THE ROLE OF SOCIAL MEDIA TOOLS IN ENHANCING INSTRUCTIONAL PROCESS IN PUBLIC UNIVERSITIES WITHIN UASIN GISHU COUNTY

 \mathbf{BY}

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DECLARATION

Declaration by the Candidate I declare that this work is my original work and has not been submitted for the award of a degree in any other University. Date..... **Annette Munyiva** EDU/PGET/1002/13 **Declaration by the Supervisors** This thesis has been submitted for examination with our approval as University Supervisors. Date..... Prof. John Simiyu, Department of Technology Education, School of Education, University of Eldoret, Kenya. Date..... Prof. Jackson Too Professor of Educational Communication & Technology,

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DEDICATION

This thesis is dedicated to my loving mother Winfred Mwikali Ndunda, my husband Christopher Otieno Okal and my children Ivannah Akoth Okal, Cjay Martial Okal and Kaavia Dyani Okal. They inspired me with their love and care which gave me the strength to do my best.

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ABSTRACT

The evolution of the Internet has transformed nearly all aspects of human endeavor, from health to education. This study explored the role that social media tools play in the education sector to enhance the processes of teaching and learning in Public Universities within Uasin Gishu County, Kenya. The study outlined the level and influence of the current utilization of the technologies and explored the potential that lies in incorporating them into the teaching and learning processes. The objectives of the study were to: explore the utilization of social networks in enhancing teaching and learning in Public Universities in Kenya; examine the influence of social media in Public Universities in Kenya; determine suitable methodologies of utilizing the social media tools in learning environments in Public Universities in Kenya and determine the challenges of using social media tools in Public Universities in Kenya. The study developed on the principles of the improvement theory, social media acting as the variable that sought to improve instructional and learning processes. It utilized a mixed research design to enable the complementary application of both qualitative and quantitative methods. The target sample size was obtained from the Universities within Uasin Gishu County. Kenya and the population included both lecturers and students. The data was collected using sets of questionnaire for the instructors and learners in the sampled institutions and analyzed using Statistical Package for Social Sciences (SPSS). The findings indicated that there are various benefits that the relevant participants can obtain from the utilization of social media platforms in their instructional and learning exercises. The ability for the networks to enable the sharing of information in diverse formats increased the flexibility of those parties to use them to disseminate it to one another. However, time consumption was a challenge when it came to the efficient use of social media technologies in the University context and they were likely to distract the learners from focusing on studies as they are a form of entertainment. All in all, the technologies were seen as feasible in terms of cost and skill requirements; hence it is important to utilize them into the instructional process of Universities. It was noted that the current investigation focused on the ways that the learners and tutors could use the technology for instructional process. However, it was important to find out the potential that existed in customizing the technology to suit the needs of specific institutions as a way of enhancing the experience. The usage of social media tools in Universities should be embraced since they enhance interaction between lecturers and students. Similarly, teachers across many schools will share information thus improving research and teaching. Further study should make it possible for technologies to be used for inter-institutional collaborations, especially, for students and instructors under similar courses of study.

LIST OF ABBREVIATIONS

ANOVA- Analysis of Variance

CIM- Department of Curriculum and Instructional Media

HTML –HyperText Markup Language

ICT - Information Communication Technology

SPSS - Social Package for Social Sciences)

CHAPTER ONE

INTRODUCTION

1.0 Overview

This chapter presents the background to the study and statement of the problem. It also highlights the purpose of the study, its objectives, research questions justification, and significance of the study, scope, assumptions, and limitations of the study. It also provides the theoretical as well as conceptual framework and the operational definition of key terms used in the study.

1.1 Background of the Study

Social media tools are becoming part of the communications landscape in today's higher education settings. Their emergence is rapidly changing the way the instructors teach as well as how students learn (Bower, Hedberg, & Kuswara, 2010). These tools can be used to reinforce classroom learning; hence, having a positive influence in the teaching and learning environments. This influence of social media on education has seen educators and researchers experimenting on the use of social media tools to create a collaborative form of learning. Through the social media platform, both instructors and students are capable of creating and receiving content and this facilitates a collective construction of knowledge (Burke, Snyder, & Rager, 2009). Like in many other countries, Kenyan educators are slowly integrating the use of social media in the teaching and learning processes. This study focused on the use of social media technologies in enhancing classroom instruction through the illustration of the success of the venture in Universities found in Uasin Gishu County. The aim was to establish if they brought any enhancements to the processes of teaching and learning by using University students in Uasin Gishu County.

Though not primarily developed for educational purposes, social media applications are increasingly becoming prominent in the day to day classroom learning. In the everchanging learning environment, the benefits of this technology are far-reaching. While there has been much progress in the scope of devices that people use to access the features of the Internet, tremendous advancements has been experienced in the platform itself (Churchill 2011)). The applications of the Internet have increasingly been incorporated into different fields including business and education.

Various technicians have come up with numerous ways to enhance how people can use the Internet for varying purposes beyond the traditional utilizations of unidirectional interactions. The primary motivation for this progress has been the widening scope of using the Internet as well as the increasing audience around the globe. More people have increased their engagement with the utilization of the platform for the reasons of communication and access to information (Hsu, & Wang, 2011). It has grown its potential to include even digital libraries that are essential for learners and educators. They are important in increasing the efficiency and speed of accessing the resources that people publish elsewhere in the world with minimal costs. The Internet also enhances the processes of people sharing information as it happens instantly regardless of their locations and the distance between them (Hew, 2011). The motivation to carry out the research was also as a result of the amount of time that people spent on the Internet that has been on the rise. Most of the people who used the Internet took advantage of the various opportunities that the World Wide Web presented to enhance their livelihood through different participations.

There is an increase in the levels of Internet utility around the globe, mainly, deriving from the rapid developments in the relevant technologies (Nevo, Turner & Williams, 2016). Some of the most influential factors include the growth of information

technology with more people being able to access computing devices in different areas. The penetration of mobile network providers to a majority of the regions has played an important role in ensuring that more people are able to access the Internet on their phones. The advancement of mobile phone technologies has also advanced a great deal to become another influential force in the manner in which people access and utilize the Internet (Kim, Nam, Oh, & Kang, 2016). Other factors include the dynamism of the content that is available on most Internet platforms that are a major attraction to the way most people participate. The advance of computing and Internet capacities have given most individuals the ability to generate, post, and access content in multiple forms that include text, audio, and graphics (Ben-Yehuda, Greenberg & Weinstein, 2016). Such actions have been a significant motivation for most people in various sectors to seek different strategies that can enable them to benefit from the information that is available on the Internet. The greatest potential lies in the ability of people to participate actively on the Internet platforms as both audience and authors of the content (Lin, Spence & Lachlan, 2016).

The evolution of the Internet and its relevant technologies has been essential in ensuring that people have the ability to participate actively on various platforms (Kim et al., 2016). That has given rise to social media platforms that act as avenues for various individuals to network and socialize with one another in a virtual world (Brambilla, Mauri & Umuhoza, 2016). The development of various platforms has led to the stiff competition between the different networks with each offering a set of features that can attract more individuals. In the most typical setting, social media is an essential tool that enables people to create and maintain relationships on virtual platforms (Brambilla, Mauri & Umuhoza, 2016). Some of the primary benefits of using those avenues are that they eliminate the distance barriers between the relevant parties as they

only require the individuals to have an access to the Internet. The other advantage is that people can access an endless list of other individuals that are potential connections on the relevant platforms. This offers an opportunity to create even larger social networks that cover multiple geographical areas (Roberts & Piller, 2016). Social media platforms also provide the ability for the users to share information about various issues to their connections (Sherman, Payton, Hernandez, Greenfield, & Dapretto, 2016). Additionally, it implies that the people using the tools have an infinite access to information from various ends of the world as long as they stay connected with the right individuals.

The ability to share information has been a major influence on the ways that people use social media making the strategy a main factor leading to the voluminous adoption of the platforms in various areas. It has moved social media from a peer-to-peer level sharing strategy to include other actors such as corporations among other organizations as a way of accessing various individuals in the population that are potential audiences for their operations (Agnihotri, Dingus, Hu, & Krush, 2016). Most enterprises use social media as a marketing tool as well as a way of delivering public relations information to the relevant parties. Other sectors that have adopted social media include learning institutions that use the platforms to maintain communication with various stakeholders (Adeiza & Howard, 2016).

This study dealt with the application of social media tools in the field of education using Uasin Gishu County. Educators have developed strategies to utilize the potential that the Internet has to better their modes of delivering information to the learners worldwide (Junco, Heibergert, & Loken, 2011). They have used the social networking methodologies to utilize techniques of information sharing in Universities and other learning environments to enhance the exercises of education. There are different

advantages that the use of the Internet in learning presents to both the instructors and learners upon utilization. The technology encourages the students to participate actively in the exercises and be more creative as a result of this input and the critique it receives (Morris, 2010). The involvement in this manner also increases the opportunities that they have to control their environment. They can determine the kind of information they have access to at any particular moment, and this implies that they can learn more within a short period of time. The students can showcase their skills and knowledge through the Internet platforms to a broad audience that they would not without it, for instance, through podcasts (O'Bannon, Lubke, Beard, & Britt, 2011). It encourages innovation in them as they now serve a bigger scope than just their classroom setting. This research indulged into the application of social media tools in a learning environment to determine their feasibility in Uasin Gishu County. There have already been different utilizations of the World Wide Web in higher education for various purposes such as social interactions and entertainment (Mangala, 2010). Though, there is little literature to determine if they are relevant in the lower levels of education. The findings from studies in other countries indicate the significance of the platform in many areas of industry and specifically in education (Ketelhut, & Nelson, 2010). They serve as motivation to outline the essence of technology in the Kenyan arena, the benefits it can bring, and any challenges that the students and educators may face upon using them in their systems.

According to Ngonidzashe (2013), security stands as one of the main hurdles of initiating the technology for use in different locations around the globe. The number of people that can access the information that the educators and learners post on the sites is too diverse and robust that it can present issues of safe utilization. Data security is an issue of global concern in computing, and the application in this industry is no

exception from the phenomenon. This research highlighted further challenges that the technology was likely to face upon utilization in classrooms and other learning areas around the world.

1.2 Statement of the Problem

The utility of the Internet and various social media platforms has been growing in capacity and the levels of adoption penetrating a majority of the areas around the world (Sobaih, Moustafa, Ghandforoush, & Khan, 2016). The educational sector has been one of the major adopters of the Internet technologies and incorporating them into various operations that include learning among others. However, there is unclear information on the adoption of social media, especially, into the teaching and learning processes in the educational institutions. There is a concern that social media tools are being used by learners for entertainment and interaction purposes. Many learners spend most of their time on the Internet on social sites not necessarily for the purpose of learning, but to satisfy their self interests that are not educative (Lederer, 2012). It should be noted that proper orientation and presentation of the technology could be used to improve education. The social media tools could be positively incorporated into the processes of teaching and learning, and this would lead to an improvement of the learners' performance (Liu, 2010). In this case, the social media tools need to be used as an effective teaching and learning tool rather than a platform where people interact for the entertainment purpose.

Due to the current technological changes in the world, companies, governments, and institutions are faced with many challenges and opportunities that come with innovation. The school administrators are responsible for determining when and what techniques should be incorporated in learning and sharing information within the education system. Various methods of technologies that can be used in schools exist but

the problem of choosing one that is relevant to both educators and learners face the stakeholders (Buzzetto-More, 2012). Kenyan Universities face the challenge of determining the social media tools to use in learning. Additionally, many of the educators are not experts in using the Internet thus presenting an issue towards utilization of the technology. What is more difficult and rarer is for lecturers and innovators to work together in asking how learning and instructing might be made productive and efficient with innovations of technology and what is about the technology and the challenges it might present to teaching and learning (Griffith, & Liyanage, 2012). There is a need to study the role social media tools play in teaching and learning in Kenyan Public Universities.

1.3 Purpose of the Study

The purpose of the study was to determine the role of social media tools in enhancing classroom instruction process in Universities.

1.4 Objectives of the Study

- Demonstrate the utilization of social networks in enhancing teaching and learning in Public Universities within Uasin Gishu County, Kenya.
- Examine the influence of social media in teaching and learning in Public Universities within Uasin Gishu County, Kenya.
- 3. Determine suitable methodologies of utilizing social media tools in teaching and learning in Public Universities within Uasin Gishu County, Kenya.
- Determine the challenges of using social media tools in teaching and learning in Public Universities within Uasin Gishu County, Kenya

1.5 Research Questions

1 Which social media networks are used in enhancing teaching and learning in Public Universities within Uasin Gishu County, Kenya?

- 2 What is the influence of social media tools in teaching and learning in Public Universities within Uasin Gishu County, Kenya?
- 3 Which methodologies are used in teaching and learning in Public Universities within Uasin Gishu County, Kenya?
- 4 What are the challenges of using social media tools in teaching and learning in Public Universities within Uasin Gishu County, Kenya?

