

EXPLORING AWARENESS AND FACTORS FACILITATING DIFFUSION, ADOPTION AND USE OF SOCIAL MEDIA IN TEACHING, LEARNING AND RESEARCH BY FACULTY MEMBERS IN AHMADU BELLO UNIVERSITY, ZARIA

By

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Abstract

This paper focused on Exploring Awareness and Factors Facilitating Diffusion, Adoption and Use of Social Media in Teaching, Learning and Research (TLR) by Faculty Members in Ahmadu Bello University, Zaria. The objectives of this paper are: To identify the types social media faculty members of Ahmadu Bello University, Zaria, are aware of and to identify factors that facilitate the diffusion, adoption and use of social media in TLR by faculty members in Ahmadu Bello University, Zaria. The researchers used single case study research design for this study. The population of this study comprised all the faculty members including staff in training in the 12 faculties of ABU, Zaria with a total number of One thousand nine hundred and fifty nine (1, 959). The researchers selected participants purposefully who must have had life experiences with using social media in Teaching, Learning, Research. Thus, the researchers used this criterion to select 12 faculty members for the interview, one from each faculty. The researcher employed interview as the instrument for collecting data. The researcher adopted the thematic process of data analysis. It was found out that Faculty members were aware of two types of social media: Everyday life Social Media and Scholarly Social Media. Factors that facilitate the diffusion of social media for TLR are: being technologically savvy (curiosity), social media as a tool for interactions, social media as a tool for collaboration and Interactions among faculty members. Factors that facilitate Adoption of social media for TLR by the faculty members are academic network, official academic gathering, and family members. Factors that facilitate the Use of social media by the faculty members are social media benefit, ease of use and Exposure of faculty members abroad (training) etc. It was concluded that Faculty members in Ahmadu Bello University, Zaria were aware of scholarly social media and everyday life social media. They indicated that diffusion, adoption and use of social media for teaching, learning and research depend on some factors. These factors included curiosity, Academic connectivity like academic colleagues, online forums, students etc. It was recommended that University management should mount training programmes aimed at creating awareness on the academic implication of the two social media types and how best to apply in Teaching, Learning, Research. Training programmes in the form of workshops, conferences and symposium etc. would ensure increased awareness and encourage best practice and Faculty members should endeavor to acquire technology savvy skills as it will help in upstanding social media technologies which will improve Teaching, Learning and Research in the University.

Introduction

Social media is an integral tool in today's teaching, learning and research. It promotes active, collaborative learning (Harris, 2002). Active learning is a constructivist pedagogical approach that stresses the critical role of social interactions in the learning process (Prince, 2004). Collaborative learning is a major feature of high ranking universities; they mostly achieve this through using Social media (Babson Survey Research Group, 2011). However, despite the advantages of Social media in

promoting collaborative learning, we do not have a better understanding of the adoption and use of social media for teaching, learning and research (Teaching Learning and Research) from the perspective of faculty members within the context of universities in developing nations, particularly in Nigeria (Dar es Salam, 2011; Liman, 2014).

The use of social media in higher institutions of learning has transformed Teaching, Learning and Research in significant ways. For instance, the interactive nature of social media allows students to share information and generate dialogues with their teachers and other students at the same time. It also gives an opportunity for both faculty members and students to build professional networks and create a better learning environment (Mhunpiew and Purayidathil, 2015) in which they learn from and share knowledge and information in their fields of specialization in colleges of education, polytechnics, and universities. Universities and colleges are rapidly embracing these new technologies and leveraging them not only to enhance their traditional curriculum, but also to extend course offerings beyond the college campus (Enonbun, 2010).

Statement of the Problem

Social media play a major role in educational environment where teaching, learning and research take place. Nigerian Universities have high student enrollments. Many institutions in the developed and developing countries have taken the advantage of Social media in this way. For instance, many institutions in the United States have adopted Social media for academic purposes (Babson Survey Research Group, 2011). Similarly, 94% of teachers in Croatia are familiar with Social media, and 60% used it for teaching (Matesic, Vockovic, Doveda and Lucica, 2009). In the same vein, 90% of teachers in the South East European University in the Republic of Macedonia are aware of Social media, out of whom 52% used it in teaching (Bexheti, Ismaili & Cico, 2013).

