

# **The Role of Social Media on Students' Identity Development in Tanzania Higher Education: A Case of Ruaha Catholic University**

**David E. Mwanakatwe**  
Ruaha Catholic University  
*davlamwa@gmail.com*

## ***Abstract***

*This study examined the role of social media on student identity development in Tanzania higher education. Two research objectives guided the study; firstly, investigating how social media influence learning identities and perception among university students. Secondly, examining how university students perform their academics activities in the context of social media learning space. The Ruaha Catholic University was used as a case study. It is out of this population that a sample of 173 students from three programmes was extracted by using random sampling. Qualitative data collected from semi-structured interview were subjected to thematic analysis, whereas quantitative data collected through open-ended questionnaire were computed and analyzed by using Statistical Package for Social Science (SPSS) version 23.0. After studying the phenomena that were of interest to the study, the results revealed that social media are widely used by students of higher institutions and contribute a significant role to the development of their academic life and therefore shaping their ideas and practice of being the university students. It is recommended that educators, who wish to engage students in an open discussion and expression of ideas in and out of the classroom, should look to social media as the potential educational tools towards learning.*

**Keywords:** Social Media, Social Networking Sites, Identity, Identity Development

## **1.0 Introduction**

In a network and knowledgeable society, lifelong learning has become a joint knowledge sharing and creation rather than top-down knowledge transfer. The social web offers unprecedented opportunities for this kind of learning. The new realities of our digital generations have caused a radical shift in the execution of social exchanges among individuals in the society by changing the role that major agents of socialization now play in the 21<sup>st</sup> century (Code, 2015).

Due to the internet making mutual data communication possible, the concept of social media has emerged (Gunduz, 2017). Hansen *et al.* (2017) defined social media as a set of online applications and tool that provide ways of social interaction and communication between digital media users by facilitating and creating knowledge sharing and ultimately transforming a monologue into a dialog, for instance, by an organization to customers. Social media prompts individuals to construct their online identities, negotiate and verify identity claims and – most important – to enact multiple identities (Stets & Serpe, 2016).

The world network opens up new opportunities for self-expression and for forming identity. Identity is a “conscious sense of individual uniqueness” and an “unconscious striving for a continuity of experience” (Erikson, 1968). Identity is a construct that encompasses the way we think about ourselves and our role in larger social environments; identity is enacted through social interactions with others and our relationships with them. How we see ourselves and our role in the larger social environment can have consequences on how we behave,

what we believe, and whom we affiliate to. Therefore, the term identity, in this case, is used to refer to a broad set of attitudes and behaviours associated with intellectual engagement, approach to learning and identification with the social category, of being a learner.

The advent of social media has impacted significantly on how students learn and the mode instructors teach. In today higher education settings, social media influence instructors, students, and others to cooperate with each other on the tasks of knowledge construction in learning and teaching environments. Its applications strengthen class material and positively influence discussions collaborative work, and authoring. The emergence of hyper-connectivity where people can now be constantly connected online, the spread of social media, and the increase in online personal information, are key factors which will interact to influence identities. Social media have the potential role to shape identity processes in meaningful ways, it is therefore important to consider the identity implications of social media practices.

### **1.1 Background of the Study**

In the era of social media, social consciousness is formed in accordance with new principles thus establishing new goals in all public institutions. It is obvious that education is not an exception. Institutions and academicians are continually trying with social media technologies hoping to excite critical thinking skills, collaboration and knowledge construction. Today, social media have been accepted by higher learning institutions making them a platform where students connect with their instructors, fellow students and other higher authorities. In Web

2.0, the possible forms of network activity of modern students are extremely diverse including facebook, wikis (Wikispaces), media-sharing services (Youtube), blogging tools (Blogger), micro-blogging services (Twitter), social bookmarking (Delicious), bibliographic management tools (Zotero) and presentation-sharing tools (Slideshare, Gruzd, Staves & Wilk, 2012). Others are like Instagram, Google plus and LinkedIn. Some of such networks have become more popular in schools as the base of new learning environment. The social media and the personal identity online determine new forms of an educational process and new learning environments.

The rise of social media has inspired many researchers to explore what social media do to our identity. Researchers on social media in education suggest that integrating social media in learning and teaching environments may yield new forms of inquiry, communication, collaboration, identity work, or have positive cognitive, social, and emotional impacts (Gao, Luo & Zhang 2012; Greenhow, Burton & Robelia 2011; Greenhow & Robelia 2009a, 2009b; Pimmer & Grohbiel, 2012; Ranieri, Manca & Fini, 2012). Copes *et al.* (2016) and Pinkard *et al.* (2017) agree that construction of professional identity in social media among students is strongly related to individual or collective social identities through their cultural narratives, which determine their professional choices, norms, and expectations.