1.6 Significance of the Study

There has been tremendous growth in the adoption of Internet technologies in various areas of operations including learning institutions. Social media has also grown in utility with a majority of Internet users also utilizing one networking platform as well. However, there has been a scarce focus on the utilization of social media in higher learning institutions, especially, in the potential that it holds in enhancing the work of instructors and connecting them to the learners. This study offered relevant information on the ways through which lecturers and learners in Universities could use social media to enhance their teaching and learning processes. The insights the research offered were essential in enabling the relevant actors to utilize the networking capacity that existed in social media to improve the education process.

1.7 Justification of the Study

The primary interest of the study involved establishing the feasibility of using social networks to enhance the instructional process in public Universities within Uasin Gishu County, Kenya. The study assessed the utility and role that these tools play in Universities then established the methods that enabled teachers and students use them in the teaching and learning exercises. The study provided information on the current level of utilization for social media platforms as well the methodologies that the Universities in the area of study used to incorporate them into instructional process.

Those insights were important in offering the relevant parties the opportunity to explore the utilization of the technology and attain the benefits that arose from the potential that social media held.

1.8 Scope of the Study

This study established the role of social media tools in enhancing instructional process in learning institutions. The research used Uasin Gishu County to offer a perspective on the relevant issues in other areas around the world as well. The primary focus was on Universities among other tertiary institutions that provide dynamic instances for the utility of social networks such as blogs, Facebook, Twitter, WhatsApp, for both instructors and learners in the relevant environment. The primary objective was to offer insights on how the relevant parties utilized the media to enhance learning in their areas. Therefore, the research explored the current materials that the participants had in place and how they impacted their teaching and learning processes, among other aspects. Additionally, the investigation determined the feasible techniques that the learners and instructors could set in place to enhance instructional process to improve the modes of learning. This process was derived from the establishment of the available facilities that teachers and students could use to enhance the instructional process.

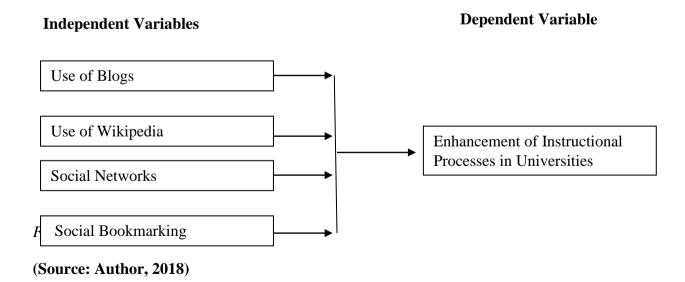
1.9 Theoretical Framework

The study developed on the principles of the improvement theory, social media acting as the variable that sought to improve instructional and learning processes. The improvement theory states that there are intentional observations of a program and the utilization of a second one that acts as an improvement strategy to the initial part with an objective of increasing its efficiency. In this case, the first program is the instructional process and other learning factors that are present in the Universities among other institutions. The research then used social media tools as the enhancement

strategy that stood in the place of the second program that brought improvements to the first one. The study observed how the utilization of social networking actors could serve the purpose of improving the conditions of instructional and learning processes in the relevant institutions. The aim was to determine how the networking potential between learners and instructors could provide an avenue that increased the efficiency of teaching and acquiring additional information for the learners.

1.10 Conceptual Framework

The study developed on various variables that facilitated its efficiency in answering the research questions that guided it. The instructional process in Universities in Uasin Gishu County counted as the dependent variable of interest that the study assessed. The action was to determine how social media tools impacted the instructional process in the relevant learning institutions. Therefore, social media tools were the independent variable that acted as an influence on the instructional process. Figure 1.1 represents the conceptual framework that described the relationship between the two variables that were of interest in the study.



1.11 Study Limitations and Delimitations

The study was prone to challenges in regard to the level of adoption of social media and the willingness of the respondents to disclose information about its utility in the educational context. This mainly derived from the generational gap that was bound to exist between the instructors and learners in the relevant area of study. The common perception that such technologies as social media were mainly for young people presented a problem as other individuals from the middle and elderly ages were also part of the participants. The researcher used the metropolitan nature of the area of study to provide a solution to the underlying challenge.

1.12 Assumptions of the Study

The researcher made various assumptions that facilitated the completion of the study with a particular interest in the sample population and data collected as follows:

- 1. The researcher assumed that at the period of conducting the study, social media platforms were functional and in wide adoption in the area of research.
- 2. The investigation assumed that a majority of the respondents that offered responses to the survey had sufficient knowledge about social media and had adopted the technology before the period of data collection.
- 3. Some of the Universities in Uasin Gishu County were operating as satellite campuses of their institutions. The researcher assumed that those campuses selected into the sampling process were operational during the period of the investigation.

1.13 Operational Definition of Key Terms

Application – a computer program whose design serves a specific purpose for the end user.

Blog – an online journal

Education – the systematic process of giving or receiving instructions or information.

Instructional Process - activities that provide the means through which teachers and learners achieve stated objectives of a course.

Internet – the global network that allows computing devices to connect to it and exchange information.

Social bookmarking – a process of tagging a website page with a browser-based tool so that you can easily visit it again later.

Social media - a collection of Internet-based computer tools that enable people or groups of people to create connections where they share information in virtual networks between one another.

Social network – a social structure made up of individuals and organizations.

Web 2.0 – the supposedly second stage of the World Wide Web that develops from the static pages to a more interactive environment.

Web page – a document that exists on the World Wide Web.

Website – a location on the Internet that contains at least one Web page or more with particular information.

Wikipedia – a free online encyclopedia created and edited by volunteers around the world and hosted by the Wikimedia Foundation.

World Wide Web – an Internet system that allows the interconnection of documents through hyperlinks.

1.13 Chapter Summary

This chapter presented the background to the study and statement of the problem. It also highlighted the purpose of the study, its objectives, research questions justification, and significance of the study, scope, assumptions, and limitations of the study. It also provided the theoretical as well as conceptual framework and the operational definition of key terms used in the study. The study had a concern on establishing the role that social media tools played in enhancing instructional process in various learning institutions with a particular focus on Universities. The determination of the relevant issues was essential in offering insights on the pertinent uses that enabled lecturers and learners to benefit from the potential that social networks hold. The study utilized the improvement theory to establish how the social media tools were important in enhancing the relevant instructional activities to increase the efficiency of learning in the institutions. It derived from the tremendous improvements of Internet technologies and the increased rate of utility in various areas around the globe. The study used Uasin Gishu County as a case study to offer the insights into the research questions.

CHAPTER TWO

LITERATURE REVIEW

2.0 Overview

This section offers an insight from previous research findings on the issues that are relevant to the utility of the Internet and social media tools in an educational context. The focus is on the levels of utility for the different tools of interest and the impact that they have created in the education context. The intention is to provide an overview of the pertinent issues to determine the relevancy of the research to other real-life problems that are present in the learning institutions. The review of literature should offer the researcher an opportunity to determine whether the investigation has the potential to offer solutions to any of the issues that it identifies.

The social media/networking concept was started in the mid-years of the last decade when platforms such as Facebook and YouTube were introduced. Since then, the concept has taken the world by storm. However, according to Dzvapatsva, Mitrovic & Dietrich (2014), the scope of functionality of these platforms has expanded tremendously. Furthermore, it is recognized that the number of social media platforms, tools, and applications has also risen drastically (Gangwar, Deshbhratar & Garg, 2013, p. 93). Currently, there are thousands of social networking tools used in different capacity. Advances in technology have significantly improved the usability and corresponding utility of social media tools. Dumpit & Fernandez (2017, p. 1) claim that the education sector is one of those that have significantly benefited from the integration of social media and networking tools. Students and teachers alike can use social media tools for the benefit of the education process.

Ideally, the learning and teaching processes in different levels of education have been positively affected by the introduction of the social media concept. Particularly, Al-

rahmi and his colleagues (2017) connote that education processes in higher-education institutions have been enhanced through the use of social media tools in the classroom. Furthermore, the vast amount of studies conducted on the impact of social media on the education process reveal that social media tools offer both students and teachers multiple opportunities to improve the education process. Benefits of social media use and integration at the classroom level are therefore afforded to both the learners and the teachers. This literature review presents a comparative analysis of the different findings and reports by previous authors on the role of social media tools in enhancing the teaching and learning processes in higher education. The report primarily analyzes and reviews findings on how social media tools enhance the teaching and learning processes in higher education.

2.1 Understanding Social Media and its Adoption around the Globe

Social media refers to a collection of Internet-based computer tools that enable people or groups of people to create connections where they share information in virtual networks between one another (Wyche, Schoenebeck & Forte, 2013). Most researchers face difficulties in defining social media and differentiating them from other forms of social networks that also take place on the computing arenas. However, there are various features that differentiate social media and offer every audience an opportunity to work on the manner in which they work. The first component is that social media sites take their base in Web 2.0 Internet applications that are in the second generation of the Worldwide Web (Okolloh, 2009). Another common feature is in the nature of the content that is available on those websites usually consisting of an active authoraudience interaction (Makinen & Kuira, 2008). The implication is that the content is user-generated and the audience can also participate in it through such actions as commenting and sharing.

The ability to share information between various actors has been a major influence on the adoption of social media tools around the globe. The improvement of computing technologies is also another significant force for the widespread use of the Internet and social media in most places around the globe (Poushter, 2016). The development of mobile computing devices has also presented a big impact with statistics indicating that about 145.9 million smartphones owners also operate a social media profile in the United States alone as of 2016 (Statista, 2016). There is a widespread use of the social media tools through personal computers and other computing devices for every individual that has the ability to access an Internet connection.

2.2 Popular Social Networking Platforms

There are multiple platforms that developers use to present social media to various users around the globe. The primary approach is to use social media to develop websites to which the users subscribe and participate (Thackeray, Neiger, Hanson, & McKenzie, 2008). The Internet is an essential component of the setup to ensure that various individuals can access the technologies from multiple regions in the world. Social media tools address a range of needs, but they share one important feature that is they are interactive; thus, allowing users to connect and interact with the web and other users. Researchers have carried out studies on what social media tools are essential for classroom teaching and learning. Among the proposed ones are discussed below;

2.2.1 Use of Blogs

Blogs are some of the most common forms of social networking that exist on the Internet that have the tendency of connecting individuals that specialize on a particular subject for the content that they contain implying that there are specified authors and others are just the audiences (Attree, 2014). A blog is a journal appearing online authored by an individual or a group of authors with the purpose of sharing content

with other users. It is used for various purposes in research that include publishing results, literature reviews data collection. Initially, the blogs were designed for personal purposes but with the increased usage, it has been used by many scholars and students (Purchase & Letch, 2011, p. 204). However, blogs are considered a way of enabling certain experts to share information to an audience without any emphasis on the need to share it with the populace outside the specialty (Ngare, 2011). However, the ability to circulate that information on other platforms offers the bloggers an opportunity to conquer larger audiences and is a major influence for most of the authors to migrate to the digital arena. Students in higher education make use of blog posts as a way of expressing their ideas and comments concerning topics; thus enhancing their learning experiencing.

2.2.2 Use of Wikipedia

According to Prensky, a Wiki is an informational site made in such a way that it makes it possible for readers to alter the content and contribute more ideas (2010). Some of the elements that distinguish a Wiki from other Web pages and Web 2.0 tools such as blogs include the collaborative authoring of the content, the limited use of HTML and the dynamism of the content. In the Kenyan educational system, Wikis have been used for a number of purposes that include supporting collaborative work, the collaborative production of study corpuses and courses, and the distribution of information to a number of students by learning facilitators. It is a website comprising the work done by many authors allowing any other researchers or students to edit content placed on the website. Wikipedia; an online encyclopedia is the typical example of the wiki tool. Wikis maximizes the reflection, publication and reviewing. Though wikis have manifold uses in education, they are well designed to support writing by many users. In

this case, all changes done on any wiki page is traceable by both instructors and students making it a useful learning resource (Agarwal, 2011, p. 43).

2.2.3 Social Networking

The term refers to the broad class of websites allowing users to connect with other people, for instance, friends, relatives, and colleagues on the Internet. The site allows users to post information about location, relationship status and hobbies. The users receive responses through the same media. Teachers may use networking sites to supplement face to face communication with students. Facebook is most popular within student fraternity. Therefore, when teachers are looking for tools to communicate with the student, they should first seek to know which tool is more popular with the students. Social networking websites do not have specific authors or subject specialties in their nature. Some of the social media include smartphone applications that the users download onto their devices with some having a connection with the website platforms (Pandey, Hasan, Dubey, & Sarangi, 2013). Et Some examples include Facebook, Google+, Skype, Twitter, and WhatsApp among other applications of similar nature. They are the most popular forms of social media applications that are in wide use in different areas in the world. They vary in popularity among themselves according to the preferences that the users have for the features that each of them has to offer.

Table 2.1 courtesy of Statista (2016a), summarizes some of the most popular application worldwide as of April 2016. The social networks offer the users an opportunity to post content in the form of text, graphics, audios, and videos offering flexibility for both authors and audiences.