In spite of the wide diffusion, adoption, and use of Social media for Teaching, Learning and Research, there is scarcity of literature concerning awareness and factors concerning diffusion, adoption and use of Social Media particularly by Faculty Members in Ahmadu Bello University, Zaria. Hence, the researcher conducted this study. The study focused on Exploring Awareness and Factors Facilitating Diffusion, Adoption and Use of Social Media in Teaching, Learning and Research by Faculty Members in Ahmadu Bello University, Zaria.

Research Questions

The following research questions were raised:

1. What types of social media technologies are faculty members aware of in Ahmadu Bello University, Zaria?
2. What factors facilitate the diffusion, adoption and use of social media by faculty members in Ahmadu Bello University, Zaria?

Objectives of the Study

The following objectives guided this study:

1. To identify the types social media faculty members of Ahmadu Bello University, Zaria are aware of.
2. To identify factors that facilitate the diffusion, adoption and use of social media in Teaching Learning Research by faculty members in Ahmadu Bello University, Zaria.

Review of Literature

Based on the research questions and objectives of this study. The following literature was reviewed in order to find out the views of other scholars on the Awareness and factors facilitating the Diffusion, Adoption and Use of Social Media in Teaching, Learning and Research.

Awareness of Social Media for Teaching, Learning and Research

The awareness of social media for teaching, learning and research cannot be separated from its diffusion. The diffusion of social media is because of the rising Internet penetration (De Zuniga, [Jung and Valenzuela](#), 2012). In essence, more than half of the world populations are connected to Internet (Kemp, 2017), this makes it possible for more and more people to gain access to information via WhatsApp, YouTube, Skype, etc. More so, the increase in access to Internet is by day resulting to the shrinking of the digital divide which is the gap between the nations having Internet connectivity and those who do not have (Kende, 2017). To bridge the digital divide, organizations at international, regional, and local levels are funding programmes aimed at bridging the gap (World Information Society Report, 2007).

As Internet access is becoming cheaper, the technologies for accessing the Internet are becoming cheaper by the day. For instance, Smartphones which cost several hundreds of dollars are now readily available at affordable prices (Humphreys, [Pape and Karnowski](#), 2013). The affordability

of Smartphones and mobile phones devices have significantly accelerated the rate of diffusion of social media. Many people in the developed and developing countries connect to social media through their mobile phones to access news and stories. As such, a high number of people including faculty members prefer to access their profiles on social media first before visiting news sites. Therefore, with the rise in the awareness of social media sites such as Facebook and Twitter, more and more people are logging in everyday to interact and share information with friends and followers thereby changing the way they socialize and interact with one another. The awareness of social media has tremendously changed the way people spend their leisure time. The era of which people meet one another or new people through traditional venues such as Cafes, Parks and so on, is gradually fading away, more people are discovering friends via social media.

Nevertheless, the awareness of social media informed faculty members about product and services, about online transaction and E-Government. They seized this opportunity to communicate with their client and shop online. Therefore, social media allows entrepreneurs to discover its great potential in reaching out to potential clients. Social media is used as a way of attracting new clients and promoting products and services. For instance, Facebook's Express Wi-Fi let entrepreneurs to set up a hot spot to help their community access apps and services built by local developers. The era of manual transactions in businesses is fading away. Banks use the power of this media to interact with their customers and advertise their products and services. Subsequently, more people are subscribing to e-banking and e-businesses. Also, E-Government is gradually gaining ground in both developed and developing economy arising from effective cultivation strategy offered by social media. From the foregoing, the awareness and use of social media by the faculty members in their daily lives promotes student-faculty interactions (Association of College & University Telecommunications Administrators, 2010) has a notable impact on students' academic performance.

