HOW IS FACEBOOK BEING USED FOR EDUCATIONAL USE IN TWO MPUMALANGA SCHOOLS: A CASE STUDY

by

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A research report submitted to the School of Education, Faculty of Humanities at the University of the Witwatersrand, Johannesburg, in fulfillment of the requirements for the degree of Master of Education

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February, 2014
DECLARATION

I, Tshiredo Tshilidzi Baldwin, declare that this dissertation entitled ‘How is Facebook being used for educational use in the Mpumalanga school: a case study’ is my own unaided work; and that the information quoted from other sources has been duly acknowledged. It is being submitted for the degree of Master of Education at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at any other university.

Tshiredo Tshilidzi Baldwin 14th day of February 2014

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EXECUTIVE SUMMARY

Facebook has witnessed enormous transformation since its onset. It developed rapidly and started being used widely in and outside the school environment. According to Wang et al. (2011), “Facebook is a popular social networking site, like many other new technologies, has potential for teaching and learning because of its unique built-in function that offer pedagogical, social and technological affordances. Several studies asserting the field of social networking sites (SNS) in education have acknowledged that the use of SNSs within the educational context of the secondary school level is an under explored area.

Triangulation of (qualitative and quantitative) methodologies was applied to investigate how Facebook is being used for teaching and learning in two secondary schools in Mpumalanga Province, South Africa. The two schools have created their Facebook groups for learning, and both schools encourage their learners to visit various Facebook groups for learning purposes.

Teachers use Facebook groups for: administration, classroom announcements, to respond to learner questions, and when they want to motivate learners to collaborate on issues of mutual concern. Often in the classroom, teachers share through the significant affordances of Facebook and participation in this group by the learners is voluntary. Questionnaire, interviews and Facebook page data were categorized into themes to interpret the results.

The findings reveal that learners in Grade 11 and 12 used Facebook for socializing, knowledge exchange and collaboration. Through Facebook, teachers are able to get to know learners challenges while the more reserved learners find comfort in this mode of learning.
TABLE OF CONTENTS

DESCRIPTION

<table>
<thead>
<tr>
<th>CHAPTER 1</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Declaration</td>
<td>ii</td>
</tr>
<tr>
<td>Executive summary</td>
<td>iii</td>
</tr>
<tr>
<td>Table of content</td>
<td>iv</td>
</tr>
<tr>
<td><strong>GENERAL INTRODUCTION</strong></td>
<td></td>
</tr>
<tr>
<td>1.1. Introduction</td>
<td>1</td>
</tr>
<tr>
<td>1.2. Statement of the problem</td>
<td>1</td>
</tr>
<tr>
<td>1.3. Rationale of this study</td>
<td>2</td>
</tr>
<tr>
<td>1.4. Aim of the study and research questions</td>
<td>4</td>
</tr>
<tr>
<td>1.4.1. Aim of the study</td>
<td>4</td>
</tr>
<tr>
<td>1.4.2. Research questions</td>
<td>5</td>
</tr>
<tr>
<td>1.5. Structure of the study</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHAPTER 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LITERATURE REVIEW AND THEORETICAL FRAMEWORK</strong></td>
<td>7</td>
</tr>
<tr>
<td>2. Literature review and theoretical framework</td>
<td>7</td>
</tr>
<tr>
<td>2.1. Literature review</td>
<td>7</td>
</tr>
<tr>
<td>2.2. Definitions</td>
<td>7</td>
</tr>
<tr>
<td>2.3. Facebook and its popularity in teaching and learning</td>
<td>7</td>
</tr>
<tr>
<td>2.4. General affordances of Facebook for education</td>
<td>8</td>
</tr>
<tr>
<td>2.5. Pedagogical affordance of Facebook features</td>
<td>9</td>
</tr>
<tr>
<td>2.6. Facebook features used for educational purpose</td>
<td>10</td>
</tr>
<tr>
<td>2.7. Reasons for using Facebook and its features in teaching and learning</td>
<td>11</td>
</tr>
<tr>
<td>2.8. How Facebook benefits teaching and how it is used in teaching</td>
<td>13</td>
</tr>
<tr>
<td>2.9. How the Facebook features are used by learners for learning</td>
<td>18</td>
</tr>
<tr>
<td>2.10. Educational outcomes from the use of Facebook in teaching and learning</td>
<td>18</td>
</tr>
<tr>
<td>2.11. Conclusions</td>
<td>19</td>
</tr>
<tr>
<td>2.12. Theoretical framework</td>
<td>20</td>
</tr>
<tr>
<td>2.12.1. Definitions and short description of concepts</td>
<td>21</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHAPTER 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>METHODOLOGY: PROCEDURES OF COLLECTING AND ANALYZING THE DATA</strong></td>
<td>25</td>
</tr>
<tr>
<td>3.1. Research design</td>
<td>25</td>
</tr>
</tbody>
</table>
3.2. Research setting
3.3. Research participants
3.4. Sampling method: Purposeful sampling
3.5. Data collection methods
  3.5.1. Qualitative phase
    3.5.1.1. Interviews
    3.5.1.2. Facebook document analysis
  3.5.2. Quantitative phase
3.6. Data analysis methods
  3.6.1. Analysis and interpretation of Facebook pages: Document Analysis
    3.6.1.1. Content analysis
    3.6.1.2. Document analysis
3.7. Ethical issues
3.8. Validating and reliability
  3.8.1. Validity
  3.8.2. Reliability

CHAPTER 4

PRESENTATION OF THE DATA
4. 1. Introduction
4. 2. Presentation of data: Document analysis
  4.2.1. School A
  4.2.2. School B
4. 3. Data from Questionnaires
  4.3.1. School A
  4.3.2. School B
  4.3.3. Synoptic analysis
4. 4. Discussion
  4.4.1. General affordance of Facebook for education
  4.4.2. What are the pedagogical affordances of these features?
  4.4.3. How are these features being used for education purposes?
  4.4.4. What are the reasons for using Facebook and its features in teaching and learning?

CHAPTER 5

GENERAL CONCLUSION AND RECOMMENDATIONS
REFERENCES
APPENDICES
LIST OF TABLES

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 3.1: Target population</td>
<td>28</td>
</tr>
<tr>
<td>Table 3.2: Codes developed from teachers’ interviews</td>
<td>41</td>
</tr>
<tr>
<td>Table 3.3: Codes developed from interviews with the learners</td>
<td>42</td>
</tr>
<tr>
<td>Table 3.4: Codes developed from Facebook pages</td>
<td>47</td>
</tr>
<tr>
<td>Table 4.1: Categorization of activities according to their personal value</td>
<td>67</td>
</tr>
<tr>
<td>Table 4.2: Purchase Value of Airtime Bundles</td>
<td>66</td>
</tr>
<tr>
<td>Table 4.3: The percentage of time each learner used for Facebook activities</td>
<td>67</td>
</tr>
<tr>
<td>Table 4.4: Categorisation of activities according to their personal value</td>
<td>75</td>
</tr>
<tr>
<td>Table 4.5: Purchase Value of Airtime Bundles</td>
<td>76</td>
</tr>
<tr>
<td>Table 4.6: The percentage of time each learner used for Facebook activities</td>
<td>78</td>
</tr>
<tr>
<td>Table 4.7: A synoptic analysis of learner use of Facebook</td>
<td>78</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 4.1: General process of Inductive Data Analysis</td>
<td>52</td>
</tr>
<tr>
<td>Figure 4.2: Facebook for teaching and learning</td>
<td>53</td>
</tr>
<tr>
<td>Figure 4.3: Facebook for teaching and learning</td>
<td>55</td>
</tr>
<tr>
<td>Figure 4.4: Facebook being used as an administrative tool</td>
<td>56</td>
</tr>
<tr>
<td>Figure 4.5: Teacher promoting collaboration among learners</td>
<td>57</td>
</tr>
<tr>
<td>Figure 4.6: Facebook for socializing and community building</td>
<td>58</td>
</tr>
<tr>
<td>Figure 4.7: Motivation of learners by the teacher</td>
<td>59</td>
</tr>
<tr>
<td>Figure 4.8: Facebook for sharing documents</td>
<td>60</td>
</tr>
<tr>
<td>Figure 4.9: Classroom announcement by teacher</td>
<td>60</td>
</tr>
<tr>
<td>Figure 4.10: Facebook being used as administrative tool</td>
<td>60</td>
</tr>
</tbody>
</table>
## LIST OF GRAPHS

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graph 4.1: Use of Facebook</td>
<td>61</td>
</tr>
<tr>
<td>Graph 4.2: Learners’ activities on Facebook</td>
<td>62</td>
</tr>
<tr>
<td>Graph 4.3: Time on Facebook</td>
<td>62</td>
</tr>
<tr>
<td>Graph 4.4: Learner-teacher consultations on Facebook</td>
<td>63</td>
</tr>
<tr>
<td>Graph 4.5: The reasons learners use Facebook</td>
<td>64</td>
</tr>
<tr>
<td>Graph 4.6: How Facebook can be used to improve school work</td>
<td>64</td>
</tr>
<tr>
<td>Graph 4.7: Categorization of activities according to their personal value</td>
<td>65</td>
</tr>
<tr>
<td>Graph 4.8: Purchase Value of Airtime Bundles</td>
<td>66</td>
</tr>
<tr>
<td>Graph 4.9: The percentage of time each learner used for Facebook activities</td>
<td>67</td>
</tr>
<tr>
<td>Graph 4.10: The attitudes of learners towards Facebook use for school purposes</td>
<td>68</td>
</tr>
<tr>
<td>Graph 4.11: Use of Facebook</td>
<td>70</td>
</tr>
<tr>
<td>Graph 4.12: Learners’ activities on Facebook</td>
<td>70</td>
</tr>
<tr>
<td>Graph 4.13: Time on Facebook</td>
<td>71</td>
</tr>
<tr>
<td>Graph 4.14: Learner-teacher consultations on Facebook</td>
<td>72</td>
</tr>
<tr>
<td>Graph 4.15: The reasons learners use Facebook</td>
<td>72</td>
</tr>
<tr>
<td>Graph 4.16: How Facebook can be used to improve school work</td>
<td>73</td>
</tr>
<tr>
<td>Graph 4.17: Categorisation of activities according to their personal value</td>
<td>73</td>
</tr>
<tr>
<td>Graph 4.18: Purchase Value of Airtime Bundles</td>
<td>75</td>
</tr>
<tr>
<td>Graph 4.19: The percentage of time each learner used for Facebook activities</td>
<td>76</td>
</tr>
<tr>
<td>Graph 4.20: The attitudes of learners towards Facebook use for school purposes</td>
<td>77</td>
</tr>
</tbody>
</table>
CHAPTER 1
GENERAL INTRODUCTION

1.1 INTRODUCTION

The proposed line of research in this project evaluates the manner in which educators and learners use Facebook, both in everyday life and as an educational medium. Learners are increasingly ensnared by Facebook, as confirmed by Bouwers-Campbell (2008). According to Facebook’s user numbers, American learners are already participating in Facebook despite unprotected access to personal information, which discourages some educationist from recommending Facebook for teaching and learning purposes. This assertion is statistically illustrated by Ellison, Steinfield, and Lampe (2007). As stated by a doctoral student of the University of North Carolina and Facebook researcher, “You can’t fight numbers like this. More importantly, you can’t ignore them” (Stutzman, 2006, as cited in Bouwers-Campbell, 2008). This statement is based on the fact that Facebook, as a social medium, has the highest number of users in the world. According to Stutzman (2006), schools should endeavour to teach learners safety and good conduct in an online environment.

This research is concerned with the potential of Facebook as resource for teaching and learning. It examines how teachers and learners of two target schools (School A and School B) in Mpumalanga Province, South Africa, use Facebook as an alternative way for enhancing information sharing and collaboration.

1.2 STATEMENT OF THE PROBLEM

School A is one of those schools currently renowned for using Facebook to enhance teaching and learning. The public/private partnership in Mpumalanga public schools in general, and in Nkangala District (e-Malahleni area) in particular, has brought about an influx of smart phones through donations in the schools, and as such, social media use is slowly emerging as a common practice among the populations of the two schools involved in this study. This phenomenon – which was made possible due to the generosity of companies within the area - has evoked within
the area the attention of many stakeholders in the field of educational technology and has urged
some practitioners to consider partaking in such practice. Telkom is one of the companies that
donated such gadgets as tablets to the schools, to promote integration of information
communication technology (ICT) in public schools. Teachers and learners are exposed to these
new technological trends and some of them now partake in typical technological summits at
national level. Learners and some educators have started to engage in the practice without formal
and systematic guidance. Teachers are using their limited knowledge of the gadget to enhance
the learners’ will and improvement of learning. Selwyn (2009), as cited in Pollara and Zhu
(2011), analysed the Facebook wall activity of 909 undergraduate students at a UK university, to
understand the reasons why students use Facebook. Five themes emerged from his analysis of
over 200 posts about education: 1) Recounting and reflecting; 2) Exchange of practical
information; 3) Exchange of academic information; 4) Displays of supplication; and 5) Exchange
of humour and nonsense. In her study, Reid (2011) found that Facebook as an alternative
pedagogical space provides a means of communication that enables collaborative learning over
the internet.

The ubiquitousness of social media sites (SMS) and the prevailing practice in learning spaces
and leisure spaces by learners warrants the need to engage in this study.

1.3 RATIONALE OF THIS STUDY

A number of reasons prompted the initiation of this research. The main reasons are based on the
literature findings and culminate with the researcher’s observations based on personal experience
as a Curriculum Implementer for Computers in Education at the Mpumalanga Department of
Education.