Table 2.1Social Media Tools and Number of Users

Social Media Platform	Number of Users
Facebook	1.59 billion
Google +	300 million
Skype	300 million
Twitter	320 million
WhatsApp	1 billion

Despite the high number of users in the different social media platforms, Kapuler (2011) argues that they are platforms that are more popular among educational institutions. Some of the most utilized platforms include Facebook, YouTube, Twitter, and Classroom 2.0. Masic and Sivic (2012) argue that students use these three platforms for different purposes, which include discussing classwork, out of class learning, planning and scheduling, and collaboration in school projects. Facebook, Twitter, and Facebook are highly preferred due to their user-friendliness and ease of access

2.2.4 Social Book-Marking

Social bookmarking websites enable the users to take note of sites that are of interest; and thus, sharing the sites with other users (Bosman & Zagenczyk, 2011, p. 5). As such, students are able to save certain website links that provide resourceful information to their studies all in one location to be accessed later. Social bookmarking also allows for users to share information with various people by tagging those who they share with a common interest (Li & Ma 2011, p. 248). This tool allows lecturers and learners to collaborate as they are able to find and share relevant materials accessible online

(Churches, Crockett, & Jukes, 2010, p. 33). Through social tagging, groups share their ideas concerning materials they have been tagged on enhancing the learning experiences of the individuals.

2.3 The Adoption and Role of Social Media in Educational Institutions

The most common mode of adoption for social media in the educational context has been in the generation of online content that learners from various ends of the world can access. Some of the most common types include videos, texts, graphics, and audios that authors post on blogs among other social sites that people of similar interest can use. Most tertiary institutions have taken part in the publication of such content on their blogs as well as on other social sites to enable learners to access the information from different areas. However, most institutions have not engaged in using mainstream social media networks such as Facebook in their instructional process, and that leaves a wide gap, especially, when focusing on the potential that such networks present.

The common adoptions include students creating blogs that enable them to discuss various education issues in their areas of interest by seeking answers to particular questions from the audience (Gitonga & Murungi, 2015). Distance learning is also another important trend that mirrors the objectives of social networking to enable the learners to access information from instructors as well as other students in the same institution (Luckin, Clark, Graber, Logan, Mee, & Oliver, 2009). The indication is that there have been multiple forms of adoption for social media in learning institutions and there is a clear need to expand on the available capacity.

Moreover, various studies on the adoption of social media tools in educational institutions have been conducted. These studies reveal that institutions of learning have increasingly began to apply these tools to enhance the learning and instructional process. Al-Mukhaini, Al-Qayoudhi, and Al-Badi (2014) conducted a study to evaluate

the adoption of social media tools in institutions of higher education in Oman. In their research, the researchers begin by acknowledging that social media has increasingly become an essential aspect of our daily lives. According to this study, social networks such as Facebook, YouTube, blogs, and Wikis have a significant amount of information that is useful to learners.

Apart from evaluating the rate of adoption of social media tools in learning institutions, Al-Mukhaini, Al-Qayoudhi, and Al-Badi (2014) also sought to understand the motivation behind the increased adoption of these tools, the challenges associated with the use of these tools and their impact on the educational process. Through a survey of students in different universities in Oman found that most of the institutions have adopted these tools in their learning process. A significant number of the students involved in this research admitted that the tools enhance their learning motivation, interaction, and access to academic information. The students also asserted these tools provide them with more control of the learning environment, allowed them to enjoy learning, and enabled them to improve their performance. On the other side, the researchers found that some of the challenges that were likely to limit the effectiveness of these tools included security concerns and their threat to the morality of the students. In a different study, Aleksandrova, Parusheva, and Hadzhikolev, (2019) explored the adoption of social media tools in Bulgarian learning institutions. In this study, the researchers collected data on the adoption of social media tools in different institutions of high learning in Bulgaria through online questionnaires. The primary purpose of this study was to check whether or not these institutions apply social media tools to enhance the learning experience of their students.

Based on the results, the researchers found out that there were two leading platforms for online learning that were common among a significant number of the examined educational centers. These two modules included Moodle and Blackboard. These two modules contained social networking features such as chats, wikis, messaging capabilities, blogs, and collaboration tools. Furthermore, the study also revealed that almost 90% of the participants in this research had a positive attitude towards these social media platforms as an education enhancement tool. The findings of this research are an indication that social media tools are increasingly being adopted in the learning environment.

In a different study, Hashim, Zamani, Othman, Othman, and Azhar (2015) conducted research at Universiti Utara Malaysia. The primary purpose of this research was to examine the level of adoption of social media tools by instructors in institutions of higher learning institutions in Malaysia; the research also sought to explore the motivations and hindrances of adoption of social media tools by lecturers. Based on the selected case study, the researchers found that approximately 70% of lecturers at the Universiti Utara Malaysia use social media tools to teach their or to provide information to their students. Most of the lecturers admitted that these tools contribute significantly towards improving their interaction with the students, provision of real-time information.

On the other hand, the research also identified some of the factors that hinder the adoption of social networking tools among the lecturers. Some of these factors include privacy invasion concerns, negative attitude in regards to the ability of social networks to improve the learning process, and the lack of sufficient knowledge among the lecturers on how to operationalize or integrate these platforms into their instructional process. Although the research was limited to only one institution, it is evident that social networking tools are increasingly becoming a common tool for enhancing the educational experience for learners and lecturers in tertiary institutions.

Furthermore, Choge (2016) conducted an enquiry in Kenya with the aim of determining the rate of adoption of social media tools in learning institutions, the ability of lecturers to apply these tools, the perceptions of lecturers in regards to the applicability of social networking tools in the learning environment as well as the challenges associated with the adoption of social media tools in tertiary institutions. The researcher collected responses from 120 respondents from two tertiary institutions in Kenya. According to the survey results, the researcher argues that the concept of social networking platforms in the learning environment was new to most of the respondents. Although most of the respondents had interacted with social networking sites, they had only done this for personal uses.

Based on these results, Choge (2016) argues that it is essential for institutional managers to motivate lecturers to adopt these tools in the instructional process. Moreover, managers should also put in place measures to change the attituded of the lecturers in regards to the integration of social networks into the learning environment. However, Choge (2016) noted that the examined institutions could integrate social media tools in the learning process. The learning centers were well equipped in terms of internet connections, assistive devices such as computers, and other ICT tools. Moreover, the research also echoed some of the challenges highlighted in other studies that might hinder the adoption of social networking tools in the instructional and learning process. Some of these limitations include privacy concerns and the absence of policies and frameworks to guide the utilization process.

2.4 How can Social Media Platforms Enhance Instructional and Learning Processes?

Researchers have pointed to the potential that social networking has in enhancing learning processes amidst the debate that it is a mere marketing tool for the institutions

(Peluchette & Karl, 2008). Social media has the capacity to solve some of the most fundamental problems that learners face when handling educational resources that are vast on the Internet. One of the challenges that a learner is likely to face has to do with the lack of the ability to access the right material to deal with certain course requirements (Gichora & Kwanya, 2015). However, the participation in social networks can enable the individual to get such information from other participants that are on the same platform. Instructors also get the opportunity to interact with their students to determine the common areas of weakness and offer solutions to them. Another benefit that the relevant participants get is that there is no limit on the time that they can spend for the discussions as long as their schedule fits (Blankenship, 2011). That offers an improvement to the traditional classroom setting that acts on a timetable and instilling a time limit on the parties. The instructors also have the opportunity to deal with more than one set of students in different courses as the engagement has fewer demands than those present in traditional learning settings.

In their report titled "Utilization of Social Media Platforms for Educational Purposes among the Faculty of Higher Education with Special Reference to Tamil Nadu," Vivakaran, & Neelamalar (2018, p. 4) begin by acknowledging the vast amount of research work done on the topic. The researchers go ahead to recognize the fact that there is enough evidence reaffirming the important role that social media tools play in enhancing learning processes in higher education. Similarly, Nkatha, Kimwele, & Okeyo, (2015, p. 51) who studied the use of social networking sites in institutions of higher learning through an exploratory approach using a descriptive survey design argue that social media and networking tools are currently indispensable for the success of any learning process given the increased usability especially among students.

Dzvapatsva, Mitrovic, & Dietrich (2014), utilized a longitudinal cohort research to study the impact of integrating social media tools in the teaching and learning process and report that there was a 35% improvement in academic performance after the intervention. Consequently, from the different studies conducted on the topic, the following themes define the role of social media tools in enhancing the teaching and learning processes in higher education.

2.4.1 Collaborative Learning

Al-Rahmi, Othman & Yusuf, (2015) exclusively studied the role of social media in enhancing collaborative learning in higher education. In their research, the authors claim that the use of social media platforms in the learning process enhances collaboration both between students and their colleagues as well as between students and their teachers (Al-Rahmi, et al. 2015, p. 180-181). Furthermore, the authors suggest that social networking at the classroom level improves learning interactivity because students can interact with one another as well as with content online in real-time. Similarly, students can interact with their tutors and lecturers in real time to make consultations or clarifications on education-related issues. These sentiments are echoed by Boateng & Amankwaa (2016, p. 4) who contend that collaborative learning is an essential part of academic success, especially for University students. Therefore, integrating technology into the learning process gives the students an exceptional opportunity to interact academically, thereby enhancing their understanding of content and expanding the scope of comprehension.

Ada, Stansfield & Baxter, (2017, p 70) also acknowledge that effective learner feedback during the teaching and learning process is critical to academic success because it gives the instructor a chance to clarify content and ensure full understanding. Learner feedback can be achieved effectively through a collaborative learning

environment, which is provided hassle-free through social networking platforms (Alrahmi et al., 2017, p. 8-9). Interestingly, Ebrahimpour, Rajabali, Yazdanfar, Azarbad, Nodeh, Siamian, & Vahedi (2016, p 135) report that 73% of the University students who participated in their study agreed that social media tools enhance and facilitate coordination both at the class and school level. Collaborative learning is a function of student-centered learning, which is currently hyped as the best learning model. It is therefore evident that social media platforms are critical in facilitating and enhancing collaborative learning, which is a vital factor that determines academic success in higher education.

Moreover, Tooley (2018) argues that social media is one of the most effective tools that can promote the learning experience of students who are engaged in graphics and artrelated studies. According to Tooley (2018), graphics art education is increasingly changing as a result of a change in technology and the increasing need to create to provide learners with a creative learning environment that can meet the needs of the students that pursue graphics art. In this regard, the research argues that social media tools can enhance collaboration between students and instructors in the field of graphic art. Nevertheless, Tooley (2018) also argues that despite the fact that social media tools can promote collaborations, it is essential to note that graphic arts education requires high level of interaction between the instructor and the students and thus this should not be lost while using social networking tools in the learning environment, and more specifically in graphics and design.

In another study, Beseghi (2017) acknowledges the critical role played by social media tools in promoting a creative and interactive learning environment. In his research, Beseghi (2017) sought to explore the impact of social media tools, such as Facebook, in promoting collaborative learning and leadership development among learners of foreign

languages in tertiary institutions. Based on the findings, the researcher concluded that social media platforms such as Facebook could serve to promote collaboration and interaction between teachers and learners of foreign languages.

Apart from promoting collaboration and interactions, these platforms also contribute significantly towards fostering social relationships among students. Facebook was also found to promote active language learning as well as the motivational and social components of a learner. Through Facebook, it was also found that learners felt free to express themselves in their target language without the fear of being judged or being misunderstood (Beseghi,2017). A decline in fear of being judged also contributes significantly towards an increase in the levels of self-esteem and confidence among the students hence promoting a conducive learning environment. In this regard, the research concludes that Facebook and other social networking tools can be used to encourage collaborative learning and leadership development among learners of foreign languages (Beseghi,2016). The effect of these platforms on learners can also be replicated in other learning environments.

Sarwar, Zulfiqar, Aziz, and Ejaz Chandia (2018) also conducted research to evaluate the role of social media platforms in promoting a collaborative learning environment and, more specifically, the effect on the success of learners and the impact of cyberbullying. The researchers begin by acknowledging that there has been an increase in the adopting of social networking tools in the learning environment. These platforms are mainly used to create education plans and communicate schedules as well as to deploy course materials and information to students. Sarwar et al. (2018) found that some of the factors that led to an increase in the adoption of social media networks within the education sector include perceived ease of usage, perceived and perceived delight from using these tools. The researchers also found social media as a useful tool

for enhancing cooperation and collaboration among students and instructors, which leads to an improvement in the learning outcomes, reinforced learning behaviors and outcomes (Sarwar et al. 2018). However, Sarwar et al. (2018) also found that factors such as cyberbullying, which are associated with social media networks, may inhibit their positive impact on collaboration and other positive learning outcomes

2.4.2 Student Engagement

In any educational content, student engagement not only to the learning process but also the entire academic program is vital for success. Engagement, according to Gangwar, Deshbhratar & Garg, (2013, p. 93-95) involves how students are up-to-date with academic and learning programs as well as how they respond to them. Social media provides the perfect platform through which students stay informed of all the important information they need to know about the academic programs and schedules. For instance, Boateng & Amankwaa (2016, p. 6) who utilized a qualitative approach to study how social media tools affect students' academic life, report that "Most of the participants claimed they receive a class schedule and other work schedules through various (social media) platforms." Similarly, when summarizing the findings of his study, Chawinga (2017) states that:

"...using these technologies, it emerged that students shared and discussed course materials, posted their course reflections and interacted amongst themselves and with their lecturer 24/7" (p. 1).