A learning identity develops over time from tentatively adopting a learning stance toward life experience, to a more confident learning orientation, to a learning self that is specific to certain contexts, and ultimately to a learning self-identity that

permeates deeply into all aspects of the way one lives their life. This progression is sustained and nurtured through growth-producing relationships in one's life. The most important things in student's life are studying, learning good habits and gaining knowledge to become a person with morally integral character. But today, this optimal learning process is seriously jeopardized by students becoming entrapped by the trick of social networking. Students neglect their studies by spending more time on social networking and websites rather than studying or interacting with people in person. Actively and frequently participating in social networking can negatively affect their grades or hamper their journeys to their future careers. Studies examining use of media among college students suggest that students spend between 30 to 60 minutes of social networking (Jacobsen & Forste, 2010; Pempek, Yermolayeva & Calvert, 2009).

A school is a mirror image of society and education should move forward and adapt social and cultural trends that occur in the world (Cuban & Tyack, 1995). It is necessary to create a new type of class, the class of the epoch of social media. A large number of scholars suggest that students learn in new ways using social media and educators should envelop these new platforms (Ito *et al.*, 2009; Jenkins, 2006). In his study, O'Keeffe *et al.* (2011) claimed that social media platforms allow students to bring together outside of class for the intention of collaborating and exchanging ideas about their homework. Building strong connections on social media helps students develop greater social capital and have a supportive network of peers when they need assistance (Ellison, Steinfield & Lampe, 2007, 2011; Ellison, Vitak, Gray & Lampe, 2014).

According to Chickering and Reisser (1993), seven vectors can be used to explain the process of identity formation to students. These include developing competence; there are three types of competences that develop in college like intellectual, physical and interpersonal. Managing emotions that college students begin to recognize their emotions and develop intrapsychic strategies for coping with them. Moving through autonomy toward interdependence as the students first learn to become self-sufficient and to function without the input and direction of others (like parents); then students realize that they cannot function independently of others and move toward interdependence. Developing a mature interpersonal relationship which involves the capacity to tolerate and appreciate differences in others and to build the capacity for intimacy. This development makes one better able to engage in relationships based on interdependence and equality. Establishing identity is the development of a stable sense of self that includes being comfortable with one's body, sexual orientation, cultural heritage, self-concept, self-esteem and personal stability. Also, developing purpose clarifying who they are, students need to develop a sense of who they want to be. This includes the development of a career plan that takes into account personal interests and familial commitments. Developing integrity is closely related to the previous two vectors, on this vector students humanize and personalize their values and develop congruence, matching their personal values with those of society and engaging in socially responsible behaviour.

In this way, students who have not successfully engaged in the process of identity formation have more difficulty of adapting

to college environments (Kroger, 2008). The research on learning in informal (online) learning networks and communities (Ala-Mutka, 2010) concludes that social media applications provide easy, fast and efficient ways to access a great diversity of information and situated knowledge. They also provide learners with opportunities to develop their competences in collaboration with other learners, practitioners and stakeholders. Learning approaches using social media furthermore promote pedagogical innovation by encouraging teaching and learning processes that are based on personalisation and collaboration. As a consequence, interaction patterns between and among students and teachers are changed, re-defining the roles of teachers and learners. Teachers become designers, coordinators, moderators, mediators and mentors, rather than instructors or lecturers, whereas students not only have to take responsibility for their own learning progress, but also they have to support each other in their learning endeavours and jointly create the learning content and context.

The extent to which entering university students can develop their identity is directly related to their academic and interpersonal success. Students who do not successfully pass through the stage of identity formation have much more difficulty in college environments. They do not have strong interpersonal connections, which are necessary for feeling a sense of connection to the college environment and for developing academic and social integration, which in turn are related to their motivation to be successful (Tinto, 1993). Therefore, understanding how students relate among themselves as agents, structured by their social background and

previous learning experiences; how they relate to the specific educational academic institution; how they relate to global changes and their expectations regarding how to be a good student in that context requires an investigation.