One of the reasons which persuaded the conducting of this research was the research by Kreutzer
(2009) at the University of Cape Town. The findings of that study reveal interesting facts about
the nature of cell phones and Facebook use by learners at schools, which are relevant to this
study. For instance, the study shows that the majority (68%) of respondents have used a mobile
phone to access the internet, while almost a half (49%) of the respondents have used the mobile
Internet to access the world wide web. The conclusion reached was that interpersonal
communication remained the most common use of phones. These findings are significant to the present study because the conclusions on cell phone data are important in understanding internet access by learners in this case study. It is not merely the use of smart phones which is significant, what is important is the reason for them being used. Learners use these smart phones to socialise (to reach out to and meet people). Research has shown activities such as sharing photos, music, videos and chatting for personal issues as common socialising activities among learners (Facebook users). These aspects of socialising through Facebook are relevant to this research because using such affordances in schooling enables teaching and learning (Reid, 2011).

This study, which is also informed by the findings by Rambe and Ng’ambi (2011) who indicate that more than sixty per cent of all South Africans above the age of sixteen already own a phone, is important because it informs this study on the current status of the use of Facebook. In addition, most studies on Facebook such as Rambe (2012) and Reid (2011) were conducted on populations at the university level. The present research intends to extend the same type of study to the secondary school level in the South African context. Currently the research around Facebook use in secondary schools in South Africa is scanty. The insufficient studies in this area necessitate research because, according to Rambe and Ng’ambi (2011), as universities are increasingly using social network sites (Facebook in particular) there is a need of using Facebook to help educators who are under pressure to evolve their pedagogical approach. Furthermore, this research is a contribution which responds to the suggestion by researchers such as Bosch (2009), Selwyn (2009), and Ng’ambi and Rambe (2008) that there is a need of research on schools, to mirror how they evolve with development of technologies by using Facebook as an educational tool.

Another reason the researcher chose this study is based on his observations as a senior trainer for Intel Teach Project-Based Learning. After realising that social media network sites (SNS), more specifically Facebook, are making educators develop much interest in using SNS, the researcher found himself wondering why South African society at large is not investing much effort in encouraging the wider use of such SNS platforms. This observation is confirmed by Bosch (2009), who affirms that, increasingly, educators are recognising the possibilities of tapping into the already popular SNS to reach students with learning material. There is a need, therefore, to validate these observations and this is a gap which this research is designed to fill. This research
is assumed to be significant because it holds the potential of capacititating the school (the educators) to harness untapped capabilities in which learners are already engaged.

The reason for choosing School A in Phola, near Delmas, and School B at Kwa-Guqa, in e-Malahljeni (both in Mpumalanga Province, South Africa), is because teachers and learners in those schools are already engaged in the practice of using Facebook to enhance their teaching and learning situation. Although Facebook and SMS are not officially endorsed in teaching and learning in South African public schools, there would seem to be an elusiveness about this situation since Grades 11 and 12 mathematics and science content are exhibited on Facebook (Rambe and Ng’ambi, 2011); and certain teachers are often found engaging their learners in dedicated Facebook groups (e.g. Geleza Facebook group) for the purpose of learning. While some schools actively encourage their teachers in such engagement, schools are however complacent about the thought that SMS could be entertained for schooling purposes. This study therefore considers it indispensable to investigate these Facebook practices in a formal study.

Finally, this study may open the debate around Facebook use in high schools. It is the researcher’s hope that the findings revealed here will spark more positive discourse on this controversial subject.

1.4 AIM OF THE STUDY AND RESEARCH QUESTIONS

1.4.1 Aim of the study

The aim with this research, which will take the form of a comparative case study, is to examine the use of Facebook for teaching and learning purposes in two public schools in Mpumalanga Province, South Africa, which will be done by the administering of a questionnaire, conducting interviews, analysing the learners’ Facebook chats, and reviewing relevant literature. In addition, the aim is also to explore the affordances of Facebook in teaching practice, as it investigates Facebook activities that are used in promoting teaching and learning. Thirdly, another objective is to contribute towards the design of a model to be used by the Department of Education for promoting social network services (SNS) in public schools.
1.4.2 RESEARCH QUESTIONS

This study was guided by the following research questions:

1. What teaching activities are teachers using through Facebook?
2. How do teachers use Facebook for teaching and learning purposes in Grade 11 classes?
3. What Facebook activities are learners engaged in at home for learning purposes?
4. What are learner’s perceptions of the use of Facebook for teaching and learning purposes?

1.5 STRUCTURE OF THE STUDY

This study is composed of five chapters of which three (Chapters 1, 2, and 3) provide the reader with understanding of the theoretical foundation of the study. Chapter 4 is devoted to presenting the data gathered and analysed, and the interpretation of the findings. Chapter 5 presents a conclusion to the study and makes relevant recommendations. Below is a summary of this study as it is presented chapter by chapter.

**Chapter 1** provides a general introduction to this study. It narrows down the focus on the specific problem of the little use of Facebook for educational purposes in secondary schools, formulates the rationale and objectives of the study, and poses the research questions.

**Chapter 2** provides a review of the literature related to the topic. The theoretical framework of the study is presented by putting emphasis on the social construction of knowledge. Literature on the popularity of using Facebook worldwide is reviewed, with particular attention to that in South Africa. The chapter emphasises the implications of Facebook in teaching and learning, and shows how Facebook is being harnessed in teaching and learning.

**Chapter 3** is concerned with the methodology used to investigate the use of Facebook as an instructional tool in two selected secondary schools in Mpumalanga Province, South Africa. As elaborated in this chapter, a triangulation of methods is deemed adequate for this study. Also discussed is how qualitative and quantitative elements of enquiry are put together “for the broad purpose of breadth and depth of understanding and corroboration” (Johnson et al., 2007). The methods applied to collect, analyse, and interpret the data are also elaborated.
Chapter 4 presents the result of the data analysis. The data is discussed and the findings interpreted.

Chapter 5 provides a general conclusion on the use of Facebook for educational purposes in two schools of Mpumalanga Province in South Africa. It provides conclusions gleaned from the first four chapters, and presents recommendations to the stakeholders in order to improve education through the use of SNS.
CHAPTER 2

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 LITERATURE REVIEW

Initially presented in Chapter 2 is a definition of Facebook, which is followed by facts that reflect Facebook’s popularity in the educational field. The discussion then presents the reader an idea of the general affordances of Facebook in education, followed by the pedagogical affordances thereof. This includes an explanation of how these features are used to support an educational context and the reason for using Facebook and its features in teaching and learning. The use and benefits of Facebook in teaching is then considered, followed by that of the usage of Facebook features by learners for learning. Finally, the positive educational outcomes from using Facebook in teaching and learning are considered.

2.2 Definitions

Facebook has been defined as “a literacy practice within the domain of social networking, which is governed by certain values, such as establishing and negotiating identity, building relationships, staying connected, brevity, conciseness and immediacy” (Reid, 2011). The researcher chose to adopt this definition for this study in order to focus on the use of Facebook as a social networking tool aimed at relationship building for effective learning.

2.3 Facebook and its popularity in teaching and learning

There is widespread evidence that Facebook is the most popular social network site (SNS) in the cyber world. According to Bromley (2011), “the ever-growing popularity of SNS is a force to be reckoned with.” For Lashinsky (2005) in Mazer, Murphy and Simonds (2007), Facebook is the most widely used SNS in the USA, with approximately eight million students from over 2,000 colleges and 22,000 high schools. Similarly, Bosch (2009) confirms that Facebook is the
prevalent social media site among South African youth. Ryan, Magro, Sharp and Tarleton (2011) indicate that Facebook is extensively used among college students. According to Munoz, Dickinson, and Towner (2009:1), “students are heavily immersed in Web 2.0 (Facebook).” There are noticeable researchers, like de Villiers (2010) and Vosloo et al. (2009) in South Africa on the topic of Facebook who indicate potential advancement of learning at college level due to the use of Facebook and new information technology. Further, empirical research shows Facebook as being the most targeted SNS for teaching and learning. According to Charmigo and Barnett-Ellis (2007), “Facebook is the largest online social network targeted for the academic environment”. Selwyn and Grant (2009) affirm that social media software offers learners access to education experiences which are based around active participation rather than passive reception. In their study Ng'ambi and Rambe (2008) state that Facebook has brought some pressure to bear on educators. Although Selwyn (2009) rejects this notion of pressure, he acknowledges that an approach is required to deal with these emerging technologies. It would emerge that because of its ubiquitousness and by virtue of its features and, as many educationists agree, Facebook has the potential to be used as an educational tool. It is however generally agreed that much has not been researched on the topic, particularly at the secondary school level.

2.4 General affordances of Facebook for education

This section presents reviews of studies conducted around the use of Facebook in schooling to identify such affordances in an educational context. Munoz and Towner (2009) claim that there are several features which make Facebook amenable to educational pursuits. For example Facebook is equipped with bulletin boards, instant messaging, email and the ability to post videos and pictures. According to Munoz and Towner (2009), with Facebook, it is possible for anyone to post information and collaborate within the system. The authors provide an overview of different ways that Facebook can be integrated into a course, create a group page for a class, post information on the Wall or profile and integrate Facebook applications by downloading them. Mazer, Murphy, and Simmonds (2009) assert that Facebook friends can post on pages through the Facebook network. Additionally, Facebook friends can post messages on a user’s wall - a discussion-board like device that allows users to communicate through the network. Manca and Ranierit (2013) conducted a critical review of studies that have investigated
Facebook as a learning environment and the following findings on Facebook’s general features were outlined. Seventeen studies referred to the private group feature and the group is always set as private for privacy and security reasons. The Facebook page feature is one of the general affordances in the study which is used in only four studies to expose students to resources and or deliver course contents.

In another study conducted by Manca and Ranierit (2013) students were found to be using a combination of Facebook applications for informal learning and communication with peers. Students reported using Facebook applications, such as status updates, private messaging, instant messaging and wall posting (Vivian, 2011). Students also reported sharing information with peers via the link application. In the study conducted by Wang et al. (2011), Facebook group affordance is used as a learning platform. In the next section, the pedagogical affordances of these features are discussed.

2.5 Pedagogical affordances of Facebook features

Facebook is equipped with bulletin boards, instant messaging, email, and the ability to post videos and pictures. According to Munoz and Towner (2009), Facebook has opened up development of downloadable applications which can further supplement the educational functions of Facebook. According to them, Facebook provides instructors opportunities and structures by which students can help and support one another by building their courses atop the community already established by the students themselves. Munoz and Towner (2009) assert that Facebook increases both teacher-student and student interaction in the form of web-based communication and also enables instructors to connect with their students about assignments, upcoming events, useful links and samples of work outside of the classroom. Students can use Facebook to contact classmates about questions regarding class assignments or examinations as well as collaborate on assignments and group projects in an online environment. According to Munoz and Towner (2009), educators are turning to Web 2.0 tools, drawing upon their ability to assist in creating, collaborating and sharing content.
In the study by Wang et al. (2011), the Facebook group feature was used as a learning management system for putting up announcements, sharing resources, organizing weekly tutorials and conducting online discussions. The study explores using Facebook as a learning management system (LMS) and student perceptions of using it in their courses. In a study conducted by Reid (2011), communication, building relationships, sharing experiences with academic classmates, closed-groups pages (which are assumed to be more private) are identified. The discussion now considers the way in which these features are being used for educational purposes.

2.6 Facebook features used for educational purposes

The most common uses of Facebook features are keeping awareness of contacts, sharing photos, organizing groups and participating in applications. Manca and Ranierit (2013) analysed studies on Facebook for educational purposes and identified five main educational uses: (1) Supporting discussion and allowing students to support each other through mutual understanding and critical thinking exercises (14 cases); (2) Sharing resources; (3) Delivering content to expand the curriculum; (4) Expose students to external resources; (5) Using Facebook to support self-managed learning. After observing that the majority of her students were not only using Facebook for socialising but also ensnared by it, Reid (2011) conducted a study on Facebook as an alternative pedagogical space, and her findings reveal that Facebook provides a means of communication that enables collaborative learning over the internet. The author continues to show how Facebook establishes mini communities, as it enables tutorial groups and encourages participation. Ryan, Magro, Sharp, and Tarleton (2011) provided a study, which suggests three themes of Facebook as an educational tool, with the third suggestion being that of enabling socialisation and building community. Selwyn (2009) contests that viewpoint by drawing on arguments advanced by Crook (2008) who claims that SNS in collaborative learning produced little learning. In his view, most instances that used collaborative learning revealed the learners’ little interest because they were coerced in such collaborative learning activities. This research, however, is not claiming that Facebook yields maximum learning output. What it is pursuing is to show that Facebook, by virtue of its popularity among learners and affordances it displays, has the advantages of enhancing school learning activities based on the affordances mentioned above. These findings reveal that Facebook stands a chance to enhance teaching and learning by
utilising its affordances to the benefit of education, as outlined in various case studies mentioned in this thesis.

Knapper and Cropley (2000) found that students utilise communication technologies to communicate with peers and undertake informal learning. Vivian (2011, p.1) claims that there is evidence to support that students with a collaborative learning preference use SNSs more frequently for education-related interaction on student Facebook walls for: (1) Recounting and reflecting on the university experience; (2) Exchanging of practical information; (3) Exchange of academic information; and (4) Displaying of supplication. Manca and Ranierit (2013) claim that Facebook features such as the wall can be used for peer assessment and cooperative learning. In Section 2.5 the discussion is focussed on the reasons for using Facebook and its features in teaching and learning.