In essence, through platforms such as Facebook, Twitter, and WhatsApp, students can be updated on all important academic information including dates, tests, assignments, academic content, classes, and programs among others. Most popular social media platforms such as Facebook and WhatsApp allow users to create virtual groups, pages, or chat-rooms, where several users can interact and exchange information

simultaneously in real time (Bozkurt, Karadeniz & Kocdar, 2018, p. 349). Therefore, social media technology, according to Fossland (2016, p. 85-86) is an imperative factor that both, directly and indirectly, enhances academic success in high education. Tin, Sheng, Hau, & Yung (2018, p. 2248), argue that although social media platforms were not meant for educational use, current advances and add-ons make them indispensable factors in the education process.

According to Kabilan, Ahmad, & Abidin, (2010), social media and internet-based tools contribute significantly towards promoting engagement among students. According to Alshuaibi, Alshuaibi, Shamsudin, & Arshad, (2018), a significant proportion of colleges in Malaysia have increasingly adopted social media tools into the operations. Although there is a link between academic performance and the use of social media tools, there is a minimal explanation regarding the association between these two factors. In this regard, the research by Alshuaibi et al. (2018), sought to examine the impact of social media tools in enhancing student engagement and the subsequent impact on student performance. This study gathered information through questionnaires from a total of 227 randomly selected students pursuing business courses in one of the public universities in Malaysia. Based on the findings, the researchers observed that social media tools led to different types of engagement among the students, each of which had different impacts on the academic performances of the students.

One of the findings was that the integration of social media platforms into the learning environment promotes the cognitive engagement of the students, which consequently leads to an improvement in their academic performance. The utilization of social networks in the learning environment also encourages other forms of student engagement, such as behavioral engagement, emotional engagement, and agentic

engagement. However, the researchers did not find any link between academic performance and these other forms of engagement.

In a different study, Alshayeb (2018) also attempted to examine the impact of using social media technologies to promote engagement among students in a project management course. The researchers noted that the application of social networks in learning played a significant role in eliminating barriers to communication and consequently promoting student engagement. Based on the findings, Alshayeb (2018) affirms that the application of these tools in the instructional process in promoting satisfaction and commitment among the students. However, the researcher also noted that other factors such as the mastery of course content also contributed significantly to the level of engagement among the student.

2.4.3 Access to Academic Information

Vivakaran & Neelamalar (2018, p. 4) claim that social media platforms such as YouTube when used academically, can become virtual learning environments. The Internet is credited as "the mother of all information" due to the huge amount of both academic and non-academic data available on different websites. Mugahed and his colleagues (2016) note that Higher Education Learning contains a lot of research and project work more than any other level of education. Consequently, students are required to research for information online as well as establish contact with scholars and academicians who can provide them with relevant insight (Al-Mukhaini, Al-Qayoudhi & Al-Badi, 2014, p. 147). Duncan, (2016, p. 14-15) argues that Facebook is one of the platforms through which students can contact scholars and academicians. Hence, the platform acts as a direct channel for accessing academic information. Furthermore, scholars and academicians have special social media platforms such as LinkedIn which students can be part of. Notably, LinkedIn also contains published

academic information and references to scholarly sources that could be of great use in the class.

In fact, Sadowski, Pediaditis & Townsend, (2017, p. 78) agree that most University students perceive social media platforms such as YouTube as hubs of accessing academic content. YouTube is one of the earliest social media platforms to ever be developed. The platform allows users to post video content which can then be viewed and reviewed by other users. Most lecturers find YouTube an interactive learning tool because class lessons or additional learning materials can be posted on the site in the form of a video for students to access. In fact, currently, YouTube features and contains videos in almost every University academic discipline. Interestingly, students can access these learning materials anywhere at any given time. Hence, Beqiri, (2014, p. 156) confirms that social media happens to make the process of teaching and learning more efficient, flexible, and reliable to a level where academic performance improvement is guaranteed.

2.4.4 Interactivity and Participation

One of the key objectives of student-centered learning is to improve the participation rates of the learners and ensure that each learning activity is interactive. Currently, most higher learning classrooms are fitted with technological tools such as monitor screens and projectors. Consequently, content can be streamed online in these classrooms to facilitate student interaction and participation in the learning activity. Ada, Stansfield & Baxter, (2017, p. 73) acknowledge that some social networking platforms offer live-streaming services, which can be exploited by instructors and students alike. In more recent times, technology advances allow social media users to follow live events free online through the streaming services. Long-distance learners, for instance, can attend a lesson virtually through the streaming service. In their study, Boateng & Amankwaa

(2016, p. 6) report that "Some of the participants affirmed that they use social media as a medium of discussion and working on their assignments."

Essentially, the ability of social media platforms to enhance student participation and interaction in the learning environment is reinforced by studies such as Sadowski, Pediaditis & Townsend (2017, p. 78) who report that even the students themselves perceive the tools as efficient and significantly improving the learning process. Empirical evidence provided by Dzvapatsva et al. (2014) further reaffirms that academic outcomes are greatly improved if the use of social media and networking tools is integrated into the educational processes. An intervention by the researchers saw the academic performance of the students improve by 35%, which is a clear indication that indeed social media platforms are critical in enhancing the teaching and learning processes in higher education.

An interesting phenomenon in the use of social media tools in educational processes captured by Al-Rahmi, Othman & Yusuf, (2015) is that not all uses of social media in the academic context can benefit or enhance the educational outcomes. The three authors argue that how students use and engage social media platforms significantly determines the impact on teaching and learning processes. For instance, some students may use social media platforms only for non-academic purposes such as entertainment. Hence, Balakrishnan, (2013) recommends that instructors should strive to align social media usage to educational outcomes. Furthermore, instructors should encourage the learners to engage with social networking tools academically to benefit from the content as well as available expertise. Previous researchers affirm the idea that social media platforms are beneficial academically when used in the right manner.

2.5. Advantages of Social Media Platforms

Multiple researchers have come up with findings to support the benefits of integrating social media tools in an education environment. According to Bilandzic & Foth (2013), social media tools play an essential role in establishing a collaborative learning environment. Additionally, Hu, Gu, Liu, & Huang (|2017) argue that these tools contribute significantly to exposing learners to multiple ideologies and cultures, which broadens their perspective. The integration of social media tools in the learning environment also plays a role in promoting digital literacy among learners and instructors (Pangrazio, 2016). Moreover, de-Marcos, Garcia-Lopez, and Garcia-Cabot (2016) argue that these tools contribute significantly towards motivating learners to increase their participation in learning activities. The integration of these tools into the learning environment also increases the ability of students to participate in institutional, social, and political activities (Ranieri, Rosa, & Manca, 2016).

Kimmerle, Moskaliuk, Oeberst, & Cress (2015) also argue that exposing students to these tools enables them to acquire self-discipline in regard to organizing and managing their times. The features that characterize these social networking tools also enable students to be more participative in course work (Pimmer, Mateescu, & Gröhbiel, 2016). The interaction between formal and informal education also makes course work more interesting hence enabling students to enjoy learning (Greenhow & Lewin, 2016). Students who are exposed to social media tools in their learning environment are also able to gain skills in multimedia communication (Brown, Czerniewicz, & Noakes, 2016). These tools also make it easy to acquire and disseminate academic information (Antonio & Tuffley, 2015). The integration of social media tools in learning institutions also contributes significantly to the establishment of student communities and alumni

associations where members can interact and support each other even after completing their studies (Carter, 2018).

2.6 Challenges for the Utilization of Social Media Tools in Instructional Process

Security is a major concern for the application of any form of Internet technology around the globe due to the rampant occurrence of cybercrimes (Strawbridge, 2010). Most people do not trust the safety of the information that they post on the Internet platforms due to the high levels of traffic that can include violators. That has been a major hindrance for the full adoption of the Internet and other networked technologies in most sectors including education (Shin, 2010). The primary concern for security in social media lies in the fact that people will need to share sensitive information about their learning processes that may expose them to cyber criminals (Mergel & Bretschneider, 2013). However, more people are beginning to trust the use of the Internet in such circumstances as a result of the improvement in the protection strategies.

The cost of utilizing social media in the educational platforms is a major concern, especially, when considering the levels of utility that it might experience among learners. The utilization of such technologies requires that each of the students to have access to the Internet to be able to use the social networks. That also needs the institutions to ensure secure network connections that the students can work from to pursue that objective. Further costs come in the need for the learners, the instructors, and the institutions to acquire newer devices that have the ability to accommodate the ever-changing technological environments (Liu, 2010). Such issues put a strain on the relevant stakeholders and hinder the efficient adoption of social media into educational processes.

The lack of common Internet operational standards also presents a challenge for the relevant adopters of social media into the instructional process. The users need to apply various software programs to facilitate the way that they access the information that is available on the social networks. The lack of uniform regulations or equal access to similar platforms presents a gap between the parties that use those networks to access learning materials. The inequality may hinder efficient utilization of instructional process through social media and a consequence of the overall learning exercise. Such an event discourages most institutions from adopting the strategy as it may raise a problem for the learners that use it (Buyya, Ranjan & Calheiros, 2010). The present study envisages closing that gap.

2.7 Chapter Summary

The indication of the review is that the Internet is an essential component in modern education and social media tools have the potential to attain a similar influence. Blogs have shown the way for the other forms of media to follow through the ability of the relevant parties to generate and share content effectively on them. Social networks offer the benefit of a wider audience that also comprises of multiple experts that can expand on the insights that are available in the instructional materials. The networking ability also enables the instructors to access further insights from other areas of the pertinent industry to enable the learners to understand the applicability of the content they learn in class to the real-world events in their courses. It seems that social media tools have the potential to enhance the instructional process in tertiary institutions. Empirical evidence from previous studies reaffirms the significant role that social media tools play in enhancing teaching and learning processes in higher education. There is a vast amount of research data on the positive impact of social media and networking platforms on academic performance. It is imperative to acknowledge the efforts and

dedication depicted by researchers in studying how better integration can enhance. Both primary and secondary studies were conducted on the topic and consistently produced evidence which confirms the positive role of social media in enhancing academic outcomes in higher education. Even though studies have been carried out on social media, they did not consider that many learners use the platform for self interests that are not educative, and, therefore, there was a gap that the study intended to close, that is, social media tools need to be used as an effective teaching and learning tool rather than a platform where people interact for the entertainment purpose.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.0 Overview

This section outlines the strategies that the investigation used to ensure that it efficiently completed the exercises of data collection, analysis, and interpretations. The actions were essential to enable the researcher to answer the research questions that guided the study. The section discusses the critical components that describe the research design, sampling strategies, and the analytical methods that allow the investigation to draw sufficient conclusions. It also highlights the relevant research instruments that enable the research to complete the relevant activities of data collection, analysis, and interpretation.

3.1 Research Design

The study used a mixed design as its approach to facilitate complementary applications of both qualitative and quantitative data. Quantitative data relies on numerical information and statistical analyses while qualitative data depends on keywords and themes to build descriptors of various events. It was of an essence to select a good utilization and integration strategy to ensure that the attributes of the two techniques complemented one another effectively. The utilization strategy, in this case, was the sequential manner in which the quantitative analytics came first and the qualitative ones followed. The integration relied upon prioritizing quantitative information and mixing with qualitative findings when necessary to ensure they worked together. The collection of data in the investigation relied on a survey that followed the mixed research design in its instruments.

3.2 Population and Sampling

3.2.1 Target Population

The intention of the study was to investigate the utility of social media tools in Universities within Uasin Gishu County and how various stakeholders use them to enhance the instructional process. Therefore, the investigation impacted the operations of both instructors and learners in various institutions using those in the County as a case study. The research utilized 2 Universities that operated within the county. The study chose to focus on the tertiary institutions since they were among the leading adopters of the Internet in their processes along with other enterprises that were not in the education sector. The Lecturers and students in the Universities were appropriate since they had sufficient exposure to the social networks among other factors that were of interest in the investigation. The institutions that the study sampled were: Moi University and University of Eldoret

3.2.2 The Sample

The sample of the study constituted both instructors and learners that participated in the Universities in Uasin Gishu County. There was a particular focus on the participants from the Schools of Education; students as well as the instructors from the Departments of Curriculum and Instructional Media (CIM) and related fields in each of the Universities in Uasin Gishu County. The aim was to approach the right individuals that understood the needs of the research and the objectives that it sought to attain due to the relevancy of their professions and actions to the issues that were under consideration.

3.2.3 Sampling Technique and Sample Size

The researcher used a probabilistic sampling approach to the exercise of data collection as a way of ensuring that the sample was a representative of the population. The investigation employed the systematic random sampling procedure in handling those exercises to assist in ensuring randomness in the selection of participants into the sample. The determination of the sample size derived from the selection of probabilities and confidence levels as is in the calculation below. Each University provided an equal number of respondents that stood at 18 according to the computation.

