Sewry (2012, page 12-24) on the "Factors for Successful Use of Social Networking Sites in Higher Education," suggested that SNS can be used productively and to great advantages, but it can also pose a significant threat to the users if its usage remains without circumspection. Whereas a research by Pearson and Babson Survey Research Group on "How Today's Higher Education Faculty Use Social Media," have discussed a number of issues and possibilities of social media. They have raised a valid discussion point "does the use of SNS being in fact a revolutionary? Many such unlimited questions are raised for suitable replies.

3 MATERIALS AND METHODS

Questionnaires were designed to know the attitudes of faculty members and students towards use of Internet and social networking sites. This research survey had been offered through the online and offline means. Support was taken from surveymonkey.com use for the online surveys. Whereas, offline survey was mainly through interview mode and interactions with the faculty members and students community.

Survey participants comprised of both male and female faculty members teaching undergraduate courses at NBU besides the students enrolled in different streams representing several Deanships and Colleges of said university. A sample of 300 students and more than 250 faculty members were randomly picked from different majors and streams and were chosen through using the stratified sampling method. As an instrument we used the questionnaires to collect data to find out whether there were any relationship between the approaches and usage of technology or not.

The variables are listed below:

3.1 Independent Variables:
Demographics (age, gender, level of education and Subject)
General use of SNS

3.2 Dependent Variables:
SNS as educational mediums
Challenges in SNS (Privacy, Advertisement and Subscription)

3.3 Research Questions

1. What is the most important social networking site you use on a regular basis, and why?
2. How do you balance your personal and professional uses of social networks?

3. What are the challenges faculty members and students face while using SNS?

3.4 Statement of Hypothesis

It is obvious that there would be big difference between the students' approaches towards Internet in respect of their demographic characteristics (age, gender and level of education, owning a computer at home and or academic majors) and the use of SNS in their routine life?

Faculty members may use SNS for personal or professional purposes.
SNS negative effect in their personal or professional life.
Students and faculty member's challenges while the use of SNS as an educational medium.

Research data was gathered from a simple questionnaire which consisted of 15 questions such as use of Internet, time and energy spent on Internet activities especially favorite social networking sites, and whether they used SNS for academic purposes as well..

4   RESULTS AND DISCUSSION

In this research survey , a total of 250 faculty members and 300 students were selected randomly from different deanship and streams, out of which 181(72% [male (150)] and 73% [female(100)]) faculty members and 223 (77.6% [male(125)] and 70.2 [female(175)]) students responded to our study survey. Less than 6% of the faculty and student left few questions from survey, which we considered in data analyzed, whereas the 28% of the participant skipped most of the question, was removed from data analyzed.

The first question was asked to the participant is about the internet usage every day, 100% of the respondent has access to internet every day, and this makes us to think to use web technologies and social networking site in higher education.

More than 97% of the participant have profile on social networking sites , three social networking sites represent most popular among the faculty member: Facebook (50%), Google+(32.80%) and YouTube (16%), whereas among the student: Instagram (56.57%), Google+(26.56%) and YouTube (35.26%) as shown in figure-I and figure-II respectively.

What is the most important social network or media that you check on a regular basis, the one you reach for first?
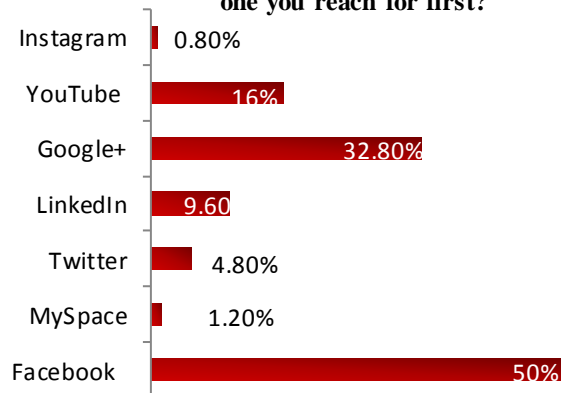
Instagram	0.80%
YouTube	16%
Google+	32.80%
LinkedIn	9.60
Twitter	4.80%
MySpace	1.20%
Facebook	50%