## **1.2 Statement of the Problem**

In the era of social media, social consciousness is formed in accordance with new social changes, thus establishing new goals in all public institutions, education is not an exception. These changes have been received in institutions of higher learning with varying degrees of rapture, disruption, acceptance, fear and resistance, at all levels of the organisation (Flavin, 2016; Watty, McKay & Ngo, 2016). Reviewing 70 studies, Seabrook, Kern and Rickard (2016) found an inverse correlation between supportive online interaction on social media and both depression and anxiety. The possible threats associated with social media are too great, because student engaging in a private relationship outside the classroom circles begs for inappropriate behaviour to commence (Gurman, 2015). The way these social webs currently operate promotes identity confusion, which affects the aim of sharing knowledge and having creative interactions with the most suitable people and information around. Unfortunately, very little attention has been given to understand how social media affect student identity development, although these sites and services are central to the lives of our students. Banquil and Chua (2009) argued that social networking sites do affect one's academics adversely and cause a gradual drop of grades of students. Students devote more of their time in social networking sites instead of their studies. Thus, the social media and the learner identity determine new forms of an educational process and new



learning environments. As pointed earlier that, school is a mirror image of society and education should move forward and adapt social and cultural trends that occur in the world (Cuban & Tyack, 1995). It is necessary to create a new type of class, the class of the epoch of social media. This paper intends to investigate how social media influence learning identities; and to examine how university students perform their academics in the context of social media learning space.

### **1.3 Social Media**

Technological advancements and pedagogies that emphasize learners as co-producers of knowledge (Selwyn, 2011) have contributed to people's adoption of the term *social media* to indicate websites and online applications that enable users to create and participate in various communities through functions such as communicating, sharing, collaborating, publishing, managing, and interacting (Mao, 2014). Research has also indicated a link between social media use and psychological problems. A systematic review of 11 studies measuring social media use and depressive symptoms in children and adolescents showed a small but statistically significant relationship (McCrae, Gettings & Purssell, 2017). A meta-analysis of 23 studies showed correlation of problematic Facebook use and psychological distress in adolescent and young adults (Marino, Gini, Vieno & Spada, 2018). Other systematic reviews have also found a meaningful relationship between social media use and depression (Foster & Allender, 2016).

Social media features include interconnections with other users through links and news feeds and sharing of user-generated content like photos, ratings and tags. Pages can be dynamically

updated and content embedded such as embedding a video (Gruzd, Staves & Wilk, 2012). The educational benefits of appropriating social media into learning contexts are contested. Researchers on social media in education suggest that integrating social media in learning and teaching environments may yield new forms of inquiry, communication, collaboration, identity work, or have positive cognitive, social, and emotional impacts (Linxen & Grohbiel, 2012). For instance, research on learning and social network sites in particular has suggested their affordances for interaction, collaboration, information and resource sharing (Maxman & Usluel, 2010) encouraging participation and critical thinking (Ajjan & Hartshorne, 2008; Mason & Rennie, 2007) increased peer support and communication about course content and assessment (DiVall & Kirwin, 2012); inter-cultural language learning (Mills, 2011); and their positive effects on the expression of identities and digital literacies, particularly for marginalised groups.

On the other hand, researchers have warned against leveraging social media for learning. Kirschner and Karpinski (2010), found that time spent on Facebook negatively affected college grades. Similarly, Junco and Cotton (2013) examined how students multitask with Facebook and found that using Facebook while doing schoolwork was negatively associated with their overall grade point average. Students' use of social media in extracurricular activities was found to be distractive to learning, especially among weaker students (Andersson *et al.*, 2014).

#### **1.4 Identity Development, Social Media and Student Academic Life**

Identity is a fairly stable sense of whose person is seems to be shared by significant people in your life and is expressed in various roles. The components of identity include psychological (a stable sense of whose person is), social (shared by people in your life) and behavioral (expressed in various roles). According to Manca and Ranieri (2013), identity development is both active and passive whereby active is when individual is engaged in the process and influencing the environment and passive is when environment is having an influence on individual. The situation involves family, peers, school, media, geographic area nation influence identity development, environmental influences and self esteem.

One factor linked to academic performance is learner identity. The term in this case is used to refer to a broad set of attitudes and behaviours associated with intellectual engagement, approach to learning and identification with the social category, "Being a learner". Learning identities are related to how actors experience themselves as learners in relation to their previous experiences, social background and different academic cultures and contexts. Individual agents define themselves in relation and with reference to other agents, contexts and previous experiences (Mead, 1934). Identities are formed as part of a relation between the active "I" and the socialised "me". Students use digital mediums to express themselves, connect with one another, and share information in ways that are not reflected in the class when activities isolate the learners from each other or from their technology (Gardner & Davis, 2013).