Closely related to the awareness of everyday life social media is another interesting finding; awareness of social media related to academic activities. The finding revealed that the faculty members are aware of the social media related to academic activities which include Research Gate, Academia.edu, Mendeley, and Moodle. This is also not surprising because the fact that the participants are aware and engage in using social media for their daily lives makes it easier to become aware of its academic potentials. Traditionally, faculty members do engage in physical interaction, collaboration, discussion and sharing of information about their academic activities among themselves and with their students. But today, social media open-up new ways for collaboration and

discussion thereby making it easier for them to interact and share information and knowledge via these media.

More so, the dynamic awareness of social media by the faculty members is needed to understand the trend in social media revolution. The revolution in social media is transforming many existing applications to begin to assume features of social media. Applications like Moodle, Mendeley, Google and email engines etc. are now having features of social media. Social media has offered necessary and better improvement to these applications and has made them more dynamic in their operations. For instance, Gmail circle in Gmail, Google Plus in Google search engine, citations software or reference managers like Mendeley and Zotero are also taking features of social media and are now referred to as social media applications. All the same, it is thus important to note that there are many existing applications that are continually transforming to assume features of social media. It is all about transformation, more and more applications are still emerging with features of social media. It is a social media revolution which has come to stay. This suggests reasons for regarding applications such as email, Mendeley and Moodle by the participants as social media platforms despite their life experiences with the use of social media.

Factors Facilitating the Diffusion, Adoption and Use of Social Media for Teaching, Learning and Research

Social media has a major role in improving and developing Teaching, Learning and Research in higher institutions of learning, (Raut and Patil, 2016). Although a considerable number of faculty members have begun to explore the potential benefits in it (Lupton, 2014), but they are still contemplating on how significantly the ways in which this new Internet can enhance their own practice and their students' learning" (Richardson, 2008). Social media is a story about community and collaboration on a scale never seen before (Burns, 2009). It's about the cosmic compendium of knowledge (Dijck, 2009) that promotes Social Constructivist Learning practice (Schrader, 2015). It is therefore, suggested that the main points of what social media offers and the elements of social constructivism are very compatible (Bonzo and Pachoma, 2010). This is because; social media is a participatory web (Koçak and Oyman, 2012). It interlinks people together, allows users to engage actively and interactively to create content. Elements of social constructivist learning are all similar to principles of social media (Yilmaz, 2008; Bonzo and Pachoma, 2010) in that learning requires active participation by the learner, while Social media are dynamic and based on active participation rather than passive viewing; previous experience is important in understanding new knowledge, while information sharing, a key element in social media helps in sharing of

experience among users which is also important in understanding new knowledge; individual knowledge construction requires a social interaction element within the environment while in social media, information is created through individual participation and interactivity; negotiation within the learning environment is essential to the development of shared meaning and common knowledge while collaboration is also very essential in social media; and lastly, learning best takes place within a sociocultural context - a community of practice and social media is all about community and is all about collaboration.

However, curiosity is identified as a factor facilitating diffusion, adoption and use of social media for teaching, learning and research. This is because curiosity super charges learning (Price-Mitchell, 2015). Curiosity also, facilitates and faculty member's ability to understand new technologies thereby breeding more technologically savvy teachers. Innovation is seen as a factor facilitating diffusion, adoption and use of social media in teaching, learning and research. For example, Jyothi and Penman (2015) showed that Facebook is beneficial for the learners in terms of providing an innovative way of learning; fostering greater interaction amongst co-students and staff; and effectively engaging them with the content of courses.

The diffusion, adoption and use of social media in the academic environment are also enabled by the existing organizational infrastructural facilities. Facilities such as power, network, smartphones and computers are very crucial in the use of social media technologies for Teaching Learning Research. It is however, surprising that on this section none of these facilities were mentioned by the participants as factors that help in the diffusion, adoption and use of social media for Teaching Learning Research. But, the fact that it has been stated by several other participants. Therefore, stable power, efficient internet bandwidth, affordability of smartphones and computers is counted among the crucial factors that facilitate the diffusion, adoption and use of social media technology for Teaching, Learning and Research by the faculty members. Similarly, technological infrastructures of social media such as accessibility to information, making new friends and keeping existing connections, acceptability, affordability, freedom of expression and the satisfaction in terms of use also forms other factors that facilitate diffusion, adoption and use of this media.