Sample Size =
$$\frac{Z^2X p X (1-p)}{C^2}$$

Where:

Z - Z value of the selected confidence level = 1.96 for the confidence level of 95%

p – Probability of the study = 0.9 which allows for 10% error in sampling

C – The selected confidence interval = 5% from (100%-95%)

Sample Size =
$$\frac{(1.96)^2 X \ 0.7 \ X \ (1 - 0.7)}{(0.05)^2}$$

The calculations yielded 138 respondents in the sample.

Respondents per University = 138/2 = 69 persons.

Each University provided a sample of 69 respondents where 10 of them were lecturers.

3.3 Data Collection

3.3.1 Research Instruments

The study used a survey as the main method of data collection relying on questionnaire as the sole instrument for that purpose. There were two sets of questionnaire forms; one for the lecturers and another one for the learners in the Universities. The questionnaire contained both open and closed-ended questions to ensure they outlined the best results from the respondents. There were various forms of closed questions with the first offering responses according to the relevant topic under consideration. The second set of closed questions used a Likert-type scale for the level of agreement that the respondent held to a certain statement. The open questions accompanied some of the

closed ones to ensure that the respondent was able to offer additional insights into the topic of consideration.

3.3.2 Research Procedure

The first step was to get permission letters to the institutions and negotiate a feasible schedule for conducting the data collection exercises. The researcher then delivered the questionnaire to the respondents on the agreed period to facilitate their completion. The investigator stayed on site to provide any assistance to the respondents according to the questions they asked. The main aim was to ensure that each participant answered the questions correctly to eliminate instances of missing data that could impact the research process.

3.4 Quality Control

3.4.1 Validity

Internal and external validity checks were essential actions in the study that provided a reflection of the conditions that affected relevant stakeholders on a larger scope. The primary approach was to seek the assistance of statistical experts and those in other areas to ensure that the research selected the best methods for handling the investigation. The checks also focused on the research instruments to ensure they offered information that was relevant to the sectors of education and information technology as the investigation touched on both of them. That implied that the data collection and analysis processes had to offer the best levels of validity to eliminate any issues that might have reduced that of the research.

3.4.2 Reliability

The research used a pilot investigation as one of the ways that ensured that the methods and approaches it used were reliable and offered relevant insights. The pilot study offered a reflection on the ability of the techniques to provide reliable results by focusing on their accuracy regarding repeatability. It was essential to provide information on what parts of the methodologies needed changes or improvement to ensure consistent and reliable results on the final exercise. The process was essential to eliminate any errors that may have led to the failure of the test to offer insights on the relevant issues on a broader scope.

3.5 Logical and Ethical Issues

One of the key concerns of conducting research exercises in an educational institution is that it has to coincide with the learning processes and potentially not pose a disruption to the relevant stakeholders (Bartlett & Burton, 2016). The researcher ensured that the disruption that this investigation caused was minimal and caused an insignificant impact on the other activities. There were keen agreements between the investigator and the other parties to establish the best schedule that could enable both parties to achieve minimal disturbance to learning in the Universities.

Informed consent is an essential component of every research operation to ensure every participant understands their call and place of participation. The researcher used permission letters that described the research and the roles of the participants that were selected into the data collection process. It was important to offer such information prior to the relevant exercises to ensure that the respondents made pertinent choices. Therefore, the researcher contacted the Universities beforehand and negotiated the relevant schedules for delivering the questionnaires.

Anonymity is an essential and legal consideration that every researcher has to make about their respondents (Punch, 2013). That was a major consideration for this research, especially, due to the nature of the information that it dealt with in its data. During the exercise of data collection, the researcher restrained from seeking personal information

from the respondents that went beyond the basic demographic requirements. The same was applied during the publication of the study reports ensuring full protection of the identity of the respondents.

The safety of the researcher and the respondent are a major consideration for every research project (Bryman, 2012). It is wise to ensure that each person feels secure when handling their part of the whole process to eliminate hazardous events (Robson & McCartan, 2016). The researcher approached the respondents in their areas of study and practices as they provided better safety for both parties. That included delivering the forms and other requirements to the pertinent offices and classrooms as was relevant to the individuals.

3.6 Data Analysis

The study relied on statistical tests to analyze the quantitative data that was collected in the sets of questionnaire. Measures of central tendency were essential in handling conclusions in some of the parts of the questions including the keyword counts for qualitative information. The measures on the keyword and theme counts were essential to complement the quantitative information that the researcher obtained from statistical analyses. The research used the analysis of variance (ANOVA) as one of the methods of testing the hypotheses in the study. The researcher employed the T-test in the process of hypothesis testing. The research relied on a 95% confidence interval for these exercises. The researcher used the computer software SPSS (Social Package for Social Sciences) as the main tool for completing the analytical activities.

3.7 Chapter Summary

The study utilized a mixed research design that complemented both qualitative and quantitative techniques. The researcher utilized statistical to analyze data. Ethical

considerations that the study employed included anonymity, safety, informed consent, and causing minimal disruption to the learning processes.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 Introduction

This chapter provides detailed presentation of the data, analysis, and interpretation according to the objectives of the study. A demographic description of the respondents is also presented.

4.1 Utilization of Social Networks

4.1.1 Demographic Information of Students

All the students in the sample are pursuing undergraduate courses and the age range is between 18 and 23 and some above 23 years. All of the cases indicate using social media in varying times with the majority stating its utility on a daily basis. The graphs below summarize the findings of the data from the questionnaires.

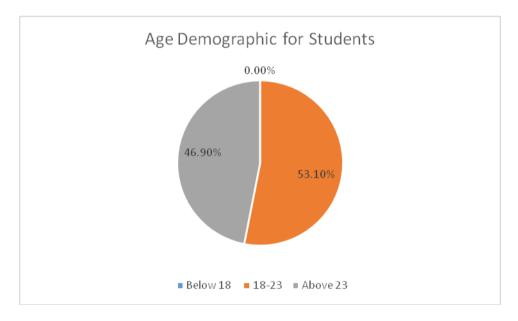


Figure 4. 1: Age of Students

4.1.2 Demographic Information of Lecturers

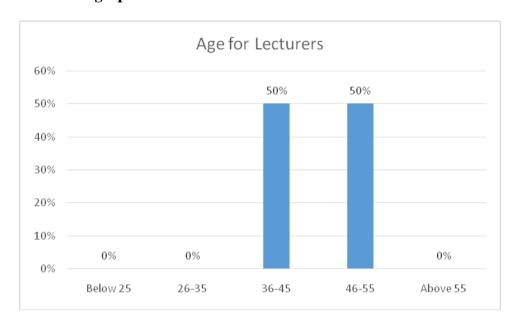


Figure 4. 2: Age of Lecturers

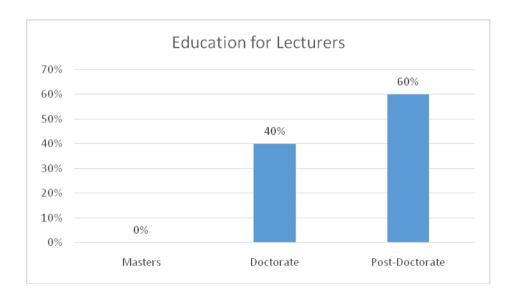


Figure 4. 3: Education of Lecturers

4.1.3 How Regularly do People Use Social Media

The study sought to determine how regularly the respondents used various forms of social media tools. 86.7% of the people in the study indicated that they used at least a social media app on a daily basis. 10.9% of those used social media on a weekly basis while the remaining 2.3% said they used it at least once a year. The graph in figure 4.4 below offers an overview of the cases.

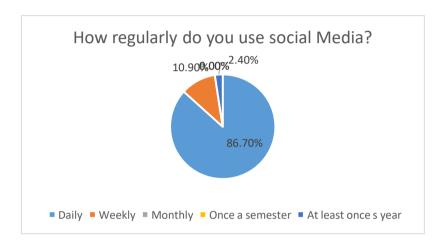


Figure 4. 4: How Regularly People Use Social Media

4.1.4 Usage of Social Media Tools

The study also engaged in establishing how people used various social media applications for their desired functions. The findings indicate that WhatsApp was the leading social networking platform with 96.1% of the respondents using it. Other apps included Facebook, Skype, Google+, Twitter, and blogging which had the minimum usage. The graph in figure 4.5 below offers a summary of how the responses indicated the use of each of the platforms.

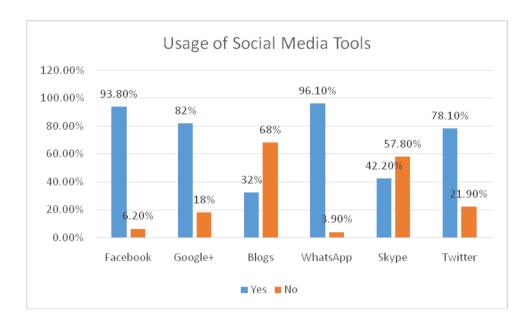


Figure 4. 5: Usage of Social Media Tools

4.2 The Influence of Social Media in Kenyan Public Universities

The questionnaires used closed-ended questions to determine the roles that various social media platforms played in the University context. Those questions followed a Likert scale depending on the level of agreement that the individuals held to each of the provided statements. The findings of the research are as follows;

4.2.1 Social Media as Collaborative Tools

The research is to determine if social media tools can enable the respondents to establish and work in a collaborative network. The responses in figure 4.6 below indicate that 50% of the respondents agree with the statement while another 39% strongly agree constituting 89% that are positive about it. The remaining minority comprises of 1.6% that are undecided while 9.4% disagree with the statement. That indicates that social media tools enable the participants to work in a collaborative environment.

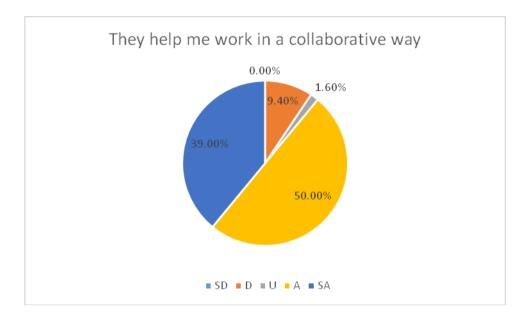


Figure 4. 6: Social Media as Collaborative Tools

4.2.2 Sharing and Dissemination of Ideas and Information through Social Media

The researcher sought to determine if the speed of sharing information would serve any important role for social media in instructional process in Universities. Figure 4.7 displays that 92.2% of the respondents indicated positivity to that fact showing that social media technologies quicken the sharing and dissemination of information and ideas. That is an important contribution as it enables the relevant parties to access various materials that facilitate learning and instructional processes.

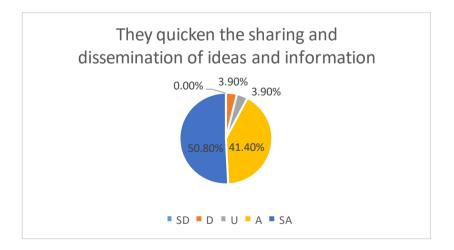


Figure 4. 7: Sharing and Dissemination of Ideas and Information through Social Media

4.2.3 Easy To Use

This question sought to establish if the respondents found it difficult to utilize social media in their learning processes deriving from the amount of skills required. However, a significant majority show that there are minimal skill requirements to facilitate the use of the technologies in learning processes. Those that agreed to the statement comprise a total of 76.5% as is in figure 4.8 below.

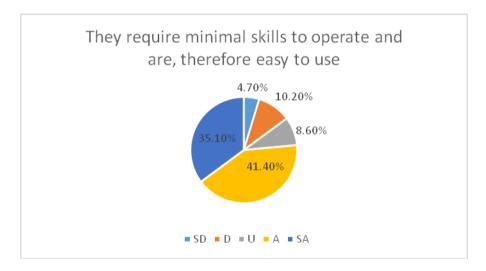


Figure 4. 8: Easy to Use

4.2.4 Require Minimal Charges

One of the greatest challenges that may affect the uptake of technologies in learning processes is that they may lead to an extra cost that the relevant parties may not afford. However, the respondents indicate that the only worry is finding a connection to the Internet as the only cost of utilizing social media for learning processes. Figure 4.9 below shows that 49.3% of those participants indicate an agreement with the statement while another 15.6% agree strongly. The indication is that social media tools are straightforward technologies with the only cost relevant to Internet connections.