Figure I

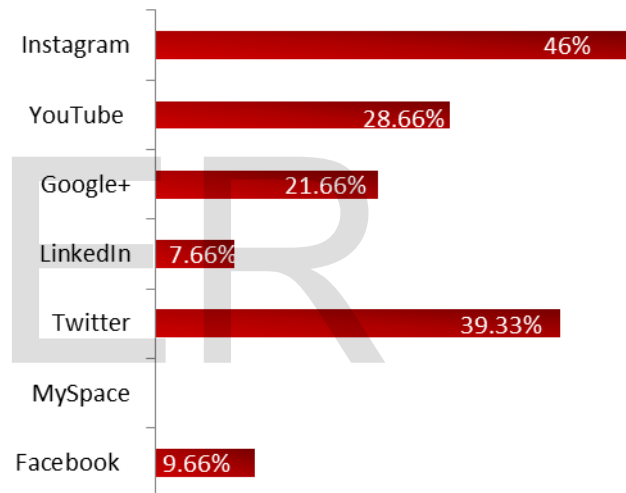|	
Instagram	46%
YouTube	28.66%
Google+	21.66%
LinkedIn	7.66%
Twitter	39.33%
MySpace	
Facebook	9.66%

Figure II

Why do they use social networking sites?
It is obvious that most of us use SNSs for connecting with the friends for communication purposes these days. Our data analysis made us observe the key factors pertaining to NBU faculty members and students which they religiously use. SNSs help them connect to their friends and so do they communicate with them effectively. We have also observed during our analysis that some faculty members even used their SNSs to benefit their research works besides communicating with other peers that turn SNSs useful for multiple purposes.

The research question, do you use SNS for teaching? Only 28% (see figure-III)of the respondent use SNS for teaching purpose, 49% (see figure-IV) of the student use SNS for learning, the ratio between faculty and student , SNS for teaching and learning is considerable good, It's important to understand

that faculty members need to be educate the features and possibilities of SNS in higher education.

It was observed that 29.60% of the faculty members activate in community discussion as reader than a moderator, its ironical 31.6% of the faculty members are not the member of any groups or community of their respective college or university, and just 25.33% of the student participate in community discussion.

Do you use SNS for teaching?

No — 42%
Yes — 28%

Figure III

Do you use SNS for Learning?

No — 33%
Yes — 49%

Figure IV

The general opinion is that, SNS has a nagative impact on personal and professional life were disagreed, from the survey we found 58.40% (figure V) of the faculty mamber believe that it deosnt has a negative impact on personal and professional life, 54.33% (figure VI) of the student also think in a same way.

Do you feel these networking sites have created any negative impact on your personal and professional life?

No — 58.40
Yes — 13.20

Figure V

No — 54.33%
Yes — 23.6

Figure VI

We included challenges like privacy, advertisement and subscription in our survey questionnaire, what are the challenges you faced while using SNS?. 27.60% (figure VII) of the faculty members consider privacy is the real concern while using SNS, whereas only 62.66% (figure VIII) of the student believe advisement is the major problem in SNS. It's observed from figure the two major challenges are privacy and advertisement.

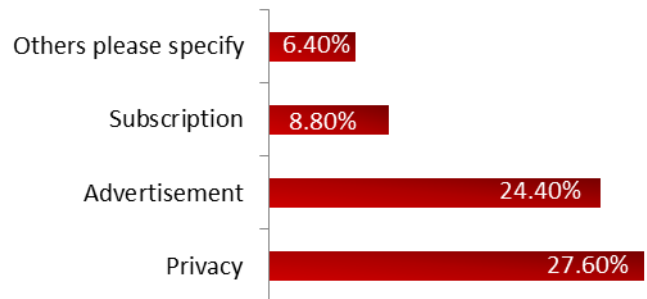**What are the challenges you faced while using SNS?**

Others please specify — 6.40%
Subscription — 8.80%
Advertisement — 24.40%
Privacy — 27.60%

Figure VII

Others please specify — 19%
Subscription — 24.33%
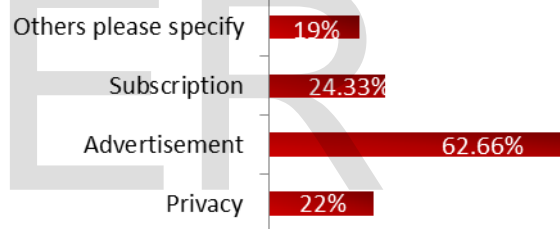Advertisement — 62.66%
Privacy — 22%