Research Methodology

The researcher used single case study research design for this study. The choice of case study was because, it is appropriate when there is a need to understand and explain social phenomena. The

population of this study comprised all the faculty members including staff in training in the 12 faculties of ABU, Zaria, with a total number of One thousand nine hundred and fifty nine (1, 959) as obtained from the Management Information System of the Institute of Computing & ICT, ABU, Zaria, 2016. The researcher selected participants purposefully who must have had life experiences with using social media in Teaching, Learning, Research. Thus, the researcher selected 12 faculty members for the interview, one from each faculty. The researcher employed interview as the instrument for collecting data. The researcher adopted the thematic process of data analysis.

Result of the Study

From the analysis of the data in this study, the following results are obtained:

1. Faculty members in ABU, Zaria, are particularly aware of the Social media that enable them to carry out their day-to-day activities. Popular types of Social media that feature under this category include Facebook, twitter, WhatsApp, and e-mail platforms. In explaining the knowledge of Facebook, Twitter and WhatsApp as a Social media a lecturer from the Faculty of Veterinary Medicine asserts that:

I think there are so many ranging from the Facebook, the Twitter, I think they are plenty and these are the common ones especially the Twitter and the Facebook I think is one that is most patronize virtually all the Social media to the best of my knowledge particularly the Facebook, the WhatsApp. However, some of the participants disclosed that they are aware and find academic Social media very valuable because they enable them to share their research work and review research results conducted by other researchers around the globe. Some examples of the academic Social media that ABU FM, are aware of are: Research gate, Academia.edu, Mendeley, Moodle and Blog. In discussing the knowledge of Research gate, Academia.edu, Mendeley, Moodle and Blog as academic Social media, a lecturer from the Faculty of Science highlighted that:

Firstly, I think I use a number of Social media ranging from Facebook, WhatsApp, Twitter and the Research Gate, LinkedIn and Academia.edu and so on. I use quite a number of them

2. Faculty members in ABU, Zaria, came to know about the application of Social media for academic purposes because of their curiosity. This facilitates the diffusion and adoption of the media by the faculty members. They also get to know the relevance of Social media for academic activities through their relationships and connections with other faculty members and scholars around the globe within academic circle. They create fora through social networking platforms, and or online community where people of similar interest meet and share knowledge including knowledge on the usefulness of

Social media to education. This also facilitates the diffusion and adoption of the social media by the faculty members. Some faculty members became aware of the immense benefit of Social media to academics through organized official meeting or training programme arranged by some departments in the University, where issues of importance about current research trends are discussed. Official academic gathering comes in the form of workshops, conferences, symposia, seminars, meetings etc. Furthermore, some of the participants indicated that they came to know about Social media use for academic purposes through family members. The factors that facilitate social media use for Teaching, Learning and Research include: Social Media benefit, ease of use, security and exposure of faculty members abroad (Training).

Summary of the Major Findings

The major findings of this study in the order of the research questions were:

1. Faculty members were aware of two types of social media: I. Everyday life Social Media and ii. Scholarly Social Media.
2. The findings on the factors that facilitated the diffusion, adoption and use of social media for Teaching, Learning and Research were: Being technologically savvy (curiosity), social media as a tool for interactions, social media as a tool for collaboration and Interactions among faculty members among others.

Discussion of Findings

This section discussed the findings of the study regarding the types of social media the faculty members are aware of. The findings revealed that the faculty members are aware of social media related to everyday life which include Facebook, WhatsApp, and Twitter. The fact that the faculty members are aware of Facebook, WhatsApp, and Twitter is not surprising because social media continue to diffuse in both developed and developing economies. The diffusion of social media is because of the rising Internet penetration ([De Zuniga, et al., 2012](#)). In essence, more than half of the world populations are connected to Internet (Kemp, 2017), this makes it possible for more and more people to gain access to information via WhatsApp, YouTube, Skype, etc. More so, the increase in access to Internet is by day resulting to the shrinking of the digital divide which is the gap between the nations having Internet connectivity and those who do not have (Kende, 2017). To bridge the digital divide, organizations at international, regional, and local levels are funding programmes aimed at bridging the gap (World Information Society Report, 2007).