2.7 Reasons for using Facebook and its features in teaching and learning

According to Selwyn (2007), in Munoz and Towner (2009), Facebook has quickly become the social network site of choice by college students and an integral part of the behind the scenes college experience. Munoz and Towner (2009) state that Facebook has a growing audience in prospective teachers high school and middle school students, and this necessitates its use since most learners are already engaged in it. According to Munoz and Towner (2009), there are a number of unique features that make it amenable to educational pursuits. For example, Facebook is equipped with bulletin boards, instant messaging, email, and the ability to post videos and pictures. Most notably anyone can post information and collaborate within the system. According to Roblyer, McDaniel, Webb, Herman, and Witty (2010), the most prevalent use of Facebook in the university community is creating profiles and groups to communicate events with users.

Southern Illinois University’s college of Business at Carbondale as quoted in Roblyer, McDaniel, Webb, Herman, and Witty (2010) reports using Facebook to communicate and market school events as well activities to students and alumni. Mazer, Murphy, and Simonds (2009) state Facebook is being used by many in school related networks to post personal information, such as pictures, hobbies and messages, and to communicate with friends and relatives. The
authors argue that students and teachers can easily communicate with one another through Facebook depending on their network affiliations. Facebook is a highly interactive virtual social network. According to Wang et al. (2011), one of possible ways of using Facebook for teaching and learning is to use group as a learning management system (LMS). Manca and Ranierit (2013) conducted eleven Facebook review studies focussing on its impact on different aspects of teaching and learning. Some of those aspects are (1) Content delivery; (2) Community building; (3) Informal learning; (4) Academic conversation; and (5) Learning outcomes. Both Bahner et al. (2012) and Pilgrim and Bledsoe (2011) maintain that Facebook has proven to be effective as a means of providing students with extra-curricular content resources, e.g. exposing pre-service teachers to resources and content deliveries by professional organisations. As regards community building, Buzzetto-More (2012) compares Facebook with a blackboard, and it was reported that learners found it better for socialisation as it strengthens interpersonal relationships.

According to Baiyun and Bryer (2012), Facebook is continuously being used by college students as well as instructors for various reasons, and hence, understanding the way individuals behave on such sites is a potential valuable source of information for educators and researchers. Reid (2011) argues that Facebook literacy practices create an alternative pedagogical space that enables critical practices in relation to writing. For Reid (2011), Facebook brings students out-of-school literacy practices into a domain which normally promotes formal, academic literacy practices. In addition, it is a space where students feel safe enough to make their voices heard, a space in which some interesting shifts in power relationships occur. In her views, Reid (2011) found that tutors used Facebook pages for sending messages to the group, responding to students’ needs, sharing interesting readings, and encouraging interaction and participation, for discussing important concepts and debates.

According to Visagie and de Villiers (2010), students are deploying Web 2.0 tools for social and academic purposes, and lecturers need to be aware of the ongoing utilisation thereof in order to be on the same playing field as their students. The authors found that students need to be kept interested and motivated during their studies, which can be done through Web 2.0 tools (Facebook). The third point is that students are using Facebook as an academic tool that helps them be involved in a classroom network with the social network as the foundation. According to Visagie and de Villiers (2010), lecturers have to learn how to use the interface of the network
(Facebook). Fourthly, through Facebook, students and lecturers are more closely connected and enhances lecturer-student relationship. According to Tower and Van Horn (2007), in Visagie and de Villiers (2010), Facebook increases the contact times between peers and thus their interactions online are also increased. Visagie and de Villiers (2010) claim that social networking can support students’ indirect sharing of resources, thoughts, ideas, productions, writings, and notes. This kind of sharing can provide students with insights into the workings of other student groups. Working on Facebook motivates students to engage in academic work before and after classes which means that the availability of cell phones increases interaction among students outside of the classroom.

A recent study by Roblyer, Mcdaniel, Webb, Herman, and Witty (2010) in Harmon (2011), shows that university students are open to using Facebook as a social tool to enrich their classroom experience. In fact, sharing of experiences is one of the aspects of peer-to-peer learning. According to Kabilan et al. (2010), the use of Facebook enhances students’ communication skills and writing skills in English, changes their attitudes towards learning English, and enhances their confidence to write in English. In their study, Ryan, Limayem and Salehi-Sangari (2011) state that Facebook has been identified as a potential educational tool because it is already used extensively among college students. Charnigo and Barnett-Ellis (2007) in Ryan et al. (2011) suggest that exploring new types of internet services such as Facebook enables us to learn new ways to reach and communicate with larger segment of our [academic library] users. Therefore, exploring a SNS tool such as Facebook in the educational context is both relevant and timely. According to Ryan et al. (2011), Facebook can be used as a means to foster a sense of ‘connectedness’ between the instructor and students in order to further increase self-efficacy, to offer a means of building peer support among students and Facebook.

Ooi and Loh (2010) in Wang et al. (2013) created a Facebook group and found that the use of events allowed the teacher to conveniently organize learning activities such as lesson observations. Manca and Ranieri (2013) studied sixteen papers and cited popularity among young people and familiarity with it. They found that Facebook features are easy to apply among learners as they spend more time on Facebook than any other digital environment and this has positive impact on their motivation and engagement.
Further, Facebook matches the expectations of millennial learners (four cases) who require a new means for self-expression and information sharing. According to Wang et al. (2009), Facebook is used by people of similar interests in terms of communicating, sharing photos and discussing ideas.

2.8 How Facebook benefits teaching and how is it used in teaching

Selwyn (2009) claims that social networking may benefit learners by allowing them to enter new networks of collaborative learning. In her view, SNS may provide a forum for extending the traditional classroom and enabling users to join groups that match individual educational interests. According to Roblyer et al. (2010), Facebook is deemed to allow teachers to go to the environment that allows students to feel comfortable with studies. Further, the authors reported that one university official explained the perceived benefit of Facebook, as the group offers the school an easy and no cost way to post school announcement(s), and makes the faculty seem approachable and opens up new avenues of communication. Mazer, Murphy and Simonds (2007) found that students exposed to a high self-disclosing teacher on Facebook reported higher levels of motivation, affective learning, and evaluated the climate of the teacher’s classroom more positively than students who viewed a teacher’s Facebook page featuring limited self-disclosures.

Facebook seems to offer great potentials for teaching and learning, as many students are using it daily. According to Manca and Ranieri (2013), Facebook enables the widening context of learning, mixing information and learning resources and provides an opportunity for distance learning. Selwyn and Grant (2009) affirm that SNS social software offers learners access to education experiences which are based on active participation rather than passive reception.

The fact that Facebook enables its users the potential of creating groups, learning activities and collaboration makes Facebook a viable learning source. According to Wang et al. (2011), Facebook as SNS provides great potentials in teaching and learning because of its unique built-in functions which offer pedagogical, social and technological affordances. For instance, the Facebook group has often been viewed by many researchers as having the potential to be used as a learning management system. In viewing Facebook as a learning management system, Wang et
al. (2011) state that Facebook is used to put up announcements, share resources, organise weekly tutorial sessions and conduct discussions online. It has been found that offering virtual office hours via Facebook had a positive impact on students’ satisfaction with their student-teacher communication outside the classroom (Wang et al., 2011). In this way, Facebook group enables the students to share course resources and exchange comments. Although the focus of this study is not on the degree of the impact that Facebook has on learning, this point is worth citing as it shows the usability of Facebook within the learning environment. In other words, these findings are significant in this study as they provide an understanding of Facebook affordances in schooling.

In his study on employing Facebook as learning tool at the University of Cape Town (UCT), Bosch (2009) reports that most students at the University were found to be using Facebook more than the official learning management system (which is known as “Vula”). The author further highlights this point by citing the scenario at the University of North Carolina, where students are reported to have preferred conducting discussions in Facebook versus the standard course management system, listing pre-existing familiarity and users as the reason for their choice. To attest this postulation at Wits, 2011 online Design Master’s Degree students had Blackboard as their learning platform of choice, yet much of their activities were conducted through Facebook. Similarly, all first year B.Ed. students who do new literacies for teachers as a compulsory core course, a blackboard is used for academic work and Facebook is used for social, informal exchanges about their learning experiences and for getting to know each other.

Research indicates that there are aspects which seem to deter many educationists from acknowledging Facebook as a potential educational tool because of well-spoken concerns that include stalking, identity theft, and limited learning benefits in schools. This was expressed by Bouwers-Campbell (2008) who claims, “Although Facebook may provide opportunities for teachers to communicate with their students and offer students increased autonomy over their learning, its potential for unprotected access to personal information prevents many educators from exploring it.” As expressed above, through this study, the researcher seeks to suggest that Facebook has the potential to enhance teaching and learning.
According to Agarwal and Mital (2009), Joinson (2008), Madge, Meek, Wellens and Hooley (2009), Raacke and Bonds–Raacke (2008), Salaway et al. (2008), Smith, et al. (2010), there are a number of reasons which motivate people to use Facebook. Those relevant to this study are (1) to exchange information, music, pictures, and videos, (2) learn more about individuals, (3) communicate with classmates and friends, and (4) express views, opinions and professional activities. These affordances of Facebook which can be replicated in the teaching and learning environment are important in schooling. According to de Villiers (2010), “Facebook’s group feature is designed to support discussions on defined topics.” As for Mazer, Murphy, and Simonds (2007), engaging learners with Facebook at school level prepares them for university educational environment since some universities are now pioneering the use of SNS tools for communication with their students. According to Bosch (2009) and Mazer et al. (2007), although SNS are common tools used as a means of communication among youth, they are not equally being used by high school learners and teacher in school activities. One of the reasons provided by Crook (2008) in Selwyn (2009) is that the students’ engagement with SNS often results in low level of learning. This is also backed up by Chase (2010) who cautions schools to be aware of the fact that many of young people are exposed to the technological era, which – ultimately - may have implications on teaching and learning.

However, researchers such as Crook (2008) concede that Facebook could act as a means of enhancing learning and teaching. Prensky (2001) goes further to say the use of technology has radically changed students’ learning behaviour. That viewpoint is however highly contested; again, this is not the argument being raised in this study, but it is in agreement that with researchers such as Ng’ambi and Rambe (2008), in Rambe (2010), who argue that educators are under continuous pressure because of the continuous development of SNS. Lampe, et al. (2011) found that students’ intensity level of Facebook engagement predicted their increased likelihood to use it to collaborate on schoolwork. This viewpoint is also advocated by Bouwers-Campbell (2008) who claims that the group feature of Facebook empowers students to take responsibility for their own learning goals.

Reid (2011) found that Facebook does not only create an alternative pedagogical space, but it also harnesses students’ out-of-school literacy practices. She further reported that using
Facebook, while allowing learners to employ informal language as they do outside the school, promotes participation among learners. Each Facebook application would be customised for each teacher, and would allow them to distribute documents such as homework assignments or course notes for later downloading by students.

Facebook can be used as a means to foster a sense of connectedness between the instructor and students, to further increase self-efficacy, promote peer support, student motivation, and positive classroom climate. Bouwers-Campbell (2008) argues that Facebook’s effectiveness for educational purposes hinges on the approach taken by the instructor as well as student familiarity and use. South African researchers such as Reid (2011), de Villiers (2010), and Bosch (2009) concur with most international researchers to say that Facebook promotes academic purpose in learning. Facebook is generally used by instructors in higher institutions of learning, and it is used by instructors to encourage collaborative learning and exchange of educational data among learners.

The studies cited above reveal Facebook as an SNS which holds the potential to be used as an educational tool in various levels of institutional learning (Bosch, 2009; Mazer et al., 2007; Reid, 2011; Ryan et al., 2011). Charmigo and Barnett-Ellis (2007) claim that using Facebook could result in innovative exposure to academic stakeholders.

According to Wang et al. (2011), Facebook enables faculty to shift the focus from content-based learning to process-based learning and, according to Vogel and Klasen (2001), Facebook helps to facilitate change from passive to active learning. Nunes and McPherson (2013) state that SNS has the potential to increase students’ enrolment and promote interaction between students and faculty members. Facebook can also enable the teacher to create a new course and enrol students in person. Bosch (2009) lists a number of benefits related to their Facebook use namely identifying and finding learning material, helping friends to answer questions about academic logistics, connecting with others about holiday projects and sharing lecture and study notes. Manca and Ranierit (2013) argue that SNS promotes learning through peer-to-peer dialogues and promotes the online sharing of resources. Such online learning, which is referred to as ‘learning space’, can be blended with a personal life online and leisure life. Activities carried out online by
learners foster the development of communication skills. Nunes and McPherson (2013) refer to such online learning as having the possibility of blurring the distinction between learning spaces and social spaces and leisure spaces. The next discussion focuses on the use of Facebook features by learners for learning.

2.9 How Facebook features are used by learners for learning

A study conducted by Ryan, Magro, Sharp and Tarleton (2011) reveals three themes that emerged out of the learners’ use of Facebook, namely, knowledge exchange, socialisation and community building. In another study conducted by Manca and Ranierit (2013), students were found to be using a combination of Facebook applications for informal learning and communication with peers. Similar ideas were expressed by Selwyn (2009) who state that students use Facebook applications, such as status updates, private messaging, instant messaging and wall posting to ask questions and ignite conversations with their peers on a specific topic.

