A Practitioner's Enquiry into the Benefits of Social Networking Services in the Teaching and Learning of Business Studies at a particular High School in Eswatini

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## University of KwaZulu–Natal



## **Edgewood Campus**

by

## Thembi Nonhlanhla Dlamini

214584561

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### Declaration

I, <u>Thembi Nonhlanhla Dlamini</u>, hereby declare that this dissertation is a representation of my own work and has not been submitted in any form for another degree or diploma to any university or tertiary institution. All information cited from published or unpublished works have been acknowledged.

This

Signature (T.N.Dlamini)

14 December 2018 Date

As the candidates supervisor, I Professor Desmond Govender agree to the submission of this thesis

Signature ..... Date .....

As the candidates supervisor, I Dr Colin Chibaya agree to the submission of this thesis

Signature ...... Date .....

## Synopsis



"The global interconnectedness of the digital communities entails new opportunities for all"

### Abstract

Teaching and learning environments have been transmuted by web 2.0 tools with no resistance. We understand Web 2.0 tools as online collaborations in which internet visitors share information through social networks. The benefits achieved in using social networks in teaching and learning were development of critical thinking, confidence, independence, deep engagement, global awareness, development of problem solving skills, promoting growth towards creativity and innovation in learners. From a technical point of view, social networks are applications stored in common electronic devices such as desktops, laptops, or cellular phones. They are web-based application systems with which people connect based on shared common interests, where such common interests can be academic, business oriented, professional, personal, or social. The benefits we achieve and enjoy as a result of using social networks (collections of tools and facilities) and social networking principles (the practice of using social networks) are referred to as social networking services. Generally, social networking services prevalently allow individuals to construct public profiles within bounded systems, articulate other users with whom to share connections, and traverse connections with them.

Use of social networking services has become more popular with learners in recent years. The world is experiencing an increased demand for smartphones, enabling holders to access the internet anytime anywhere. People are often and always connected online through various social networking services. Educators, parents and learners are not an exception, depicting citizens who are connected. The purpose of this research is to investigate mechanism in which the benefits of social networking services can be integrated into the teaching and learning of Business studies at a particular school in Eswatini.

A mixed methodology in which both qualitative and quantitative data sought was used. A total of one hundred and thirty three learners were randomly selected as participants of the practitioner's enquiry. These learners were from Forms 1, 2, and 3 classes. A questionnaire was administered to gather relevant data pertaining to learners' perceptions of the envisioned benefits and how social networking services could be integrated into teaching and learning. Generally, the study gathered that, although ignorant at the time of data collection, most learners were convinced that integration of social networking services in teaching and learning endeavours would encourage deep learning, foster engagement, enhance collaboration, and

infuse creativity. The study ascertains possibilities of successful awareness campaigns in which the values of social networking services for collaborated scholarly purposes are preached.

The value of this study was also noted to the teachers, parents, schools, the ministry of education, and the community at large. Precisely, the study provides a creative strategy for shifting the purpose of social networking services in learners, from social based values to more effective teaching and learning endeavours. The recommendations made are aligned to the views purported in Pavlov's classical conditioning theory, suggesting that – repeated attempts to shift learners' interest when they are online would, one day, yield positive outcomes with communal benefits. To the best of my knowledge, this is a creative and innovative strategy for integrating social networking services into teaching and learning contexts.

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### **CHAPTER 1 : INTRODUCTION**

### **1.1 Introduction**

Teaching and learning environments, all over the world, have been transmuted by web 2.0 tools with no resistance (Hoegg, Martignoni, Mickel and Stanoevska-Slabeva, 2006; Noss, 2007). Eswatini schools are not an exception. The researcher understand web 2.0 tools as online collaborations in which internet visitors share information (Towson, 2005; Joshua, 2008; Noss, 2007) using social networking services such as whatsApp, messenger, twitter, or facebook, to mention a few. Development of technologies has enabled educators and learners to change the way they interact with each other (Baran and Thomson, 2014). The use of TPACK (Technological, Pedagogical Content Knowledge) have made it possible for educators are able to make creative choices on the use of technology in classrooms to make teaching and learning more effective (Debbagh and Jones, 2016). Employing Technological Pedagogical Content Knowledge (TPACK) as a conceptual framework the researcher describes teachers of Business Studies to learners of the subject the need to effectively teach using mobile technology through social networks.

An attractive and prevalent feature of social networking services is the ability of users to contribute content (Towson, 2005) in the form of text messages, videos, or static images. Social networking services, precisely, enhance communication among participants (Noss, 2007), collaboration between users (Selwyn, 2008; Noss, 2007), creativity when users create and contribute content (Selwyn, 2008), media literacy (Noss, 2007; Paus-Hasebrink et al., 2009), as well as improved technological proficiency and connectedness (Hargadon, 2007). They (social networking services) build and boost participants' confidence, enhance participants' independence and engagement, as well as enhancing global awareness among visitors. The list of the benefits of using social networking services is long. However Serevin (2009) and Noss (2007) classified these benefits into three categories, namely, benefits:

- about the development of users' critical thinking and problem solving skills.
- aligned to enhancement of creativity and innovation.

• to do with engagement and the development of communication skills.

Three key terms thus arise, which characterize the theme of the work presented in the rest of this dissertation. These terms are social networks, social networking, and social networking services. We will distinguish between these three terms in the following sub-sections, highlighting contextual definitions, before we give an explicit statement of the problem.

#### **1.1.1 Social networks**

Broadly speaking, social networks are viewed as representations of social interaction systems used to study the propagation of ideas and social bond dynamics (Huberman et al., 2008). They represent social connection structures in which the actors are individuals or organizations (Wasserman et al., 1994). From a technical point of view, social networks are software applications saved and stored in common electronic devices such as desktops, laptops, or cellular phones (Ryan, 2011). They are web-based software application systems with which people can connect to one another's profile based on shared common interests. Such common interests are often academic, business oriented, professional, personal, or just social (Ellison, 2007). In most cases, the social network perspective summarizes a set of methods for analyzing the structure of the social entities and the patterns observed in these structures. In this work, social networks are contextually understood as collections of tools and facilities with which groups of individuals (particularly, and in the context of this work, groups of school going learners) who share common interests can interact. In this dissertation we will interchangedly refer to social networks as collections of tools and facilities for interaction purposes.

#### 1.1.2 Social networking

Gunawardera et al. (2009) distinguishes social networking from social networks as the practice of using social networks (the practice of using collections of tools and facilities) in order to expand individuals' knowledge through interactions with colleagues of similar interests. We equally understand social networking as a collection of processes through which online resources are used to facilitate the creation of user profiles and the sharing of information for interaction purposes (Lenhart & Madden, 2007). Although some sources in the literature emphasize on social networking as the maintenance of personal and business relationships online (Martensen et al., 2011), most sources highlight the grouping of individuals of common interests as the key feature of social networking (Reston, 2007). Our

contextual perception of social networking is thus that, it is the establishment of relationships initiated between individuals with shared interests, where conversations, collaboration, and information sharing are the key activities.

#### **1.1.3** Social networking services

The benefits we achieve and enjoy as a result of using social networks (collections of tools and facilities) and social networking (the practice of using social networks) are referred to as social networking services. These characterize the user friendliness and interactiveness of the platforms on which social networks are built, where social networking relations arise among people of common interests or people of linked backgrounds (Webster, 2014). Generally, social networking services prevalently allow individuals to construct public profiles within bounded systems, articulate other users with whom to share connections, and traverse connections with them (Ellison, 2007). In this work, we understand social networking services as collections of benefits, sets of attractive features, lists of advantages, and all sought of provisions achieved when people with shared and common interests are connected online.

Although most immediate benefits of social networking services are key result areas and major goals in teaching and learning, effective teaching strategies which exploit these benefits require a closer investigation. This dissertation presents a practitioner's enquiry in which we investigate our own perceptions regarding the integration of social networking services in the teaching and learning of business studies at a particular high school in Eswatini. In this context, a practitioner's enquiry is predominantly an intentional self-investigation in which one poses questions related to his or her own teaching context and goals (Fingeret & Cockley, 1992). We interrogate our own intervention and mechanisms in which we can exploit learners' proficiency in technology and social networking services for scholarly gains.

The research undertaken in this work emphasizes on the identification of mechanisms in which we can integrate social networking principles (the practice of using social networks) in the teaching and learning of business studies at a particular high school in Eswatini. Our goal is to prescribe a strategy for exploiting the benefits, features, advantages, and provisions of social networking services for scholarly, rather than social purposes. The key benefits we seek to exploit include enhanced communication among participants, collaboration, boosted creativity, media literacy, technology proficiency, connectedness, fostered motivation, independence, engagement, and global awareness in general. In the next section we present an explicit statement of the problem which drives the rest of the research undertaken in this dissertation.

### **1.2** Statement of the problem

While it is globally agreed that knowledge is power, the act of gathering satisfactorily sufficient knowledge on a given topic is handy and tedious. This is even a greater challenge to high school learners who often have substantial amount of homework and assignments on daily basis, while at the same time they have to cope with other daily life demands. Worse still is the challenge, learners have, of developing adequate discipline to achieve fairly divided time schedules for school work, social life, and other important life activities.

Interestingly, social networking prevalently takes the largest share of teenagers' time (Renaud & Biljon, 2008). This is unfortunately at the expense of other important daily activities such as attending to school work and developing other life skills. Do school going teenagers take advantage of social networking services for educational and life-long skills development purposes at all? If they do, which social networking services do they embrace and to what extent? The statement of the problem researched in this dissertation can, thus, be rephrased as: "*an investigation of mechanisms in which particular social networking services can be integrated into the teaching and learning of business studies*".

We hypothesize that cross-purpose uses of social networking services create a healthier balance between social gains, educational advantages, and life skills development benefits of social networking services to learners. Our research statement of the problem can further be rephrased into three sub-questions as follows:

- (a) Do learners use social networking services for scholarly benefits? In responding to this question, we identify aspects of social networking services learners use for sharing content, the common media of communication they currently use, and how the proposed use of social networking services for scholarly purposes can have an impact on teaching and learning. We also seek learners' opinion regarding the envisioned impact of integrating social networking services into teaching and learning. This will give an insight as to how effective and accepted the proposed integration will be.
- (b) What aspects of social networking services learners value most, and how do they use those services? In responding to this question, we investigate the different forms of information shared among learners, and an evaluation of the degree of independence when learners use electronic gadgets and social networking services. This aspect will help us know the amount of relevant transactions that take place between learners and the levels of independence of learners in using electronic gadgets. Again the information we gather in this regard will give insights regarding the effectiveness of the proposed integration.
- (c) How can we integrate desirable features of social networking services in the teaching and learning of business studies at a particular high school in the Republic of Eswatini? In this question, we make an evaluation of the effectiveness of the different forms and media of communication used, as well as an assessment of the extent to which collaboration and creativity are supported amongst learners. We make an assessment of learners' digital literacy, awareness, technological proficiency, connectedness, appreciation of electronic gadgets, and engagement with social networking services.

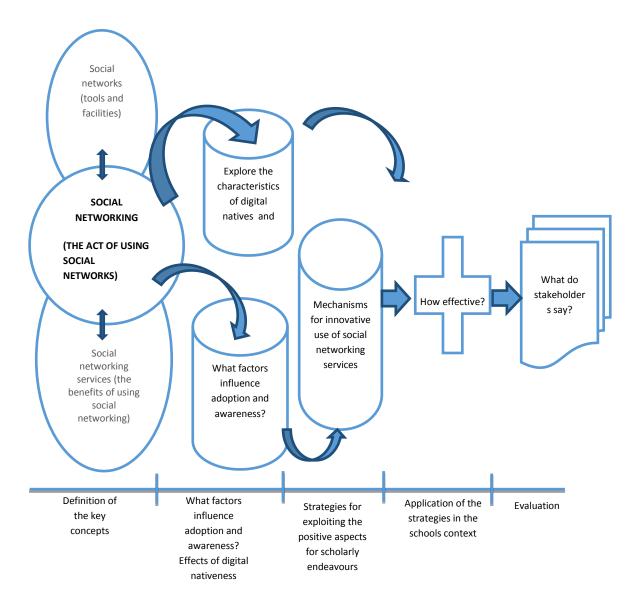


FIGURE 1.1 A summary of the statement of the problem

Figure 1.1 summarizes the statement of the problem which guides the rest of the sections and chapters of this dissertation. Our premise is that the recommendations we present in Chapter 6, and the observations thereof, would summarize our integration strategy of social networking tools for cross-purposes, particularly socializing and scholarly benefits. The value of the findings thereof is further emphasized by the insights we envision towards changing the way we see and perceive the implications of social networking services to the youth. Precisely, besides benefiting learners and simplifying teachers' work, the outcomes

of this work will also serve as a relief to parents and schools regarding the purported negative implications of social networking services to this generation.

### **1.3** Rationale and motivation

Two primary motivating factors to this research work are apparent. First is the inspiration that arises from the work of Khan (2012) in which particular social networking services have been achieved and reported in the teaching and learning context in Pakistan. Khan's work emphasized on students' engagement, motivation, and awareness as the key social networking services that are paramount. Although the key parameters of his study were related to demographic information (age, gender, level of education, social levels and academic achievements), the work of Khan (2012) highlighted collaborative interactions as the key driver to the attainment of the fore-mentioned social networking services to education and training. Precisely, collaborative interactions were found to boost morale, encourage independence, foster creativity, and increase the sense of being involved and loved. They generally support the creation and development of collaborative worlds, thus remedying stressful moments and supporting the culture of openness (Khan, 2012). These findings motivate our desire to investigate the effectiveness of similar social networking services to teaching and learning in the context of Business studies learners at a particular high school in Eswatini. The notion which informs this rationale and motivating factor is associated with the desire to yield similar benefits (students' engagement, motivation, awareness, collaborative interactions, morale, independence, and creativity) within the same group of learners.

Another motivating factor arises from the main researchers' personal experiences as a teacher who interacts with learners and parents who fall in the sample group bracket. Hypothetically, learners in this category are almost and always believed to concentrate on the ill-side of the benefits sought from using social networking tools. It is, undoubtedly, believed that social networking activities disturb studies, communicate vulgar and abusive messages, connect youth to wrong social links, foster premature independence, and increase awareness to adult worlds (Paul et al. 2012 ; Junco, 2012). On an academic note, social networking processes have given birth to an undesirable hybrid S.M.S language which profoundly degrades the development of appropriate academic writing skills (Mehmood & Taswir, 2013). The desire to validate or invalidate these views and hypotheses, further motivates the investigations that are undertaken in this work.

The study seeks to provide remedial recommendations towards bona fide uses of social networking tools and services for scholarly, social, and life skills development purposes. This is because one of the significant trends in learning highlighted by Siemens (2004) is that many of the processes previously handled by learning theories (especially in cognitive information processing) can now be off–loaded to or supported by technology. Those challenges that come with turning the tables around and gainfully make use of social networking tools are an ambitious task which further inspires the research we undertake in this work. The next section summarizes the envisioned contributions of this work to teaching and learning, to research, and to the body of knowledge of the field.

### **1.4 Envisioned Contributions**

The value of this work is emphasized by a number of envisioned contributions both on an academic and practical point of views. On the academic side, this work will likely make the following three contributions:

(a) Successful identification of the characterizing features of digital natives, which justify awareness, acceptance, and adoption of web 2.0 technologies in youth, is a big milestone in this study. If we get to understand the driving factors which motivate youth engagement with web 2.0 technologies, then we can prescribe useful strategies with which to exploit social networking services for scholarly and other life enriching purposes. Success in this regard creates knowledge and awareness to most stakeholders.

- (b) This work will present innovative strategies in which cross-purpose social networking activities are prescribed. These strategies have the potential to further inspire the development of smart classrooms with social and practical implications.
- (c) Available literature lacks clarity with regards to how best social networking tools can be turned into useful teaching and learning aids. This work provides a baseline strategy upon which further researches and investigations may be built on. Thus, we open up new research avenues with educational and social implications.

On the practical side, we make the following three contributions:

- (a) The results of this work have direct relevancy to educators, learners, parents, schools and all other stakeholders. Successful use of the proposed strategies will likely promote industrialization, development of paperless classrooms, green computing and modernization of education.
- (b) Although this work does not generalize the findings here reported, it provides a solid working platform on which generalized paradigms may arise.
- (c) The government of Eswatini spends lots of Emalangeni every year in preparing teaching and learning materials. We recommend reduced use of paper, purporting a shift towards better resource management. This view is practically an indirect reallocation of government resources towards other poverty alleviation programmes.

In the next section we present anticipated problems and limitations of this study.

### **1.5** Anticipated Problems/Limitations

Although the study presents a number of significances and contributions both on the academic and practical angles, it comes with some limitations beyond the researchers' control. On top of the list of such limitations are, but not limited to, the following:

- (a) This is a practitioner's enquiry in which the participants are business studies learners in forms 1, 2, and 3 at a particular high school in Eswatini. Such results cannot, therefore, be generalized as yet. However further researches in the future which include participants from other schools and communities will minimize this limitation.
- (b) Assessing pro-active collaboration, media literacy, technological proficiency, and engagement requires learners to own sophisticated cell phone gadgets which support WhatsApp and Facebook. That alone is a challenge in a society where socio-economic levels of learners are different. The researcher hypothesize that most participants will have access to cell phone gadgets (directly, or from relatives, friends, brothers, sisters, or parents) which support social networking services and technology.
- (c) The proposed questionnaire used for data collection may take substantial time to complete. This is a known disadvantage of questionnaires upon which respondents often base their excuses for not providing desired feedback in time. We propose the administration of the questionnaire under supervision in classrooms.
- (d) Participants will be required to have access to the internet using data bundles loaded in their cell phone gadgets. This is costly. We hope that the current tariffs for using WhatsApp remain low.
- (e) The validity of data collected using questionnaires is inherently questionable since responses may be influenced by peers or other interested parties. We hope that learners will remain objective and faithful in their responses, especially under supervision.