Academic life in this context is described as the activities that relate to the work done in colleges and universities, which involve studying and reasoning rather than practical or technical skills. Higher education on the other hand is an educational level that primarily describes post-secondary education that takes place at the universities as well as other colleges and institutions that award academic degrees, diplomas and professional qualification. Helou and Rahim (2014) conducted their study in Malaysia exploring the students' opinions in this regard and concluded that they support the positive influence of social media on their performance despite the fact that they use this technology mainly for social interaction more than for academic purposes.

According to Chickering and Reisser (1993) and Erikson (1968), college students are in the process of developing an identity, a stable sense of self that is both internally consistent and externally validated, so participating in social media allows students to test out or "Try on" different facets of their identity through their online self-presentation. Literature analyzed that the social networking websites are not designed for negative impact but we have noticed in our daily life that students become addicted to social networking websites. Bakar (2010) declares that students who use Facebook or any e-learning webpage have better reading and writing skills. Social identity is accepted as the way English Foreign Language students portray themselves as real persons through interactions; for example, using postings and chatting for swapping ideas about themselves in their foreign language, likewise for recognizing other members in a group. Furthermore, it allows them to

represent and negotiate their social presence with other member in a virtual community (Guamán, 2012).

Kuppuswamy and Shankar (2010) explained that the social networks grab the total attention and concentration of the students and divert it towards non educational, unethical and inappropriate actions such as useless chatting, time killing by random searching and not doing their jobs. Wiley and Sisson (2006) argued that previous studies have found that more than 90% of college students use social networks. In the same way, Ellison, Steinfield and Lampe (2007) stated that the students use social networking websites approximately 30 minutes throughout the day as a part of their daily routine life. This statement shows the importance of social networking websites in students' life. Lenhart and Madden (2007) revealed through a survey that students strongly recommend social networking websites to stay in touch with friends to keep informed and aware.

Lenhart and Madden (2007) calculated a huge amount of underage users which must be violated. According to Lenhart and Madden's (2007) calculation, it has been analyzed that 41% of 12–13 years old and 61% of 14–17 years old users use social networking websites. Williamson *et al.* (2011) has conducted a research report in which it has been analyzed that 35.3% of female users use social networking websites where 42.2% male users use social networking websites. The ratio of male and female users is almost near to be equaled. Tinto (1997) reviews that new information on social networking websites encourages growth and provide students with an ever growing learning community which in-returns substitute both academic and

social success. Greenhow and Robelia (2009), Madge *et al.* (2009) and Selwyn (2009) point of view social networking websites best serve educational goals and objectives by connecting students through such informal methods as it allows student through the process of collaborative sense making. Some of social networking websites are specifically specified for educational environment including linkedin.com which is fully featured for education purpose and let user to updates his educational credential and make a professional connections.

In addition to the foregoing statement, Ellison *et al.* (2007) and Lampe *et al.* (2008) also stated that social networking websites may enable collaborative sense making among students as it is used by majority of students. A number of studies have found relationship between social media and student commitment in higher education including King and Robinson (2009) who found that students who use electronic voting system were more likely to answer question in their math course. Annetta *et al.* (2009) observed that students who played an educational game are more committed towards their work rather than a group control. Nicole *et al.* (2007) analyzed that there is a strong link between social networking websites and students as social networking websites helps to maintain relation with people when they move from one offline community to another. Such connections could help students in term of home assignments and projects in terms of job, internship and other opportunity.

Madge *et al.* (2009) and Salaway *et al.* (2008) argue that often students use social networking websites to discuss their academics issues formally and informally and also to interact with their instructors, teachers and professors. Research

examining student instructor relationships suggests that professors who have online profiles with high disclosure levels are associated with increased student motivation (Mazer *et al.*, 2007) and that self-disclosures decreased uncertainty, increased student motivation, and created more positive attitudes toward both the course and the professor (O'Sullivan *et al.*, 2004). This parthas analyzed the implication of social networks on education.

## **2.0 Materials and Methods**

A sample of 173 students from three programmes offered at Ruaha Catholic University was involved in this study. The reason for using such large sample was associated with the fact that the University has many students. Since either a quantitative study or mixed-methods study put emphasis on a sample of not less than 100, the researcher preferred to have 173 respondents. On top of that, such a sample was taken randomly to avoid biasness. Qualitative data collected from semi-structured interview were subjected to thematic analysis, whereas open-ended questionnaire were computed and analyzed by using Statistical Package for Social Science (SPSS) version 23.0.