2.10 Educational outcomes from the use of Facebook in teaching and learning

Mazer, Murphy, and Simonds (2007) in Roblyer, McDaniel, Webb, Herman and Witty (2010) state that students may perceive a teacher’s use of Facebook as an attempt to foster positive relationships with his or her students, which may have positive effects on important student outcomes. The authors continue by arguing that teachers may enhance their credibility among students by signifying an understanding of contemporary student’s culture. They also found that Facebook helps instructors to improve the classroom climate.

According to Wang et al. (2011), a number of studies have found that the use of Facebook increases student motivation, satisfaction, classroom climate and the student-faculty relationship. Li and Pitts (2009) in Wang (2011) reported that offering virtual office hours via Facebook had a positive impact on student satisfaction with student-teacher communication outside the classroom. Similarly, Hewitt and Forte (2006) claimed that interaction via Facebook had a positive impact on student perceptions of their professor. According to Wang et al. (2011), Facebook seems to offer great potentials for teaching and learning because many students are using Facebook daily. Manca and Ranierit (2013) found that the use of Facebook to support
discussion and interaction increased participation, and encouraged the classroom discussion and exchange of information. A further study by Estus (2010) confirms that using Facebook may have a positive impact on participation because it encourages students to discuss topics more openly. According to Greenhow (2011) in Manca and Ranierit (2013), SNS might be re-envisioned as support for student learning outcomes at least from two perspectives: first, they can provide peer support to manage the ups and downs of high school or college life or help with school related tasks; second, SNS can stimulate social and civic benefits, online and offline, environmental activism promoted through a series of actions addressed to young people within an application implemented on Facebook, which encourages role modelling and civic engagement, widening of context of learning and mixing of information and learning resources. The traditional limitations of e-learning programs that mainly focussed on content with limited interactions may be overcome by encouraging learners to share personal and professional interest and aspirations usually excluded from e-learning settings.

Literature has so far shown that students are already using Facebook for socialisation and communication purposes, and they are willing to use these sites in learning. A study by Cain and Policastri (2011) highlighted the efficacy of Facebook as an informal learning tool in which an optional Facebook activity was used to expose students to issues not covered in the core content of a formal course. Two studies by LaRue (2012) and Lim and Ishmail (2010) found that Facebook has the potential to engage students in meaningful academic conversations, depending on the timing as well as the topics of discussion. Selwyn and Grant (2009) affirm that social media software offer learners access to education experiences which are based around active participation, rather than passive reception. This indicates that Facebook is a potentially useful tool for promoting effective academic practice.

2.11 Conclusions

As alluded to in this research, there is much literature reflecting on the use of Facebook in the school context. In spite of the literature review provided above and prevailing common practice in our schools, there number of studies on Facebook use for educational purpose is still scanty. Researchers such as Bouwers-Campbell (2008), Ng'ambi and Rambe (2008), Reid (2011), and
Selwyn (2009), agree that Facebook use in education has become essential. According to Agarwal and Mital (2009), Joinson (2008), Madge, et al. (2009), Raacke and Bonds–Raacke (2008), Salaway et al. (2008), Smith et al. (2010), there are a number of reasons which motivate people to use Facebook. Those relevant to this study are: (1) Exchange of information, music, pictures, and videos, (2) Learning more about individuals, (3) Communicating with classmates and friends, and (4) Expressing and viewing opinions and professional activities. This shows that Facebook provides opportunity for schools to create collaborative activities and exchange information (Castells, 2007; Ryan et al., 2011).

Most of these empirical studies applied the interview as their main research instrument. This inspires the present study, which, in addition to interviews, uses Facebook chats to investigate the efficiency of Facebook use in learning. There are more advantages to using data received directly from the respondents because they indicate whether or not the use of Facebook for educational purposes has to be taken more seriously.

The literature review has revealed that Facebook holds the potential to enhance teaching and learning in institutions of higher learning as well as in high schools. The findings in this literature review also indicate that most studies on Facebook were done in developed countries, and that research on the use of Facebook in developing and underdeveloped countries is still lacking.

2.12 Theoretical framework

The discussion presented in this report follows that of a collaborative and constructivist research approach. Learning environments and contexts can be structured in different ways, i.e., learning can be viewed as formal, informal, collaborative, and constructivist. These approaches are relevant in the practice of Facebook for teaching and learning because they help learners become active participants in their own learning process. This view assumes the underlying assumption to learning that “knowledge is acquired through involvement with content instead of imitation or repetition” (Ismat, 1998). Learning activities in a constructivist setting are characterised by active engagement, inquiry, problem solving, and collaboration with others.
In social constructivism the major emphasis is on the social construction of knowledge. This theory believes that knowledge is constructed and that the teacher remains the facilitator of the learning process. This means that the teacher has the responsibility of creating a learning environment conducive for learning. Thus, social constructivism emphasises mediation of knowledge.

This theory developed by Vygotsky firmly suggests that knowledge is acquired through interaction with the environment and culture, which supports the principle of social constructivism that ‘knowledge is constructed.’ The concept of construction is thus important in schooling. Social constructivism uses collaborative approaches, since learners have to interact with the teacher and other learners in order to acquire meaning and knowledge. In schooling, this theory encourages collaboration learning. This approach is of the view that activities which the learner interacts with in learning should reflect the real world. For social constructivists, learning should be authentic (Ismat, 1998).

Within the framework of social constructivist theory, there are key concepts that are necessary for understanding the manifestation of Facebook use in teaching and learning. They are defined and described in Section 2.12.1.

2.12.1. Definitions and short descriptions of concepts

- **Learning space**

  “Learning space” is a concept referring to ‘mobile learning’ in the classroom, i.e., the learners’ flexibility in how, when and where they can use physical or virtual technologies for collaborative learning. Cherian and Williams (2008) propose that Learning technologies may continue to broaden the boundaries of the conventional classroom, making it possible for the learning strategy to become as prolific and, possibly, as effective as face-to-face learning (Kennedy, 2011). Manca and Ranierit (2013) argue that SNS promotes learning through peer-to-peer dialogues, promotes the sharing of resources, which is actual learning conducted online, and such online learning, which is referred to as ‘learning space’ can be blended with online personal life and leisure life, which is a learner’s or professional’s private time or space. Activities carried out online by learners, such as sharing of resources, foster the development of communication skills.
• “Just-in-time” learning

Besides extending learning space, the other advantage afforded by mobile learning is that it facilitates “just-in-time” learning Rambe and Ng’ambi (2011) and lends greater flexibility to the whole learning process. The concept of just-in-time learning is important for this research question because it confirms the relevancy of Facebook in teaching and learning. Just-in-time learning also enables teachers and learners to ‘scaffold’ learning activities at the time of need. As manifested in their Facebook group activities, learners could ask and receive assistance- even during their leisure time. This would mean learners, through their smart phones, are enabled to learn and get assisted as they have the need. This then brings in the element of peer collaboration, which does not only find leverage in just-in-time learning but can also be enhanced through learners and their smart phones.

• Social space

“Social space” refers to informal learning. According to Knapper and Cropley (2000), informal learning can be described as learning that is outside of the classroom; and this is an unstructured way of learning. For instance, students utilise communication technologies to communicate with peers through informal learning via Facebook. As Madge et al. (2011) observed, when students extend their use of Facebook from its purely social origins, they increasingly use Facebook for educational purposes. Manca and Ranierit (2013) argue that since SNS promotes learning through peer-to-peer dialogues, online learning, which is referred to as learning space can be blended with personal life online and leisure life, which is a learner’s or professional’s private time or space. Activities carried out online by learners such as sharing of resources, foster the development of communication skills, Nunes and McPherson (2013) states, refer to such online learning as having the possibility of blurring the distinction between learning spaces and social spaces and leisure spaces.

While this point raises the crucial theme of the potential of SNS like Facebook in promoting schooling activities, it also reflects how SNS can be used to promote learning in a non-academic approach. In this research, this point is important because it presents the importance of social media services, like Facebook, within a schooling environment.
• **Blurring space**

‘Blurring space’ has been defined by Reid (2011) as a hybrid space that brings a popular out-of-school literacy practice into a schooled space. Bugeja (2005), in Olson, Clough and Penning (2009) claims that teachers have access to technologies that blur the distinction between public and private space because they were enabled to share videos, take and distribute unlimited digital images instantly. Lim, Fadzil, and Manso (2011) describe how blurring of space with learners was done when the university sends text messages to learners, unsolicited information is pushed to the learners outside normal interaction hours and communication spaces. Mobile learning blurs the learning space and learner private space or leisure space. In this instance, learning space would mean classroom environment and leisure space would mean learners out of school time or “non-contact time”. These practices suggest that there is a very thin line between school period and private time for learners, as teachers are able to engage learners anytime, anywhere. It is apparent that social media services, such as Facebook, are able to mix both public and private time in learning. Several literatures on Facebook argue that, because of its affordances such as the Facebook wall or profile, it enables collaborative activities in a learning environment. This aspect of Facebook, and the many more cited in similar literature reviews, is relevant and responds to the research question of this study.

• **Role of the teacher in online facilitation**

The role of the teacher in an online teaching environment is often understood in terms of virtual education. According to Jung et al. (2011), virtual education refers to instruction in a learning environment where the teacher and students are separated by time or space, or both, and the teacher provides course content through the use of methods such as course management applications, multimedia resources, the internet and videoconferencing. With the advent of the information era, the teacher’s role has often been changed the result of blurring and breakdown of time and space boundaries. In two instances when they conducted studies on Facebook, Manca and Ranierit (2013) found that that teachers have to innovate their teaching practice to meet students’ digital needs, and in two further studies the authors discovered that as new forms of literacy are emerging educators should adapt their style of instruction to reflect those changes. Facebook is viewed as a flexible tool that offers a mobile setting for learning and engaging students in academic content, without the constraints of the traditional curriculum.
Privacy
The concept of privacy in the context of Facebook has been described under ‘closed-group pages’, which are more private in the sense that they can only be viewed by members of the group. Reid (2011) states that when privacy settings are appropriately set, members of the group are not able to view each other’s walls unless they are ‘friended’. This aspect is important to this study because teachers can create learning groups with confidence, as there is little interference from outsiders. This enhances confidence of learners as they engage in learning activities. This affordance of Facebook is important in this research question because it does not only elucidate the relevancy of Facebook in this study but contributes in responding to the greater part of the research question.
CHAPTER 3

METHODOLOGY: PROCEDURES OF COLLECTING
AND ANALYSING THE DATA

3.1 RESEARCH DESIGN

For the purpose of this study, a case study approach is considered appropriate to respond to the research question. As Yin (2009) states, the research questions of a study determine the methodology to be used. As the questions of the present study seek to explain in details some present circumstances, a case study method is the most relevant. This study is set to probe the use of Facebook to enhance teaching and learning, which requires an in-depth knowledge of the phenomenon. The author affirms that a case study is considered relevant when the method posed for research study demands an extensive and “in-depth” description of the same social phenomenon. According to Yin (2009), a case study approach is most relevant when the boundaries between the phenomenon and context are not clearly evident. This means that to know the effects of the use of Facebook in learning requires a detailed and in-depth analysis of a case.

According to Smith (1978) in Merriam (1998), case studies “are intensive descriptions and analyses of a single unit or bounded systems such as program, event, group intervention or community. Yin (2009) states that case studies can be defined in terms of other technical characteristics such as data collection strategies. Some case study research methods may use a mix of qualitative and quantitative evidence as Merriam (1998) argues that case studies can accommodate a variety of disciplinary perspectives. The design of this research is a mixture of both qualitative and quantitative methodologies. A qualitative study is used for the greater part of this research by means of interviews and Facebook document analysis that is backed up by a quantitative study by means of two questionnaires.

At the beginning of the twentieth century, researchers began to realize that both qualitative and quantitative research methods have strengths and weaknesses, and that combining them could result in maximising their strengths and minimising their weaknesses (Johnson and
Onwuegbuzie, 2004). Johnson et al. (2007) assert that “combining elements of qualitative and quantitative research approaches is important for the purposes of breadth and depth of understanding and corroboration”. This approach subsumes the notion of data triangulation, which is the use of data from different sources in order to investigate the same phenomenon.

3.2 RESEARCH SETTING

This study follows a comparative case study approach. Yin (2009) argues that in selecting multiple cases, researchers should consider “replication” design instead of multiple cases on the bases of “sampling” design. According to Yin (2009), “upon uncovering a significant finding from a single experiment, an ensuing and pressing priority would be to replicate this finding by conducting a second, third and even more experiments.” The author further states that the logic for this selection is that “each case must be carefully selected so that it either (a) produces similar results or (b) predicts contrasting results but for anticipatable reasons.” The author also states that if all cases turn out as predicted the result should produce a compelling support for the initial set of propositions.

The setting of this research is in two secondary schools (School A and School B) in Mpumalanga Province, South Africa. Both School A and School B have introduced Facebook in Grade 11 and 12 for enhancing teaching and learning. This action is aimed at enabling learners to access extra learning activities in and after school, i.e., at home, thus blurring the learning space and leisure space through their smart-phones. School A received a donation of sixty tablets from Telkom that enable internet access for a period of two years. Learners have access to those tablets in the classroom under teacher supervision but they may not take them home. School B uses Facebook as a resource to enhance learning among their Grades 11 and 12 learners on a voluntary basis.

There are a number of reasons why the researcher chose these two schools for this study. The first is that of having more than one site to enable comparisons of the results. According to Creswell (2013), a case study approach is that in which “the investigator explores a real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information and reports, a case
description and case themes). The two schools have a common approach to Facebook, which is to use Facebook to enhance teaching and learning and all their learners are required to have a Facebook enabling cell-phone to partake in this voluntary activity. Although the teachers often explain some affordance and participative rules of Facebook, this is generally done online and during non-contact time.