Figure VIII

5) CONCLUSION AND RECOMMENDATION

Educators are now accepting the latest technology tools eagerly to incorporate them in their teaching methodologies. 28% educators and 49% of the student use SNS for teaching and learning process, also like to experience social networking sites keenly and ensure that the features of such innovative teaching ideas are brought into use in a society that is already in the transition phase and ready to adapt all latest tools for teaching purposes. Social networking sites therefore offer an opportunity to both teachers and students to remain connected to the best extent possible. It is no more difficult for them to remain connected henceforth everybody from students to teachers, managers and alumni et al both within and outside the current institution develop ample connectivity through such resources. Most teaching fraternity praise social networking tools for features such as motivate and encourage students in a meaningful communicative practice.

- With its anytime learning features SNS prove highly supportive for learners to learn at their own time and pace convenience. Learners have their own choices

like when to study, what to study and how to study. SNS offer a variegated learning solution.

- SNS offer an opportunity for the learners to retrieve information immediately or later as per their choices.
- SNS are easier and quicker in term of accessibility, revising, updating and or upgrading the learning materials.
- SNS allow learners to select the learning materials from large quantity of courses offered online, and so do they make easier distribution of courses materials.
- SNS help to reduce the stress level besides increasing satisfaction amongst students. It also permits each student to study at their own pace and speed (self-pacing).
- It is too easy to join the bulletin board, discuss on a topic any time, visit the classmates and chat remotely with the instructors.
- It can provide stronger understanding and increase retention on the subjects concerns.
- SNS permit students to access courses and follow ups online itself that too without any reservation of time or location in the convenience of time so it deems an appropriate option to overcome limitations of space and time in educational process. As a result, it helps resolve the timetable conflicts.

With the above features of social networking sites, educators have to be very much careful with the privacy issues and the rest challenges like copyright laws, security issues, intellectual property rights and stability of technology amongst others.

Recommendation

From the survey data, we observed more than 90% of the participant both faculty and student has a profile in social networking sites, we concluded that student are more active than faculty in using SNS for education. There is strong requirement for training and educating faculty member to use social networking sites in teaching, communicating students, engaging them in healthy discussion, we recommend few suggestion for faculty members and student to integrate social networking sites in their teaching and learning process.

- Social networking sites allows to create pages and groups, faculty members can groups their student as per there academic year. This will make easy for student as well as faculty members to share required information between them.
- In SNS one can set his/her privacy settings, faculty member can use this feature to share their personal details with students.
- Faculty member may unfriend or delete the group once the teaching and learning process is completed

REFERENCES

[1] Ali, W., Z. (2008). Students' teacher attitudes towards computer and online learning: Are they a factor in students' usage? *The International Journal of Learning, 15*(6), 35-42. Retrieved from http://ijb.cgpublisher.com/product/pub.30/prod.1793

[2] Al Jarf, R. (2005). Connecting students across universities in Saudi Arabia. *ERIC Journal*, Number (EJ Number).ED 497940), Retrieved from ERIC.

[3] Al-Jarf, R. (2006). Impact of online instruction on EFL students' cultural awareness, *ERIC Journal.*(ED497400), Retrieved from ERIC.

[4] Bauer, J. & Kenton, J. (2005). Toward technology integration in the schools: Why it isn't happening, *Journal of Technology and Teacher Education, 13*(4), 519-546.

[5] Boyd, D.M., & Ellison, N.B. (2008).Social Network Sites: Definition, History, and Scholarship, *Journal of Computer-Mediated Communication, 13*, pp 210– 230.

[6] Castillo, Alexandra; Nettles, Mary Frances,(2012). Exploring Trends and Barriers to Implementation of Branding and Marketing Concepts in the School Nutrition Setting, *Journal of Child Nutrition & Management, v36 n2 Fall 2012*

[7] Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluation of quantitative and qualitative research*, Merill Prentice Hall: Upper Saddle River, NJ. (3rd edition).

[8] D., Treharne, D., & Tripp, H. (2003). University students' self-efficacy and their attitudes towards the internet: The role of students' perceptions of the internet, *Educational Studies, 32*(1). Retrieved from http://www.google.com/url?sa=U&start=1&q=http://editlib.org/index.cfm/files/pape145.