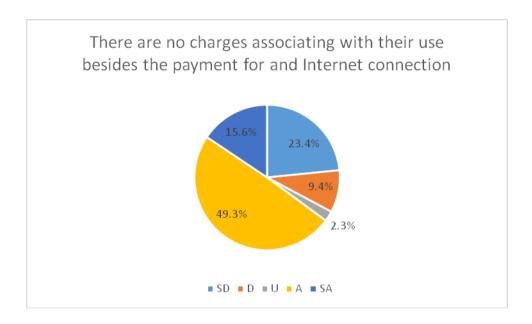


Figure 4. 9: Require Minimal Charges

4.2.5 Ensures Constant Updates of Research Information

The chart in figure 4.10 below indicates that a majority are in agreement with the fact that social media tools are important in providing them with updates regarding research information. Those respondents that agree and strongly agree constitute 47.7% and 42.1% respectively. That constitutes to 89.8% which shows that most of the respondents in the study found those technologies useful in their research activities

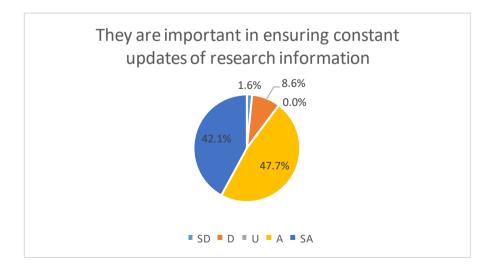


Figure 4. 10: Ensures Constant Updates of Research Information

4.2.6 Cost Efficient

One of the biggest worries for the researcher in the utility of social media was the cost that the relevant parties had to incur to facilitate the operations. However, the respondents in the study indicated that the tools were cost effective as they saved expenses in other areas. A majority of the respondents agreed that utilizing social media tools allowed them to save on other areas such as transport and purchasing stationary. Figure 4.11 shows that 39.1% agree and 48.4% strongly agree to the statement making the tools a cost-effective approach to learning processes.

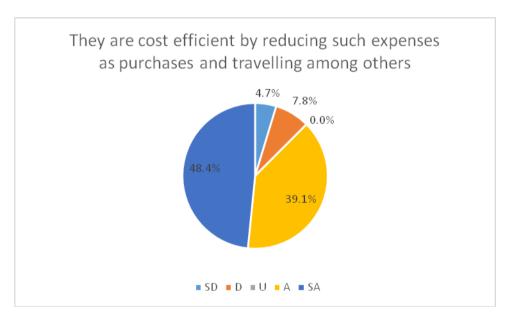


Figure 4. 11: Cost Efficiency

4.2.7 More Insights from Lecturers

The study sought further insight from lecturers in this section by including more questions. The extra questions had the aim of increasing the specificity of the application to a context for people offering instructional materials such as interdepartmental consultations among other relevant issues. The findings from those questions were as follows:

4.2.7.1 They Enable the Connection with Colleagues and Other Partners

It was important to establish whether social media was an important technology to allow lecturers and other tutors to connect with other people in the same fields that were not their students. The responses indicate positivity to this function as a majority agrees to use it. 70% of those participants stated that social media enables them to connect with other partners and colleagues in the context of learning and teaching as reflected in figure 4.12.

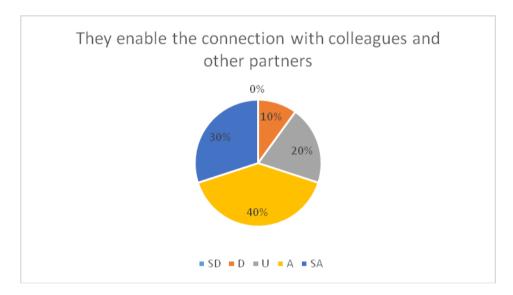


Figure 4. 12: Connection with colleagues and other partners

4.2.7.2 Allow Collaborative Working among the People in the Institution

The study sought to determine whether social media would allow collaboration between the lecturers and other people in the institutions in functions related to instructional process. A majority indicate an agreement to this statement showing that the technologies are essential in enhancing such collaborative exercises. 70% of the responding lecturers indicated benefitting from the use of social media in collaborating with other partners as is in figure 4.13.

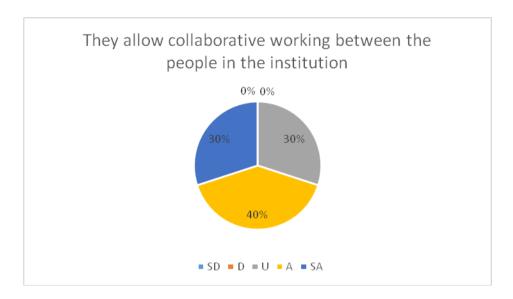


Figure 4. 13: Collaborative Working

4.2.7.3 Important in Integrating the Scholars and External Participants

The study also engaged in determining whether the lecturers would use social media to link their students with other partners in the fields of practice

. The responding tutors point to the fact that the technologies serve an important part in integrating the scholars to real-world practitioners. That purpose is especially important for research activities and the summary is in figure 4.14 below.

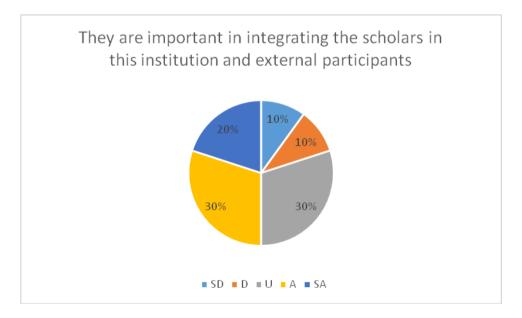


Figure 4. 14: Integration of scholars and external participants

4.3 Suitable Methodologies of Utilizing Social Media Tools

The intention of this section was to establish the common objectives of social media in the context of the University. It focused more on how students applied their time on social media. The sets of questionnaire used closed questions to determine how important particular factors were in the case. The graph below represents the findings from the responses in the research. Some of those functions include networking with family and friends; an application that is relevant even for people that are outside the classroom environment. Another important function that was relevant to learning was that the tools enabled the learners to access information that would add on to what they received in class. That created more relevance of the tools to the context of instructional process. Another function that was more relevant to learning was that social media technologies acted as avenues for research for a majority of the respondents in the study. However, there was a concern in that social media tools were likely to act as a distraction to the learning processes judging from the responses. The respondents (80.5%) indicated that social media acted as a form of entertainment when they were not focusing on studies. There was the potential that those forms of entertainment may have turned into distractions even when the learners were going on with their studies.

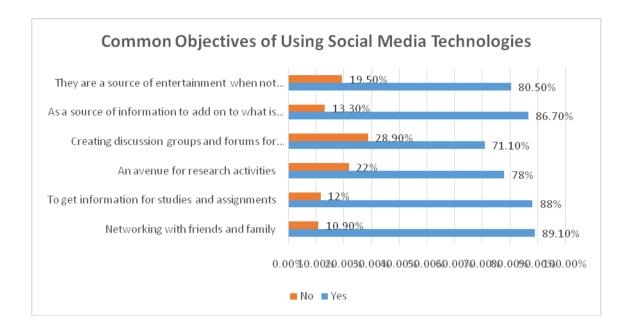


Figure 4. 15: Common Objectives of Using Social Media Technologies

4.3.1 How Social Media Technologies Can Enhance Educational Processes

There are various benefits that the researcher envisioned would result from the use of social media in universities to facilitate instructional process. The study used a set Likert-type statement to determine the level of agreement that the respondents held regarding those advantages. Below are graphs and summaries to describe the findings that the research got.

4.3.1.1 Enable Immediate Feedback between Students and Their Instructors

The research sought to determine if the speed of communication that is a major attribute of social media could serve any important purpose in instructional processes. The responses to this question were positive judging by their representation in figure 4.16. 75.8% of the respondents were in agreement with the statement that social media enables immediate feedback between students and their instructors.

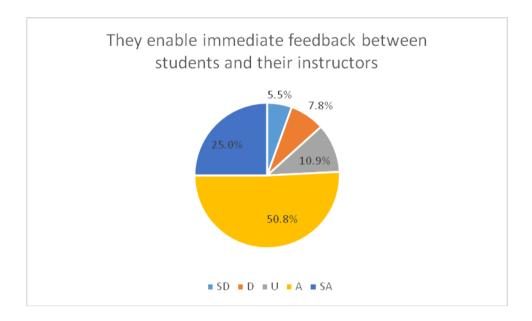


Figure 4. 16: Provision of Immediate Feedback between Students and Their Instructors

4.3.1.2 Allow For Efficient Completion of Assignments

The research had an interest in determining whether social media would facilitate the completion of assignments for the learners as a way of enhancing instructional process. The responses indicate positivity to the fact that social media allows an ease of access to various resources that instructors publish, thereby, enhancing the completion of assignment. Figure 4.17 below contains a chart that summarizes the findings that show 44.5% agree and 27.3 strongly agree to this fact.

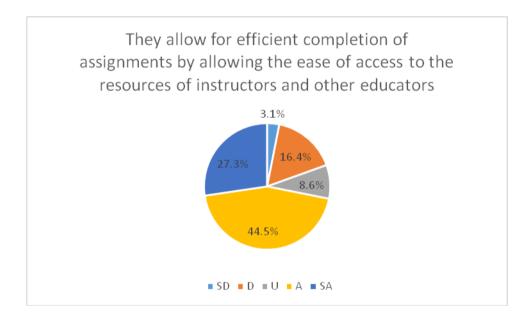


Figure 4. 17: Ease of Access to the Resources of Instructors and Other Educators

4.3.1.3 It Enables Interactive and Collaborative Teaching and Learning

One of the benefits of using social media is that it creates an interactive platform for communication, and the study sought to establish if this factor was relevant to instructional process in universities. The level of agreement that the participants showed indicates that the technologies are essential in enhancing collaboration between learners and instructors. Figure 4.18 below summarizes the responses that show that

75% of the respondents supported the relevant statement as 46.9 agree and 28.1 strongly agree.

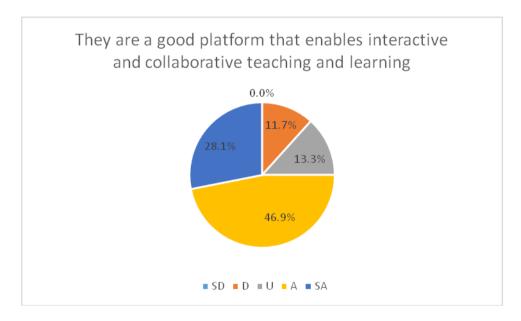


Figure 4. 18: Social Media as Interactive and Collaborative Teaching and Learning Tools

4.3.1.4 Creation of a Very Good Classroom Environment

The research findings also indicate that the use of social media enables the learners and instructors to create a good classroom environment in which they can share information. That may be a direct derivative of the fact that the technology allows collaborative working between the relevant parties. The summary of those results in figure 4.19 below indicates that 46.9% agree and 14.8 strongly agree that they find it convenient to create classroom environments on the social media platforms. That is a further indication of the potential that the technologies have in enhancing instructional process.

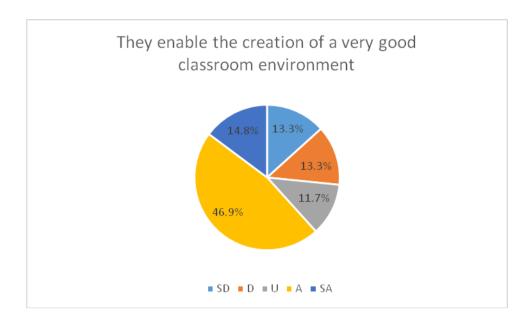


Figure 4. 19: Creation of a very Good Classroom Environment

4.3.1.5 Communication and Collaborative Tools

Most learning processes in the University require the collaboration of various parties with particular focus on that between learners and their instructors. That ability of those two parties to work together effectively enables the identification of various problems and their respective solutions. The findings of the research indicated that social media helped students and their instructors to develop communication channels that facilitated collaborative working. The summary in figure 4.2 indicates that 45.3% agree and 28.1% strongly agree to the fact making it a relevant utilization in University education.

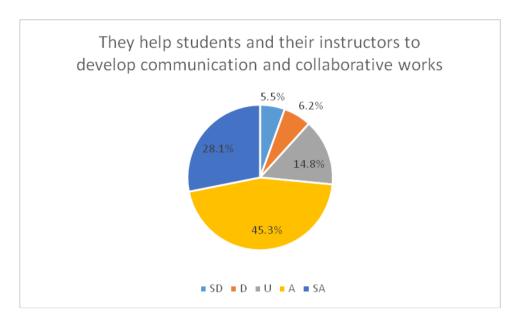


Figure 4. 20: Communication and Collaborative Tools

4.3.1.6 Avenues of Research Activities

The responses in figure 4.21 below show that 57.0% agree and 20.3 strongly agree; thus, support the fact that social media tools can serve as an important avenue for conducting research activities which is a method of enhancing instructional process in Universities.