- (f) Hypothetically, most parents believe that social networking activities disturb studies, communicate vulgar and abusive messages, connects youth to wrong social links, foster premature independence, and increase awareness to adult worlds (Factsheet, 2006; Young, 2004). Societies of today agree that social networking services (the act of using social networks) prevalently take the largest share of adolescents' daily time (Renaud & Biljon, 2008; Young, 2004). This research may therefore face parental criticisms. We hope parents will see bona fide uses of these services for scholarly purposes.
- (g) Social networking services have given birth to an undesirable hybrid S.M.S language which profoundly degrades the development of appropriate academic writing skills in learners. Supporting the use of social networking services may worsen the development of such shorthand writing skills.
- (h) Gathering satisfactorily sufficient data with which to respond to the questions posed is a tedious process especially when adolescents such as forms 1, 2, and 3 learners are involved. These learners are often loaded with homework and assignments, while at the same time they strive to cope with other daily life demands.

The next section presents an overview of the entire dissertation and the sub-sections thereof.

### **1.6** Overview of the dissertation

In chapter 1 we introduced the statement of the problem, the rationale and motivation for undertaking this work, and listed the contributions we envision, as well as the limitations we anticipate.

Chapter 2 will review literature which explores awareness, adoption, and engagement with web 2.0 technologies among learners. We also investigate the factors which motivate acceptance and adoption of these technologies and present a theoretical frameworks which informs the arguments and recommendation we make.

In chapter 3, we present our methodology. The data collected is presented in Chapter 4. Chapter 5 interprets the findings before we conclude the dissertation in chapter 6, highlighting our observations and presenting our recommendations.

### **1.7** Conclusion of the chapter

We primarily defined the key terms of the dissertation and explicitly presented the statement of the problem which seeks to investigate strategies for integrating social networking tools into teaching and learning. A rationale and motivation for undertaking this research was presented in which two factors were noted - the desire to explore the scholarly benefit of social networking services and the desire to validate or invalidate specific hypotheses. The chapter also listed the contributions and anticipated limitations. In the next chapter, we present literature related to this work as well as the framework which informs our argumentation throughout this dissertation.

### **CHAPTER 2 : Related work and Theoretical framework**

### 2.1 Introduction

This chapter discusses related works, in line with the application of practitioners' enquiries in teaching and learning. An elaboration of social networking services follows in section 2.3. Effects of social networking services discussed in 2.4 - 2.5 and the use of cell phone and social networking services by learners and teachers in 2.6. Different forms of information shared will also be discussed in 2.7. The chapter then discusses the theoretical framework which informs the interpretation of the findings of this work. In section 2.9, are assumptions before concluding the chapter in section 2.10.

### 2.2 Practitioners' Enquiries

Investigations into one's own practices are not new in the literature (Adams & Hills, 2007). Teachers have, in the past, questioned their classroom environments and contexts with corrective, adaptive, consultative, or augmentative views to teaching and learning (Gideonse, 1988). The practitioner's enquiry proposed is an extended action research (Adams & Hills, 2007; Ayers, 2009) in which possible intervention strategies are sought towards improving learners' time on school work, competitiveness, ownership and collaborative attention to homework and assignments using social networking services.

A practitioner is someone who is working and qualified in a designated subject area such as business studies, who carries out action research (Robson, 2002) to study and develop his or her own skills (Hendricks, 2009). Action research is done by teachers for themselves (Mertler, 2012). When discussing action research, the attention is practical regarding teachers and learners' situations (Kemmis & McTaggart, 2008). Teachers conduct their own research on classroom environments in order to improve learners' performances. Thus, integrating

social networking services in teaching and learning can motivate learners and improve learner's participation. The researcher conducts a practitioner's enquiry into own teaching of Business Studies at a particular high school in Eswatini. Precisely, the researcher took advantage of learners' awareness of social networking services, proficiency in using electronic gadgets, and desires to collaboratively engage on topics of common interest and flip these skills towards teaching and learning. The next section views the elaboration of social networking services.

### 2.3 Social Networking

Researches in which social networking services are proposed as learning tools are also in abundance. Khan (2012), in particular, reported the use of social networking services in the teaching and learning context in Pakistan. His results emphasize learners' engagement, motivation, and awareness as the key benefits, while collaborative interactions were found in Khan (2012) to boost morale, encourage independence, foster creativity, and increase the sense of being involved and loved. Social networks represent social interaction systems (Huberman, Romeo, and Wu, 2008) in which the main actors are individuals (Wasserman & Faust, 1994). The practice of using social networks in order to expand knowledge through interactions with colleagues of similar interests is called social networking (Gunawardera, Hermans, Sarchez, Richmond, Bohley, and Tuttle, 2009) where electronic devices such as computers and cellphones are used (Ryan, 2011) to facilitate information sharing between actors of common backgrounds (Reston, 2007).

The benefits yield from using social networks and social networking principles are referred to as social networking services (Webster, 2014) which include the user friendliness and interactiveness of social networking platforms (Ellison & Boyd, 2007 ; Webster, 2014), online collaboration (Towson, 2005 ; Hoegg et al., 2006) and information sharing (Bartolomé, 2008 ; Joshua, 2008). Collections of social networking services, social networks, networking gadgets and the benefits yield from using these tools define web 2.0 technologies

(Hoegg et al., 2006). The proposed practitioner's enquiry investigates the use of web 2.0 technologies in the teaching and learning of business studies at a particular Eswatini school.

On top of the list of common web 2.0 technologies are Facebook chat groups (Akyıldız & Argan, 2011; Helmink, 2013). However, the proportion of high school learners that use Facebook for social interactions around the world is not confirmed (Akyıldız & Argan, 2011) due to age restriction and parental control constraints (Ofcom, 2008). Educational uses of new social networking services such as WhatsApp and messenger technologies have not been fully researched yet (Ayiah & Kumah, 2011; Helmink, 2013). This study therefore serves as a baseline investigation of the integration of WhatsApp technologies in the teaching and learning of business studies in Eswatini. To the best of one's knowledge, this is the first time such an investigation has been proposed in the context of Eswatini schools. In the following section, the effects of social networking services in education are discussed.

#### 2.4 Effects of social networking services in education

#### 2.4.1 Positive effects

The internet which is existing on cell phones fascinates a lot. It offers a remarkable capability, mainly as an assistance to employment, education, public and private entities. The connectedness of users of social networking services have made it possible for people living in rural areas to communicate, share information and knowledge at low cost (Jere & Biru, 2015).

Social networking services available on cellphones are being utilized mainly by educators to facilitate teaching and learning in higher institutes. The accessibility of the internet on cell phones compels holders to be more attracted on the use of the gadget than other means such as the use of desk top computers.

According to Zheng, (2013) the internet makes it cost effective for the users since it can replace the use of costly hardcopies, offers easy accessibility of information, makes online

libraries available for educators and learners to download information, and makes it possible to interconnect with the world. Past has confirmed that teaching and learning improves when information is shared cooperatively. Sending of information or conversing through electronic mail becomes possible through the availability of internet to complement other ways of transmitting information. West (2015) advocates that some educators use cell phone applications such as Facebook to make learning easy through discussions. West (2015) asserts that the availability of the internet makes online discussions possible since it enables comments from educators and responses from learners to be posted.

The school institutions is perhaps an area where social networking services is playing a significant function. Social networking tools according to the study conducted by Sarkar, Agarwal, Ghosh, and Nath (2015) assist in the exchange of educational resources and makes learning more interesting as well as in the management and storage of library academic information. This makes sharing of information and classroom discussions easier. Kumar, Kumar, Singh, and Singh, (2014) in a study on management of library ascertained that public libraries have drifted from arranging materials using outmoded system to an on-line system to makes it more easily to locate materials. This online system supplement the old-style of in person teaching and learning which encourages lecture method of teaching. According to West (2015), learners easily retrieve class notes, send assignments, and participate in discussions with other learners as well as getting help on some of the challenging tasks through the use of online system.

West, (2015) asserts that the growth in the number of applicants for the different programmes offered by Turkcell Academy has forced the institution to facilitates some of the programmes online. This has made it possible for learners to choose from a broad variety of lessons online through the use of social networking services. Porter, Hampshire, Milner, Munthali, Robson, Lannoy, Bango, Gunguluza, Mashiri, Tanle, and Abane, (2015) argued that teaching material to facilitate teaching is being used by teachers through the use of social networking services which is available on cell phone. Porter et al, 2015 assert that social networking services improves the way teachers interact with each other as well as interacting with learners. This

incidentally creates a conducive environment to encourage learners' participation as they are contented to communicate among themselves and thus motivates them to learn knowing they will get support from teammates and teachers. Porter et al., (2015) claimed that in Africa, three countries such as Ghana, Malawi and South Africa, teachers' use social networking services as an online teaching tool where learners are helped in the late hours and even at some point on holidays. This again makes learners and teachers to be engaged with scholarly activities even during spare time.

Teachers and learners are able to retrieve information relevant to the curriculum. Porter et al., (2015) asserts that challenging educational tasks can simply be accomplished with no time consumed visiting one person to another seeking for answers. The use of cell phone by teachers and learners also engage parents to submit queries pertaining scholarly activities at any time which will end up assisting learners to improve academically (Porter et al., (2015). It was also found that the use of cell phones by a primary teacher in Malawi has made teaching of extra curricula activities easier since learners are shown different styles of dances through the cell phone other than demonstrating the dances which makes learners easily imitate the new styles of dances. During mathematics lessons, learners use cell phones as a calculator when they are in need of a calculator, similar during load shedding (power cuts), after hours, learners use cell phones as lights to carry on with their educational assignments (Porter et al., 2015).

The uses of social networking services recently by Africans in education has increased (Mutua, 2012). Cell phone technology, has deeply improved the expression of the African people and the entire region. Africa is now the rapidest expanding market for cell phones in the world and is the second largest following Asia. According to the Global System for Mobile Communication association, mobile contributions have increased almost 20% per year for the past five years. The Global System for Mobile Communication, according to its November 2011 Africa Observatory report, predicted that over 700 million subscribers in the fourth quarter of 2011, about 65% of the total potential market. The availability of applications such as the social networking services on cell phones have increased the demand

of cell phones usage by individuals both learners and adults since these applications persuades holders to access them for both social and scholarly activities.

A research conducted by Stancui, Mihai & Aleca (2012) gathered that social networking services available on cell phones is for interacting and building social relationship with colleagues and teammates. This according to Stancui, Mihai & Aleca (2012) facilitates cooperation which can be considered as an advantage in learning institutions meanwhile encouraging full participation. Likewise, Farrugra (2013) established that online friendship is created through the use of social networking services available in cell phones. On the same note, a research performed by Zelick (2013) at a public university in the United States on the use of social networking services as enhancing quality teaching and learning. Learning institutions and work organizations are worried about the use of cell phones for the advantage of the institutions or organizations. The researcher advocate for improved quality of teaching and learning, hence the intervention and this practitioner's inquiry proposed.

Research by Blaschke in (2014) on the use of cell phone through social media by teachers and students in German revealed that social media enhance learning, intellectual and examination abilities. Social media which is accessible on cell phones foster cooperation which impacts on performance. The study further revealed that the use of social networking services creates online classroom accessible to both teachers and learners which strengthen the improvement of learners' abilities and interactions. The researchers' wish is to achieve these same benefits further motivate the undertaking of this work.

A study by Paul, Moussa, Asad, Pershing, and Coustasse (2014), on students, residents and faculty conducted in Chicago demonstrated that the use of cell phones through social networking services bring some advantages. The advantages of using cell phones for medical reasons were lightness, quicker access to information, better time efficacy, ease of communication, strong functions, and ease of multimedia means. These advantages

according to Paul et al., (2014) facilitates the use of cell phones instead of fixed phones, hence the proposed intervention here.

A study conducted by Sturgess, (2013), established that the internet available on cell phones has enabled the creation of mobile family that impacts the prevailing social nature. Thus, beings be affected destructively and constructively. Cell phones are perceived with insolence as an interruption in humanity, nonetheless these gadgets offer some benefits such as easy access of information, provision of security, and protection to holders. Velentzas and Broni (2015) advocated that other theorist and sociologists claimed that a human being perceive community as a site you can actually see and believed to be personal. Velentzas and Broni (2015) assert that cell phones and computers damages the sites such that it becomes difficult to distinguish between public and private affairs. On the same note, Baran (2014), gathered that, cell phones have damaged human moral that compels a person to differentiate between public and private affairs thus leading to an uncontrolled behavior. This is not a major challenge in a practitioner's enquiry.

A research by Santiago, Navaridas & Rioja during the year of 2014 in the United State of America found that social networking services on cell phones improves teaching and learning. Majority (71%) of the respondents who were educators concurred that cell phones' applications are valuable for effective teaching and learning. These valuable applications available on cell phones contain some educational benefits such as making learning more interesting, enhances abilities, encouraging learners to learn more and foster collaboration resulting in improvement in academic performance. Santiago et al., (2014) asserts that online discussions by teachers encourages collaboration among colleagues from various schools around the world resulting in improvement in teaching skills. Additionally, the use of cell phones eases the burden of carrying heavy teaching and learning materials as they use the gadget for accessing information which motivates owners. According to Davies (2014), obtaining quality results is a way of measuring teacher's performance. If academic results improves, signifies improvements in teachers' performance. The desire to achieve similar outcomes drive this work further.

#### 2.4.2 Negative effects

The introduction of Information and Communication Technologies in recent years have led to a growth in the number of producers supplying computers and cell phones. This has resulted in an increase in markets selling cell phones of different brands. Schools are not in exception as they also introduce Information and Communication Technologies for learners to acquire computer skills. The growth resulted in increase in supply of cell phones in the markets which have resulted in learners to easily access this mobile computer gadget. A study conducted in Tanzania by Kihwele & Bali (2013) to assess the effects of using cell phones on academic performance revealed that majority (64%) of the learners who use cell phones perform poorly on academic work. On the same note, a study conducted by Quilliams and Beran (2009) discovered that low academic grades probable results to insecurity, demotivation and lack of parental or guidance support. The desire to evaluate the same views in the context of Eswatini learners implicitly drive part of the work reported in this dissertation.

A survey by Porter et al., (2015) in three countries, Ghana, Malawi, and South Africa validated damaging effects of cell phone usage in education for both teachers and learners. The study discovered that the use of social networking services by teachers in class interrupts lesson delivery since teachers end up concentrating on cell phones resulting in poor lesson delivery which have a negative impact on the performance of both teachers and learners. The ringing tones available on cell phones which can sometimes be vibration causes interruption resulting in learners losing concentration as teachers frequently receives calls outside class. Teachers were even cited "remind me", requesting learners to remind them where they have ended when returning from receiving a call which greatly affect learning negatively (Porter et al., 2015). However our proposed intervention will be monitored against these flaws closely.

Improper use of cell phone can be distracting. According to Pederson (2011) cell phone usage during school hours has forced teachers to incorporate cell phone etiquette not only in the curriculum but also before lessons resumes, inside classrooms and even after lessons. Pederson (2011) asserts that when a learner is found abusing the use of cell phone, which

will force teachers to repossess the gadget and probably prohibit the use of cell phones around school premises. On the same note, in a research conducted by Kihwele and Bali (2013) in Tanzania it was revealed that due to absence of guidance on how, where and when to use cell phone in school by both teachers and learners seem to be disturbing. This has resulted in prohibiting the use of cell phones in school areas by most learning institutions. The prohibition was intended at enhancing learners' performance and conduct since more time is wasted on social networking services. Kihwele and Bali (2013) further assert that breaching the rules leads to repossession of the cell phone and can further results in disallowing the learner to participate in school activities or even dismissal. Practitioners' inquiries are however, well informed of such negatives and would be monitored against any misuses of cell phones. In fact, the intention is to convert misuses into bona fide uses of cell phones for scholarly purposes.

Kahari (2013) argued that the use of cell phones in libraries is perceived as being disturbing. Learners replying cell phones whilst inside the library making noise thus distract studies. Social networking services can be useful under complete students' silence by educating learners on how, where and when to use cell phones.

Investigations by Buchegger (2010) in Australia founds that learners' adopt tricky conduct by abusing the use of cell phones through texting answers to each other. This encourages learners not to take learning more seriously as they will easily get answers from colleagues. The study also revealed that the use of cell phones within school premises has resulted in clashes among school authorities who perceive cell phone usage as irritant since it causes distractions from school activities yet on the other hand, parents and guardians perceive the use of cell phones as a valuable tool since it enables them to contact their children when need be at any time. Buchegger (2010) assets that extensive use of cell phone at school is debatable for that reason producers of cell phones and traders are devising ways to assist promoters and rivals to reach a common ground. This work, therefore comes at the right time where a need to demystify the negative views stakeholders have about purposes of cell phones and social networking services towards beliefs inclined to teaching and learning. On the part of road users, a research by Nikolaev, Robbins and Jacobson (2012), indicated that the contributing factor in the high rate of road accidents is the use of cell phones instead of concentrating on the road by drivers. Nikolaev et al., described the two forms of dangers which are likely of occur when using cell phone while driving. First of all, the fact that drivers use eyes to text messages and receive phone calls while driving can result to serious accidents. Lastly, the use of cell phones requires concentration which is also vital when driving in the sense that drivers need to observe road signs and pedestrian crossings resulting in accidents which can be avoided. On the same note, study conducted by Rodrigues (2013) in South Africa revealed that the use of cell phones while driving causes disruptions which incidentally leads to accidents. One of the key aims of our work is to evaluate the extent to which these views apply to business studies learners in Eswatini.