## **3.0 Results**

### **3.1 Influence of Social Media on Learning and Perception among University Students**

This was examined by asking respondents to report on how social media influence the ways in which they socialize in and out of their academic life? In regard to this, students interviewed for this research find social media to be the most important platform regarding their academic life. It is important

to note that 98% of respondents in this particular study do possess at least one social networking site account, see Table 3:1 for summary.

**Table 3.1: University Students with Social Network Account (N=173)**

Response	Frequency	Percent
Yes	171	98.8
No	2	1.2

**Source:** Field data, 2018.

Some of the interviewees said that being on social media has made them think about their learning outside their lectures hours. One of the respondents said:

*Nowadays, we have a class at our finger tips. Learning is not confined only in the four walls, you can keep learning while you are outside the class any time and wherever....so social media increases learning options and our understanding horizons.*

All the interviewees have a positive attitude regarding how social media have changed their academic life. Students also said social media are opening new channels for discovering more academic resources as stipulated by a respondent who said that:

*When I fail to catch up well what my lecturer was teaching, I always go to Google search engine and write the main theme of the topic to get exactly or related resources, and read it at my own.*



Youtube, for example, was seen as valuable in enhancing learning in the classroom by enabling the sharing and discovering of new content and tutorials. Most of respondents interviewed argued that social media keep them informed, entertained, interactive and reinforcing their personal identity. It provides them the freedom to do whatever they want, to upload what they want and talk to whom they want. They make new friends and comment on the lives of different people, create other online identities that the real world does not allow. Therefore, it is left up to the users to decide what really matters in their life and how much of this virtual life translates to real life. On student attitudes towards learning, respondents observed that social media has changed their attitude and ideas about learning in university; the most important idea is that:

*Social media reduces too much dependence to lecturers by students, it make learning to be very simple and easily, with smart phone you can access a lot of materials in softcopy any time, it is an online classroom for university students, attending lectures is important and must because of university regulations and degree requirement but not necessary when comes to learning.*

In support to this, Deng and Tavares (2013) concluded that web-based discussions can contribute to the development of students' reflective ability and critical thinking skills. In case of self-representation while they online, the findings revealed that many students are worried about their looks, and so they always try to upload nicer and impressive pictures to draw and attract attention of their friends. However, caution about that is, responses to these posts may affect their moods positively or

negatively which often produces stress, anxiety or fear about their identities as people and sometimes lead to depression.

### **3.2 Students' Academic Performance in the Context of Social Media Learning Space**

Some of the participants affirmed that they use social media as a forum of discussion and working on their assignments. They use Google plus to share assignments and discuss some questions instantly. They use WhatsApp to discuss assignments, notes and share audio books and other learning tutorials. For example, one respondent said I use You Tube to learn creative writing in languages subjects. Bakar (2010) declares that students who use Facebook or any e-learning webpage have better reading and writing skills. It allows them to represent and negotiate their social presence and meaning with other member in a virtual community.

Other respondent argued thatwhile he is online he would share some academic materials like assignments, course materials, search possible questions related to what is taught in classroom and share his social life skills to college mates and friends. This claim concur with that of O'Keeffe and Clarke-Pearson (2011) who said thatsocial media also allow students to get together outside the class to collaborate and exchange ideas about projects and assignments. This is also supported by Boyd and Ellison (2007) idea that social media allow people identify other users with whom they have a connection, read and react to postings made by them on the site, and send and receive messages either privately or publicly.

Most ofstudentsinterviewed were very eager to use social media as a mean of developing their career networking. They argued