These two schools have been chosen because they both are using Facebook to enhance teaching and learning on a voluntary basis with their Grades 11 and 12 learners. Although learners at School A do have access to tablets, their engagement of Facebook activities is exclusively on a voluntary basis and the learners may also use their own smart phones for this purpose. Ten learners at School A and seventeen from School B participated in this study.

3.3 RESEARCH PARTICIPANTS

In this section, the method and reasons for selecting the participants are explained. Yin (2009) states that, with case studies, a group or “case is not “sampling units” and should not be chosen for this reason. Rather the individual case studies are to be selected as a laboratory investigator selects the topic of a new experiment. It is therefore important to consider that the participants were chosen in that context.” McMillan and Schumacher (2006) state that the population is the group of individuals or elements that conforms to specific criteria which are used to gain information for the purpose of this specific research. This group is also known as the target population because, according to Creswell (2012), a target population “is a group of individuals with some common defining characteristics that the researcher can identify and study. For this study, the target population is comprised of learners and teachers from School A and School B.

The teacher and learner participants were those who each had access to a smart-phone which they voluntarily used to access Facebook. This type of population is defined by Fraenkel and Wallen (1993) as the accessible population. It is evident, however, that the learners may not necessarily represent the majority of learners in their respective schools. It was initially decided to choose learners from Grades 11 and 12 because they are at least 16 years old. These learners are allowed by the policy to use Facebook, and are mature enough to provide the necessary
information for this research. Further, the selection was done from this group because only the Grade 11 and 12 learners in both schools were engaged in Facebook learning activities together with their teachers. Finally, the suggestion was made to have this study conducted only on Grade 11 learners at both schools, as their respective school management committees felt the findings could help with implementation of the use of Facebook for Grades 11 and 12 in the following years. In the end, the learner participants were selected from the ‘A’ grade learners in Grade 11 at both schools. The population group of this study also comprised teachers in those schools who are engaged in using Facebook as a teaching and learning tool. This study would follow the analytic generalisation approach which subsumes a general image of the extended sample of population. According to Yin (2009, p.76), “Analytic generalization can be used whether your case study involves one or several cases, which shall be later referenced as single-case or multiple-case studies.”

The selected target population is illustrated in Table 3.1.

**Table 3.1: Target population.**

<table>
<thead>
<tr>
<th>Schools</th>
<th>Learners</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>School A</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>School B</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>2</td>
</tr>
</tbody>
</table>

**3.4 SAMPLING METHOD: PURPOSEFUL SAMPLING**

In the case of the purposeful sampling strategy, Creswell (2013) argues that it is “essential that all participants have experience of the phenomenon being studied.” This study has chosen the sampling approach based on the criterion that all individuals participating in the study should be familiar with the phenomenon under study. The author states further that “it is a purposeful
sample that will intentionally sample a group of people that can best inform the researcher about the research problem under examination. The number of participating schools was limited to two.

The population was limited on the basis of the following: (1) only participants with access to smartphones were selected. (2) Although participants were within the researcher’s field of work, and subsequently easy of reach, this conversely subjects the study to exclusive participants. Fraenkel et al. (1990) assert that “the more narrowly researchers define the population, the more they save on time, effort, and (probably) money. This indication is being clearly elaborated to render applicability of the study relevant to interested stakeholders. Fraenkel et al. (1990) claim that “failure to define in details the population of interest, and the sample studied, is one of the most common weaknesses of published research reports. The sample envisaged however satisfied the broader spectrum of the researcher’s expectations of the phenomenon in study. Wilson (2009) asserts that before embarking with a research study, effort should be taken to consider and justify the selection of the sample.

Wilson (2009) argues that the sampling approach can either be very thorough or confirmed by triangulation. In this study, it was difficult to select either a random, systematic non-random sample or convenience sample. Fraenkel et al. (1990) claims that “on occasion, based on previous knowledge of a population and the specific purpose of the research, investigators use personal judgement to select a sample.” In this case, the researcher, as mentioned in Chapter 1, is responsible for overseeing the implementation of Information Technology in and around this geographical area and, consequently, thoroughly knows the schools. Basit (2010) agrees that in applying the purposive method of sampling researchers use their discretion, knowledge and experience to select the sample which they think suits the purpose of their studies.

The purposeful sampling was adopted for this study. Creswell (2012) asserts that in a purposeful sampling, researchers intentionally select individuals and sites to learn or understand the central phenomenon. The author further states that participants are chosen on the basis of being “information rich”. According to Merriam (1998), purposeful sampling is based on the assumption that the investigator wants to discover, understand, and gain insight and therefore
must select a sample from which the most can be learned. As indicated previously, Grade 11A learners were selected on the basis of their anticipated level of participation in the phenomenon under study. This research has therefore adopted the convenience type of purposeful sampling, because, according to Merriam (1998), in convenient sampling the researcher selects the sample based on time, money, location, availability of sites or respondents. The researcher was therefore convinced that the school, based on the logical framework of their technological participation and make-up, were information rich about the phenomenon under study. According to Cohen, Manion, and Morrison (2005), there is no clear-cut answer for a correct sample size. Merriam (1998) quotes LeCompte and Preissle (1993), who prefer the term “criterion-based selection” to purposeful sampling, by arguing that in criterion-based selection you create a list of the attributes matching the list. In this case, the criteria established for purposeful sampling, as stated by Merriam (1998), directly reflect the purpose of the study and guide in the identification of information-rich cases. It depends on the purpose of the study as well as the nature of the population under scrutiny. Basit (2010) contends that “researchers cannot study the entire population of the group that they want to investigate because of constraints of time, access and expenditure”. Merriam (1998) argues that in “purposeful sampling the size of the sample is determined by information considerations.” This is a small scale study in which the objective was to follow analytic generalisation.

3.5 DATA COLLECTION METHODS

3.5.1 Qualitative phase

A “case study can come from many sources” (Yin, 2009). In this study the interview and document analysis was selected as qualitative data collection methods. In this report a definition of qualitative data collection methods is first considered and what that would entail. That is followed by a discussion of qualitative data collection principles and the rationale for choosing this research method. An explanation is then given of how it will help in responding to the research questions set for this study. Merriam (1998) states that data conveyed through words have been labelled qualitative. According to the author, qualitative data consists of direct quotations from people about their experiences, opinions, feelings, and knowledge obtained
through interviews, behaviours, actions, observations, and excerpts, and various types of documents. This definition is strategically conceived as relevant to this study because it fits well in the contextualising of the research questions. It seeks to execute the mandate of the definition. By interviewing respondents, the researcher accesses direct information about the phenomenon under study, while detailed descriptions of activities supplement the gained information from the interviews and acts to validate the data gained through the interview. Combining these two data gathering methods is therefore vital, as they should complement each other. Fraenkel and Wallen (1990) in Basit (2010) define qualitative methodology as those which investigate the quality of relationships, activities, situations and materials. In this definition, there is greater emphasis on holistic description, that is, describing in details what happens in specific situations. Employing the qualitative approach in this study would therefore assist in answering the research questions in a sense that the selected sources, the interviewing of the participants and the analysis of their Facebook document would enable the probing of the phenomenon. Document analysis should enable the investigation of aspects of the phenomenon such as activities engaged in and in a holistic manner. This is important as it helps generate a response to Research Question 1 (What teaching activities are teachers using through Facebook?) and Research Question 2 (How do teachers use Facebook for teaching and learning purposes in Grade 11 classes?) and Research Question 4 (What are learner’s perceptions of the use of Facebook for teaching and learning purposes?).

Document analysis should reflect details of what transpires in a specific situation of the participants with the phenomenon. This source of evidence is important as it also contributes in answering Research Questions 1, 2 and 3. Fraenkel and Wallen (1990), in Basit (2010), further claim that the qualitative approach aims to describe events, perceptions and views scientifically, thus illuminating social phenomenon. This assertion is significant to the research question because the study also seeks to investigate learners’ perceptions of Facebook use. This will also help in answering Research Question 4. This is anticipated to be achieved as the researcher interviews participants. Document analysis source of evidence would also help in describing Facebook events as posed in Questions 1, 2 and 3.
According to Fraenkel and Wallen (1990) in Basit (2010), the focus of a qualitative study is exploration of a small number of examples or participants who can elucidate a particular aspect of social reality. In this study, twenty seven participants are expected to produce evidence that is anticipated to illuminate Facebook use in the two schools under investigation. Sherman and Webb (1988) give a good description of the qualitative approach by stating that qualitative research implies a direct concern with experience as it is ‘lived’ or ‘felt’ or ‘undergone’. According to McMillan and Schumacher (2006), qualitative researchers do in-depth analysis of small groups with specific reference such as age group or behaviour.

Yin (2009) argues that it is not enough just to be familiar with data collection methods and posits that researchers need to continue addressing the designing challenges of such methods. In order to address these challenges, the study will now discuss principles of data collection.

Yin (2009) mentions three principles of data collection:

a) Using multiple, not just single, source of evidence;

b) Creating a case study database; and

c) Maintaining a chain of evidence

According to Yin (2009), those principles are important as they help to deal with the problems of construct, validity and reliability. In designing the data collection strategy for this study the three principles cited above were considered. To address the first principle, a mixture of data collection methods was considered: the qualitative and quantitative approaches and, within the qualitative approach, the interview and document analysis sources of evidence were selected. Under quantitative approach, the questionnaire was considered to triangulate findings. All three sources of evidence were designed to complement one another. This consequently subsumed the third principle. Through the application of those principles in this manner, the researcher intended to produce valid, reliable results in reply to the research questions.

The qualitative data collection instruments are explained as follows:

**3.5.1.1 Interviews**
One of the most important sources of case study information is the interview. According to Yin (2009) and Leedy and Ormrod (2001), interviews as data collection instruments can provide useful information. The researcher has to be aware of the fact that when questions are posed about certain facts, he or she relies on the memory of respondents, which is not always that trustworthy. In consideration of this assertion, this study considered triangulation as a confirmation method. There are different kinds of interview, but the semi-structured interview was targeted for the teacher-participant interviews and the focus-group interview was targeted for learner-participants. In this case, a group of five learners per school was randomly chosen in a class to form a focus group and a teacher per school was subjected to the semi-structured interview. The interviews were recorded to authenticate the results of interpretation. The interview questions were similar to the questionnaire questions, and hence, they were designed to complement the data received through answers to the questionnaire. The researcher conducted the interviews.

There are reasons for choosing these two types of interview in this study. The main reason was convenience. The reason for choosing the focus group interview for learner-participation was because learners are too many for individual interviews. A focus group interview at each school was preferred to save time. Yin (2009) asserts that with a focus group interview, participants are interviewed for a short period. In addition, the advantage of a focus group interview is that it provides opportunities for members of a group to interact with each other and stimulate each other’s thinking (Lichtman, 2006). This study asserts the argument advanced by Yin (2011), that focus group have their own dynamics that researchers need to manage, such as moderation of the group which requires skill born out of experience. The author cites such essential skills as managing the high risk that one or two persons are likely to dominate a group discussion. McMillan and Schumacher (2010) argue that the focus group interview is helpful in that it creates a social environment in which group members are stimulated by one another’s perceptions and ideas, and they claim that this can help researchers increase the quality and richness of data collected through a more efficient strategy than that which may be collected through one-on-one interviewing. The authors argue that the focus group assists the researcher in obtaining a better understanding of a problem or assessment of a problem, concern, new product or idea. The focus group interview is therefore considered good for this case study, as it will
contribute in understanding in answering the research questions. Further, McMillan and Schumacher (2010) also state that the focus group can be used as a confirmation technique.

The semi-structured interview was convenient and suitable for the teacher-participants because of their manageable number for this kind of interview. Both interviews were done within school hours and arrangements were made with the schools at times that did not disturb the smooth running of other school activities. Prior arrangements were made with the respondents about the time and venue for the respective interviews.

3.5.1.2 Facebook document analysis
Yin (2009) asserts that document analysis is not only important in many instances with case studies but further recommends that they should be included at most in case studies. In this study, Facebook pages will be analysed to complement the sources of evidence mentioned above. According to Yin (2009), the most important use of documents in case studies is to corroborate and augment evidence from other sources. Further, the author argues that document analysis is useful even though it is not always accurate. Yin (2009) further asserts that documents may not be lacking in bias, as many documents can be useful simply by the nature of the details they contain. In this study, Facebook pages are virtual pages that would display the actual (real time) engagement of the participants with the phenomenon. According to Merriam (1998), personal documents such as the Facebook document can tell the researcher about the inner meaning of everyday events, or provide descriptions of “rare and extraordinary events in human life”.

Documents can provide specific details to corroborate information from other sources. In the interpretation of findings, document findings complement interviews and questionnaires. This study was guided by the view that inferences from document analysis or any such source should be treated as clues worthy of further investigation rather than definitive findings because the inference could later turn out to be false leads. Basit (2010) claims that documents can be perused to gather data and analyse them. In this case, the Facebook pages of both groups of learner and teacher participants were analysed in order to form an understanding of the phenomenon. Lincoln and Guba, in Basit (2010) note that the reason documents should be more
consistently tapped in research is that they offer a rich source of data which are contextually relevant and grounded in the context they represent, and appear in the natural language of that setting. Analysing the Facebook pages which learners and teachers were engaged in during learning activities offered this study valuable information on how Facebook was utilised and revealed its relevancy in teaching and learning.