This section discussed the findings regarding the *factors that facilitate the diffusion, adoption and use of social media by the faculty members on Teaching Learning Research in Ahmadu Bello University, Zaria*. The findings revealed that Exposure of faculty members abroad arising from *curiosity*, Academic Network (*including academic colleagues, online forums, students and other non-academic colleagues*) official Academic Gathering and *Family Members*. Others were Social Media Benefits (*including beneficial connections, availability of required information, and social interaction*), Ease of Use, (*including accessibility to information, acceptability, affordability, freedom of expression*) Satisfaction, and Exposure of faculty members abroad (Training) were found to be the factors that facilitates the diffusion, adoption and use of social media for Teaching, Learning and Research activities by the faculty members.

Conclusion

It was concluded that Faculty members in Ahmadu Bello University, Zaria were aware of scholarly social media and everyday life social media. They indicated that diffusion, adoption and use of social media for teaching, learning and research depend on some factors. These factors included curiosity, Academic connectivity like academic colleagues, online forums, students etc. Others include official academic forum, family members, importance of the media such as beneficial connections, availability of required information, and social interaction among others.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. Although, faculty members were aware of social media related to everyday life and scholarly social media, their awareness of everyday life social media is for social interaction alone without realizing its academic potentials. Therefore, the University management should mount training programmes aimed at creating awareness on the academic implication of the two social media types and how best to apply in Teaching, Learning, Research. Training programmes in the form of workshops, conferences and symposium etc. would ensure increased awareness and encourage best practice.
2. Faculty members should endeavor to acquire technology savvy skills as it will help in upstanding social media technologies which will improve Teaching, Learning and Research in the University. Also, the University Management should strive to improve the level of interaction among faculty members, by constructing more seats out parks and gardens, sports and recreational centres and other interactive arena that brings together the

faculty members to freely interact and share ideas such as social media use in Teaching, Learning and Research.

References

- Association of College and University Telecommunications Administrators. (2010). Social media and higher education literature review. The literature review compiled in conjunction with the survey research group. Retrieved from www.fullerton.edu/technologyservices/.../SC10SemerLitReview.pdf. Accessed on 22/9/2018.
- Babson Survey Research Group. (2011). Teaching, learning, and sharing: How today's higher education faculty use social media. The education resources information center (ERIC).
- Bexheti, A. L., Ismaili, E. B. and Cico, H. B. (2013). An analysis of social media usage in teaching and learning: The case of SEEU. Recent advances in electrical and computer engineering. Retrieved from <http://inase.org/library/2014/venice/bypaper/OLA/OLA-14.pdf>. ISBN. Accessed on 21/9/2018.
- Bonzo, J. and Pachoma, G. (2010). The paradox of social media and higher education institutions. *Proceedings of the 7th International Conference on Networked* ISBN 978-1-86220-225-2.
- Burns, K. S. (2009). *Celeb 2.0: How social media foster our fascination with popular culture*. Greenwood Publishing Group.
- Dar es Salam, L. K. (2011). [Unleashing web 2.0 for African education](#). *International Conference Proceeding on "Perspective on ICT, Education and Development in Africa"* eLearning Africa News.
- [De Zuniga, G. H., Jung, N. and Valenzuela, S. \(2012\). Social media use for news and individuals' social capital, civic engagement and political participation. *Journal of Computer-Mediated Communication*, 17 \(3\). Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.1083-6101.2012.01574.x/pdf>. Accessed on 21/9/2018.](#)
- Dijck, J. V. (2009). Media, culture and society: Users like you? Theorizing agency in user-generated content. DOI: 10.1177/0163443708098245. Accessed on 19/9/2018.
- Enonbun, O. (2010). Constructivism and web 2.0 in the emerging learning era: A global perspective. *Journal of Strategic Innovation and Sustainability*, 6 (4), 74.
- Harris, S. (2002). Innovative pedagogical practices using ICT in schools in England. *Journal of Computer Assisted Learning*, 18, Pp;449-458.
- [Humphreys, L., Pape, T. V. and Karnowski, V. \(2013\). Evolving mobile media: Uses and conceptualizations of the mobile internet. *Journal of Computer-Mediated Communication*, 18 \(4\). Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/jcc4.12019/pdf>. Accessed on 15/9/2018.](#)