A survey conducted by Scott (2010) gathered that cell phone users are exposed to dangers of electromagnetic radiation on daily basis which can seriously results to health problems. The claim made by Scott (2010) revealed that stakeholders such as government and cell phone producers deny the existence of electromagnetic radiations. This radiation can cause dangers such as headaches, brain damage, sleep disorder and genetic problems. The study also discovered that cell phones contain some toxic chemicals which are related cancer and other developmental disorders on human beings. Lee (2012) on the other hand, discovered that the use of cell phones and its harmful effects on human beings as well as the environment are not yet identified. The only threatening effects occurs during production of these gadgets. Is this how learners in Eswatini view these technologies? The desire to, also, investigate this aspect drives this work.

Employees such as teachers in order to improve academic results need to be motivated. Administrators are concerned on seeing an improved academic performance of learners yet on the other side teachers are concerned on job satisfaction. A study conducted by Forson (2012) discovered that in order for employees to increase performance need to be motivated at work place since demotivation can results in less effort in any assigned task resulting to low performance. This can even lead to absenteeism and later high labor turnover which can affect the organisation negatively (Ganta, 2014). Teachers like any other workers according to a motivational theorist Herzberg (1966), money alone in a form of salary or bonus cannot encourage a worker to put more effort in the long run, administrators need to consider intrinsic and extrinsic motivation which can be monetary and none monetary. Therefore, the use of cell phones by teachers and learners as an academic tool can have a positive effect of motivating both parties leading to an improvement in academic results. Should the work discovers social networking services as conducive learning environments for learners, teaching and learning would directly benefit from the outcomes thereof.

#### 2.6 Cell phones, social networking services, learners and the teacher

Studies in the use of cell phones by teachers and learners within school premises showed a lot of interruptions. A study conducted by Sturgess (2013) in Canada proved that the use of social networking services by learners attract them in such a way that they even continue concentrating on the cell phone forgetting to abide by the school policies on the use of the gadget. This have led to learners texting messages online forgetting about the main academic activity. Investigations based on learners in this study revealed that the use of cell phones by learners has no effect on learning since teachers are not aware of its usage by learners in class. When teachers were investigated, it was discovered that the use of cell phones in class interrupt teaching and learning as a results lesson delivery is interrupted. Sturgess (2013) assert that the conflicting discovery on the use of cell phone in classrooms have resulted in failure to provide guidance since there are no policies in place regarding the use of cell phones by teachers and learners. It is these misconceptions the researcher seeks, as a practitioner, to clarify towards bona fide uses of social networking services.

The extensive use of cell phones globally has resulted in many stakeholders such as banks, schools, hospitals, universities, libraries, courtrooms and churches to become worried about its usage. Baron (2010) revealed that improper use of cell phones have forced other places such as libraries to ban the use of this gadget due to interruption. This have forced many

places to display signs informing the public on the state of the institution regarding the use of cell phones. On the same note, installation of signal-jamming equipment by large organisations such as banks is being observed to quickly stop the usage so that holders can be blocked from receiving or sending messages whilst inside the premises. Ajasa, Shoewu and Nwamina (2014) coincided with Baron (2010) by presenting developments done by large institution such as fixing signal detector machines to prevent disruption caused by the use of cell phones usage. Nonetheless, Walen, Chitwood, DeCleenen and Shaver, discovered conflicts in the use of cell phone by various airline as they are not applying the same policies when customers board the planes. The hope is that social networking services advocate for silence, concentration, and less noise suitable for academic purposes.

According to Ferry (2009) in a study conducted in Australia on effects of using cell phones to enhance teacher learning, it was gathered that the use of social networking services results in teacher learner relationship and teacher-teacher relationship. To begin with, teachers and learners were communicating freely without the use of strict policies, however, as time pass by unofficial methods of communicating intensify. This have resulted in an increase in teacher-learner and teacher-teacher relationship. Parents and teachers during educational tours were able to easily locate the where about of the learners and other teachers through the use of social networking services. Buchegger (2010) explored that in addition to the teacherlearner or teacher-teacher relationships, the use of social networking services promotes learner-learner relationship which further results to collaboration among learners. This have led to learners freely communicating with their class colleagues, former school mates and friends online. Sundari (2015) on the same note, discovered that use of social networking services creates online friendship which results in online social engagements other than socializing through private clubs. Online engagement according to Buchegger (2010) help learners to be educated on how to administer relationships and approaches in addition developing confidence. These are attributes of interest in our practitioner's inquiry.

Online relationships has increased among learners resulting to greater confidence and social ties to the users of social networking services. Investigations by Sawyer (2011) in the United

State of America revealed that consistent use of social networking services through text messages by learners results to a greater improvement in English language. Learners discover new English terms on daily basis as they engage themselves on social networking. Deriquito & Domingo (2012) discovered in a study in Australia that teachers perceived the use of cell phones as a learning tool as the main cause of incorrect spellings by learners since learners normally use abbreviations when communicating instead of full sentence. The study also revealed that majority of people including learners use cell phones on daily basis which have led schools to adopt the use of this gadget as a teaching and learning instrument. The use of cell phones by teachers and learners according to Perderson (2011) encourages write assignments online as full participation is experienced compared to when completing the tasks using the outmoded style for instance the use of textbook and exercise materials. This study embraces constant communication skills development fostered by the use of social networking services, as well as seeks to curb the development of wrong phonetic skills through encouraging full text messages.

Studies reveals that there are some arguments regarding the use of cell phones in schools by learners. According to Isaac (2012) in a study on mobile learning for teachers in Africa and Middle East found that the use of cell phones by learners as a learning tool promotes unacceptable behavior of copying assignments using social networking services. In this study it was gathered that the use of cell phone by learners as a learning tool must be a decision from parents and guardian's since learners need to be educated on the proper use of the gadget. Another research by Haider, Guijar, Juni and Kareen (2014) on the impact of cell phone usage at higher institutions discovered that the use of cell phones by learners resides in distant places. The study also reveals that the use of cell phone by learners and relatives. Pederson (2011) on the same hand advocates that the advantages gained through using cell phone for scholarly activities surpasses the disadvantages experienced. This study investigates the truthfulness of this claim in the Eswatini context.

West (2015) reveals that trends in learning requires learners and teachers to be in line with the developments in technology in order to stimulate learning. This study contested that poor educational grades resulted from the use of cell phones through social networking services. West (2015) assert that the use of cell phones have positive effects on academic performance of both learners and teachers. The study ascertain that teachers and learners are able to retrieve comprehensive resources online which aid in the teaching and learning of various courses. This study seek to verify these claims as well.

Even though some studies presented drawbacks on the use of cell phones by learners, a study conducted in Zimbabwe by Kahari (2013) on the effects of cell phone use on the study habits, gathered that limitations in the use of cell phones by learners must be removed to allow M-Learning (education through the use of mobile or cell phone) which have a greater effect of improving academic results. A research conducted by Pederson (2011) concurred with the findings by Kahari (2013) in that the use of cell phone promotes M-Learning which encourages learners to fully participate on scholarly activities resulting in improved academic performance since they are motivated by the use of the gadget. The study further revealed that even shy learners are able to participate online other than in a classroom situation. The study also seek to exploit similar benefits in the Eswatini schools contexts.

## 2.7 Forms of information shared on social networking services

Studies revealed that cell phone usage mainly by teachers and learners results to debates due to various ways of its usage. It was gathered in a study performed by Pousher (2015) that learners use cell phones as cameras, video playing equipment and texting of messages. This motivates learners to use this gadget since it allows storing of typed written information which can later be retrieved. On the same note, the use of cell phones enable holders to easily download videos of any size and take pictures at any convenient place which encourages most people to use this form of a computer. Chepken and Muhalia (2011) grouped the uses of cell phones into two forms. Firstly, the study indicates the use of cell phone for personal

activities. This enable cell phone holders to convey information to relatives and friends as well as accessing any type of information including pictures and videos with ease. Secondly, the study indicates the use of cell phone for business activities. This again enable every holder to access markets and advertise products using the cell phone as well as transmitting important information to groups of customers without wasting time queuing in postal offices. Parents, teachers and learners easily transact financial transaction through the use of cell phone service commonly known as e-wallet. Kwapich (2013) gathered that the use of cell phone makes it easier for holders to take pictures and videos especially during main activities since this gadget allow for such services. These uses are all valuable in the schooling context. The desire is to similarly exploit these benefits in the teaching and learning of business studies hence the drive for undertaking this study.

Teachers and learners use cell phones as a watch, calendar and alarm clock. A study conducted in South Africa by North, Johnston and Ophoff, (2014) on the use of mobile phones revealed that people use cell phones to watch time, to set alarms and to remind on the date. This motivates people to buy cell phones as this portable computers avails all the important functions as a result money spent on buying wrist watches and calendar is being spent on other necessities (Baruah, 2012). The study asset that cell phones are used as diaries and navigators. This enable holders to note important dates and easily get directions whenever they want to pay a visit. This again motivates holders to access this all in one gadget which is easy to carry. Times, alarms, and navigators found of cell phones are important tools in education which this work seeks to integrate in the teaching and learning of business studies.

The use of cell phones through social networking services has promoted online learning. Learners are able to access scholarly videos through YouTube which is available on cell phones. A study by IctechII (2014) indicated that cell phones are used for enjoyment. This enable users to easily download videos and games of any kind. Teachers and learners whenever they feel boredom can easily access scholarly videos with ease. The availability of this applications on cell phones enable teachers to easily teach extracurricular scholarly activities since learners are able to see and hear what other school mates are doing through downloaded videos and music. On the same note, OECD (2015) advocates that the use of cell phone enable owners to access AM/FM radio to get current news, enjoy music and listen to other important programs. (Baruah, 2012) revealed that owners are encouraged to use cell phone since they are able to enjoy all the benefits in one tool at a very affordable cost. The benefit of low costs further attract the use of these services for scholarly purposes as proposed in this dissertation.

Wahla & Awan, (2014) described cell phone as a tool which facilitates the use of internet. This encourages the use of social networking services through transmitting of information via WatsApp, Facebook and Skype as well as sending and downloading of videos, pictures and music. The study reveals that the convenience brought by the easy access of internet on cell phone make owners to be addicted in the use of this tool. The desire to exploit these new technologies is an apparent drive for this practitioner's inquiry.

## 2.8 Theoretical Framework

Three theories of teaching and learning inform our reasoning and argumentation throughout this proposed research work, namely; connectivism, situated learning, and the engagement theories. Connectivism emphasizes on learning through networked societies (Siemens & Downs, 2009; Duke et al., 2013). It considers knowledge as distributed entities across networks from which shared opinions arise (Downs, 2007). Learning and knowledge rests in the diversity of opinions argued online (Siemen, 2004). This theory agrees that nurturing knowledge determines the choices of what to learn and the meaning of what one learns. Such knowledge can even be stored in non-human appliances for on-demand retrieval, and be updated for currency and timeliness (Siemens, 2004). Collaborated learning and sharing of information via social networking services connote the views of connectivism. However meaningful teaching and learning should be situated within known contexts and environments (Brown et al., 1989; Wilson, 1993).

The situated learning theory advocates that knowledge be related to what we have seen or experienced before (Wilson, 1993). Participants in this study and the rest of youth in the world predominantly socialize online. Thus, integration of social networking services into teaching and learning undoubtedly situates learners in similarly interactive and collaborative environments, implying a situated learning context (Wilson, 1993).

The connectedness and situatedness of the users of social networking services have been made easier with every improvement in technological advances. Such technology facilitates engagement in ways difficult to achieve otherwise (Kearsley & Shneiderman, 1999). The engagement theory supports the development of communities of practices (Kearsley & Shneiderman, 1999). Participants will collaboratively engage online, remedying the common challenges of lack of participation by timid learners, while at the same time, encouraging peer reviewed and indirect participation, which minimizes the often feared, face-to-face engagement.

The methods proposed in this dissertation all follow specific theories of education, which together, blend a theoretical framework for this work. In this context, a theoretical framework is a set of proven principles that backed by literature (Sinclair, 2007). These principles directly or indirectly guide and underpin the research thereof to the goals set, justifying the knowledge base and the findings that arise as the study progresses. In simple terms, a theoretical framework suggestively responds to questions related to understanding the researcher's background knowledge about the phenomenon under study, as well as unearthing mechanisms in which known theories are applied to the findings, determining things to measure, and the statistical relationships to look for. The theoretical framework proposed informs our perceptions of how we can integrate social networking services in scholarly endeavours as well as guides the processes through which we investigate the key drivers for successful implementation of social networking principles a particular high school in Eswatini. This is a practitioner's enquiry into what the researcher observes in her business studies classroom.

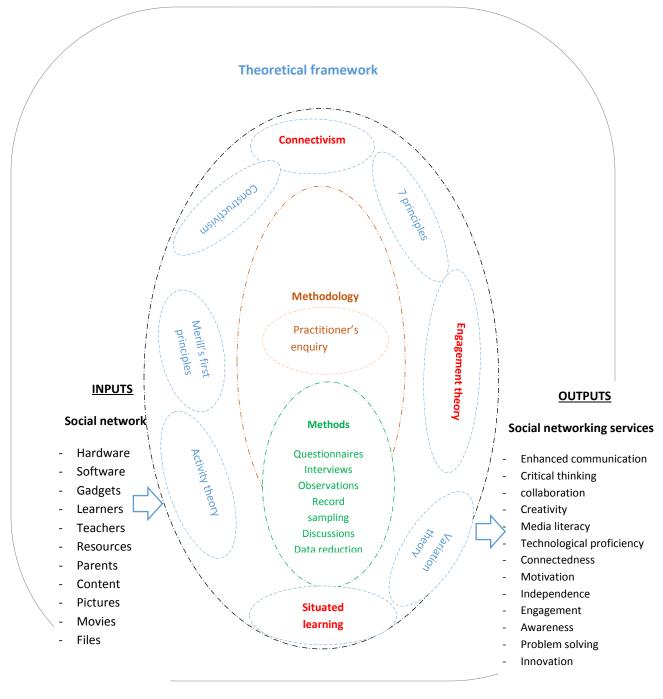


FIGURE 2.1 Schematic representation of the theoretical framework

Broadly speaking, practitioner's enquiry as a theoretical framework incorporates three aspects, namely ontology, epistemology, and methodology. Ontology refers to what the reality is or what exists. In this context, the reality is that learners embrace social networking

services. Epistemology refers to how we know the reality regarding whether we are part of knowledge or whether we find out such knowledge. In this context, participant to this study are, in fact, digital natives born in a digital era. Methodology then stipulates the methods we use, how these methods fit within the context of this research, as well as how and when these methods are used when researching and developing the report. In this work, action research is applied seeking to gather quantitative and qualitative facts towards justifying the value of integrating social networking services in the teaching and learning of business studies.

Figure 2.1 summarizes the theoretical framework assumed. It shows the three theories in red which inform our research, surrounding the methodology. Besides the inputs and outputs to the framework, the methods applied in data collection and analyses are also shown in pictures. In the next section is the discussion of the assumptions.

## 2.9 Assumptions

In today's world, most people communicate through cellular phones. About thirty African nations have more cell phones than landlines (Diem, 2008). Thus, cell phones have become part of our societies (Shaw, 2005). The assumption is that the learners involved in this study are not left out as they are part of our societies. Precisely, it is assumed that these learners have direct access to cell phones through ownership of one or from close relatives and family.

In Eswatini, the Computer Education Trust which is a non- profit making organization was set up in 1999 with funding from private business sources within Eswatini to address the poverty of technical education across the country's state school system (Isaacs, 2007). Its main objective was to ensure every secondary and high school learner is computer literate. Learners as early as thirteen year old are assumed computer literate. They are also assumed active cell phone users.

Delivery of professional pre-service and in-service training for all Eswatini teachers is done in order to ensure that computers are used across curricula. The aim is to ensure future internet integration in education. That way, social networking services would likely encroach into all aspects of teaching and learning. Currently, schools around Eswatini employ internal policies regarding the use of social networking sites by learners during school hours. On the same note, the curriculum offered, Eswatini General Certificate for Secondary Education (EGCSE) requires learners to work independently. However, schools do not have adequate resources such as libraries and internet facilities to support this requirement. The assumption is that integration of social networking services into teaching and learning will remedy such shortages and limitations.

## 2.10 Conclusion of the chapter

The chapter mainly dwelt on related literature. First, works related to the main aspects of this study including literature associated with the application of practitioners' enquiries in teaching and learning, as well as aspects related to the use and integration of social networking services were discussed. A detailed discussion of the theoretical framework which informs the interpretation of the findings of this work followed. Three theories informing the theoretical framework were identified as connectedness, situated learning and the engagement theories. These fed into the methodology assumed. The assumptions the researcher come with into this study were discussed last. Key to these are that learners are digital natives who have access to cell phone technology. In the next chapter the methodology followed is discussed in more details.

## CHAPTER 3: Methodology

## 3.1 Introduction

This chapter presents the methodology followed when answering the questions posed in chapter 1. Firstly the approach is presented before discussing the data collection strategies used. An emphasis on the data analysis strategies used follows in section 3.4. The sample, which characterizes subject of study, as well as mechanisms in which validity and reliability of the results are ensured are presented last in this chapter. The statement of the problem of this chapter is summarized into the following five sub-questions presented in succession:

- What is the approach followed in responding to the questions posed?
- Which data collection strategies best suit the context of the task?
- How is the collected data analysed?
- What sampling procedures are apparent?
- What mechanisms are in place to ensure validity and reliability of the results?

Answers to the five questions collectively present the methodology followed in the dissertation.

## 3.2 Approach

This research followed a mixed-methods approach, having both a quantitative and a qualitative component. The design was sequentially explanatory - Quantitative –Qualitativein which the qualitative data collected was used to elucidate quantitative findings (McMillan & Schumacher, 2010). The first phase of the study involved a survey type questionnaire. Firstly, all participants were asked to complete a questionnaire probing their means of sharing information related to school content. The type of information they share included common media of communication, effectiveness of the forms and media of communication used, the extent to which collaboration and creativity is supported when different means and forms of communication are used. Learners' digital literacy and awareness of social networking services were also probed. The questionnaire also probed learners' proficiency in using technological gadgets, their levels of confidence and independence in doing so, and the features of social networking services most attract learners. A questionnaire probing these views appear as appendix A is included at the end of this write - up.