Document analysis is considered useful for this study because it provides insight of teaching activities in the classroom. Through Facebook activities, learners had an opportunity to engage in various Facebook affordances. They collaborated, discussed, commented and posted videos and texts assisting one another in their learning activities. Each learner’s individual page was studied. This analysis provided the researcher with insight into the personal feelings, experiences and emotions of the respondents.

Creswell (2009) provides advantages and limitations of document analysis. First, the advantages:

- Enables a researcher to obtain the language and words of participants;
- Can be accessed at a time convenient to a researcher-an unobtrusive source of information;
- Represents data which are thoughtful - participants have given attention to compiling them;
- As written evidence, it saves a researcher the time and expense of transcribing.

The limitations of document analysis:

- Not all people are actually articulate and perceptive
- May be protected information and unavailable to public or private access
- Requires the researcher to search in hard-to-find places
- Requires transcribing or optically scanning for computer entry
- The material may be incomplete
- The document may not be authentic or accurate

All the advantages cited were found to not only be relevant and helpful, but contributed in responding to the first three research questions of the study. Similarly, all the limitations were found to be important and relevant to the study with the exception of bullets three and four.

3.5.2 Quantitative phase
In this study the quantitative data collection method took the form of two specially prepared questionnaires: one for the teachers and one for the learners. The reason for using a questionnaire was to compliment the qualitative data sources (interviews and document analysis). This was done for the purpose of analysing data from various sources to increase validity and reliability. Basit (2010) claims that quantitative methodology assumes that clear cause and effect relationships can be established while scrutinizing human behaviour. In this study, this was done through designing questions about Facebook use after establishing patterns of Facebook use from each participant’s responses in the form of the data collection sources mentioned above (questionnaires, interviews and Facebook document analysis). The two questionnaires were used as the main methods of collecting quantitative data.

**Questionnaires**

The Question 1 of the learner questionnaire asked the participants what they use Facebook for, to elucidate understanding of their general Facebook use. Question 2 was intended to reveal the significance of Facebook in their teaching and learning. Question 3 required respondents to indicate the length of time they spent on Facebook. Questions 4 to 10 investigated the main reasons for the learner using Facebook and the ways through which Facebook could be used to improve school work (see Appendix A).

Questionnaires can be seen as an intrusion into the life of respondents. In answering a questionnaire, the respondents are not passive providers of data. They are actively involved in the research process. They are seen as subjects and not simply objects of the research process Cohen, Manion, and Morrison (2005). According to (Cohen et al. 2005), respondents should not be forced to complete a questionnaire. They should be requested to do so under their decision to participate voluntarily. The researcher has to judge the appropriateness of using questionnaires for data collection purposes and decide on the questions to be asked. Questionnaires have strengths and weaknesses. According to McMillan and Schumacher (2006), the strength of the questionnaire includes that they:

- Are economical
- Can be anonymous
• Involve standard questions and uniform procedures
• Are usually easy to score
• Provide the time for subjects to think about their responses

The weakness of questionnaires includes that the:

• Response rate of mailed questionnaires is usually low
• Researcher is not able to probe and clarify
• Scoring of the open-ended items is difficult
• Answers may be faked and social desirability
• They are restricted to subjects who can read and write,
• The biased and ambiguous items cannot be clarified,
• Response set.

This study found commonality in the strength of the above characteristics. It became apparent during responses that the questionnaire provides a uniform procedure as well as time for subjects to think about responses.

In this study, the researcher took the responsibility of handing out the questionnaires and collecting the answer sheets to each prospective respondent to eliminate the low rate of return on mailed responses. As all the prospective respondents were teachers and learners in Grade 11. It was assumed that there would be no problems of respondents not being able to read or write. When preparing the questionnaires, the researcher ensured no questions containing biased or ambiguous items appeared in the questionnaire. Therefore, all the questions were clear and simple to answer. Thereafter each participant put their individual answer sheet into an envelope that was then sealed. The researcher then collected the two sets of sealed envelopes, to ensure trustworthiness between the researcher and the respondents.

The use of questionnaires was to support or disapprove evidence of data gained during the interviews and document analysis. There was great similarity between the questions asked during the interviews and questions posed in the questionnaire. The researcher looked for aspects that correlated with the events found in the each respondent’s Facebook page.
3.6 Data analysis methods

While it was the researcher’s intention through the data analysis methods chosen in this study to respond to the research question, he also hoped to develop a holistic understanding of Facebook in teaching and learning in the two selected secondary schools. According to McMillan and Schumacher (2010), the data collection and other aspects of methodology follow from the research questions. The question of matching these research approaches to the research questions was designed at the initial stage of this research study, as the nature of the study called for a ‘multisite’ case study; which then led to the implementation of the interview, document analysis and questionnaire methods of data collection. The researcher believed that these three sources of data would assist in analysing the phenomenon under study. Creswell (2008) in McMillan and Schumacher (2010) refers to a case study as an in-depth exploration of a bounded system, for instance, an activity, event, process, or individuals based on extensive data collection. It is hoped that the interviews and questionnaire supplemented by the document analysis will help in collecting in-depth data by probing the phenomenon’s activity, event, process and individuals partaking in the phenomenon. The data collection had to engage all those methods because of the need to collect in-depth information about the phenomenon. According to McMillan and Schumacher (2010), the researcher needs to gather whatever information on the question and situation.

This section describes data analysis in terms of qualitative and quantitative methods, provides the nature of both data analysis methods, and shows how they help in answering the research questions. To accomplish this, an illustration of data analysis in the context of the research questions is presented, coupled by a brief explanation of the steps in data collection.

According to Basit (2010), quantitative data are seen as offering precision, whereas qualitative data are viewed as presenting depth. Both methods were used in this study, and the data analysis approaches were selected according to Cohen et al.’s (2011) proposal on the selection of data analysis methods. According to Cohen et al. (2011), there is no one single correct way to analyse and present qualitative data. They claim that the qualitative data analysis can be organised and
presented in many ways, such as organising data into emerging themes by coding, categorising, and discussing as a narrative.

This study followed the general process of inductive data analysis, which is found in Macmillan and Schumacher (2006) as illustrated in figure 3.1.

![Diagram of General process of Inductive Data Analysis](image)

**Figure 3.1: General process of Inductive Data Analysis (McMillan & Schumacher, 2010, p 365)**

*Data collection* refers to the first research process after the research proposal. The data of this study was collected at school premises just after a non-contact period. McMillan and Schumacher (2010) state that data collection on qualitative research is conducted in the field, on the participants’ “turf”. The authors add that researchers should attempt to collect all qualitative data in a way that allows the participants to respond naturally and honestly. It has been shown that qualitative studies usually display a great volume of data to be analysed, summarised and interpreted. To accomplish this, the researcher used research questions to organise the data into themes. Prior knowledge of the researcher about the phenomenon also assisted in organising the
data. The researcher reanalysed the data, which helped in organising it according to codes and themes. Data was recorded and interview scripts were taken. Data was then analysed to develop codes and categories.

A code is a name or a phrase that is used to provide meaning to the segment. Codes can, for instance, be activities, ideas, quotations and events. According to McMillan and Schumacher (2010), data coding begins by identifying small pieces of data that stand alone.

The purpose of coding is to break down and deconstruct the data to make sense of them and then reconstruct and synthesise the data, to consider the links, similarities and differences (Basit, 2010). This process is one of the initial procedures the researchers embarked upon while making sense of the data collected. Strauss and Corbin in Basit (2010) argue that researchers analyse and code paragraphs, words, phrases or sentences. In this study, the researcher found the magnitude of this statement more prevalent, as most of the coding product, considered relevant and usefulness in comprehending the phenomenon, turned out to be a word, sentence and phrases, which were then classified under similar sets of data and collectively coded as themes, which were subsequently discussed as narratives.

*Categories* are entities comprised of grouped codes. According to McMillan and Schumacher (2010), a single category can be used to provide meaning to group of codes that are combined. In a narrative, the data are presented as quotations of participant’s actual language for an evident based enquiry. Data are presented to the readers in the form of detailed texts.

**Interviews with teachers**

Interviews were conducted with two teachers, one from each participating secondary school. The questions asked were the same as those provided in the questionnaire. The reason of using the same questions was to check the accuracy of answers, to make sure that the findings are reliable and well evidenced. The answers illustrated here are extracts of interviews relevant to this study. Some of them are used in the interpretation section, when it is necessary to back an idea with a quotation. Interview samples are presented in Appendix B1.
In order to narrow down data into a few themes, the following codes were developed; from which three themes emerged from the interviews with the teachers. The following codes provide evidence of the themes.

Table 3.2: Codes developed from teachers’ interviews

<table>
<thead>
<tr>
<th>CODES</th>
<th>CARTEGORIES OR THEMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Communicating with friend</td>
<td>Use of Facebook</td>
</tr>
<tr>
<td>• Motivate learners</td>
<td></td>
</tr>
<tr>
<td>• Post comments</td>
<td></td>
</tr>
<tr>
<td>• Is current and relevant</td>
<td></td>
</tr>
<tr>
<td>• motivate learners</td>
<td></td>
</tr>
<tr>
<td>• Share links</td>
<td>Activities in Facebook</td>
</tr>
<tr>
<td>• Exchange educational matters</td>
<td></td>
</tr>
<tr>
<td>• Forster independent learning</td>
<td></td>
</tr>
<tr>
<td>• enhances the nature of education</td>
<td></td>
</tr>
<tr>
<td>• Blurring of learning space</td>
<td></td>
</tr>
<tr>
<td>• It a resource for learning</td>
<td></td>
</tr>
<tr>
<td>• Facilitate learning of</td>
<td></td>
</tr>
<tr>
<td>• challenging aspects to learners</td>
<td></td>
</tr>
<tr>
<td>• Enable collaboration</td>
<td></td>
</tr>
<tr>
<td>• Not a formal learning platform</td>
<td>Facebook as a learning Management system</td>
</tr>
<tr>
<td>• Learners smart phones serves as learning platforms</td>
<td>All Cited affordances</td>
</tr>
<tr>
<td>Perspectives held by learners</td>
<td>Perception of Facebook</td>
</tr>
</tbody>
</table>

These codes and categories are to be considered in order to classify interview data into themes. The next section deals with interview coding and categorisation.

**Interviews with learners**
Unlike the codes and themes that emerged upon analysing the data from the teachers, the codes that emerged from the data were grouped on the basis of the theme/s they make. This means that some codes appear under different themes, depending on the formulation of the themes. This was done to avoid lines, which may distort these illustrations. The interview transcripts are presented in Appendix B2.

Table 3.3: Codes developed from interviews with the learners

<table>
<thead>
<tr>
<th>QUOTES</th>
<th>CARTERGORIES OR THEMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>• GelezaNathi Facebook page’</td>
<td>USE FACEBOOK</td>
</tr>
<tr>
<td>• Educational programme on SABC 1</td>
<td></td>
</tr>
<tr>
<td>• Socializing and communicating with people</td>
<td></td>
</tr>
<tr>
<td>• We interact with teachers where we encounter problems while we are studying</td>
<td></td>
</tr>
<tr>
<td>• Communicating with classmates and teachers”</td>
<td></td>
</tr>
<tr>
<td>• Ask questions when there is something that i don’t understand</td>
<td></td>
</tr>
<tr>
<td>• Look out for bursaries through Facebook”.</td>
<td></td>
</tr>
<tr>
<td>• Facebook for teaching and learning our group is Leonard Ntshuntshe Grade 11”</td>
<td></td>
</tr>
<tr>
<td>• Help learners coping with their learning activities by joining learning groups, s</td>
<td></td>
</tr>
<tr>
<td>• Learners will cope as long as at their own comfort. Because as learners we are different in many ways some do not like to ask in class lesson but rather they can do it on Facebook”.</td>
<td></td>
</tr>
<tr>
<td>• GelezaNathi Facebook page’</td>
<td>LEARNING ACTIVITIES</td>
</tr>
<tr>
<td>• Educational programme on SABC 1</td>
<td></td>
</tr>
<tr>
<td>• Socializing and communicating with people</td>
<td></td>
</tr>
<tr>
<td>• We interact with teachers where we encounter problems while we are studying</td>
<td></td>
</tr>
<tr>
<td>• Communicating with classmates and teachers”</td>
<td></td>
</tr>
<tr>
<td>• Ask questions when there is something that i don’t understand</td>
<td></td>
</tr>
<tr>
<td>• Sharing info and schoolwork</td>
<td></td>
</tr>
<tr>
<td>• Learners will cope as long as at their own comfort. Because as learners we are</td>
<td></td>
</tr>
</tbody>
</table>
different in many ways some do not like to ask in class lesson but rather they can do it on Facebook”.