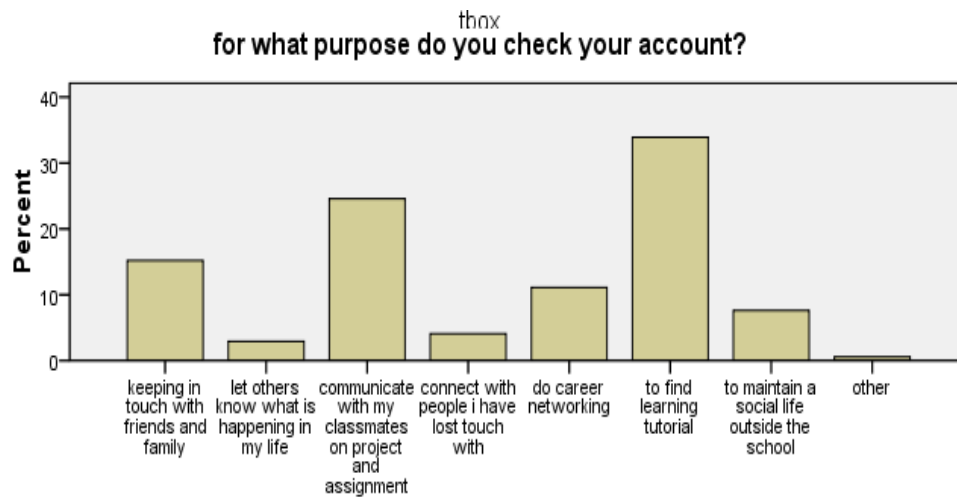
that through social media make them get connected to the social world, and meet inspirational ideas and great stories from successful people. You share and market your skills and talents, getting role model, and entrepreneurial skills. One respondent, in this regard, said, *"I am addicted to you tube because of entertainments, inspirational speech related to entrepreneurial ship and learning tutorials...I follow Erick Shigongo's because of his educative post."* This idea is supported by Tinto (1997) who also argued that new information on social networking websites encourages growth and provide students with an ever growing learning community which in-returns substitute both academic and social success.

The other respondent said that, *"You can use social media to find various opportunities such as scholarship, get connected to professional platforms like LinkedIn you can diversify and increase learning horizon by learning other issues informally."* For example, *"with no formal experiences in agricultural production through social media I can learn it informally anywhere and anytime by following the respective pages to get the skill I want like horticulture, poultry, and fish production without attending to class."* Greenhow and Robelia (2009), Madge *et al.* (2009) and Selwyn (2009), in support of this, argues that social networking websites best serve educational goal and objectives by connecting students through such informal methods as it allows student through the process of collaborative sense making.

### **3.2.1 The purpose of using social media**

Using questionnaire to determine the purpose of using social media, it was shown that students use social media for various

ways including finding tutorial materials (34%), communicating with classmate on project and assignments (25%), keeping in touch with friend and family (15%) and others uses in percentage as indicated in Figure 3.1.

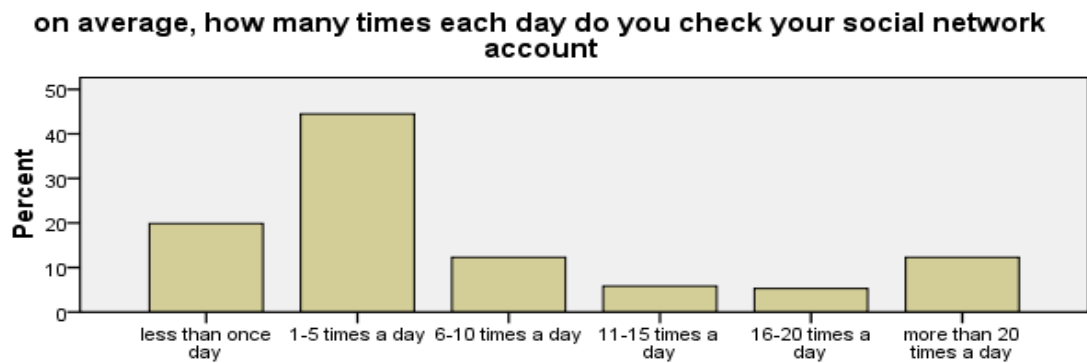


**Figure 3.1: Students' Purpose of Using Social Media (N=173)**

**Source:** Field data, 2018.

### **3.2.2 Frequencies of going online**

In revealing the frequency of social networking sites usage among students, it is fairly frequent because even though a majority of them log in to their accounts every day, but they only log in for a moderate duration per session. However, about a half (45%) of students log in to their accounts up to five times a day, which have a great implication on the timing of intensive and serious study (see Figure 3.2 for summary of the findings).



**Figure 3.2: Frequencies of Students' Social Networking Sites Usage (N=173)**

**Source:** Field data, 2018.

#### **4.0 Conclusion and Recommendations**

From this study of how social media influences the development of student's learning identity in higher learning institutions, several conclusions were drawn. It is important to note that most of our students possess at least one social networking site account, and the best site of their choice was Facebook account. Most of the students use social media as a platform of discussions for their assignments and other course work, they get feedback on class schedules, class venues, receive and send information's among their peers, explore tutorials related to their courses. Social media enable identity expression, exploration and experimentation, something natural for the human experience. Some students rely on the accessibility of information on social media and the web in general to provide answers of their challenges. It develops an awareness of student identity as they progress through their higher education experience in the context of social media which is not only important for student engagement at university, but it is also an integral aspect of shaping their practices and ideas about collaborative learning. Social

networking teaches students many social skills they will need to survive in the social world. For them being able to create and maintain connections to many people is an integral part of developing their career network. Social media provide students with direct medium to publicly evaluate and comment on their campus environments, institutional policies, classes, lecturers, and administration and fellow students in real-time.