## **3.3** Data collection

The survey questionnaire was based on the Pintrich's Motivation and Strategies Learning Questionnaire (MSLQ) (Pintrich et al., 1993) described and updated by Duncan and McKeachie, (2005). This questionnaire has two parts. The first part of the questionnaire is the motivation which consists of thirty items that assess learners' desires, attraction, and awareness of social networking services.

The second part of the survey questionnaire is the learning strategy section which includes twenty items regarding learners' appreciation of cross – purpose social networking services. The benefits of social networking services to teaching and learning, collaborative learning, and creativity (using different cognitive and metacognitive strategies). Part of this questionnaire probes learner management of different resources such as time on social aspects versus time on schoolwork. Similar components of questionnaires were used in various forms by numerous researchers in the past, for example by Glynn and Koballa (2006) as well as Glynn et al. (2009).

Quantitative data complimented with qualitative data obtained from interviews with selected participants was sequentially collected. Quantitative data was recorded, mainly in tabular and graphic forms. The participants in the interviews were selected based on their responses in the questionnaire. The interviews allowed deep exploration of responses obtained from the

questionnaire. This data allowed responses to all the sub questions of this research. An interview schedule is included as appendix B at the end of this write - up.

#### **3.3.1** Questionnaire

A questionnaire is a set of questions given to different people in the same social bracket (Oppenheim, 2000). For this research, each learner is asked to respond the same set of questions pre-arranged in order. A form containing questions based on the use and effects of social networks was distributed to forms 1, 2, and 3 learners at a particular high school.

Questionnaires allow collection of data quickly. They allow collection of data from a large group of people. They have been tried and tested in the past, hence suitable and reliable in our context where time is limited due to learners' subject schedules during the day. Questionnaires are relatively cheaper than other data collection strategies especially when large groups of respondents to the research questions are involved (Jones, 2014). In this case, the researcher will self-administer the questionnaire. Learners were supported as they completed the questionnaire in order to minimize the numbers of un-returned questionnaires and errors. Completed questionnaires collected were scrutinized in details. Reporting of the key findings was tables and graphs as shown in the next chapter.

#### **3.3.2** Face to face interviews

An interview refers to a two-way conversation between two or more people. An interview is originated by the examiner for a particular purpose of obtaining research relevant information. It is focused by the examiner on content specified by research objectives (Channel & Kahn, 1968).

Follow up interviews were administered after the analysis of data collected via a questionnaire. That way, qualitative data arose elucidating detailed views and opinions

regarding usage of social networking tools in teaching and learning. A samples of ten learners were selected and interviewed from forms 1, 2, and 3 in order to verify some of the responses given. Commonly, personal experiences and views regarding the use of social networks in teaching and learning were sought. Similarly, this was additional data which allowed further understanding of answers to the sub questions of this research.

#### 3.3.3 Discussions

In addition to questionnaires and face-to-face interviews, the researcher engaged in informal discussions with fellow teachers and learners across the school. These discussions were used to explore the topic further and get open views from non-subject members of the study. These discussions provide potential intervention and potential uses of social networking tools in teaching and learning at school level. Most discussions focus on the questionnaire, particularly seeking critical views and suggestions for improvements. This merely enables the study to get a richer understanding of participant's experiences and beliefs (Morgna, 1998). In addition, discussions provide feedback to respondents on results and the findings. The notes prepared during discussions were useful sources of additional data to the study.

## **3.4 Data analysis techniques**

The findings gathered from the questionnaire were analyzed quantitatively. The data collected from the questionnaire and interviews were analyzed using the three common constructs of a practitioner's enquiry theoretical framework.

Descriptive statistics was extracted which mainly investigate the measures of central tendencies and measures of dispersion. Descriptive statistics for instance, mean, mode, and median were used to validate any central tendencies observed. In addition, standard deviations and ranges were extracted to assess the validity of any measures of dispersion

noted in the data sets. Meanwhile, the coding qualitative data was done by looking for supporting and explanatory themes.

## 3.5 Sampling

Stratified sampling was used to ensure that from the population sampled all three forms were represented although there was gender imbalance Respondents to the questionnaire were sampled from three groups of learners, forms 1, 2 and 3. There were thirty nine, twenty five, and sixty nine learners in each respective form. The sample had more male learners than females. Most learners fell in the middle class category. However all learners come from similar ethnic and racial backgrounds.

The study conducts a practitioner's enquiry on the experiences of learners at a particular high school in using social networking services for educational purposes. The population of the study are all learners enrolled for business studies at the school. The sample used represents above 50% of the population enrolled in business studies at the school. To reduce statistical implications and justification for selecting specific samples, a questionnaire was sent in person to all learners in the sample group.

## 3.6 Validity, Reliability and Rigour

Questionnaires are instruments that have been used and developed by other researchers in the field with success. They were validated as reliable fact gathering tools when respondents were many and geographically spaced from the researcher. They were relatively cheap and easy to administer under the contexts mentioned above. For reliability, the instrument was pilot tested using twelve learners who are not in the sample (form 4s and 5s) the results did not show any error. The same instruments were used in a number of countries, in a variety of contexts, and findings have been published. Most importantly, their validity has been acknowledged in the past (Pintrich et al., 1993), supporting the validity and reliability of our questionnaire.

Rigour in this study by the use of a mixed method approach. The researcher did not only use established and validated questionnaires but also conducted follow – up interviews ensured that the data collected in the questionnaire is thoroughly interrogated for individual learners' voices. Such interviews also ensured that the researcher verify any ambiguities and misinterpretations.

A number of contributions it will likely make both on an academic and practical arena also emphasizes the value of this work. That, on its own, further validates the work as worthwhile.

## 3.7 Conclusion of the chapter

The chapter presented the methodology we follow. It firstly highlighted our approach – which is a mixed method. Data collection techniques discussed included questionnaire, interviews, and informal discussions. Fact recording strategies mentioned included tabular and graphic forms. In addition, data analyses techniques presented where descriptive statistics dominate. The key statistics sought relate to finding trends, tendencies, and relationships between our research variables. Validity and reliability issues dealt with last before presenting this conclusion. The next chapter reports the results yield from the research.

## **CHAPTER 4 : Data collection and reporting**

## 4.1 Introduction

This chapter presents the results and findings of this work. The main purpose of the study was to investigate mechanism in which the benefits of social networking services can be integrated into the teaching and learning of Business studies at a particular school in Eswatini. This chapter presents mainly the rate of occurrences of responses from respondents and illustrates these in tabular and graphic styles. The study reports the responses question by question, and in every response suggest on the meanings arising. The following sub-sections tabulate the data yield in each of the first forty five questions of the questionnaire. The outcomes of the remaining five reflective and qualitative questions are reported in section 4.3 before with the chapter closes in section 4.4 with the conclusions.

## **4.2** Distribution of responses to the questionnaire

#### 4.2.1 Distribution of respondents by gender

The first question of the questionnaire investigated the distribution of respondents by gender. There are more male learners than females in forms 2 and 3. The overall ratio is 52.6% male learners to 47.4% female learners. Low numbers of female learners are observed in higher level classes (form 3) because, as learners grow older, female learners' were pushed out of school through pregnancy (Grant & Hallman, 2006), peer pressure to join out of school friends, or family responsibilities such as getting married (Russell & Sun, 2008). There are, however, form 1 had more girls than boys. Overall, boys out-numbered girls because the form 1 class is smaller.

Table 4.1 reports the distribution of respondents by gender. This distribution defines the sample comprising of one hundred and thirty three respondents. The researcher believe that this sample is statistically representative of the population of learners enrolled in business studies at the school. The characteristics observed in this sample becomes comparable to the characteristics of other learners from similar demographic environments, family contexts, school environments, related religion, and similar socio-economic backgrounds.

	Male	Female	Total per group
Form 1	16	23	39
Form 2	15	10	25
Form 3	39	30	69
Total	70	63	133

Table 4.1 Distribution of respondents by gender

## 4.2.2 Age demographics

An investigation into the distribution of the respondents' ages show that most learners were teenagers. Table 4.2 report the age distributions of the respondents in this study.

	13-15	16-18	19-21	Others
Form 1	28	10	1	0
Form 2	4	19	0	2
Form 3	14	40	15	0
`Total	46	69	16	2

Table 4.2 Distribution of respondents' ages

Generally, results indicate that learners join school at an appropriate age of between five and six years, explaining why most form 1 learners are between the ages of thirteen to fifteen. However, learners who get into school at the age of 5 may get to form 3 while still within the age range of thirteen to fifteen years as well, explaining the observed frequency of this age range in the form 3 class. The significance in this study is that overall learners in the research sample were teenagers who are very active in embracing social networking facilities (Perrin, 2015; Duggan & Brenner, 2013).

#### 4.2.3 Distribution by cell phones ownership and access to internet

The primary goal of this dissertation is to investigate mechanisms in which social networking services can be integrated in the teaching and learning of business studies. This requires the researcher to investigate how many of the enrolled learners own cell phones and hopefully with internet access. Table 4.3 presents learners' responses on cell phone ownership and access to internet.

Distribution	Yes	No
Cell phone ownership	115	18
Internet access on cell phone	112	10
Internet access on personal computer	43	90

Table 4.3 Cell phone ownership and access to internet

Question 4 of the questionnaire establishes that approximately 86.5% (115) of the learners in the study sample that own cell phones. Either the few who do not own cell phones had other means of accessing online resources or they reportedly use personal computers. Question 5 investigated learners' ownership of gadgets with access to the internet. Findings reflected that most learners have access to online services using their cellphones or other means. In this sample, specifically, about 7.5% (10) of the learners reportedly have cell phones without internet access. The researcher view this as unimportant since affects small group of learners who can easily get similar services somewhere else. However, one rare case was observed where a learner reportedly ignored responding to this question. This is also a very insignificant case. On the same note, access to internet resources through personal computers was visible among the respondents of this study but rare. The researcher attributed these findings to the age range of the respondents who are possibly denied access to computers at home (Shields & Behrman, 2000) or have limited access to personal computers. Besides, most Eswatini families do not have personal computers in their houses (Encyclopedia, 2007), explaining the low frequencies observed. However a 32.3% (43) of respondents observed to have access to the internet-using personal computer is a significant alternative mode to cell phone access which supports our intended intervention to promote the use of online services for scholarly endeavours.

### 4.2.4 Frequency of online visits

Findings showed that majority of the learners have cell phones or personal computers with access to internet, it is unclear if they exploit this services fairly. Table 4.4 draws learners' responses on frequency of online visits.

	Everyday	Sometimes	Never
Form 1	14	22	3
Form 2	10	15	0
Form 3	25	42	2
Total	49	79	5

Table 4.4 Frequency of online visits

This question examined the rate in which respondents visit online services. The researcher understand that although a gadget may have internet access, there are cost implications that may hinder full exploitation of the services. In this study it was observed that about 37% (49) of the respondents are online on daily basis. Most respondents 59.4% that is 79 in total sometimes visited online services. Respondents who rarely visit online services were insignificantly below 4% (5). These were possibly users of devices but due to cost, can only afford cell phones without the internet facility or just that learners cannot afford airtime and data.

#### 4.2.5 Use of services by platform

While it is clear that learners in the study sample embraced social networking services or not, the question that remains is which platform is commonly used. Table 4.7 reports these frequencies.

	WhatsApp	Facebook	Messenger	None
Form 1	27	24	2	4
Form 2	17	16	0	0
Form 3	43	49	3	4
Total	87	89	5	8

Table 4.5 Use of services by platform

Responses to question number 8 of the questionnaire established Facebook and WhatsApp as the most popular and equally competing platforms. Most users interchangeably use these two platforms with ease and agility. Very few learners (3.8%) know of messenger as indicated in the table.

### 4.2.6 Commonly used platform for friendly interactions

The WhatsApp platform out-classes the rest of the known platforms regarding the services sought for friendly interactions. However, Facebook still closely follows as indicated in table 4.6.

	WhatsApp	Facebook	Messenger	SMS	Call	Others
Form 1	27	17	1	1	3	1
Form 2	17	11	1	1	2	0
Form 3	41	42	1	5	13	1
Total	85	70	3	7	18	2

Table 4.6 Friendly interactions by network platform

The differences observed between the choices of WhatsApp and Facebook could be attributed to bandwidth and data access or speed issues. Facebook for instance, is traditionally more expensive than whatsApp. However, it is clear that any intervention through WhatsApp or Facebook would make a significant difference to teaching and learning.

## 4.2.7 Platform uses: Social versus scholarly purposes

An investigation into learners' view of the uses of social networking services for social and scholarly aspects yielded equally interesting results as indicated in table 4.7.

	Scholarly	Social	N/A
Form 1	23	15	1
Form 2	16	8	1
Form 3	26	38	5
Total	65	61	7

Table 4.7 Platform use for social versus scholarly purposes

While lower level classes tend to, generally, use social networking platforms for both scholarly and social activities, higher-level classes, comprising of more aged learners, predominantly use social networking services for friendly interactions than scholarly endeavours. This reflects on lack of orientation and failure by previous mentors to integrate these tools into teaching and learning in earlier years of study. This work seeks to resolve this anomaly.

#### 4.2.8 Forms of information shared online

While results proven that most learners visit online resources through WhatsApp or Facebook, these platforms are attractive to learners for sharing text information, images and videos. Table 4.8 show the results on which forms of information do learners commonly shared and it has been established that a large percentage of learners in all the forms share texts, images and videos.

	Text	Images	Video	Text/Image/Video	None
Form 1	6	3	1	13	2
Form 2	11	9	1	21	0
Form 3	26	11	2	38	3
Total	43	23	4	72	5

Table 4.8 Forms of information shared

Very few learners share text only, images only and videos only. This results indicate that these platforms can be exploited for scholarly purposes. This is an indication that most learners are proficient with utilizing the services offered by social networking tools.

## 4.2.9 Frequency with which learners share schoolwork online

An investigation into the type of information shared and the level of collaboration show that most learners collectively share scholarly and social activities online. The statements that assessed the information shared and the level of collaboration are established in table 4.9, which communicates the learners' responses to the statements. Findings in this category indicate that 61% (81) of the respondents share school work online more often.

Information shared and collaboration	Class	Yes	No	Others
Sharing school work online	Form 1	27	12	-
	Form 2	18	7	-
	Form 3	36	33	-
	Total	81	52	-
Method of information sharing is effective	Form 1	24	14	1
	Form 2	13	11	1
	Form 3	41	27	1
	Total	78	52	3
Possibility of online collaboration	Form 1	29	10	-
	Form 2	17	8	-
	Form 3	34	35	-
	Total	80	53	-
Online collaboration is valuable	Form 1	20	19	-
	Form 2	20	5	-
	Form 3	57	12	-

Table 4.9 information shared and collaboration

	Total	97	36	-
Sharing information online improve learning	Form 1	32	7	-
	Form 2	19	6	-
	Form 3	57	12	-
	Total	108	25	-
Sharing information online improve critical	Form 1	33	6	-
thinking	Form 2	18	7	-
	Form 3	57	12	-
	Total	108	25	-
Creatively share information online	Form 1	23	16	-
	Form 2	14	12	-
	Form 3	47	22	-
	Total	84	50	-
Sharing information improves creativity	Form 1	35	4	-
	Form 2	21	4	-
	Form 3	62	7	-
	Total	118	15	-

The results in table 4.9 show that form 1 learners share schoolwork online more often than the form 2 and 3 learners although the form 2s were less in number than the other forms. The researcher attributed the drop in sharing school work as learners get older to possible shift to social interests. Often, grown up (form 2s and 3s) learners 'activities online are no longer fully monitored (Shields & Behrman, 2000) either by parents or other guardian hence the shift of interest. Schools, particularly teachers, have also exhaustively tried all sorts of

counseling and guidance. Precisely, older learners are less focused on schoolwork when online. Social and peer influences are dominantly embraced in this age group.

Effectiveness of method of information sharing. This question probed the efficiency, suitability, and credibility of the method of information sharing favored among learners. Findings revealed that 59% (78) of the learners perceived their method of information sharing as efficient, suitable and credible. The researcher attribute the beliefs in the remaining 41% (52) who felt the method thereof was not as effective as they wanted to lack of technical knowhow of the architectures behind social networks. Although the majority of learners were satisfied, minority were limited by the availability of internet and the type of cell phone they use, hence the dissatisfaction. The overall findings in this question was that, learners generally support the method of information sharing as efficient, suitable and credible as possible. This is validating the view that integrating social networking services for scholarly purpose can be achieved.

The level of online collaboration for scholarly activities. In this question of the questionnaire the study investigate learners' opinions of any likelihoods to collectively perform scholarly activities with friends online. Findings reveal that 60% (80) of learners see this as possible. The researcher explain the views of the remaining 40% (53) who doubt such possibilities as follows: (a) data bundle issues and how cost effective the processes can be, (b) skill of discussing, availability of time, as well as (c) mere lack of trust in technology. Thus, it is acknowledged by learners to collectively work online.

Perception on the value of online collaboration. This question investigated the value of information obtained through online collaborations, 73% (97) of the learners believed online teamwork as a suitable way to do assignments. This is far above the average percentage of responses, implying that the use of social networking services for scholarly activities can draw interests in their studies. This attributed the denial observed in the remaining 27% (36)

respondents to ignorance of the concept of collaborative learning, hence, the value of collaborative studying is noted.

Regarding the question, does sharing information online improve your learning? Findings in this question proved that majority of the learners believed that sharing information online improves learning. A large proportion of the learners showed confidence that online information sharing improves learning. This is in line with the views reported in Subrahmanyam et al. (2001) who argues that sharing information online improves learning. The few respondents who thought otherwise demonstrating unconditioned response to learning (Malone, 1990) where learners may not be aware of the value and changes taking place in their cognitive growth engaging in online interactions with peers. Theories related to unconditioned responses (Malone, 1990) attest to possibilities of such unconscious learning. As a result, qualitatively agree that learners' value and understand the sharing of online information as beneficial.