- “Sharing ideas and information
- Look out for bursaries through Facebook”.
- Discuss a lesson that is broadcasted on TV on that same page (Learn Extra) Channel
- Facebook for teaching and learning our group is Leonard Ntshuntshe Grade 11”
- Help learners coping with their learning activities by joining learning groups, s
- Very good teacher in the group(GelezaNathi Facebook page’)
- You are free when you use Facebook group.(Learnard Ntshuntshe Facebook page)
- “Sharing ideas and information
- Discuss a lesson that is broadcasted on TV on that same page (Learn Extra) Channel
- Help learners coping with their learning activities by joining learning groups, s
- Earners will cope as long as at their own comfort. Because as learners we are different in many ways some do not like to ask in class lesson but rather they can do it on Facebook”.
- Because the culture of classroom learning is not only to be taught but also it is to interact and free our opinions”.
- Most of the time we are scared to ask question in class because of our peer so we get enough time to ask our teachers on Facebook and we understand them easily because they gave us their all attention
- I find it difficult to read a book but prefer downloading it to my cell phone so that i can read easy at any time, so i think it can be easier to learn on Facebook.
- Educational groups online will keep them busy from doing useless thing.
- Help us to post problems and others will solve them and share the different

PERCEPTION OF FACEBOOK
methods of solving these school problem

- It involves two people a learner and a teacher which will make it easy to share questions to teachers anytime and anywhere in if not in a class

- Spend much time on Facebook chatting with friends than on learning activities. My percentage is 80% with friends and 20% dealing with my school work.
- B “35% school work and 65% personal”.
- Learner from School B “60% school work and 40% personal”

TIME SPEND ON FACEBOOK

- , because you can be easily disturbed while you are busy looking at learning programmes by the post that your friends post
- Waste time that you should be using for learning”.
- we use Facebook to socialize with our teacher and friend it help us a lot because we improve our English in terms of writing spelling
- most of the time we are scared to ask question in class because of our peer so we get enough time to ask our teachers on Facebook and we understand them easily because they gave us their all attention

FACEBOOK AS A LEARNING MANAGEMENT SYSTEM

- I find it difficult to read a book but prefer downloading it to my cell phone so that i can read easy at any time, so i think it can be easier to learn on Facebook.
- Educational groups online will keep them busy from doing useless thing.
- It involves two people a learner and a teacher which will make it easy to share questions to teachers anytime and anywhere in if not in a cla…
- Help us to post problems and others will solve them and share the different methods of solving these school problem

Five themes emerged from the codes which are closely related. They were classified according to the relationships discussed in the literature and theoretical framework.
3.6.1 ANALYSIS AND INTERPRETATION OF FACEBOOK PAGES: DOCUMENT ANALYSIS

3.6.1.1 Content analysis

Basit (2010) describes *content analysis* as, a “method which reports textual data in a summarised form by examining the frequency of occurrence in the text.” In this study, the researcher chose to follow this method in developing the themes, while applying both empirical and tacit knowledge of the phenomenon to make sense of the data. Basit (2010) argues that researchers should not merely concentrate on what documents contain, but need to ask questions about how documents affect and function in particular situations. In my analysis, the documents are analysed in relation to the literature in order to find out their significance in real use of Facebook. During this phase, for verification purposes, I discuss the analysed data that I collected from Facebook use by participants.

Basin (2010) is of the views that before the researchers engage in the task of analysing the data, they need to read them. The researcher read the collected data many times, to understand them. The reading process followed the approaches recommended by Mason (2002) in Basin (2010), and McMillan and Schumacher (2010). The researcher considered the value of using both approaches, as they are both deemed essential in outlining the coherence of procedure in this analytic process. The result of this decision is presented below.

Mason’s data analysis approach:

a) Literal reading: This involves looking at the content, structure, style and layout of the data.

b) Interpretive reading: This entails constructing or documenting a version of what the researchers believe the data represent and what they can infer from the data.

c) Reflexive reading: This locates the researcher as part of the data that they have generated, exploring their role and viewpoint in the collection and interpretation of the data and thus depicting their relationship with the data.
This next document analysis approach is set to complement the above in order to help understand and respond to the research question.

Five steps recommended by McMillan and Schumacher in their document analysis approach:

1. Locations of artefacts: Researchers obtain documents and objects

2. Identification of artefacts: Documents are photocopied

3. Analysis of artefacts: Requires descriptive data about the production of the documents, important questions concerned with: who uses it, how it is used, where it is used, and the purpose of its use.

4. Criticism of the artefacts: The determination of its authenticity and accuracy to identify the meanings of the artefacts in the social setting.

5. Interpretation of artefacts meanings must then be corroborated with observation and interview data.

The document analysis also followed the inductive analysis process. Firstly, the Facebook pages had to be located, and then permission was gained from each participant – through the signing of a consent form - to use them for the purpose of this study (see Appendix C). After reading them, the next step was to sort the pages according to codes and categories, together with brief description thereof. Then themes were developed, with the most important questions asked here being the uses of the documents: how it is used, where it is used, and the purpose of its use. Finally, the documents are interpreted, and the interpretations then corroborated with the data obtained through the interviews. In Section 3.6.1.2 questions used to develop codes, themes and narratives for the document analysis are presented in Table 3.4.

3.6.1.2 Document analysis

The Facebook data were analysed and presented as follows:

Table 3.4: Codes developed from Facebook pages
Facebook use, according to the interview data, displays two main categories, i.e., the way they use Facebook and activities they do on Facebook. The main information from the document analysis converges to sharing and exchanging information.

### 3.7 ETHICAL ISSUES

Since this research involved human beings, an ethics clearance was required and it was obtained from the University of Witwatersrand. At the time of starting this study, the researcher informed all the prospective respondents that all data is considered confidential and, as such, would never be shared with others. According to Lisetolli (2003), there are principles that underlie the research project. There is a way in which a researcher approaches the research and how research is conducted in the field to participants. There must be trust, honesty and trustworthiness during the research process as well as respect to participants as subjects, not just as research objects (Bogdan and Biklen, 1992).

Interviews, according to Kvale (1996), have an ethical dimension because of the interaction that takes place between two people. It is therefore necessary to consider the following matters during interviews:
• Permission gained from parties involved. Here the researcher will get the permission from respondents by means of a written letter that invites them to participate in the research.

• Confidentiality of data. Each respondent will also receive a participation form that explains to them the research, and terms such as voluntary participation, privacy, confidentiality and anonymity as well as informed consent.

• Consequences of information provided. The researcher here will explain to all respondents that all information or data gained from them will only be used for the purposes of this research. All information will be treated as confidential and no names of any respondents will be made public (Kvale, 1996).

For the purpose of this study, the researcher contacted the Mpumalanga Department of Education to get the necessary permission to do this research within two schools under their jurisdiction. All parties involved in the research were ensured that all data provided by them would be treated with confidentiality and anonymity. Participation was confirmed as being voluntary by both parties, and the respondent and the researcher signed the consent form (see Appendix B). No names of persons were mentioned. All data were only used to provide information for this research project. Respondents were also informed that they could withdraw their participation at any time during the research process.

3.8. VALIDITY AND RELIABILITY

3.8.1 Validity

The notion of validity refers to the appropriateness, meaningfulness, and usefulness of the specific inferences researchers make based on the data they collect” (Fraenkel and Wallen, 1993). Validity is the most important idea to consider when preparing research instrument for application. Cohen et al. (2005) view validity as an important key for effective research. Validity is a necessary requirement for both quantitative and qualitative research. With qualitative research, on the one hand, data validity could be achieved through the depth, honesty, richness and scope of the data collection as well as the number of participants approached and the objectivity of the researcher. With quantitative research, on the other hand, validity of data can
be improved by means of careful sampling, appropriate instrumentation and appropriate statistical treatment of the data. Wilson (2009) posits that strategies should not necessarily be used to offset threats in validating research findings. Instead, threats should be identified and anticipated by relevant strategies. In this study, validity has been ensured by triangulation in the data collection and maintaining integrity when collecting the data. The triangulation method was conducted by mixing qualitative and quantitative data collection strategies. That approach was adopted with the intention of validating the results and endorsing reliability of the findings. To achieve this, the qualitative approach included interviews and document sources of evidence, while the quantitative approach used the questionnaire. Further, those three sources of evidence were designed to complement each other. The document analysis was designed to act as a confirmation technique. There is a strong correlation with the questions posed in both the questionnaires, interview questions and document analysis; and it is by this means that the study assumes that the evidence collected would validate the inferences reached. In this study, the content-related evidence was considered and the criterion-related evidence to satisfy the criterion of a valid inference. According to Fraenkel and Wallen (1993), there are three main types of evidence a researcher may use to validate inference. Those are content-related evidence of validity, criterion-related evidence of validity, and construct-related evidence of validity. As alluded in this study the first two types were considered as being the most suitable for this study because the focus in this study is on determining the degree of relevance the participants display in the phenomenon and the degree of appropriateness the participant display about the phenomenon which should enable the researcher to make inferences about the phenomenon under study.

### 3.8.2 Reliability

According to Fraenkel and Wallen (1993), *reliability* refers to “the consistency of the scores obtained”. This definition is also sanctioned by Leedy and Omrod (2001) who claim that reliability has to do with the consistency of the final result gained with the measurement instrument. LeCompte and Preissle (1993) argue that reliability for quantitative research assumes the possibility of replication. In other words, if the same methods are to be used with the same sample, the results should be the same. In qualitative research, reliability is regarded as a fit
between what the researcher records as data and what actually occurs in the natural setting that is being researched (Bodgan and Biklen, 1992).

In this study, reliability is ensured by mixing the qualitative and quantitative methods of data collection. The three data collection instruments were designed such that administration of any of the three data instruments should yield similar scores on the phenomenon in question. This was done by using multiple sources of data collection forms, which are interviews, document analysis and questionnaires. To achieve this, semi-structured interviews were set for two teachers and a focus group interview was set and conducted for two groups of five learners. These interviews were designed such that they complement the questionnaires for both teachers and learners. The rationale for such design was for the purpose of double checking responses, for the sake of validating the findings. Document analysis of learners and teachers Facebook pages was also designed to act as a check for the interviews and questionnaires. Questions set for the Facebook pages were also set to compliment the two mentioned data forms. Data analysis strategies were designed to double check the findings of data collection forms, whereby analysing the data was done through description and themes of the case as well as cross-case themes. As conducted in this instance, data from the three instruments reveal common themes and strong correlation. Responses from the two schools on the interviews conducted reflect the same trends of behaviour and perceptions of the phenomenon. There is a direct correlation between the questionnaires, interviews and document analysis. Document analysis questions were also designed to complement the two instruments. According to Wilson (2009), the notion of reliability refers to the rigour, consistency and, above all, trustworthiness of the research. In this study, the researcher is of the view that triangulation would eliminate inconsistency of responses, given the nature of the instruments.
CHAPTER 4

PRESENTATION OF THE DATA

4.1 Introduction

The analysis of data provided themes which are discussed and interpreted case by case. According to Creswell (2013), when multiple cases are chosen, a typical format is to provide first a detailed description of each case and themes within the case called a within-case analysis followed by a thematic analysis across the cases. In the course of analysis, the evidence for the learners’ purpose of using Facebook will first be presented and then the learners’ engagement with Facebook. Second, Facebook practices for school activities are presented and the learners’ attitudes towards Facebook use for learning purposes discussed. Third, the implication of using Facebook for school-based work is presented.

4.2 PRESENTATION OF THE DATA: DOCUMENT ANALYSIS

4.2.1 SCHOOL A

The presentation of the document analysis data is comprised of codes and themes identified during the Facebook document analysis. Each code and theme is supplemented by an example of the extract of a screen shot. In the next Facebook page (Figure A), the Grade 11 Mathematics teacher is responding to the learners’ questions and providing an answer. In this case, the learner is due to write a test the next day and needs “just-in-time” clarity from the teacher. The learners presented their challenge or question to the teacher, who then responded just at the time when the learner needed an answer. The response by the teacher to this learner, given the nature of the Facebook group feature, is viewable by all learners in the group. The teachers respond to the learners’ questions by presenting the correct answer. When observing the time-span in which the learner posed the question and the teacher responded, it is evident that Facebook in this case was
able to provide the “just-in-time” response accordingly. This is considered helpful by some learner participants, as was revealed in that learner’s focus group interview. According to the learners, using Facebook has its advantages - particularly for those learners who are too shy to ask questions in the classroom setting - because the teachers’ responses do not only benefit all learners in that moment but remain on the group wall forever.

Figure 4.1: Facebook for teaching and learning

Theme: Activities in Facebook

In Figure 4.1, a Grade 11 English teacher is using Facebook group to foster discussion of English grammar. According to the teacher’s interview responses, learners like Facebook and enjoy collaborating and learning through this medium.
Figure 4.2: Facebook for teaching and learning

Theme: Activities in Facebook

The next theme uses Facebook as an administrative tool. Here Facebook group is used for managing a learning area or subject with the group. Members of the group are permitted to ask any subject related matter and the teachers relate such matters through this Facebook group. In Figure C, the teacher is using Facebook to administer the learning area and make announcements to the learners. The teacher informs learners in the group of the term test, which is to be taken on the following Tuesday, as indicated in the screen shot. Learners then engage with the teacher
more about the test and the teacher responds by highlighting the scope of the test to the learners. This again benefits all members of the group.

Figure 4.3: Facebook being used as an administrative tool: Making classroom announcements

In Figure 4.3, Facebook is being used for promoting teaching and learning. The Grade 11 mathematics teacher is using Facebook as a teaching medium. He poses questions and learners respond. According to the teacher, as revealed in the interview, this mode of learning is not only timely but significant, in that learning can be extended even into a learner’s leisure time. Learners are able to ask or respond, with the assistance of peers, at their convenient time. In this case, the teacher introduces the topic and engages learners in a discussion. We see learners deeply engaged in discussion and collaborating in order to get the answer. This again is viewed
by both learners and teachers as being beneficial, since all learners are actively involved in the lesson by virtue of being members of the group.