[9] Hair, J.F., Anderson, R.E., Tatham, R.L., & Black, W.C. (2009). *Multivariate Data Analysis*, Prentice Hall, Upper Saddle River, New Jersey, (7th Edition).

[10] Heo, Gyeong Mi; Lee, Romee,(2013). Blogs and Social Network Sites as Activity Systems: Exploring Adult Informal Learning Process through Activity Theory Framework, *Educational Technology & Society*, v16 n4 p133-145 2013

[11] Hoveland & M. J. Rosenberg (Eds.). *Attitude organization and change*. New Haven: Yale University Press.

[12] Isman, A. & Dabaj, F. (2008). Attitudes of students towards internet, *Turkish Online Journal of Distance Education- TOJDE*. *5*(4). Retrieved from http://tojde.anadolu.edu.tr/.

[13] Kimmons, Royce, (2014). Social Networking Sites, Literacy, and the Authentic Identity Problem, *TechTrends: Linking Research and Practice to Improve Learning*, v58 n2 p93-98 Mar 2014

[14] Lim, Keol; Meier, Ellen B.,(2012) . International Students' Use of Social Network Services in the New Culture: A Case Study with Korean Youths in the United States, *Asia Pacific Education Review*, v13 n1 p113-120 Mar 2012

[15] Mathews, B.S. (2006). Do you Facebook? Networking with students online? *Association of College and Research Libraries*, *67* (5). May. [online] retrieved from http://www.ala.org/ala/acrl/acrlpubs/crlnews/backissues2006/may06/facebook.cfm

[16] McLoughlin, C. and M. J. W. Lee (2008). *Mapping the digital terrain: New media and social software as catalysts for pedagogical change*, in Hello! Where are you in the landscape of educational technology? In: Proceedings Ascilite, Melbourne.

[17] Nour, S. (2002). Attitudes affecting college students preferences for distance learning. *Journal of Computer Assisted Learning, 18(2-9). Retrieved from http://faculty.ksu.edu.sa*

[18] Ozkan, B. & McKenzie, B. (2008). Social Networking Tools for Teacher Education. *Proceedings of Society for Information Technology & Teacher Education International Conference 2008* (pp. 2772-2776). Chesapeake, VA: AACE

[19] P.A. Kirschner, A.C. Karpinski, (2010). Facebook and academic performance. *Computers in Human Behavior.* 26 (2010) 1237-1245

[20] Parameswaran, M., & Whinston, A.B. (2007). Social computing: An overview communications of the association for information systems, [],*19*, pp.762–780.

[21] Paul Kiser, (2011, April 13). Who uses Facebook, Twitter, LinkedIn, & MySpace, retrieved from http://socialmediatoday.com/.

[22] Peng, H., & Tsai, C., & Wu, Y. (2006). ICT opportunities and challenges for development in the Arab world, *UNU-Wider. 83*, Retrieved from http://www.wider.unu.edu/publications/.

[23] Prichard, Caleb,(2013). Training L2 Learners to Use Facebook Appropriately and Effectively, *CALICO Journal*, v30 n2 p204-225 May 2013

[24] Rambe, Patient.(2011). Exploring the Impacts of Social Networking Sites on Academic Relations in the University. *Journal of Information Technology Education*, v10 p271-293 2011

[25] Snyder, J., Carpenter, D., & Slauson, G.J. (2007) . MySpace.com – A Social Networking Site and Social Contract Theory. *Information Systems Education Journal, vol. 5, no. 2, pp 3–11*

[26] Sharon Griffith , Liwan Liyanage. (2008).*An introduction to the potential of social networking sites in education.* retrieved from http://ro. uow.edu.au

[27] Thayer, S., & Ray, S. (2006). *Online communication preferences across age, gender, and duration of internet use. CyberPsychology & Behavior*, 9(4). Retrieved from http://www.liebertonline.com/doi/abs/10.1089/cpb.2006.9.432

[28] Tomei, L. A. (2005). Taxonomy for the technology domain. *USA: Information Science Publishing.*

[29] Valdes, R. (2007).Facebook and the Emerging Social Platform Wars, *Gartner Group*, *ID Number: G00152268*

[30] Yap, R., Muirhead, B., & Keefer, J. (2005*)*. Blog RUBRIC: Designing your Business Blog. *International Journal of Instructional Technology and Distance Learning*, vol. 2, no. 11, pp 53–59