The question, does sharing information online improve critical thinking yielded positive results. Findings revealed that majority of the respondents perceived that online information sharing improve critical thinking thus enhances learning.

About the question, do you creatively share information online? Compelling is the belief by most learners that they share creative information online. This alone satisfactorily confirms that learners in the sample are ready to use social networking services for educational benefits, coupling these benefits with creative interactions. The researchers' hope is that the introduction of the proposed integrated teaching strategy further motivates learner to even believe in themselves more. Figures reported in this category indicate divided beliefs in early years of high school as compared to the beliefs that arise with time in high school. We attribute these differences to mental growth in senior learners.

Regarding the question, do you think sharing information improves your creativity? Learners believed that they creatively share information online also ensures self-growth arising from such creative interactions. Respondents believed that sharing information online improves creativity, which partly touches on the assumptions of this study. Such an outcome is a further indication that learners are ready to exploit the social networking services available while, at the same time, improving their own creativity and growth.

#### **4.2.10.** Rating of digital literacy

While the question sought for a number of possible responses, the bigger picture was whether learners saw themselves as digitally literate or not. Fitting a response trend line on the graph representing the outcomes depicts Gaussian's normal distribution curve skewed to the left. This happens when the left tail is longer, when the mass of the distribution is concentrated on the right side of the midpoint of the figure. Table 4.10 presents the rating of digital literacy among learners.

	Illiterate	Very	Bad	Good	Very	Excellent	Not
		bad			good		known
	0	1	2	3	4	5	-
Form 1	0	4	8	16	6	5	0
Form 2	1	2	3	11	3	2	3
Form 3	2	2	7	33	15	9	1
Total	3	8	18	60	24	16	4
	29				100		4

*Table 4.10 Rating of digital literacy* 

In this case, the distribution purports more than 75% (100) of respondents as digitally literate, thus supporting the assumptions that learners can integrate the digital features of social networking services with scholarly activities. Such a belief cannot be doubted especially when we consider previous responses and outcomes.

#### 4.2.11 Rating of awareness of the values of social networking tools to data sharing

While learners embrace the use of social networking services, most of them were not aware of the values of social networking services to information sharing and collaborative learning. They did not see any link between the two tasks (social networking and scholarly information sharing). Again, the theory of unconditioned responses is observed. Table 4.11 presents awareness of the value of social networking tools to information sharing.

	Unaware	Very bad	Bad	Good	Very good	Excellent	Not
							known
	0	1	2	3	4	5	-
Form 1	1	7	9	7	11	4	0
Form 2	1	4	7	3	3	4	3
Form 3	5	1	12	21	21	8	1
Total	7	12	28	31	35	16	4
		47		82			4

Table 4.11 Rating of awareness of values of social networking tools to information sharing

The intervention proposed is thus a revelation to most learners regarding availability of such facilities. The researcher believe that an integrated approach would increase both aspects of the facilities. Although 62% (82) of the learners were reportedly aware of the values of social networking services to information sharing, a large proportion 35% (47) of the respondents still require awareness campaigns and further education regarding such opportunities and services. This work sought to such awareness in the learners before learners fully enjoy the benefits thereof.

#### 4.2.12 Awareness of the values of social networking to scholarly activities

Findings in this category are fascinating. Although learners prevalently rate their awareness of the values of social networking services to scholarly activities positively, they were more inclined to trusting their perceptions rather than actions regarding such awareness. This was shown when comparing the outcomes that arose when learners' actions and abilities were investigated to the outcomes of learners' opinions (see table 4.12).

Information shared and collaboration	Class	Yes	No	Others
Sharing school work online	Form 1	27	12	-
	Form 2	18	7	-
	Form 3	36	33	-
	Total	81	52	-
Method of information sharing is effective	Form 1	24	14	1
	Form 2	13	11	1
	Form 3	41	27	1
	Total	78	52	3

Table 4.12 information shared and collaboration

Possibility of online collaboration	Form 1	29	10	-
	Form 2	17	8	-
	Form 3	34	35	-
	Total	80	53	-
Online collaboration is valuable	Form 1	20	19	-
	Form 2	20	5	-
	Form 3	57	12	-
	Total	97	36	-
Sharing information online improve learning	Form 1	32	7	-
	Form 2	19	6	-
	Form 3	57	12	-
	Total	108	25	-
Sharing information online improve critical	Form 1	33	6	-
thinking	Form 2	18	7	-
	Form 3	57	12	-
	Total	108	25	-
Creatively share information online	Form 1	23	16	-
	Form 2	14	12	-
	Form 3	47	22	-
	Total	84	50	-
Sharing information improves creativity	Form 1	35	4	-
	Form 2	21	4	-
	Form 3	62	7	-
	Total	118	15	-

The researcher attribute the 3% (4) of responses reflecting complete indecision to an insignificant population of economically challenged backgrounds, who do not own cell phone gadgets or do not have access to the internet as shown in table 4.3. However generally, the results here reported are again in line with the belief that learners are ready to embrace the use of social networking services for scholarly activities. Further, indications to these views are shown through the trend line fitted in figure 4.1

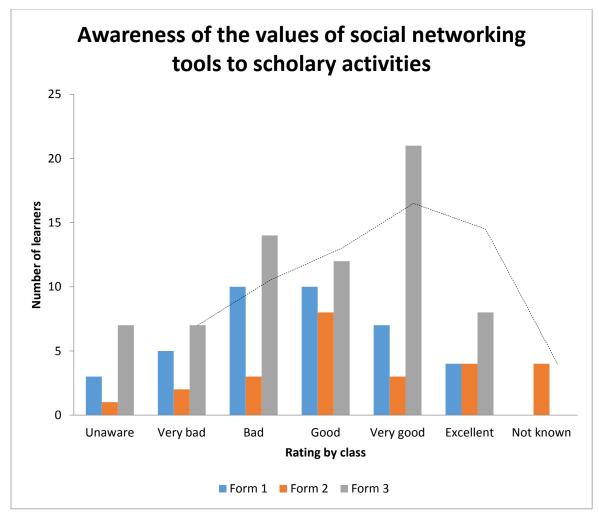


Figure 4.1

#### 4.2.13 Proficiency in using cell phones for social networking or scholarly purposes

While most learners are comfortable users of cell phones in general, a number of these students regard themselves as average rather than proficient users. This is because, at this age, some learners have limited access time to cell phone gadgets due to parental controls. On the other hand human, naturally, avoid rating themselves too high, leaving such judgments for others to make. Such beliefs thus explain the 28% (37) sample of respondents who underrate themselves. We require learners to have basic, rather than proficient, skills in using social networking services. Table 4.13 presents the proficient use of cell phones for social networking and scholarly purposes.

Proficient use of cell phones	Yes	No	Other
Proficient use of cell phones for social networking purposes	93	37	3
Proficient use of cell phones for scholarly purposes	65	64	4
Total	158	101	7

 Table 4.13 Proficient use of cell phones for different purposes

The value of the proposed intervention is clear when the outcomes of this question are compared to the study conducted in the previous questions. While 93 of the 133 respondents are confident and proficient users of cell phones for social networking services, this number dropped to 65 when scholarly endeavours were investigated. A drop by 21% (93 – 65) from proficient cell phone users for social networking services to incompetent users of cell phones for scholarly purposes is significant.

The researchers' intervention has direct contributions in rising learners' competence in using cell phones for scholarly reasons, which in turn, foster teaching and learning. This

observation also indicates that, although learners may be proficient users of cell phones for different purposes, they have not directly and consciously reflected and related social networking platforms and services to any academic matters. However, indirect collaborative works may have been visible without notice. Again, the work presents ways in which learners' proficiencies and skills in social networking services were mapped to skills required for integrating the same services with scholarly activities. Successful completion of this work, would therefore, directly benefits all stakeholders in teaching and learning.

# 4.2.14 Rate of level of confidence in using cell phones for social networking and scholarly purposes

This question probed similar views to those presented in section 4.2.14, investigating learners' confidence in using cell phone gadgets for social networking purposes. Similar trends were observed, and a related explanation is assumed regarding the views of the respondents who regard themselves as timid users of cell phones for social networking purposes.

Table 4.14 presents learners' level of confidence in using cell phones.

Confidence	Ignorant	Very	Bad	Good	Very	Excellent	Not known
		bad			good		
	0	1	2	3	4	5	-
Social networking purposes	8	15	12	37	28	30	3
Scholarly purposes	13	16	33	25	24	22	0

Table 4.14 Level of confidence in using cell phones

Similarly, this question probes comparable outcomes to the views presented in section 4.2.13 in which confidence is evident when cell phone uses for social purposes were probed, it is not obvious when cell phone uses for scholarly purposes are sought. This work provides an innovative strategy for filling this gap towards better uses of cell phones for schoolwork. Table 4.14 summarizes the outcomes thereof.

#### 4.2.15. Type of information they share on social networks

The information gathered shows that respondents predominantly concentrate on sharing private, personal, or other irrelevant stuff when they go online. Business interactions are, understandably uncommon, because these are learners in their teen's age. The researcher attributes the low frequency of scholarly activities to lack of awareness and uninformed uses of social networking services. This study comes at the right time to address both awareness and proficiency issues regarding uses of these facilities. Table 4.15 reports these views.

	Highly Private	Personal	Others	Scholarly	Business	
	0	1	4	3	2	
Form 1	5	14	9	9	2	
Form 2	3	12	5	9	0	
Form 3	6	32	18	21	6	
Total	14	58	32	39	8	
	104			47		

Table 4.15 Type of information shared on social networks

#### 4.2.16. The extent of independent use of cell phones for social networking

This question similarly probes learners' confidence in using cell phones for social networking as investigated in sections 4.13 and similar trends observed, along with related explanation to the outcomes thereof. This is depicted by the trend line fitted on to the plot, which shows logarithmic growth in confidence towards desired independent use of cell phones.

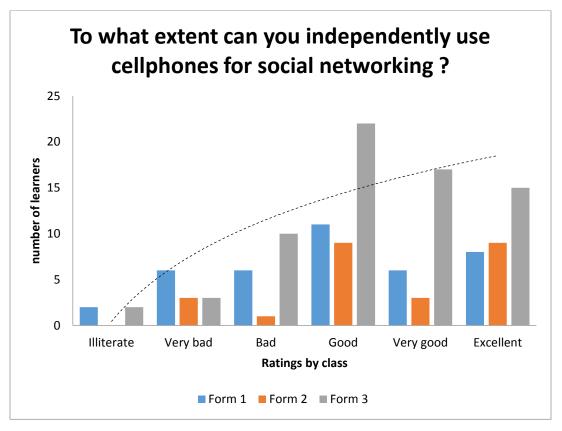


Figure 4.2

### 4.2.17 Extent of independent use of cell phone for scholarly work

While respondents demonstrate confidence in using cell phones for social purposes, they to some extent demonstrate, timidity when scholarly endeavours are mentioned. As such, outcomes are close to non-skewed normal distributions with central tendencies placed around the centre of the Gaussian curve. The researcher explains such trends as arising from lack of awareness of the values of social networking services for scholarly purposes.

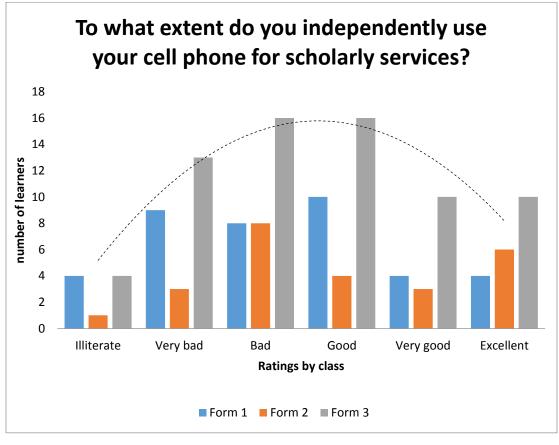


Figure 4.3

This survey proposes a strategy to foster such awareness and enhance desired confidence towards the use of cell phones for both social and scholarly purposes. It is viewed that such enhancements will improve learners' time on schoolwork and academically benefit them with regards to performances.

## 4.2.18 Social networking services and disturb on scholarly activities

While consensus tends to tilt towards social networking services without disturbing scholarly activities, a significant number of respondents acknowledge some form of disturbances and detraction from schoolwork. This is displayed in figure 4.4.

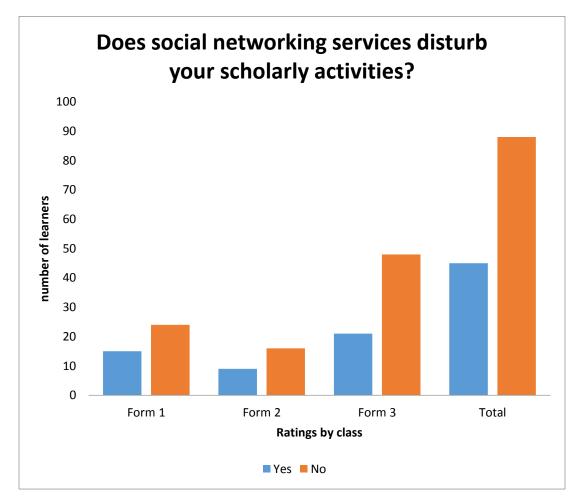


Figure 4.4

This is a common outcome in this age group where internet addictions are possible (Factsheet, 2006; Young, 2004). This work presents a strategy through which wasted time can be put to good use when social networking is coupled with scholarly activities.

## 4.2.19. Communicate freely and flexibly on social networking services.

Again, issues related to probing learners' communication skills, confidence, proficiency and engagement were probed in with regards to the social networking services was done. Majority of learners agreed to free and flexible abilities, depicting an exponential confidence towards strongly agreeing with the view. The remaining lot who believed cannot freely or flexibly communicate on social networking services may include the socially disadvantaged learners who neither have access to the internet nor possess cell phone. Table 4.16 outline learners' responses on how they freely and flexibly communicate using social networking services.

Communication, confidence,	Strongly	Disagree	Neutral	Agree	Strongly
proficiency and engagement	disagree				agree
	0	1	2	3	4
Communicate freely and flexibly on social networking services	10	11	16	30	66
Write lengthy messages using networking services	9	7	15	31	71
Send pictures, music and videos using social networking services	8	6	8	22	89
Have a group of friends I chat with after school on social networks	19	9	14	19	72
Express myself to friends in class than on social networks	43	21	22	12	35

Table 4.16 Communication, confidence, proficiency and engagement

Comparable outcomes to the results reported in the previous question of the questionnaire are apparent in this investigation, where exponential confidence towards strongly agreeing to the view that, respondents can write lengthy messages using social networking services. The researcher explained the few negative outcomes to the economic demographics of the sample under study.

I can send pictures, music, and videos using social networking services. The aim in this question was to further probe learners' competencies in using cell phones beyond text communications and messaging. Even better responses in this regard, with above 83% (22 + 89) of the respondents confidently agreeing to the view that they can send pictures, music, and videos using social networking services. The gradient of the trend line thereof is even steeper. Similarly, the few responses on the other side of the distribution fall in the category of learners without internet access or without cell phones.

Have a group of friends I chat with after school on social networks. The results yielded in this question are in line with the assumption that learners are already acquainted with social networking platforms and have already set up social networking groups. However, these groups are currently used for other aspects other than scholarly activities. The aim of the study is to exploit this outcome for scholarly benefits.

About the question - I express myself to friends in class than on social networks. Interesting outcomes were observed in this category of the investigations. Learners generally feel that they express themselves better on social network platforms. This is a compelling outcome, which support this proposed integration. The researcher particularly appreciate the emergent view that learners can effectively interact in different ways, directly or indirectly, thus further motivating our investigations and intervention. The researcher believe that learners' online participation takes away detractions that come with class participation.

## 4.2.20 Share schoolwork via social networking services.

Similarly compelling was the belief, which arose that learners did not see themselves as actively and effectively sharing school work online. They do not see social networking facilities as related to school work. This outcome shows that learners were visibly engaged on social networking services but not on scholarly activities. This study rightfully sought to present a way in which this mind set is turned around towards empowering learners to, rather, share schoolwork via social networking services more often than before. The outcome is outlined in table 4.17.

Effectiveness of social networks for scholarly purposes	Strongly	Disagree	Neutral	Agree	Strongly
scholarly purposes	disagree				agree
	0	1	2	3	4
My friend and I share school work via social networking services.	40	22	24	19	28
I hardly go for a day without chatting with friends on social networks	50	13	15	18	37
I will likely contribute ideas on the Business Studies social group	26	13	16	27	51
We will learn better Business Studies on Social group than in class	30	14	18	23	48
Online discussion of school work with my teachers will be helpful.	8	9	16	24	76
I can express myself to my teacher online than in class	17	5	18	23	70

Table 4.17 Effectiveness of social networks for scholarly purposes.

Online forums will help my timid friends to participate in discussions	7	12	28	30	56
Social networking services will waste our time on other tasks	67	22	18	14	12
Social networks and school work can be balanced	15	11	17	23	67
Costs of using social networks are reasonably low and affordable	15	11	14	12	81

I hardly go for a day without chatting to friends on social networks. Split views arise when this question is analysed. The bigger picture thereof is thus that learners, generally, do have time to chat every now and then. Few hick ups from socio-economic contexts of the learners such as not affording airtime and data bundles on daily basis could be reason for not using social network platforms. However, should this factor be ignored, learners would likely engage on social networking facilities whenever possible.

Responses to the statement - I will likely contribute ideas on the Business Studies social group. Diverse views were revealed. However, the researcher regards this question as, more of, a spot aspect, which learners did not anticipate since their primary use of social networking services was predominantly social. A majority of learners would likely think about their roles on such groups with time. Those who disagreed to the view could be guided by fears of failure to fulfil the pledge. One's view, given time, most learners would contribute ideas in one way or another.