It is recommended that lecturers should know and use social media as platform for teaching and learning in order to spark conversations and debate about classroom topics. Both lecturers and students have to be optimistic and responsible with the use of social media. It should be kept in mind that social networking sites create virtual worlds that drastically differ from reality. Students should be supported to develop the cognitive and intuitive ability to analyze the positive and negative impacts of using social media. Actually, it is necessary to develop certain regulations over the use of such social networking sites, to college/university students so that it does not hamper their academic life and identities. Therefore, it leads to understand and recognize students who are struggling with or working through some vectors and target certain vectors and add skills that will help students move through other vectors.

## **References**

- Altbach, P. G., & Reisberg, L., & Rumbley, L. E. (2009). *Trends in global higher education: Tracking an academic revolution*. Sense: UNESCO Pub.
- Ala-Mutka, K. (2010). Learning in online networks and communities. *JRC Scientific and Technical Report*, <http://ipts.jrc.ec.europa.eu/publications/pub.cfm?id=3059>.

- Andersson, A., Hatakka, M., Grönlund, A., & Wiklund, M. (2014). Reclaiming the students: Coping with social media in 1:1 Schools. *Learning, Media and Technology*, 39(1), 37–52.
- Best, P., Manktelow, R., & Taylor, B. (2014). Online communication, social media and adolescent well-being: A systematic narrative review. *Children and Youth Services Review*, 41, 27–36.
- Copes, H., Leban, L., Kerley, K. R., & Deitzer, J. R. (2016). Identities, boundaries and accounts of women methamphetamine users. *Justice Quarterly*, 33, 134–158.
- Chickering, A. W., & Reisser, L. (1993). *Education and identity*. San Francisco: Jossey-Bass.
- Creswell, J. W. (2007). *Qualitative enquiry and research design: Choosing among five approaches*.
- Cuban, L., & Tyack, D. (1995). *Tinkering towards Utopia: A century of public school reform*. Cambridge, MA: Harvard University Press.
- Christine, K., Kirsti., & Yves, P. (2010). *Learning 2.0: The impact of social media on learning in Europe*. Luxembourg: Office for Official Publications of the European Communities.
- Chickering, A. W., & Reisser, L. (1993). *Education and identity*. San Francisco: Jossey-Bass.
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of facebook “friends:” Social capital and college students’ use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4), 1143–1168.

- Ellison, N. B. (2007). Social network sites: Definition, history and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 2102–2130.
- Ellison, N. B., Vitak, J., Gray, R., & Lampe, C. (2014). Cultivating social resources on social network sites: Facebook relationship maintenance behaviors and their role in social capital processes. *Journal of Computer-Mediated Communication*. DOI: 10.1111/jcc4.12078.
- Erikson, E. H. (1968). *Identity: Youth and crisis*. New York: W. W. Norton & Company.
- Flavin, M. (2016). Technology-enhanced learning and higher education. *Oxford Review of Economic Policy*, 32(4), 632–645.
- Foresight Future Identities (2013). *Final project report*. London. The Government Office for Science.
- Giddens, A. (1991). *Modernity and self-identity: Self and society in the late modern age*. Cambridge: Polity Press.
- Gruzd, A., K. Staves., & Wilk, A. (2012). Connected scholars: Examining the role of social media in research practices of faculty using the UTAUT model. *Computers in Human Behaviour*, 28, 2340–2350.
- Gurcan, H. I. (2015). *Contribution of social media to the students' academic development*. Cambridge, MA: Polity Press.
- Gunduz, U. (2017). The effect of social media on identity construction. *Mediterranean Journal of Social Sciences*, 8(5), 85–92.