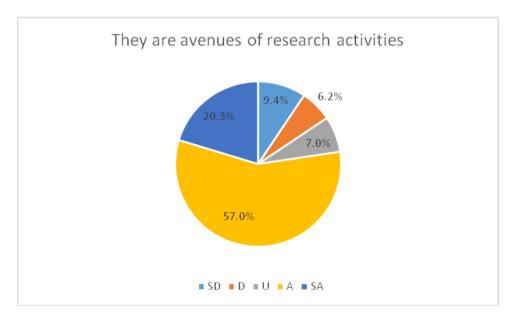


Figure 4. 21: Avenues of Research Activities

4.3.1.7 Creation of Discussion Groups and Forums for Learning Purposes

From the responses in the previous questions, it is clear that social media allows the creation of collaborative networks between learners and their instructors. It was then important to determine if that capacity would allow those parties to create discussion groups for learning purposes. The level of support for that perspective is high and an indicator that it is relevant in enhancing instructional process in universities. As in figure 4.22; 59.4% agree and 21.9% strongly agree; hence, indicate their support for the use of social media to create discussion groups and forums for learning purposes.

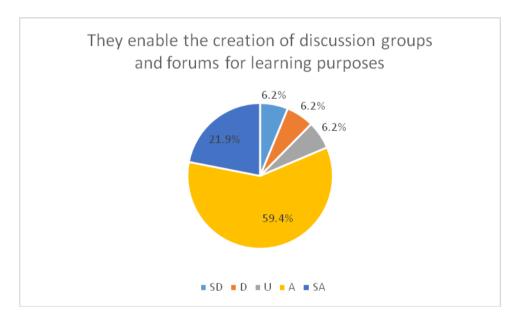


Figure 4. 22: Creation of Discussion Groups and Forums for Learning Purposes

4.3.1.8 They Are Used As a Source of Information

The respondents of the study indicated that social media acted as a source of information to supplement whatever they got from their classrooms. 56.2% of the respondents agreed while 28.1% indicated that they strongly agreed to this statement. The summaries are in figure 4.23 below.

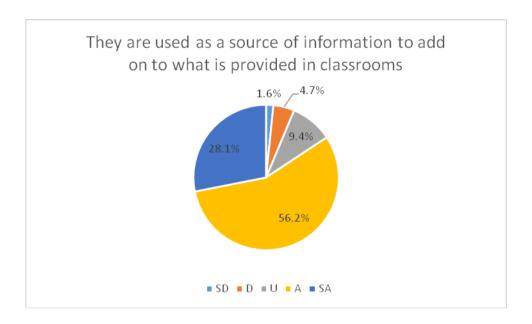


Figure 4. 23: Source of Information to Add on to what is Provided in Classrooms

4.4 The Challenges of using Social Media in Public Universities in Kenya

The research anticipated that various reasons would hinder the application of social media in Universities, and particularly in learning processes. It was important to test how the respondents perceived each of those factors. Some of the factors that were of major concern according to the responses included the security of the information that the relevant parties shared over the platforms; 45.3 % indicated their worry with the issues of cybersecurity. Another area of concern was the point that the technologies were time consuming as 55.5% of the respondents said yes to this reason. The rest of the factors had insignificant impacts as majority of the respondents did not find them relevant to their applications. The summaries are as in figure 4.24 below.

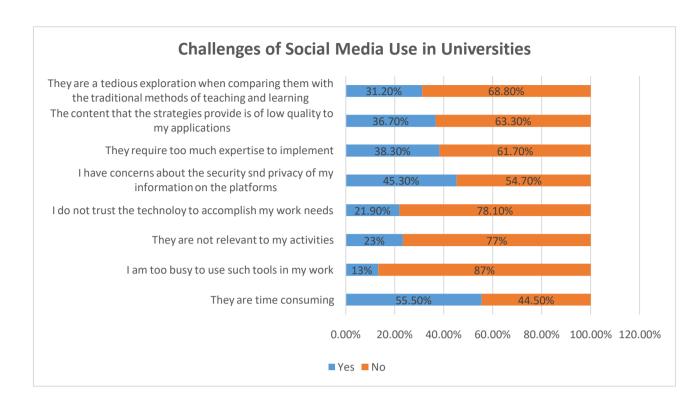


Figure 4. 24: Challenges of using Social Media in Public Universities in Kenya

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

5.0 Introduction

This chapter gives summary of the study findings, conclusions and recommendations.

5.1 The Utility of Social Media Tools in Kenyan Universities

The responses in the research indicated that social media is a popular trend in Kenyan universities judging by its levels of adoption as at the time of data collection. 86.7% of the respondents indicated using at least a social media application on a daily basis while another 10.9% report using it at least once a week and the remaining 2.4% stating once a year as is in figure 4.4. All of the respondents therefore utilize social networking over the Internet for various functions. The indication is that the influence of those tools is growing in Kenyan universities in the same way that it is in the rest of the world. It shows the potential that the technology has in enabling the relevant players to incorporate it into various processes in the institutions. The fact that all the learners and instructors have adopted the technology is an indicator that they all possess the relevant skills to handle the technology, thus making it easier to use. It is then important to establish the various functions that social media tools can serve in the context of University education in the country and beyond the borders. Looking at the different applications and their capabilities can enable a better perspective on how they are relevant to the learning and instructional process.

There were also various levels of adoption for the different forms of social media platforms. The leading app was WhatsApp which is a mobile-based messaging services that increases the convenience of texting in that the users can share information in different formats including text, pictures, and videos. Facebook was the second most popular application that allows the users to share content in a similar manner. One other

outstanding feature of the leading social media tools is that they allow the users to create groups in which they can share information. That makes them relevant to the learning and instructional process that require collaborative efforts. The ability to share information in diverse formats also increases the flexibility in the nature of content that the learners and lecturers can disseminate over those platforms. However, blogs indicate minimal popularity amongst the students while they should stand among the leading methods of learning. That is because those blogs present the most flexible and applicable methods of use that would enhance the whole learning processes. However, the lack of sufficient information would be the leading cause of the poor utility that the technology is facing in this current state. That may also be a direct result of the lack of awareness on the levels of control that the modern day audience has in utilizing the Internet resources.

5.1.1 Is the Utilization of Social Media Tools a Feasible Exploration?

The study also had an interest in underlining the feasibility of applying the technologies in instructional process and the findings from the data provided significant insights. Collaboration between the students and lecturers was one of the outstanding benefits that are clear from the research judging by the level of agreement that the respondents indicate regarding the relevant statement. The collaborative factor arises from the ability of those parties to create networks that enable them to act in groups with a common objective. The participation in those grouping enables the relevant parties to share information in a timely manner deriving from the speed of the social networking platforms. Instructors find it easy to send communications through those groups regarding various course actions and material. For example, the representative of a particular class may create a WhatsApp group in which they share messages with the rest of the class about lecture issues.

The feasibility check also indicated that the social media tools were a cost-effective methods of communication between the various parties that used them. Their popularity and convenience is one of the factors that promote their cost-efficiency in that it reduces the whole process of communicating between the relevant parties. WhatsApp was one of the most popular applications in the study which made it a convenient example in the study. The creation of a WhatsApp group enabled the representative, taking the example, to post a message once and the rest of the class members could then access it. That eliminated the hassle of having to call all the relevant members to pass the message. As a result, using social media tools becomes an easy exploration unlike traditional methods of communication. The respondents also indicated that the use of social media tools required minimal skills to operate and utilize, and that also promoted their popularity in the relevant areas. The conclusion was that social media is feasible for application in the context of University instructional process. If all the parties could agree on a schedule that they needed to be online, then the communication could occur in a seamless and timely manner. The ability for every person to participate in the communication is another benefit, especially, in a question and answer forum if they all agreed to engage in one. The bottom line is that the social media tools were popular among the students which led to the need of establishing how they could enhance the whole learning process.

5.1.2 What Role Do Social Media Tools Play in Teaching and Learning?

The feasibility check on the utility of social media in universities only sought to provide an over-the-surface applications that most of the users have engage in during various processes. However, it was important to pin down on applications that are relevant to instructional process and the classroom environment. In this light, there was a major advantage in the application of those tools in the instructional process in that

they allowed immediate feedback between the instructors and the students. The implication is that the speed of the tools is sufficient to sustain a live discussion in which every participant gets real-time information. That can enable the relevant parties to share information about various course issues at the convenience of other locations outside the classroom. That also endorses the information about another benefit regarding cost efficiency in that those individuals will not need to attend to physical classrooms and that reduces the amounts they incur in transportations. The implication of those observations is that they are pertinent for use in enhancing learning processes in the universities as they serve various benefits that make it easier for the parties to share information. For example, using the platforms can allow the instructors to send extra learning materials to their students in soft copies instead of having to use printouts. Such a move reduces the costs of stationary and transport while at the same time increasing the convenience of the access that the learners have to the relevant resources.

The social medial tools have also shown the potential to enable collaborative activities between the various participants in the universities. The respondents indicated that they are capable of creating collaborative networks with different partners as a way of enhancing their operations as are relevant to instructional and learning processes. The lecturers further indicated that they can use social media to integrate their scholarly processes to other players outside the institutions as is in figure 4.14. That indicates that the technologies are important in linking the learners to the real-world events such as those relevant to their areas of employment. The ability to integrate the learners with other partners can allow the instructors to expose those individuals to potential employers as a way of connecting the class learning to real-world problem-solving. The use of social media groups and forums enables one person to send information to many

more at once instead of having to contact them separately. That serves an important part in the instructional process as the instructors can use those groups to disseminate information to many recipients in the relevant course. Every other person that posts on those platforms also enables the rest to see. In such a setting, it is easier for the students to work collaboratively in developing solutions to various problems. That also benefits them in the sense that it is convenient as they do not necessarily have to be in the classroom to handle those activities.

5.1.3 What Methodologies do the Lecturers and Learners Use to utilize Social Media?

Discussion forums and groups are some of the most pertinent methodologies that instructors can use to ensure that they benefit from social media in enhancing the instructional process. The finding from the data analysis above indicates that the platforms can enable the learners to create a virtual classroom environment in which they can share information (as is in figure 4.19). Other responses indicate that it is possible for the relevant parties to work collaboratively over those platforms even with other external partners. The ability to share information instantaneously is also another benefit that social media offers the relevant users especially those in a learning environment. Another great advantage is the flexibility that exists in the diversity of the nature of the content that those individuals can share over the social media platforms. However, the greatest factor that is present in a majority of those platforms is that the users can create groups that allow each person to share information to the rest at once without having to contact them separately. As a result, it is then possible for those individuals to create an avenue that enables them to post information about their relevant problems and the sought answers from the members of the group. That is the primary setting of a discussion group or forum in an educational environment except that it offers better convenience. The participation on such social media platforms does not need the participants to meet physically in one location like it is in traditional discussion groups. There is the flexibility to participate from various places as the technology allows the participants to create virtual environments.

Dissemination of study and research information is another methodology that the lecturers can use to handle the relevant instructional process through the social media tools. Some of the prominent forms of social media in the modern day are blogs that allow for an active audience to participate in them. The lecturers and instructors also stand to benefit from this technology in that it offers them more control and opportunities to publish information on the Internet. The primary benefit is that they can be able to share that information directly with their learners. The greater advantage is that people are capable of participating in the creation of that information and any amendments that it might need. That arises from the fact that blogs allow the audience to place comments on what they feel or know about the particular subject. That gives the learners an opportunity to pose questions on what they do not understand about the information on the particular publication. It also allows other experts to comment on further additions that the information needs to make it more suitable for application. If the publication needs any correction, then the experts can offer an insight on the relevant amendments to make the publication valid for application.

Social media also acts as a platform for networking between the lecturers and learners with other partners that are both within and outside the particular institution. The ability to allow for collaborative efforts implies that the tools can allow more people to work together towards a common academic objective. Students in one institution can network with those of another to ensure that their exercises are simultaneous and consistent with the relevant requirements. Another benefit is that the instructors and learners can

connect with other experts in active employment to provide further insights on the applicability of the information that is in classrooms. Such uses are particularly important for people that are undertaking research activities within the learning institutions. For example, a student in the University can link with an expert in a firm to determine the impact that a particular research activity can have on the relevant area. That professional can also offer further information on how to make the research project more relevant to the target areas and population. In similar fashion, students can link with others in different universities as well as with instructors between those institutions. That can as well enhance learning and research efforts for both parties in the network.

5.1.4 Challenges to the Utility of Social Media in Public Kenyan Universities

There were extra questions in the questionnaires that were open-ended that had the intention of getting further light on the issue beyond what the closed ones could cover. It is from that information that the study found another big challenge that hinders the absorption of social media tools into the instructional process in Universities. A majority of the respondents that filled that section of the form pointed to poor access to the Internet beyond the campus grounds as one of the problems that led them to denounce their support for using those technologies in their class work. While those learners have access to the Internet over mobile service providers, they pointed to the concern over the costs that they will incur in the long run. The lack of providers of unlimited Internet services implies that the individuals have to purchase expensive connectivity bundles, and that stands as a major challenge. Some of the universities in the study offered Internet services through wireless local area networks in their quest to enhance the connectivity to the Internet that is essential in enabling them to access study and research material. However, the networks would not deliver the Internet to

those students living outside the campus premises, and that gave them a disadvantage. While the students reported accessing unlimited subscriptions from other service providers, they were highly unreliable as the speed was too slow to manage real-time sharing of information.