To the statement - we will learn better on Business Studies social group than in class - more neutral responses emerged. A high frequency of NO answers was recorded. The researchers' views is that this study is an opportunity for learners to reflect on their practices when they go online. This is an opportunity for learners to try alternative ways of learning. Again, learners would reflect of the benefits of collaborated learning once they engage with the proposed intervention. This work, thus, comes at the time when it is most needed.

Online discussions of schoolwork with my teachers will be helpful. Investigations in this question shows that some respondents are ignorant of the benefits of social networking services for scholarly activities even though majority of the learners believed the intended intervention as beneficial. They value interactions with the teacher beyond school time. In is viewed that the teacher will have a great opportunity to control or minimize his / her learners' engagement with non-scholarly activities after school. Again, this view further validates the rationale for undertaking this research work.

I can express myself to my teacher online than in class. Interesting outcomes are reported in this category. The researcher take the outcomes to mean that there are, generally, learners who find classroom environments intimidating. The researcher's intervention thus create a different, and more conducive, teaching and learning environment on which those intimidated learners get opportunities to open up and contribute their perceptions to any content under discussions. The value of this research work can thus not be further emphasized.

Online forums will help my timid friends to participate in discussions. Again a high frequency of neutral responses is observed. However, the distribution is sloping to left, implying that more counts favour the opinion that timid learners would get an opportunity to open up in forum discussions. This, in a way, is an added contribution this work seeks to present in the teaching and learning of, as a case study, business studies.

Social networking services will waste our time on other tasks. The authenticity of the suggested intervention is reiterated by learners' perception of the value of social networking services regarding time managements. Though, on the opposing, the researcher expected views aligned to time wasting and diversion from the norms, learners do not see social

networking services as time wasting. This hints us of learners' preparedness for alterative learning strategies. This work comes at this moment when such interventions are overdue.

Social networking and school work can be balanced. The researcher was mostly fascinated by learners' views regarding the balancing of social networking and school endeavours that are highly tilted to the left of the normal distribution curve. As such, most learners in the sample believe that the two aspects can be balanced. Successfully mapping this opinion to the population and proving the same is another outcome sought in this work.

Costs of using social networks are reasonably low and affordable. An investigation into learners' perceptions regarding the cost implications for adopting the proposed intervention yielded encouraging results. This survey showed a majority of the respondents were happy with the costs of using social networks. The 20% who echoed negative sentiments in this regard is already been discussed as, possibly, that group of learners who bring socio-economic challenges to the sample here studied. This work does not present economic challenges to the learners under study.

# 4.3 Qualitative views

Learners further responded to five open ended questions as outlined next.

#### What motivates your interest in using social networking services?

The first question investigated the motive, which drives learners to embrace social networking services. It emerged that, prevalently, the desire to get information from colleagues stood out. It also came out that social networking services encourages freedom of expression while, at the same time, connecting learners to the world beyond immediate friends. This observation further supports the intervention this study proposes. Precisely, learners will share and gain information from one another. They will make friends, and

express themselves at will while, at the same time, learning from one another. Below were some of the quotes from respondents.

"I communicate freely with my friends" [participant 1] "I get more friends even from other countries" [participant7] "We are able to share and gain more information" [participant 10]

## What two factors discourage you from using social networking services?

The second open-ended question required learners to indicate factors, which they find disturbing when social networking services are considered. Top on the list came the issue of data depletion rates and the forms of data shared. Most learners are not happy to receive immoral communications, which in addition, consumes more data bundles than they can afford. A few opinions pointed to parents and teachers' critics, while others highlighted disturbances as key factors not embraced. These are all motivating factors and encouraging opinions to the undertaking of this work since its goal was to minimize the same flaws while making good use of the time and money invested. What some respondents said about the factors, which discourages them from using social networking services is cited as;

"Sometimes the use of vulgar languages discourages me because if my parents can read what my my friends say, I can be in trouble" [participant 1]

"It consumes more data bungles which makes it expensive to reload more bungles especially when downloading pictures and videos" [participant 6]

"Sometimes nude pictures are posted which disturbs me" [participant 4]

#### Identify two negative effects of social networking tools to your studies?

In the third question, negative effects of social networking services to learners' studies were sought. Predominant complaints revolved around the undesirable emergence of hybrid shorthand, as well as, slang languages. These generally distort proper language development, grammar and spellings. However, while spellings and grammar are not the primary objectives when business studies assignments are completed, efforts need be made to enforce the use of proper grammar and discourage developments of street phrases. Respondents' views on the negative effects of social networking tools to studies, some quotes were;

"I end up using abbreviations when answering questions resulting to less marks" [participant 5]

"When communicating with my friends we use mainly jargon language which I mistakenly end up using it on studies something which my teacher dislike" [participant 8]

"each time I write English composition I find myself making a lot of spelling mistakes due to the way we write on social networks with my friends" [participant 10]

## Identify two positive effects of social networking tools to your studies?

In the fourth question, the researcher investigated learners' opinions of the positive effects of social networking services to studies. The concepts of information sharing, freedom of expressions, and augmented opinions on concepts stood out. These opinions further hinted on how prepared and willing learners were to collaboratively complete work. However, such provision, facilities, opportunities, or privileges were not explicitly explained to them. The study presents an opportunity for learners to exploit technology, social networking services, and their facilities. Respondents are cited in this question as;

"I communicate freely with my teacher on social networks which makes it easier for me to ask any question than in class" [participant 1]

"I gain a lot since it becomes easier to access information from my friends and as a shy person I express myself freely" [participant 7]

"Nobody laughs at me when saying a wrong answer than in class something which make me keep quiet even if I need help" [participant 3]

# Is there anything you would like to share regarding the impact of social networking tools?

In the last question, the researcher allowed learners to present open views regarding their perceived impact of social networking services. The easiness of services, as well as, freedom of expression are the main impacts mentioned. A number of respondents did not provide clear opinions other than a YES or NO. However, generally, learners find and see some value in the technologies presented through social networking tools. They acknowledge potential benefits arising from the use of these technologies for scholarly benefits. This works situated learning and presents learning environments suitable for the learners of today in the context of Eswatini communities. Some views regarding this question are cited as;

"Yes, it makes learning easier since I'm motivated by the use of the gadget" [participant 5]

"Yes, I express myself freely and it trains my speed when it comes to thinking and writing" [participant 10]

Follow-up interviews on a few learners yielded the following observations:

- (a) social networking services enhance information sharing, speed consultation, and allows collaborated completion of assignments and homework.
- (b) undesirable features of social networking services are mainly regarding time wasting, costs, invasion of privacy, and sharing of immoral materials.
- (c) negative effects of social networking services to studies are mainly to do with the development of hybrid slang and shorthand languages which distort already learnt language principles.
- (d) making new friends and sharing new ideas with these new friends are the positives commonly echoed by most respondents.
- (e) Generally, respondents see social networking services as easy to use, interesting, and fairly convenient for digital natives.

These findings are inspiring and are a further motivation for undertaking this work.

# 4.4 Conclusion of the chapter

The chapter reported data collected from the administration of a questionnaire to 133 learners. It also reported qualitative views from the same learners. The data was tabulated and interpreted in graphs with fitted trend lines. Although the researcher gave preliminary opinions on the meanings of some data, chapter 5 gives a detailed data analysis and interpretation of the same form another.

# **CHAPTER 5 : Data analysis and Interpretation**

## 5.1 Introduction

Chapter 5 presents an outline of the analysis of data gathered during the research process. This analysis presents data and arguments from the questionnaires and observations used to collect data. To determine the benefits of social networking services in the teaching and learning of Business Studies an established and validated questionnaire was used. This was followed by follow-up interviews to ensure that data collected in the questionnaire is thoroughly interrogated for individual learners' voices.

The data were analysed using percentages, frequencies, means and standard deviations using the statistical package for social sciences (SPSS version 20). Emphasis in this chapter was on pinpointing common trends and variations in the data reported. These analyses are aimed at providing statistical justifications to arguments towards accepting or refuting proposed hypotheses. Tables were drawn to determine the benefits of social networking services for scholarly, social and life skill development.

First, the researcher grouped the responses to questions probing positive views and attitudes towards the use of social networking services in which YES or NO answers were sought. Percentages were calculated in the YES or NO questions to determine majority views or negative views on the statements. A Likert type scale was also used to indicate the extent to which the respondents agreed or disagreed with these items and the levels of using social networking services. In the rating scale presented in table 5.9, 6.11, 5.13 and 5.15, mean responses with the value in the range of 0.00 to 2.40 were considered to imply negative views and those with a mean values in the range around 2.50 were considered to imply indecision while mean responses in the range above 2.60 were considered positive.

The researcher firstly tested the data reported for normality using Kolmogorov-Smirnoff test. This is important when we want to derive generalized conclusions from the data. This was followed by various measures of central tendencies ranging from mean, mode, and median. Measures of dispersions are also of value since they hint us of the spread between the values of the data set. In this case, the researcher concentrated on standard deviation and the range. In the end, associations between the data sets reported were established using Pearson correlation coefficient.

Conclusions were drawn from these statistics with which, a particular level of confidence, the value of the proposed integration of social networking services to the teaching and learning of the case study scenario of business studies learners at a particular high school in Eswatini were stated. The rest of the sections of this chapter discusses, in detail these statistics, one after the other.

Responses were first presented in tables to assess the benefits of social networking services in the teaching and learning.

## **5.2 Demographic data analysis**

The first part of the questionnaire presents demographic data as outline next.

## 5.2.1 Gender

Firstly, the researcher wanted to find out the number of females and males who took part in the study to determine the gender that frequently use social networking services as shown in table 5.1.

Table 5.1: Gender Distribution
--------------------------------

Male7052.6Valid Female6347.4	Frequency Valid Percenta	age
Valid Female 63 47.4	e 70 52.6	
	hale 63 47.4	
Total 133 100.0	al 133 100.0	

Table 5.1 indicates that there were more male learners than female learners. The findings of the study indicated a higher percentage 52.6% (70) of the respondents (n=133) was male and 47.4% (63) were females. This showed that there were more male learners who are active in social networking services than female learners. Despite the fact that there were more males than females, the overall results indicates that both male learners and female learners are active in social networking services.

## **5.2.2 Age demographics**

According to Rieout (2012) age greatly affects the use of social networking services. Respondents' ages are presented in table 5.2 below.

	Frequency	Percentage %
13-15	46	34.6
16-18	69	51.9
19-21	16	12.0
22 and above	2	1.5
Total	133	100.0

Table 5.2 Age distribution

Table 5.2 indicates that majority of the respondents (46 and 69) were in the age group 13 to 18 years compared to the age group above 19 years. The group below the age of 19 constitute 86.5% (115) more than the group above the age of 19, which constitute 13.5% (18). The study indicates that majority of the respondents (86.5%) (115) who are teenagers are very active in social networking services. This was also revealed by Perrin (2015), that participants in social networking services are mainly young and innovative people.

## **5.3 Connectedness data analysis**

This section of the questionnaire presents the rate in which learners are connected online.

## 5.3.1 Rate of connectedness

Investigations revealed that respondents owned cell phones and had access to internet. This was shown in table 5.3 below.

Statement	Percent %	
	Yes	No
3. Do you own a cell phone?	86.5	13.5
4. If you own, does it have internet?	91.7	8.3
5. Do you have access to internet using a computer?	32.3	67.7

Table 5.3 Connectedness Distribution

Findings indicated that more than 86% (115) of the respondents own cell phones and have access to the internet. Only 32.3% (43) have access to the internet using computers, which is a very low percentage, compared to the ones who uses cell phone. Respondents are connected online using mainly cell phones with internet as indicated by over 91% (122).

#### 5.3.2 Frequency of online visit

The findings discovered that over 59% (79) of the respondents sometimes go online and over 36% (49) go online on daily basis. This is an indication that most learners frequently go online compared to the minority, which is less than 4% (5) who do not go online. As indicated in chapter 4, the 4% (5) respondents can be those learners who own cell phone but have no access to internet. This is shown below in table 5.4.

Statement	Percent%					
	Everyday	Sometimes	Never			
6. How often do you go online?	36.8	59.4	3.8			

Table 5.4 Frequency of online visit distribution

It was gathered that over 95% (36.8 + 59.4) (128) of the learners are active in social networking services as they frequently go online compared to the minority, which is less than 4% (5). This is an indication that learners are engaged online though it is not certain whether the engagement is it for scholarly or social activities.

#### **5.3.3 Frequency by platform**

Percent%						
Statement	WhatsApp	Facebook	Messenger	SMS	Call None	
7. Services by platform	n 65.4	66.9	3.8	-	- 8	
8. By network platform	n 63.9	52.6	2.3	5.3	13.5 2	

Table 5.5 Frequency of services by platform and network distribution

The study explains that majority of the respondents preferred to use WhatsApp and Facebook platform as indicated by the figures in table 5.5. The overall findings of this study showed that respondents who are learners preferred WhatsApp and Facebook as communicating

platform. This is evident as over 65% (87) proved common with a mean average of 99.5%. This is a very high mean rating indicating that learners frequently use these platform. The other platforms such as Messenger, SMS, Call and other platforms were unpopular as less than 30% (30) which is a small group indicating the use of these platforms. It was indicated in the previous chapter that any intervention through WhatsApp or Facebook would make teaching and learning more effective.

## 5.3.4 Platform uses

Percent (%)						
	Yes	No	N/A			
9. Social versus scholarly	48.9	45.9	5.3			

Table 5.6 Platform uses distribution

Table 5.6 illustrate respondents' use of platform services for both social and scholarly purposes. This is indicated by more than 48% (65) in favour of scholarly whilst the more than 45% (61) for social purposes. This indicates that respondents know that they can use platforms for scholarly purposes but because of lack of orientation that tend to be overcome by social activities.

#### 5.3.5 Forms of information shared

Percent (%)					
Text	images	Video	Text/Image/Video	None	
10 Information shared 32.3	17.3	3.0	54.1	3.8	

Table 5.7 Forms of information shared distribution

Table 5.7 shows that more than 54% (72) of the respondents share text information, images and videos. This is an indication that learners are proficient in the use of social networking

services. The responses created an awareness to the education industry that teachers can exploit these platforms for scholarly purposes.

## **5.3.6 Information sharing**

Percent (%)						
Statement	Yes	No	<b>Other</b>			
11. Sharing school work online	60.9	39.1	_			
12. Effectiveness of the method	58.6	39.1	2.3			
13. Level of online collaboration	60.2	39.8	-			
14. Perception on the value of collaboration	72.9	27.1				
15. Information sharing improve learning	81.2	18.8	_			
16. Information sharing improve critical thinking	81.2	18.8	_			
17. Creatively sharing information online	63.2	37.6	<u> </u>			
18 Sharing information improves creativity	88.7	11.3				
Overall competence in information sharing online	81.0	32.6	2.3			

Table 5.8 Information sharing distribution

Table 5.8 illustrates that the overall online information sharing is 81.0 %. This means that majority of the respondents effectively share information online and perceived that sharing information online improve learning, critical thinking and improves creativity. On average only 32.6% on the negative side which can be due to ignorant or lack of information on the value of social networking on teaching and learning. There was also a high percentage of respondents who perceived that online collaboration is important for sharing school work. This was indicated by 60.9% (81) over the 39.1% (52) who are ignorant of the use of social networking services for scholarly purposes. Comparing, responses on social networking improves learning and critical thinking, it can be noted that the number of learners who use social networking services is four times the number of learners who are not sure. This is a

gab which needs to be filled in the teaching fraternity in order to creatively involve learner's participation.

Table 5.9 again demonstrates that the highest number of learners were digitally literate as shown by a 75.1% (100) with a mean average above 2.80 and standard deviation below 1.50. This indicates the likelihoods of adopting teaching and learning through social networking services. As mentioned earlier, learners lack orientations on sharing information for scholarly activities, this is observed by an increase in percentages from 5.3 to 8.3 on the part of being illiterate in the use of social networking services for scholarly activities.

Percent %									
Statement	illiterate	very bad	bad	good	very Good	excellent	not Knowr	Mean 1	SD
	0	1	2	3	4	5	-		
19. Digital literacy	2.3	6.0	13.5	45.1	18.0	12.0	3.0	3.10	1.13
20. Information sha	ring 5.3	9.0	21.1	23.3	26.3	12.0	3.0	2.95	1.36
21. Scholarly activi	ties 8.3	10.5	20.3	22.6	23.3	12.0	3.0	2.81	1.46

Table 5.9 Distribution of mean score by digital literacy and information sharing

## 5.3.7 Proficiency of social networking services

Statement	Per		
	Yes	No	Other
22. Proficient user of cell phone for social networking purpo	oses 69.9	27.8	2.3
23. A proficient user of cell phone for scholarly purposes	48.9	48.1	3.0
Overall proficiency	59.4	38.0	2.7

#### Table 5.10 proficiency distribution

Table 5.10 illustrates proficiency in the use of social networking services for both social and scholarly purposes. The respondent's overall proficiency on social networking was slight

positive (59%) (78). This indicates that less work can be done by teachers on how to use social networking services for scholarly purposes. The fact that more than 50% of the respondents proved being active online is an indication that much learning can take place online.

## 5.3.8 Level of confidence

Percent %									
Level of Ign Confidence	orant	Very bad		Good	Very Good	Excellent	Not Know	Mean SD n	
	0	1	2	3	4	5	-		
24. for social purpose	6.0	11.3	9.0	27.8	21.0	22.6	2.3	3.17 2.73	
25. for scholarly purpo	se 9.8	12.0	24.8	18.8	18.0	16.5	-	1.50 1.55	

Table 5.11 Distribution of mean score by level of confidence

Table 5.11 illustrates that majority of the respondents are confident in the use of social networking services for social purposes compared to when used for scholarly purposes. This is illustrated by a total of 71.4% (95) on the social side with a mean average of (mean=3.17, SD=2.73) and a drop by 18.1% when level of confidence is rated for scholarly purposes. The results indicates that learners had knowledge on the use of social networking services for social purposes as compared to the use for scholarly purposes where a very low mean average is observed (mean=1.50, SD=1.55). This work can present a strategy which teachers can use to make learning more interesting.