- Helou, N. Z., & Rahim, A. (2014). The influence of social networking sites on students' academic performance in Malaysia. *Int. J. E.Commerce*, 5(2), 15–23.
- Hoare, E., Milton, K., Foster, C., & Allender, S. (2016). The associations between sedentary behavior and mental health among adolescents: A systematic review. *International Journal of Behavioral Nutrition and Physical Activity*. BioMed Central Ltd. doi: 10.1186/s12966-016-0432-4.
- Ito, M., Baumer, S., Bittanti, M., Boyd, D., Cody, R., & Herr-Stephenson, B. (2009). *Hanging out, messing around, and geeking out: Kids living and earning with new media*. Cambridge, MA: MIT Press.
- Inkard, N., Erete, S., Martin, C. K., McKinney de & Royston, M. (2017). Digital youth divas: Exploring narrative-driven curriculum to spark middle school girls' interest in computational activities. *Journal of the Learning Sciences*, 26, 477–516.
- Jacobsen, W., & Forste, R. (2010). The wired generation: Academic and social outcomes of electronic media use among university students. *Cyberpsychology, Behavior and Social Networking*, 45, 275–280.
- Jenkins, H. (2006). *Confronting the challenges of participatory culture: Media education for the 21<sup>st</sup> century*. Chicago: The John D. and Catherine T. Mac Arthur Foundation.
- Junco, R., & S. R. Cotton, (2013). No a 4 u: The relationship between multitasking and academic performance. *Computers & Education*, 59, 505–514.

- Kirschner, A. P., & A. C. Karpinski. 2010. Facebook and academic performance. *Computers in Human Behaviour*, 26, 1237–1245.
- Kroger, J. (2008). Identity development during adolescence. In G. R. Adams & M. D. Berzonsky (eds.), *Blackwell handbook of adolescence* (pp. 205–226). Oxford, UK: Blackwell.
- Kuppuswamy, S., & Narayan, P. (2010). The impact of social networking websites on the education of youth. *International Journal of Virtual Communities and Social Networking (IJVCSN)*, 2(1), 67–79.
- Lenhart, A., & Madden, M. (2007). *Teens, privacy & online social networks: How teens manage their online identities and personal information in the age of my space*. Washington, DC.
- Manca, S., & M. Ranieri. (2013). Is it a tool suitable for learning? A critical review of the literature on facebook as a technology-enhanced learning environment. *Journal of Computer-Assisted Learning*, 29(6), 487–504.doi: 10.1080/17439880902923606
- Marino, C., Gini, G., Vieno, A., & Spada, M. M. (2018). The associations between problematic facebook use, psychological distress and well-being among adolescents and young adults: A systematic review and meta-analysis. *Journal of Affective Disorders*, 226, 274–281.
- Mao, J. (2014). Social media for learning: A mixed methods study of high school students' technology affordances and perspectives. *Computers in Human Behaviour*, 33, 213–223.

- Mills, N. (2011). Situated learning through social networking communities: The development of joint enterprise, mutual engagement and a shared repertoire. *CALICO Journal*, 28(2), 345–368.
- McCrae, N., Gettings, S., & Purssell, E. (2017). Social media and depressive symptoms in childhood and adolescence: A systematic review. *Adolescent Research Review*. doi:10.1007/s40894-017-0053-4.
- Mugenda, O. M., & Mugenda, A. G. (2003). *Research methods*. Nairobi: Acts Press.
- O'Keeffe, G.S., & Clarke-Pearson, K. (2011). The impact of social media on children, adolescents and families. *Pediatrics*, 28, 127–136.
- Pempek, T. A., Yermolayeva, Y. A., & Calvert, S. L. (2009). College students' social networking experiences on Facebook. *Journal of Applied Developmental Psychology*, 30(3), 227–238.
- Seabrook, E. M., Kern, M. L., & Rickard, N. S. (2016). Social networking sites, depression and anxiety: A systematic review. *JMIR Mental Health*, 3(4), 32–50.
- Selwyn, N. (2011). Social media in higher education. In Gladman, A., (ed.), *The Europa world of learning* (pp. 1-9). London, UK: Routledge.
- Sheldon, P. (2015). *Social media: Principles and applications*. London, UK: Lexington Books.

- Stets, J. E., & Serpe, R. T. (2016). *New directions in identity theory and research*. New York, NY: Oxford University Press.
- Tinto, V. (1997). Classrooms as communities: Exploring the educational character of student persistence. *Journal of Higher Education*, 68(6), 599–623.
- Watty, K., McKay, J., & Ngo, L. (2016). Innovators or inhibitors? Accounting faculty resistance to new educational technologies in higher education. *Journal of Accounting Education*, 36, 1–15.
- Wiley, C., & Sisson, M. (2006). *Ethics, accuracy and assumption: The use of facebook by students and employers*. Paper Presented at the Southwestern Ohio Council for Higher Education Special Topics Forum, Dayton, OH.