The researcher also anticipated various reasons that would hinder the adoption of social media with responses indicating the outcomes as is in figure 4.24. The time that it takes to use social media was amongst the challenges that were outstanding as one of the major concerns for the learners and tutors that responded to the research. The graph indicates that 55.5% of the people find social media tools to be time consuming, and that discourages them from applying those technologies in learning-related programs. Some of the respondents indicated in the open questions that the current nature of social media tools presented very many distractions that would hinder effective learning leading to more time than it actually should. For example, it is easier to bump into messages that are outside the scope of study, such as those from family and friends, and that distracts that learners by engaging them in conversations that are not relevant to their studies. That raised a concern that the current tools may then not be effective in supporting instructional process in the institutions of higher learning.

Another challenge that also showed mentionable concerns is the security of the information that the learners and tutors share over the social networks that will facilitate instructional process. Cybercrime has been growing in the recent decade exposing various people to multiple breaches of information that raise even personal security threats. While more technologies are arising to minimize the cases, the criminals also seem to evolve along with those techniques and exploit them. While a majority of the respondents did not show concern over that security, those that has a worry were an equally significant number. While learning materials do not pose any threat in the

hands of cybercriminals, there are other issues that are of concern regarding the use of such networks that could have motivated those responses. Some of the common issues include criminal access information about an individual and stalking them to pose a security threat. The platform can also expose the users to various other events such as cyberbullying in the case that the criminals choose to use it to send disturbing messages to the relevant recipients. However, the fact that the majority does not show a worry implies that they are rising above the challenge and have developed confidence in social media tools. That may derive from the experience that they have in using the technologies over the time they have existed.

5.2 Conclusions

The findings in the study pointed to the relevance and significance of social media tools in teaching and learning processes in Universities as outlined below;

- i. The ability for the networks to enable the sharing of information in diverse formats increases the flexibility of those parties to use them to disseminate it to one another. However, the greatest potential arises in the potential to create networks with many individuals through groups and share that information instantaneously. That enables the relevant participants to create groups that allow them to work collaboratively as a way of enhancing the instructional process for the instructors and the learners.
- ii. There are various challenges that hinder the efficient use of social media technologies in the University context and the biggest one is that they are time consuming. The other problem is that they are likely to distract the learners from focusing on studies as they are a form of entertainment.

- iii. Few people (45.3%) indicated their worry with the issues of cybersecurity indicating that the utilization of the technology has matured to a level people can protect themselves from any relevant threats.
- iv. Since the technologies are feasible in terms of cost and skill requirements, it is important to use them for instructional process in the Universities.

5.3 Recommendations for Further Study

The following recommendations are suggested:

- i. The current investigation focused on the ways that the learners and tutors can use the technology for instructional process. However, it is important to find out the potential that exists in customizing the technology to suit the needs of specific institutions as a way of enhancing the experience.
- ii. Further study should also enable the potential to use the technologies for interinstitutional collaborations for students and instructors under similar courses of study. This will mainly derive from the indication that is clear in the current study that social media enables networking in an almost instantaneous manner.

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APPENDICES

APPENDIX I: QUESTIONNAIRE FOR LECTURERS

Dear Respondent,

A study is being undertaken to examine **Social Media Tools and their utility in Universities.** This questionnaire has been designed to this effect. You are kindly being requested to complete it. Please note that the information will only be used for the purpose of the study in as far as Social Media Tools and their utility in Universities is concerned. All responses will be kept strictly confidential; do not write your name on the questionnaire.

Thank you in advance for your valuable inputs.

Sincerely,

Annette Munyiva

Section 1: Personal Information

1. Age

Below 25	26-35	36-45	46-55	Above 55

2. Level of Education

Masters	Doctoral	Post
		Doctoral

Section 2: Social Media Tools and their Utility in Universities

3. Which of the following Social Media Tools do you use (Tick on the ones you use and ignore the others).

Social Media Technologies	Tick (√)
Facebook	
Google +	
Blogs	
WhatsApp	
Skype	
Twitter	

4.	. State any other technology that you use that does not appear above	

5. How regularly do you use the technologies that you responded to in the question above?

Social Media	Daily	Weekly	Monthly	Once a	At least once a
Technologies				Semester	year
Facebook					
Google +					
Blogs					
WhatsApp					
Skype					

Twitter			

Section 3: Social Media Tools as Feasible Exploration for Lecturers

6. Tick (√) in the appropriate box that corresponds with your level of agreement in the statements below about the role of Social Media Tools in your application.Use the following guidelines to respond sufficiently to the statement.

 \mathbf{SD} – Strongly Disagree, \mathbf{D} – Disagree, \mathbf{U} – Undecided, \mathbf{A} – Agree, \mathbf{SA} – Strongly Agree

Statement	SD	D	U	A	SA
They help me work in a collaborative way					
They quicken the sharing and dissemination of ideas and					
information					
They enable the connection with colleagues and other partners					
They require minimal skills to operate and are, therefore easy to					
use					
There are no charges associating with their use besides the					
payment for and Internet connection					
They are important in ensuring constant updates of research					
information					
They are cost efficient by reducing such expenses as purchases					
and travelling among others					
They allow collaborative working between the people in the					
institution					
They are important in integrating the scholars in this institution					
and external participants					

Section 4: The use of Social Media Tools to Enhance Instructional Process

7. Please respond with the level of agreement in the following statements that outline the use of Social Media Tools to Enhance Instructional Process.

Statement	SD	D	U	A	SA
They enable immediate feedback between students and their					

instructors			
They create a good avenue for instructors to post content that			
learners can access easily			
They allow for efficient completion of assignments by allowing the			
ease of access to the resources of instructors and other educators			
They are a good platform that enables interactive and collaborative			
teaching and learning			
They enable the creation of a very good classroom environment			
They are avenues of research activities			
They allow for networking with collaborative scholars for			
education purposes			
They enable the creation of discussion groups and forums for			
learning purposes			
They are used as a source of information to add on to what is			
provided in classrooms			

Section 5: Challenges on the Adoption of Social Media use in Universities

8. Which, among the following reasons, are the main hindrances to the effective utilization of Social Media Technologies?

Reasons	Tick (√)
They are time consuming	
I am too busy to use such tools in my work	
They are not relevant to my activities	
I do not trust the technology to accomplish my work needs	
I have concerns about the security and privacy of my	
information on the platforms	
They require too much expertise to use them	
The content that the strategies provide is of low quality to	
my applications	
They are a tedious exploration when comparing them with	
the traditional methods of teaching and learning	

Section 6: Solutions to the Challenges on the use of Social Media Tools in Universities

9.	Based on your response to question 5, what are the solutions to the ineffective
	use of Social Media tools to enhance Instructional Process?

APPENDIX II: QUESTIONNAIRE FOR LEARNERS

Dear Respondent,

A study is being undertaken to examine **Social Media Tools and their utility in Universities.** This questionnaire has been designed to this effect. You are kindly being requested to complete it. Please note that the information will only be used for the purpose of the study in as far as Social Media Tools and their utility in Universities is concerned. All responses will be kept strictly confidential; do not write your name on the questionnaire.

Thank you in advance for your valuable inputs.

Sincerely,

Annette Munyiva

Section 1: Personal Information

1. Age

Below 18	19-23	Above 23

2. Level of Education

Certificate/Diploma	Undergraduate	Postgraduate

Section 2: Social Media Tools and their utility in Universities

3. Which of the following Social Media Tools do you use (Tick on the ones you use and ignore the others).

Social Media Technologies	Tick (√)
Facebook	
Google +	
Blogs	
WhatsApp	
Skype	
Twitter	

4. State any other technology that you use that does not appear above							

5. How regularly do you use the technologies that you responded to in the question above?

Social Media	Daily	Weekly	Monthly	Once a	At least once a
Technologies				Semester	year
Facebook					
Google +					
Blogs					
WhatsApp					

Skype			
Twitter			

Section 3: Social Media Tools as Feasible Exploration for Learners

6. Tick ($\sqrt{}$) in the appropriate box that corresponds with your level of agreement to the statements below about the role of Social Media Tools in learning. Use the following guidelines to respond sufficiently to the statement.

 \mathbf{SD} – Strongly Disagree, \mathbf{D} – Disagree, \mathbf{U} – Undecided, \mathbf{A} – Agree, \mathbf{SA} – Strongly Agree

Statement	SD	D	U	A	SA
They help me work in a collaborative way					
They quicken the sharing and dissemination of ideas and					
information					
They require minimal skills to operate and are, therefore easy to use					
There are no charges associating with their use besides the payment					
for and Internet connection					
They are important in ensuring constant updates of research					
information					
They are cost efficient by reducing such expenses as purchases and					
travelling among others					

Section 4: The use of Social Media Tools in Enhancing Instructional Process

7. Please respond with the level of agreement in the following statements that outline the use of Social Media Tools to Enhance Instructional Process.

Statement	SD	D	U	A	SA
They enable immediate feedback between students and their					
instructors					
They allow for efficient completion of assignments by allowing the					
ease of access to the resources of instructors and other educators					
They are a good platform that enables interactive and collaborative					
teaching and learning					
They enable the creation of a very good classroom environment					

They help students and their instructors to develop communication			
and collaborative works			
They are avenues of research activities			
They enable the creation of discussion groups and forums for			
learning purposes			
They are used as a source of information to add on to what is			
provided in classrooms			

Section 5: Challenges on the Adoption of Social Media use in Universities

8. Which among the following reasons are the main hindrances to the use of effective utilization of the Social Media Technologies?

Reasons	Tick (√)
They are time consuming	
I am too busy to use such tools in my work	
They are not relevant to my activities	
I do not trust the technology to accomplish my work needs	
I have concerns about the security and privacy of my	
information on the platforms	
They require too much expertise to use	
The content that the strategies provide is of low quality to	
my applications	
They are a tedious exploration when comparing them with	
the traditional methods of teaching and learning	

Section 6: Solutions to the Challenges on the use of Social Media Tools in Universities

9.	Based on your response to section 5, what are the solutions to the ineffective use
	of Social Media tools to enhance Instructional Process?
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APPENDIX III: UNIVERSITY RESEARCH AUTHORIZATION



P.O. Box 1125-30100, ELDORET, Kenya Tel: 053-2063111 Ext. 232 Fax No. 020-2141257 E-Mail: deansoe@uoeld.ac.ke Website: www.uoeld.ac.ke

SCHOOL OF EDUCATION Office of the Dean

The Secretary,
National Commission for Science, Technology and Innovation,
P.O Box 30623-00100,
NAIROBI-KENYA.

Dear Sir/Madam.

RE: ANNETTE MUNYIVA

The above named refers. Annette is a bonafide student of the University of Eldoret pursuing a Masters degree in Educational Technology in the School of Education. The title of her research proposal is "The role of Web 2.0 Tools in Enhancing Instructional Process: A Case of Selected Universities in Eldoret Municipality". She has completed her course work and has had her research proposal approved by the University machinery. She is ready to proceed for field work.

Thanking you in advance.

Yours Sincerely,

DEAN, SCHOOL OF EDUCATION

APPENDIX IV: NACOSTI RESEARCH AUTHORIZATION



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone:+254-20-2213471, 2241349,3310571,2219420 Fax:+254-20-318245,318249 Email:dg@nacosti.go.ke Website: www.nacosti.go.ke when replying please quote 9th Floor, Utalii House Uhuru Highway P.O. Box 30623-00100 NAIROBI-KENYA

Ref: No.

Date:

NACOSTI/P/16/83965/10915

2nd May, 2016

Annette Munyiva Okal University of Eldoret P.O. Box 1125-30100 ELDORET.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "The role of Web 2.0 tools in enhancing instructional process: A case study of selected universities in Eldoret Municipality," I am pleased to inform you that you have been authorized to undertake research in Uasin Gishu County for the period ending 29th April, 2017.

You are advised to report to the County Commissioner and the County Director of Education, Uasin Gishu County before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies** and one soft copy in pdf of the research report/thesis to our office.

BONIFACE WANYAMA

FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner Uasin Gishu County.

The County Director of Education Uasin Gishu County.

28/5/12

APPENDIX V: NACOSTI RESEARCH PERMIT

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Permit No : NACOSTI/P/16/83965/10915 Date Of Issue Nand CMay, 2016 lence, Technology Fee Recieved : Ksh 1000

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- 1. You must report to the County Commissioner and the County Education Officer of the area before Science embarking on your research. Failure to do that Science ission by Science, Technology and innovation National Commission for Science may lead to the cancellation of your permitsion for Science
- 2. Government Officers will not be interviewed on for without prior appointment.
- No questionnaire will be used unless it has been approved.
- 4. Excavation, filming and collection of biological or Scient specimens are subject to further permission from the relevant Government Ministries.
- 5. You are required to submit at least two(2) hard copies and one(1) soft copy of your final report.
- 6. The Government of Kenya reserves the right to modify the conditions of this permit including for S its cancellation without notice of National Commission for the Science recommend and important National Commission for



REPUBLIC OF KENYA



National Commission for Science, Technology and Innovation

RESEARCH CLEARANCE PERMITor Science, Techno

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APPENDIX VI: SIMILARITY REPORT