#### 5.3.9 Type of information shared

	Percent %							
Statement	Highly Private	Personal Scholarly		Business	Other			
	0	1	2	3	4			
26. Type of Information shared	10.5	43.6	29.3	0.6	24.0			

Table 5.12 Type of information shared distribution

Table 5.12 proves that majority of the respondents share personal information. This was observed by a 43.6% (58) compared to the 29.3% (39) on the side of scholarly. Some even share information which is highly private due to lack of engagement on scholarly activities. This again indicates that learners lack awareness on the use of cell phones for scholarly purposes. As mentioned earlier this gap need to be filled to make learning more effective.

#### 5.3.10 Independent use of cell phone

Percent %										
Level of Illit Independence	erate	Very bad	Bad	Good	Very Good	Excellent	Mear	n SD		
	0	1	2	3	4	5				
27. for social networking	3.0	9.0	12.8	31.6	19.5	24.1	3.28	1.30		
28. for scholarly networking	6.8	18.8	24.0	22.6	12.8	15.0	2.61	1.48		

Table 5.13 Distribution of mean score by independent

Table 5.13 demonstrates confidence again in using cell phones for social networking and scholarly work. Majority of the learners demonstrated confidence in using cell phones for social activities which is indicated by higher mean score rating (mean=3.28, SD=1.30. The findings discovered that respondents as mentioned earlier lack awareness on the use of cell phones for scholarly work as indicated by a low mean rating (mean=2.61, SD=1.48). This is an indication that as much as they used social networking services for social purposes

respondents still lacked some basic knowledge on the use of these services for scholarly purposes.

## 5.3.11 Social networking disturb scholarly activities

Statement	Perce	ent %
	Yes	No
29. Social networking services disturb scholarly activities	33.8	66.2

Table 5.14 Disturbance distribution

Findings indicated in table 5.14 that respondents admit some form of disturbances when using cell phones for schoolwork as indicated by over 33% (45) although majority of the learners felt the use of social networking services will not disturb scholarly activities. This findings indicates that learners lack some basic rules on when and how to use cell phones to minimize the level of disturbances.

## 5.3.12 Development of skills

	Percentages (%)							
Statement	<b>SD</b> 1	<b>D</b> 2	<b>N</b> 3	<b>A</b> 4	<b>SA</b> 5	Mean	SD	
30. I communicate freely and								
flexibly on social networking services	7.5	8.3	12.0	22.6	49.6	4.0	1.3	
31. I can write lengthy messages using social networking services	6.8	5.3	11.3	23.3	53.3	4.1	1.2	
32. I can send pictures, music and videos								
on social networking services	6.0	4.5	6.0	16.5	66.9	4.3	1.2	
33I express myself to friends in class than								

*Table 5.15: Distribution of mean score by development of skills through using social networking services* 

on social networks	32.3	15.8	16.5	9.0	26.3	3.9	1.5	
34. Have a group of friends I chat with on								
social networks	14.3	6.8	10.5	14.3	54.1	2.8	1.6	
35. My friends and I share school work on								
Social networking services	30.1	16.5	18.0	14.3	21.1	2.8	1.5	
36. I hardly go for a day without								
chatting to friends on social networks	37.6	9.8	11.3	13.5	27.8	2.8	1.7	
37. I will likely contribute ideas on the								
Business Studies social group	19.5	9.8	12.0	20.3	38.3	3.5	1.6	
38. Will learn better on a studies social								
group than in class	22.6	10.5	13.5	17.3	36.1	3.3	1.6	
39. Online discussions of school work with								
my teachers will be helpful	6.0	6.8	12.0	18.0	57.1	4.1	1.2	
40. I can express myself to my teacher online								
than in class	12.8	3.8	13.5	17.3	52.6	3.9	1.4	
41. Online forums will help my timid friends								
to participate	5.3	9.0	21.1	22.6	42.1	3.8	1.2	
42. Social networking services will waste our	•							
time on other tasks	50.4	16.5	13.5	10.5	9.0	2.1	1.3	
43. Social networking and school work can b	e							
balanced	11.3	8.3	12.8	17.3	50.4	3.8	1.4	
44. Cost for social networks are reasonably								
low and affordable	11.3	8.3	10.5	9.0	60.9	4.0	1.4	
SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree and SA = Strongly Agree								

Responses were further presented in table 5.15 in a form of percentages ranging from strongly disagree to strongly agree. Respondents in these questions proved proficient and flexibility in the use of social networking services. This is indicated by more than 72% (96) of the learners who communicate freely and flexibly through social networks with a mean rating (mean=4.0, SD=1.3). Findings indicated that majority of the respondents were positive on the use of social networking services in the teaching and learning of Business studies as over 75% (102) felt online discussions will improve learning with a mean rating above 2.60 (mean=4.1, SD=1.2). Respondents felt they express themselves well online than in class. This was an indication that even timid learners could be accommodated if class discussion can be online.

Findings indicated that online discussions with teachers can help even timid friends to fully participate as indicated by a mean rating (mean=3.8, SD=1.2). Learners felt social

networking and schoolwork can be balanced as indicated by 67.7% (90). This again an indication that learners are confident and proficient in the use of social networking services. Although the use of social networking services come with some costs, it was revealed that majority of the learners felt the cost is reasonable low and affordable as over 69% (93) with a mean rating (mean=4.0, SD=1.4) indicated not affected by the costs of using social networks. The mean ratings in the above items indicates a positive view since it is above 2.60. The findings indicated in table 5.15 showing summary of all the findings from question 31 to 44.

The analyses below is based on the findings presented in the tables above (table 5.3 to table 5.15)

## 5.4 Test for normality

It is hard to tell the general situation regarding the distribution of data by looking at it from the tables (for example, we cannot see from a naked eye scan whether the data presented in Table 5.3 to 5.15 follow a normal distribution or not). Although descriptive statistics may give a picture of the central tendencies in these data sets, they often fail to detect, or they often ignore the effects of tail cases. Kolmogorov-Smirnov tests for normality compare samples of data with the standard normal distribution and establish whether these sample distributions differ from theoretical expectations. Precisely, these tests compared sample data with the prediction of a Gaussian distribution, thus determining how close the sample approximates a normal distribution curve.

Kolmogorov-Smirnov tests reported one critical outcome called the p value. If the p value yield is above 0.05, the sample distribution passes the test for normality, otherwise it fails. The Kolmogorov-Smirnov test for normality has a number of advantages over other methods including not being sensitive to identical data values in the sample data sets or any ties. In

this case, the data reported yield a Kolmogorov-Smirnov p-value above 0.05, thus passing the Kolmogorov-Smirnov tests for normality. We can thus proceed to investigate other statistical measures.

## 5.5 Measures of central tendencies in the data

This section reports central tendencies yield in the two data sets. The average frequencies of positive views towards the use of social networking services, and the negative category indicating the average frequency of concerns.

#### 5.5.1 Mean

Mean synonymously refers to one measure of the central tendency of a probability distribution or random variable characterized by that distribution. The means of a discrete random variable X, is equal to the sum of all the values in the distribution divided by the number of scores in the distribution. If *x* represents each score of *n* terms in the distribution X, then: mean= $\frac{\sum x}{n}$ .

Based on the tables drawn in this chapter, a sample of 133 respondents indicated a mean of 93, close to 70%, of the respondents are commonly positive on the use of social networking facilities. The researcher understood the remaining 30% (40) to be accounted for by learners who come from socio-economically disadvantaged backgrounds. These also include learners who may have not correctly understood the questions of the questionnaire. Another part of the same group arises from generally stubborn respondents who intentionally choose undesirable responses. The researcher concludes that:

- (a) anxiety is visible in learners to embrace social networking services for content sharing, enhance communication, creative connectedness, enhanced confidence, independence, deep engagement, and collaboration.
- (b) an awareness drive towards informing stakeholders regarding the values and benefits of integrating social networking services in teaching and learning is well overdue. Such a drive would shift part of the 30% (40) of the respondents who do not embrace such an intervention to the positive side of the equation.

## 5.5.2 Mode

In order to describe the data at a nominal level we use the mode. This is another measure of central tendency which describes the data entry that occurs with the greatest frequency. The responses occurring with the greatest frequency on the use of social networking services reported in the tables in this chapter indicates a modal score of 108, way above the 25 modal score reported on the negative side. These outcomes are consistent with the views depicted under mean analyses, indicate common interest and positivism towards the values of social networking services.

#### 5.5.3 Median

Median is another measure of central tendency which consolidates the views purported by the mean and mode. It divides the data set into two halves and pick the value at  $position\left(\frac{n+1}{2}\right)$ . In simple terms, it is the middle number in an ordered set of data. The researcher observed a median score of 98 on the positive category, and 35 on the negative category. These outcomes are similarly consistent with the views already visible from the mean and modal assessments. Precisely, high central tendencies are inclined towards embracing social networking as useful tools both for social and scholarly purposes

## 5.6 Measures of dispersion in the data

This section reports two measures of dispersion arising from the data gathered. The researcher precisely report standard deviation and the range.

#### 5.6.1 Standard deviation

This statistic quantifies the amount of variation or dispersion of a set of data values. A low standard deviation indicates that the data points tend to be close to the expected value called the mean. High standard deviations indicate that the data set consists of spread out values. The standard deviation of a data set is the square root of its variance. It is the average distance of each score of the distribution to the mean. In mathematical terms, if x is the n scores in a data set, and y is the mean of the same data set. Then, standard deviation is:  $\frac{\sum_{i=1}^{n} x_i - y}{n}$ .

In this particular case, where a mean of 93 is observed, a standard deviation of 20 respondents arises. This indicates that, on those respondents recorded to embrace the integration of social networking facilities, a drop by 20 from 93 can arise. Thus the worst case scenario in adopting this belief would accommodate not less than 73 respondents on the positive side, a number which is still above 50%. Best case scenarios can go as high as 113 (20+93) respondents of the 133 supporting the use of social networking services in the academia. This is close to 85% of the sample. On the negative side, where a mean of 40 respondents is observed, a standard deviation of 21 is observed. It appeared as if there were possibilities of achieving below 20 learners against the use of social networking services.

#### 5.6.2 Range

To check the spread of data in a data set, the range score is used. This measures the difference between the highest and lowest observation. The smaller this value, the closely related the scores. If  $x_{max}$  and  $x_{min}$  were the two extreme scores, range is  $x_{max-x_{min}+1}$ . In this case, the positive side, where extreme scores are 43 and 128, a range of 85 is observed. On the other side, where scores ranged from 5 to 90, gave a spread of 85. This merely endorses the views picked on central tendencies and standard deviation analyses as the reflectors of the beliefs on the ground.

## 5.7 Conclusion of the chapter

The chapter reported and interpreted the findings hereto. It first tested the data for normality and established that the data passed Kolmogorov-Smirnoff test with a p value above 0.05. The chapter then proceeded to report both statistical measures of central tendency and those of dispersion. General consistent mean, mode, and median scores were observed in both data sets. Measures of dispersion equally confirmed the observed tendencies. Generally, common views pointed to desires by learners to flip from using social networking services for social, to academic purposes. The next chapter lists observations thereof, the recommendations, and the contributions of the dissertation to the body of knowledge and to stakeholders at large.

# **CHAPTER 6 : Observations, Recommendations, Conclusion**

# 6.1 Introduction

This practitioner's enquiry investigated potential benefits for integrating web 2.0 tools, particularly social networking services, in the teaching and learning of Business studies at a particular high school in Eswatini. It looked at mechanisms in which to exploit particular features of social networking services for scholarly purposes, including features related to abilities of users to contribute content, abilities to communicate and share ideas, aptitudes to collaboratively and creatively work in groups, as well as facilities inclined towards enhanced technological proficiency and connectedness among users. These benefits are known to develop confidence, independence, deep engagement, and global awareness in learners. The premise, in this study, has been that full exploitation of the benefits of social networking services fosters development of critical thinking and problem solving skills, as well as promoting growth towards creativity and innovation in learners. Precisely, the work defined social networking services as collections of benefits, sets of attractive features, lists of advantages, and all sought of provisions achieved when people with shared interests are connected online.

A group of Business studies learners at a particular high school was selected as subjects of the investigations undertaken. Generally, these participants prevalently used web 2.0 tools for non-scholarly activities, not taking advantage of the services thereof for educational and life-long skills development purposes. This study investigated particular social networking services which can be integrated into teaching and learning. The study also investigated the extent to which the identified services are beneficial to teachers and learners in general.

The hypothesis presented which states that cross-purpose social networking activities create a balance in the benefits and advantages of the same services between social life, school endeavours, and other life skills development was qualitatively accepted based on the responses collected from the sample group of respondents. The main drive to completing this work has been inspired by Khan (2012) whose ideology emphasized on social networking services as allowing engagement, intrinsic motivation, and creation of a global citizen. He also highlighted collaborative interactions as boosters of morale, encouragers of independence, enhancers of creativity, and supporters of the sense of being involved and loved. Social networking services thus, create collaborative worlds, remedying stressful moments and supporting the culture of openness. The work was further motivated by my own personal experiences as an educator who also fall in the sample group of stakeholders. The next section explicitly state observations arising from the investigations undertaken.

# 6.2 Observations

This section presents the key observations based on the statistics yielded from the responses collected from the participants of this study. The observations were numbered. However this numbering does not reflect the value or any order of preference or priority to these observations. Instead, the numbering associates each observation to some recommendation to follow in section 6.3. In this light, the main observations made are:

- The work established that learners commonly do not share schoolwork and any school related content via social networking services merely out of ignorance and unawareness of such services. Learners, as yet, lack knowledge of how social networking services can be integrated into their learning. The values of these services to scholarly activities and endeavours are, at this point, very blurred. A recommendation is made in section 6.3, point 1, towards some innovative intervention proposed in this regard.
- 2. Investigations revealed that using Technological Pedagogical Content Knowledge (TPACK) requires both the teacher and the learner to have not only content knowledge but also knowledge and skills in technology (social networks) to effectively facilitate teaching and learning for professional purposes. Therefore it is important to note that understanding the interplay among Business Studies content, technology and pedagogy

that how Business Studies concepts can be represented using technology can aid or hinder the acquisition of Business Studies. A recommendation is presented in section 6.3, point 2 which suggest the way in which social networks can be integrated into teaching and learning of Business Studies.

- 3. The work also found out that, although the common media of communication used among learners is cellular technology, the communications thereof are, predominantly, WhatsApp and Facebook messages related and inclined to social relationships and matters. Interactions via cellular technology that are related or linked to scholarly activities are barely noted. A recommendation is presented in section 6.3, point 3, which proposes mechanism in which cellular technology can be utilized and accepted as a useful tool in the teaching and learning context.
- 4. Further investigation ascertained that learners do not collaboratively share schoolwork via social networking services and, when they do so, the frequency at which such collaborations are conducted is alarmingly low. This is because learners have not been oriented or made aware that social networking services are valuable tools from an education and scholarly point of view. In their views, social networking services are deployed for social purposes as suggested in the name. Recommendation 4, proposed a way forward towards curbing and changing these beliefs.
- 5. In addition, the work found that, although neither for scholarly needs or transactions relevant to studies, most learners independently use electronic gadgets and social networking services in social contexts. A recommendation is presented which supports harnessing these abilities for scholarly gains.
- 6. Lastly, it was observed that most learners were digitally literate and aware of the values of social networking services. They are technologically proficient, appreciative of electronic gadgets, and valued the engagements supported. A recommendation is made which also supports harnessing these skills.

Based on these observations, the next section presents recommendations and reflections which beneficiaries of this work can consider as baseline beliefs for further researches.

# 6.3 **Recommendations and reflections**

The recommendation presented are mostly directions towards implementation and adoption by educators. These recommendations are as follows:

- 1. The value of social networking services to teaching and learning cannot go unnoticed or unmentioned. Such values are acknowledged at a time when learners who embrace technology are observed to lack awareness of potential uses of social networking services for academic purposes. The same learners are observed to be ignorant of the benefits which come with the integration of these services in teaching and learning. It is therefore recommend that practitioners in different teaching and learning fields, as well as all other stakeholders, take the challenge of providing platforms and environments in which orientation programmes and awareness campaigns are administered to learners towards enculturating possibilities of sharing school content via social networking services, particularly, through group chats and study forums for collaborated achievements. This culture would, undoubtedly, be more dominant if it is induced and communicated to learners at an early age. Educators are challenged to innovatively devise ways in which to motivate learners' participation online. Indirectly or directly, teaching and learning will be fun but effective, related to social contexts.
- 2. The importance of teachers' technological knowledge is supporting teaching and learning is very vital in enhancing the quality of education through improvement in communication, efficiency and collaboration. It is therefore recommended that teachers must be effectively taught on how to professionally use technology to facilitate teaching and learning of Business Studies.

- 3. Learners' ability to use cellular technology for interaction and communicating messages is a stepping stone towards the proposed integration of social networking services in teaching and learning. Although learners, at this point in time, prevalently share information inclined to social relationships, exploitation of the skills already possessed for other purposes would not pose a challenge both to practitioners, stakeholders, and the learners themselves. It is recommended that educators orientate learners towards other valuable uses of cellular technology. It is recommended that calls and text messages currently reported among leaners be re-defined to allow scholarly acts to dominate the social network space. That way, a proposed awareness campaign and formalization of scholarly chat groups and academic forums as a strategy for promoting the utilization of cellular technology as an aid in the teaching and learning context.
- 4. Campaigns aimed at encouraging learners to value collaborated and peer developed solutions to problems are apparent. Such solutions are self-moderated, enriched, and carry diverse viewpoints to problem solving. Social networking services support these views. It is recommended that educators further emphasize these perceptions to learners.
- 5. The skills demonstrated by learners to independently operate electronic gadgets and use the same gadgets for social networking purposes in the social contexts are a starting point. These same skills can be extended to scholarly needs and to transactions relevant to studies. It is recommended that educators and related stakeholders further exploit learners' proficient use of electronic gadgets and social networking services for relevant transactions inclined to scholarly needs.
- 5. Exploitation of learners' digital literacy, awareness of the values rendered through using social networking services, as well as exploitation of learners' technological proficiency, appreciation of electronic gadgets, and the values attached to engagement with social networking services for school related activities are milestones educators,

learners, and other stakeholders can point to as successes. It is recommended that these views form part of the culture envisioned.