- Jyothi, T. and Penman, J. (2015). Social media for learning and teaching undergraduate sciences: Good practice guidelines from intervention. *The Electronic Journal of E-Learning*, 13 (6), 455-465. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1087212.pdf>. Accessed on 15/9/2018.
- Kemp, S. (2017). Digital in 2017: Global overview. Retrieved from <https://wearesocial.com/special-reports/digital-in-2017-global-overview>. Accessed on 23/9/2018.
- Kende, M. (2017). The shrinking digital divide. Retrieved from <https://techcrunch.com/2015/07/12/the-shrinking-digital-divide/>. Accessed on 23/9/2018.
- Koçak N. G. Oyman M. (2012). Social media usage behaviors of individuals: An application in Eskişehir. *International Journal of Business and Social Science*, 3 (22), Retrieved from http://www.ijbssnet.com/journals/Vol_3_No_22_Special_Issue_November_2012/16.pdf. Accessed on 28/8/2019.
- [Liman, S. \(2014\). *New Media in Higher Education: A Study of Social Media Use among Students of Ahmadu Bello University, Zaria, Nigeria.* \(Unpublished Dissertation, Department of Theatre and Performing Arts, Faculty of Arts, Ahmadu Bello University, Zaria\).](#)
- [Lupton, D. \(2014\). *Feeling better connected: Academics' use of social media.* A report published by the News & Media Research Centre, University of Canberra, 10 June 2014. Retrieved from https://www.canberra.edu.au/about-uc/faculties/arts-design/attachments2/pdf/n-and-mrc/Feeling-Better-Connected-report-final.pdf. Accessed on 16/4/2019.](#)
- Management Information System of the Institute of Computing and ICT, ABU, Zaria. (2016). Staff statistics of the university faculty members.
- Matesic, M., Vockovic, K., Doveda, Z., and Lucica, I. (2009). Social software: A teaching tool or not? *INFuture 2009, Digital Information and Heritage*, 3.
- Mhunpiew N., Purayidathil J. (2015). Social networks as tools for education: An awareness of school leaders. *US-China Education Review*, 2, 135-141. Doi: 10.17265/2161-623X/2015.02.006. Accessed on 17/4/2019.
- Price-Mitchell, M. (2015). Curiosity: The force within a hungry mind. Retrieved from <https://www.edutopia.org/blog/8-pathways-curiosity-hungry-mind-marilyn-price-mitchell>. Accessed on 16/4/2019.
- Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering Education*, 93 (3), 223-231.
- Schrader, D. E. (2015). Constructivism and learning in the age of social media: Changing minds and learning communities. DOI: 10.1002/tl.20160. Accessed on 21/9/2018.
- Raut, V. and Patil, P. (2016). Use of social media in education: Positive and negative impact on the students. *International Journal on Recent and Innovation Trends in Computing and Communication*, 4 (1). Retrieved from

http://www.ijritcc.org/download/conferences/ICRRTET_2016/ICRRTET_Track/1455261816_12-02-2016.pdf. Accessed on 21/9/2018.

Richardson, W. (2008). Blogs, wikis, podcasts, and other powerful web tools for classrooms. Thousand Oaks: CA: Corwin Press. A Sage Publication.

World Information Society Report. (2007). Bridging the digital divide. Retrieved from <https://www.itu.int/osg/spu/publications/worldinformationsociety/2007/WISR07-chapter2.pdf>. Accessed on 21/9/2018.

Yilmaz, K. (2008). Constructivism: Its theoretical underpinnings, variations, and implications for classroom instruction. *Educational horizons*, 86 (3), 161-172.