The value of the work presented here is emphasized by the contributions it makes to the body of knowledge as well as to educators, learners, parents, schools, and other stakeholders. The researcher explicitly present the contributions thereof in the next section.

# 6.4 Contributions

The work noted valuable contributions from an academic point of view, as well as contributions from a practical point of view. Remedial recommendations towards bona fide uses of social networking tools and services for scholarly, social, and life skills development purposes have been the thrust contribution of this work. The challenge of recommending ways in which we can turn the tables around and gainfully make use of social networking tools in teaching and learning is a contribution on its own. In addition, the inspiration and hope we render to other educators, learners, and stakeholders cannot be under-estimated. The researcher emphasises the contributions arising from an academic point of view as follows:

- (a) By successfully identifying the characterizing features of digital natives learners, which justified technological awareness, independence, and proficiency in web 2.0 technologies, unearthed driving factors with which to motivate learners to exploit social networking services for scholarly and other life enriching purposes. This creates knowledge and awareness to researchers in similar areas.
- (b) This work presented innovative strategies in which cross-purpose social networking activities take place. These strategies further inspire the development of smart classrooms with social and practical implications.

- (c) Additional literature which clarifies how social networking tools can be turned into useful teaching and learning aids was provided.
- (d) The work also provides a baseline strategy upon which further researches continue opening up new avenues with educational and social implications.

On the practical side, the following contributions are made:

- (a) The observations and recommendation presented have direct relevancy to educators, learners, parents, schools, and all other stakeholders. Considerations and, hopefully adoption, of the recommendations made would certainly foster the development of paperless classrooms, green education, and modernization of teaching and learning.
- (b) Although this work does not generalize the findings here reported, it provides a solid working platform on which generalized paradigms may arise.
- (c) The government of Eswatini spends billions of Emalangeni every year in preparing teaching and learning material and resources (e.g. textbooks). This work recommends reduced use of paper based education and purports a shift towards better resource management. This view alone is a practical and implicit reallocation of government resources towards other poverty alleviation programmes.

Although myriad observations, recommendations, and contributions arise from this work, a few issues remain pending. The next sections presents issues to consider in further related researches.

### 6.5 Direction for future studies

Two key directions for future studies are apparent as follows:

- 1. On top of the list of concerns is a noted trend of social networking services giving birth to an undesirable hybrid S.M.S language, which profoundly degrades the development of appropriate academic writing skills in learners. Future works will investigate mechanisms in which learner-to-learner communication is tracked and monitored. The hope is to enculturate writing using proper English grammar and spellings.
- 2. In addition, most parents believe that social networking activities disturb studies, communicate vulgar and abusive messages, and connects youth to wrong social links, foster premature independence, and increase awareness to adult worlds. Future works will evaluate the balance between using social networking services for educational purposes and using the same services for other matters here listed. Such studies will calm down parents.
- 3. A study on how social networking services can be integrated to enhance learning in the teaching/learning/assessment framework can be the scope for the future.

### 6.6 Conclusion of the Chapter

The researcher particularly presented the main observations, recommendations and reflections, as well as the key contributions of this work. Precisely the work accepts the hypothesis we made in the beginning that integrated social networking services foster engagement, motivation, awareness, collaborative interactions, morale, independence, and creativity. Lastly is the presentation of directions for further studies.

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# APPENDIX A QUESTIONNAIRE FOR LEARNERS

This survey investigates learners' means of sharing school work, forms of information shared, media of communication, the effectiveness of the different forms and media of communication used, extent to which collaboration and creativity are supported amongst learners, learners' digital literacy, awareness, Technological proficiency, connectedness, engagement with social networking services, independence, appreciation of cell phone gadgets, and Learners' levels of confidence in using cell phone gadgets and social networking services.

#### Kindly respond to ALL questions

1.	Select your gender	Male	() Female	e ()
2.	What is your age range?	13-15 ( )	16-18()	19-21 ()
3.	In which class are you?	Form 1 ()	Form 2 ( )	Form 3 ( )
4.	Do you own a cell phone?		Yes ()	No ( )
5.	If you own a cell phone, does it have	e internet?	Yes ()	No ( )
6.	Do you have access to internet using	g a computer?	Yes ()	No ()
7.	How often do you go online? Eve	ery day ()	Sometimes ()	Never ()
8.	You are registered on: WhatsApp (	) Facebook ()	Messenger (	) none ( )
9.	Which of these services do you use	most to interact	t with your frien	lds?
	WhatsApp() Facebook() Messer	nger () sms ()	) telephone call	() others()
10.	Do you use the same service you sel	ected above for	r scholarly purp	oses?
	Yes ( ) No ( )			
11.	What form of information do you sh	are with friend	s using your pre	eferred service?
	Text() Images() videos()	All of the t	hree () none	of the three ()
12.	Do you share school work online?		Yes() No	<b>(</b> )
13.	Is your method of information sharing	ng effective, tir	neous, and relia	ble?
	Yes () No ()			

14. Can you collaboratively complete assignments with friends online?

Yes () No ()

- 15. Do you consider online collaboration a better way to do assignments?
   Yes () No ()
- 16. Does sharing information online improve your learning? Yes () No ()
- 17. Does sharing information online improve your critical thinking?
   Yes ( ) No ( )
- 18. Do you creatively share information with your colleagues online?Yes ( ) No ( )
- 19. Do you think sharing information online improves your creativity?
   Yes () No ()
- 20. How would you rate your digital literacy out of 5?

0() 1() 2() 3() 4() 5()

21. Rate your awareness of the values of social networking tools to information sharing?

0() 1() 2() 3() 4() 5()

22. Rate your awareness of the values of social networking tools to scholarly activities?

0() 1() 2() 3() 4() 5()

- 23. Are you a proficient user of cell phones for social networking purposes?Yes ( ) No( )
- 24. Are you a proficient user of cell phones for scholarly purposes? Yes () No ()
- 25. Rate your level of confidence in using cell phones for social networking purposes? 0() 1() 2() 3() 4() 5()
- 26. Rate your levels of confidence in using cell phones for scholarly activities? 0() 1() 2() 3() 4() 5()
- 27. If you do, what type of information do you commonly share on social networks? Highly private () Personal () Business () Scholarly () Others ()
- 28. To what extent can you independently use cell phones for social networking? 0() 1() 2() 3() 4() 5()

29. To what extent do you independently use cell phones for scholarly services?

0() 1() 2() 3() 4() 5()

30. Does social networking services disturb your scholarly activities?

Yes ( ) No ( )

Tick your rating in each question. 0 means strongly disagree, 4 indicates strongly agree.

QUESTIONNAIRE		0	1	2	3	4
31.	I communicate freely and flexibly on social networking services.					
32.	I can write lengthy messages using social networking services.					
33.	I can send pictures, music, and videos on social networking services.					
34.	I have a group of friends I chat with on social networks.					
35.	I express myself to friends in class than on social networks					
36.	My friends and I share school work via social networking services					
37.	I hardly go for a day without chatting to friends on social networks.					
38.	I will likely contribute ideas on the Business Studies social group					
39.	We'll learn better on a business Studies social group than in class.					
40.	Online discussions of school work with my teachers will be helpful					
41.	I can express myself to my teacher online than in class					
42.	Online forums will help my timid friends to participate					
43.	Social networking services will waste our time on other tasks					
44.	Social networking and school work can be balanced					
45.	Costs for using social networks are reasonably low and affordable					

46. 	What motivates your interest in using social networking services? Give two factors.
47.	What two factors discourage you from using social networking services?
48.	Identify two negative effects of social networking tools to your studies?
49.	Identify two positive effects of social networking tools to your studies?
50.	Is there anything you would like to share regarding the impact of social networking tools?

Thank you! Your participation in this survey will be much appreciated.

# APPENDIX B INTERVIEW SCHEDULES

A follow up interview will be administered after analysis of the questionnaires. Questions will be asked to randomly selected individual learners in order to clarify and verify different views arising from open ended questions of the questionnaire. Some of the questions likely to arise in this study include, but are not limited to, the following:

- **Survey question 46.** What motivates your interest in using social networking services? Give two factors. Two possible interview questions may be asked.
- (a) Learners generally identified ..... as the common motivating factor for using social networking services. In your opinion, how can this factor be exploited for scholarly benefits?

------

- (b) Can you show me an example of how to exploit such a service on your cellphone?
- (c) What would you consider detouring in exploiting this factor for scholarly activities?
- (d) Can you show me in what way it detours scholarly activities?

.....

**Survey question 47.** Which two factors discourage you from using social networking services?

(a) ..... is commonly identified as the most discouraging factor for using social networking services. Why do you find this factor discouraging?

\_\_\_\_\_

(b) Illustrate to me how that discourages learners?

.....

(c) What can be done to change learners' views in this regard in order to change learners' perceptions?

-----

- **Survey question 48** Identify two negative effects of social networking tools to your studies.
- (a) Why do you consider ..... as a negative effect of social networking tools?

.....

(b) Can you give me practical examples or scenarios where its negativity is evident?

\_\_\_\_\_

(c) In your opinion, how can these negative effects be prevented?

·····

- Survey question 49. Identify two positive effects of social networking tools to your studies?
- (a) Which key feature of social networking tools would you recommend to business studies learners?

.....

(b) In what way will business studies learners benefit by using your recommended features? Please demonstrate to me.

**Survey question 50**. Is there anything you can share regarding the impact of social networking tools? Is there anything else you would like to share with us regarding the use of social networking services as innovative teaching and learning tools?

.....

# APPENDIX C LETTER TO THE PRINCIPAL



University of KwaZulu-Natal Edgewood campus Private Bag X03 Ashwood 3605 May 2015

The Principal Masundvwini High School Manzini Swaziland

#### Ref: REQUEST TO CONDUCT A TEACHER PRACTITIONER ENQUIRY RESEARCH BY COLLECTING DATA FROM LEARNERS ENROLLED IN THE BUSINESS STUDIES CLASSES (FORMS 1, 2 AND 3) AT MASUNDVWINI HIGH SCHOOL.

Dear sir/madam

I am currently a Master of Education student in the School of Education, University of KwaZulu-Natal. I will be engaged in an independent research study in which I seek to self-investigate my practices through a **teacher practitioner enquiry research**. Practitioner enquiry researches may be described as commitments to the study of one's own professional practices with a view to improving the same practices for personal growth, innovative intervention, and for the benefit of others (Burton & Bartlett, 2005). In this context, my research will identify an area of professional concern in my classroom practices and interaction with my learners, and implement an appropriate intervention. Precisely, the research explores the benefits of shifting from exercise book notes to social networking technologies as a strategy for enhancing communication, collaboration, creativity, media literacy, technological proficiency, connectedness, confidence, deep engagement, independence, and global awareness among business studies learners in my classes. My work will investigate a variety of methods to select appropriate interventions and provide learners with meaningful feedback.

In this regard I am asking your permission to conduct research in the three business studies classes (form 1, form 2 and form 3) at Masundviwini high school. Please note that this is not an evaluation of learners. Rather, it is a study of my professional practice. I am only interested in the work I do, the way I do the

work, research data related to my reflective journals, lesson plans, the assignments I give to my learners, and learner work analysis. Learners will be asked to respond to a questionnaire comprising of at most 50 questions as well as respond to semi-structured interview questions relating to their perceptions and practice. The questionnaire will take approximately 20 minutes to complete while follow-up interviews will take approximately 15 minutes. There will be no additional cost to the school. I will select a small number of learners to interview. These interviews will be conducted after school hours.

The identities of all the learners who will participate in this study will be protected in accordance with the code of ethics as stipulated by the University of KwaZulu-Natal. I undertake to uphold the autonomy of all participants and such participants will be free to withdraw from the research at any time without negative or undesirable consequences to them. In addition, the parents of the participants will be asked to complete a consent form. The names of the learners and the name of the school will not appear in my technical report, or in any papers or presentations that I make after the study without permission to do so from the school. Rather, pseudo names will be used throughout the report.

You may contact my supervisor, should you have any queries or questions you would like answered regarding the contents of this letter. My supervisor is Dr. Colin Chibaya who is located at the School of Education, Edgewood campus of the University of KwaZulu-Natal. His phone number is : +27 31 260 3136, and his email address is: <u>chibaya@ukzn.ac.za</u>. You may also contact the Research Office of the University of KwaZulu-Natal on telephone number : +27 31 260 4557. My email address is <u>nkambulet@yahoo.com</u> and my contact number is +268 2518 4006.

Yours faithfully

Thank you for your contribution to this research. Should you give permission for me to conduct this research in your school, please complete the following and put the school stamp in the space provided:

I. Mamin David hereby give permission for Mrs T Makhubu to conduct research in the school.

stamini and

Name of Principal

Date

Signature

School Stamp

# APPENDIX D CONSENT LETTER TO PARENTS



University of KwaZulu-Natal Edgewood campus Private Bag X03 Ashwood 3605 May 2016

#### Ref: REQUEST TO HAVE YOUR CHILD PARTICIPATE IN A SURVEY.

#### Dear parents

I am currently a Master of Education student in the School of Education, University of KwaZulu-Natal. I will be engaged in an independent research study in which I seek to self-investigate my practices through a **teacher practitioner enquiry research**. Practitioner enquiry researches may be described as commitments to the study of one's own professional practices with a view to improving the same practices for personal growth, innovative intervention, and for the benefit of others (Burton & Bartlett, 2005). In this context, my research will identify an area of professional concern in my classroom practices and interaction with my learners, and implement an appropriate intervention. Precisely, the research explores the benefits of shifting from exercise book notes to social networking technologies as a strategy for enhancing communication, collaboration, creativity, media literacy, technological proficiency, connectedness, confidence, deep engagement, independence, and global awareness among business studies learners in my classes. My work will investigate a variety of methods to select appropriate interventions and provide learners with meaningful feedback.

To gather the information, I am interested in asking your child ...... to participate and respond to questions in the questionnaire and during an interview session. I may also request to observe your child's work in his/her workbook. I am seeking consent for your child to participate in the research. Please note that:

- Your child's confidentiality is guaranteed as his/her inputs will not be attributed to him/her individually, but reported only as a population member opinion.
- The questionnaire may take about 20 minutes to complete while interviews take about 15 minutes.

- Any information given by your child cannot be used against him/her, and the collected data will be used for purposes of this research only.
- Data will be stored in a secure storage at the supervisor's office and destroyed after 5 years.
- Your child has a choice to participate, not participate, or stop participating in the research at any chosen time. He / she will not be penalized for taking such an action.
- The research aims at establishing the teachers' practices and improvements thereof.
- Your child's involvement in the study is purely for academic purposes only, and there are no financial benefits involved.
- If you are willing and allowing your child to participate, please indicate (by ticking as applicable) whether or not you are willing to allow the interview to be recorded by the following equipment:

	Willing	Not willing
Audio equipment		
Photographic equipment		
Video equipment		
Activity narration through taking notes		

You may contact my supervisor, should you have any queries or questions you would like answered regarding the contents of this letter. My supervisor is Dr. Colin Chibaya who is located at the School of Education, Edgewood campus of the University of KwaZulu-Natal. His phone number is : +27 31 260 3136, and his email address is: <u>chibaya@ukzn.ac.za</u>. You may also contact the Research Office of the University of KwaZulu-Natal on telephone number : +27 31 260 4557. My email address is <u>nkambulet@yahoo.com</u> and my contact number is +268 2518 4006.

Yours faithfully

Thank you for your contribution to this research. Should you give permission for your child to participate, please complete the following:

I.....the parent/guardian of ....., hereby give permission for my child to participate in the research to be conducted by Mrs T. Dlamini of Masundvwini high school and Dr C. Chibaya of the University of KwaZulu-Natal.

Name of parent

Signature of parent

Date

### **Appendix E**

#### **Ethical Clearance**



21 August 2017

Mrs Thembi Nonhlanhla Dlamini 214584561 School of Education Edgewood Campus

Dear Mrs Dlamini

Protocol reference number: HSS/0452/017M Project title: A practitioner's enquiry of the benefits of Social Networking Services in the Teaching and Learning of Business Studies: The case of learners at Masundwini High School in Swaziland.

Full Approval - Expedited Application In response to your application received 4 May 2017, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted FULL APPROVAL.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

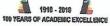
Baidoo

Dr Shamila Naidoo (Deputy Chair) Humanities & Social Sciences Research Ethics Committee

/pm

cc Supervisor: Dr C Chibaya cc. Aacademic Leader Research: Dr SB Khoza cc. School Administrator: Ms Tyzer Khumalo

Humanities & Social Sciences Research Ethics Committee Dr Shenuka Singh (Chair) Westville Campus, Govan Mbeki Building Postal Address: Private Bag X54001, Durban 4000 Telephone: +27 (0) 31 260 3587/8350/4557 Facsimile: +27 (0) 31 260 4609 Email: <a href="mailto:kimbap@ukzn.ac.za/snymanm@ukzn Website: www.ukzn.ac.za



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## Appendix F

## Turnitin report

ORIGINALITY REPORT				
3% SIMILARITY INDEX	0% INTERNET SOURCES	<b>1</b> % PUBLICATIONS	2% STUDENT PA	PERS
PRIMARY SOURCES				
1 Submitte Student Paper	ed to Mancosa			2
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