Figure 4.5: Teacher promoting collaboration among learners

4.2.2 SCHOOL B

As seen in Section 4.2.1, the emerging themes are: socialising and community building. Both teachers and learners use Facebook to socialise and share information about issues of common interest within their community these issues range from being educational to those about the community. In most instances, as revealed in a number of pages, the teachers also use Facebook group to engage parents about school related matters. In school B, this Grade 11 Facebook group is not only engaged in subject-related matters but also uses this medium to discuss community building activities. The teacher, however, regulates matters to be discussed. In Figure E, the first learner is using Facebook for socialising (discussing matters that are of common interest among the learners themselves) and in the following thread, a second learner shares a link to all learners who need help to improve their performance in the listed subjects. A third learner immediately
responds by indicating that he is willing to offer help in one of the listed subjects by indicating times which he is available to offer help to those in-need.

Figure 4.6: Facebook for socialising and community building.

In this study, motivation is one of the themes which emerged. Both the teachers and learners engage in the motivation process through Facebook group. This motivation is reflected in the learning area, bursary possibilities and good conduct in and around school activities. Figure presents an instance of such motivation by the teacher i.e., the teacher motivates learners to work hard prior to the examination. Such cases have often occurred in the Facebook use between teachers and learners.
Another emerging theme is teaching and learning through sharing documents or links. In this case, the learner shares a link with fellow learners for a bursary application (see Figure 4.7).
Another emerging theme is teachers using Facebook for making announcements (see Figure 4.8). In this case, the teacher requests learners to pass school related matters to their parents.
Figure 4.9: Classroom announcements by teachers

During time for administration and making classroom announcements (see Figure 4.10), the teacher informs learners of the extra classes during the winter holidays. The teacher also announces an educational tour to Wits University.
Section 4.3 presents an analysis of the quantitative data collected through the questionnaire that was distributed to the learners. The findings are presented through graphical illustrations combined with a brief explanation. First presented is the data from School A; which is followed by that of School B. Last presented is the result of the two schools combined.

### 4.3 DATA FROM QUESTIONNAIRES

In the questionnaire presented to them, the learners were asked ten questions which were aimed at investigating how they used Facebook and their reasons for doing so. This preliminary data would later be confirmed or disapproved by interviews during triangulation of the data. This inquiry delivered the following.
4.3.1 School A

The findings resulting from the data collected from the questionnaire distributed within School A. This discussion process is based on the questions as asked in the questionnaire (Appendix A1) and the results are presented in figures and graphs.

1. Use of Facebook

Question 1 required of the learners to indicate what they use Facebook for. Learners had to choose from the five possible uses of Facebook. The result indicated that learners mostly use Facebook for socialising, followed by sharing ideas and communications (Graph 4.1).

Graph 4.1: Use of Facebook

![Graph 4.1: Use of Facebook](image)

The results presented in Graph 4.1 indicate that learners in School A use Facebook for communication (30%), sharing ideas (30%), socialising (30%) and making new friends (10%). During focus group interviews, it emerged that learners use communication, chatting, making friends interchangeably. The impression the researcher got of this was that all these concepts meant almost one thing among learners. According to the data, it emerged in both schools that learners use all these Facebook activities in the same way. Learners communicate with teachers, chat during their leisure time and share personal and educational information in an equivocal way. The analysed Facebook pages, however, revealed that Facebook is often used for private communication and educational purposes.
2. Activities on Facebook

The learners were asked to mention the activities they engage in on Facebook when they are at school and at home (Graph 4.2). The results are as follows:

**Graph 4.2: Learners’ activities on Facebook**

Graph 4.2 indicates that the majority of learners in School A are engaged with studying and learning (40%), followed by singing (30%); while discussing, chatting each comprise 10%. These results were also confirmed by interviews.

3. Time spent on Facebook

The aim with Question 2 was to discover the level of interest and commitment learners have on Facebook which was expressed in the daily time-span which learners spend on Facebook (see Graph 4.3). The results are as follows:

**Graph 4.3: Time on Facebook**
Generally, the majority (50%) of learners in School A indicated that they roughly spend an hour per day on Facebook. Since they had to choose, this question was covered again during interview to double check the reliability of their response and the data indicates that learners spent roughly an hour or less per day on Facebook, as indicated in the questionnaire results.

4. **Learner-teacher consultations on Facebook**

In answering Question 3, most learners agree that they use Facebook to communicate with their teachers for academic purposes (Graph 4.4). The results revealed the following.

**Graph 4.4: Learner-teacher consultations on Facebook**

![No of Learners](image)

The results indicated that the majority (80%) of learners in School A affirmed that they consult with their teachers and discuss their school work using Facebook. This was also confirmed by the focus group interview. Given that all learners who partook in this study had volunteered and have met the sampling criterion of being conversant with the phenomenon, it did not come as a surprise that all learners responded positively in this question.

5. **Learners’ main reasons of using Facebook**

The results from the questionnaire indicate that there are varied reasons why learners use Facebook, as shown in Graph 4.5.
Graph 4.5: The reasons learners use Facebook

The results reveal that the main reasons for learners in School A using Facebook are: communicating with other learners and friends (9 learners), chatting with friends and finding new ones (8 learners), exchanging educational information and sharing school work with other learners, and communicating with parents, relatives and others (7 learners), communicating school work with teachers and classmates (4 learners), and sending music and photos (2 learners). These results clearly indicate that learning using Facebook is the chief reason for engaging through the medium.

6. Use of Facebook for school work improvement

The aim with Question 6 was to investigate how Facebook can be used to improve school work. The results are presented in Graph 4.6.

Graph 4.6: How Facebook can be used to improve school work
In Graph 4.6 it is indicated that, in order to improve school work, learners in School A used Facebook to post links to sites on the internet to help solve learning area problems and subject tasks (7 learners), ask clarity from educators and other learners, and exchange information relating to school work (6 learners), communicating with classmates about school work (5 learners), connecting with other learners for class activities and tasks (5 learners), and sharing school work with others learners (1 learner). The fact that more learners (7 learners) use Facebook to solve learning tasks shows the importance of Facebook for school improvement. This finding was supported in the group focus interview.

7. **Learners’ classification of Facebook use in categories**

In this question, learners were given activities which they were asked to order in terms of how they valued them. The results are as follows.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Never</th>
<th>Sometimes</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your chat for school use.</td>
<td>1</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Creating links from the internet for private use.</td>
<td>5</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Communicating with educators.</td>
<td>0</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Communicating with other learners.</td>
<td>0</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Communicating with parents.</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Your chat with friends.</td>
<td>0</td>
<td>2</td>
<td>7</td>
</tr>
</tbody>
</table>

**Graph 4.7: Categorisation of activities according to their personal value**
The findings in this question matched with those of the interview and Facebook page document analysis. When analysing their Facebook pages it became obvious that learners in School A spent much of their time communicating with other learners for private and educational use (see Graph 4.7). The Facebook pages reveals that more time is spend with the peer group than the educators; this was confirmed during focus group interview.

8. Facebook bundles purchases

This question was aimed at discovering how learners bought Facebook airtime bundles in order to consider the frequency of Facebook use at school. The results are presented as follows:

Table 4.3: Purchase Value of Airtime Bundles

<table>
<thead>
<tr>
<th>Bundles Purchases</th>
<th>No of Learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>R5.00</td>
<td>0</td>
</tr>
<tr>
<td>R10.00</td>
<td>0</td>
</tr>
<tr>
<td>R15.00</td>
<td>2</td>
</tr>
<tr>
<td>R20.00</td>
<td>0</td>
</tr>
<tr>
<td>R25.00</td>
<td>0</td>
</tr>
<tr>
<td>R30.00</td>
<td>2</td>
</tr>
<tr>
<td>R35.00</td>
<td>0</td>
</tr>
<tr>
<td>R40.00</td>
<td>1</td>
</tr>
<tr>
<td>R50.00 and more</td>
<td>5</td>
</tr>
</tbody>
</table>

Graph 4.8: Purchases Value of Airtime Bundles

As revealed in Graph 4.8, most of the learners in School A did not respond to this question however, during the focus group interview it emerged that most learners use their free bundles
for their Facebook activities. It also came to the attention of the researcher that learners tend to opt for a cell-phone option that offers free bundles, with which they engage in Facebook. Interestingly, most of the learners who did not respond to this question viewed it to be irrelevant.

9. **Time spent on communication on Facebook for school work**

The intention with this question was to discover the percentage of time each learner used for their different Facebook activities. The results revealed the following.

**Table 4.4: The percentage of time each learner used for Facebook activities.**

<table>
<thead>
<tr>
<th>Airtime Spent</th>
<th>School Work</th>
<th>Personal</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 10%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>11 - 20%</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>21 - 30%</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>31 - 40%</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>41 - 50%</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>51 - 60%</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>61 - 70%</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>71 - 80%</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>81 - 90%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>91 - 100%</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Graph 4.9: The percentage of time each learner used for Facebook activities**
The results presented in Graph 4.9 indicate that the majority (41 – 50%) of learners in School A used Facebook for school work and personal reasons. This finding suggests that learners seamlessly used Facebook for personal reasons, while learning and enhancing school activities.

10. Attitude towards Facebook use

The intention with this question was to discover the attitudes of learners towards Facebook use for school purposes. The results are presented in the following graph.

**Graph 4.10: The attitudes of learners towards Facebook use for school purposes**

The results presented in Graph 4.10 show that the attitudes of learners in School A towards using Facebook for school work were positive. Both the focus group interview and Facebook page analysis revealed that all the learners that volunteered to partake in this study perceived their use of Facebook for private and educational use in a positive light. As indicated in the interview, they found it relevant, helpful and timely.

The data in School A indicate the use of Facebook for learning content. It was shown that, through socialising and exchanging information, Facebook is used as a meditational tool for learning. The next section investigates what happens in School B.
4.3.2 School B

1. Use of Facebook

The question intended to know what learners used Facebook.

Graph 4.11: Use of Facebook

Graph 4.11 indicates that the majority (53%) of the learners in School B used Facebook for socialising, while 41% used it for communication. The responses from all learners revealed the same perception as that for School A (see Graph 4.1). It was revealed in the group focus interview and Facebook pages, the learners used the words socialising, communicating, and chatting interchangeably; to them meant the same thing.

2. Activities on Facebook

Learners in School B responded to the question to know the kind of activities they do on Facebook. The results came up as follows:

Graph 4.12 Learners activities on Facebook
The results on the activities of learners while on Facebook were the same in both School A (see Graph 4.2) and School B (see Graph 4.12).

3. **Time spent on Facebook**

The learners were questioned about their daily time-span on Facebook. The investigation revealed the following results.

**Graph 4.13 Times on Facebook**

As with School A (see Graph 4.3), the learners in School B generally spent an hour or less on Facebook. However, it emerged from focus group interview that there are a few who claimed to spend more than an hour on Facebook. This also confirmed the 19% as indicated in the pie chart (see Graph 4.13).

4. **Learner-teacher consultations on Facebook**

On the question about collaboration of learners and teachers on Facebook for school purposes, the investigation revealed the following.
As indicated in Graph 4.14, almost all learners in the designated group at School B spent time on Facebook collaborating with their teachers on educational matters, community matters and at times social aspects of their lives. This was confirmed during the group focus interview.

5. Learners’ main reasons of using Facebook

The learners at School B, as with learners at School A (Graph 4.15), asked to indicate their main reasons for using Facebook. Their responses revealed the following.

Graph 4.15 The reasons learners use Facebook
As indicated in Graph 4.15, among their reasons for using Facebook, learners in School B mentioned: exchanging educational information and sharing school work with other learners (14 learners), communicating with other learners and friends (14 learners), communicating school work with teachers and classmates (13 learners), communicating with parents, relatives and others (11 learners), chatting with friends and finding new ones (7 learners), sending music and photos (2 learners). As the graph illustrates, most learners converged on learning as being their reason for using Facebook.

6. Use of Facebook for school work improvement

The participant learners at School B revealed how they used Facebook for school work improvement and the results appear in the following graph.

Graph 4.16 How Facebook can be used to improve school work

The responses of the learners from School B to the question about how learners used Facebook for school work improvement can be ordered as follows: Exchanging information related to school work (16 learners), Creating links on the internet to solve learning area problems or subject matter task (16 learners), Communicating with classmates about school work (14 learners), Connecting with other learners for class activities and tasks (14 learners), Asking for clarity from educators and other learners (13 learners), Sharing school work with others learners (12 learners).

As manifested in their Facebook group, learners in School B share more web links with other group members, than to the learners from School A (Graph 4.6). This was followed by
communicating with other school learners or group member around school work. Most of the school work from School B related to extra-curricular activities such as offering lessons outside school contact time by learners, providing information on bursaries and issues in the community which concerned both learners and teachers, like attending sponsor meetings by mining companies in and around their community.

7. Learner’s classification of Facebook for school work in categories

The classification of Facebook activities by learners in School B was done as follows.

Table 4.4: Categorisation of activities according to their personal value.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Never</th>
<th>Sometimes</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your chat for school use</td>
<td>0</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Creating links from the internet for private use</td>
<td>15</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Communicating with educators</td>
<td>0</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Communicating with other learners</td>
<td>0</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Communicating with parents</td>
<td>9</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Your chat with friends</td>
<td>0</td>
<td>5</td>
<td>12</td>
</tr>
</tbody>
</table>

Graph 4.17: Categorisation of activities according to their personal value.
In this question, like in School A (Table 4.1 and Graph 4.7), chatting with other learners is the most indicated option which is confirmed by the Facebook page analysis and group focus interview. Communicating with other learners and Facebook for school use were the same in both School A and School B.

8. Facebook bundles purchases

Learners in School B buy Facebook bundles as the results show.

Table 4.5: Purchase Value of Airtime Bundles

<table>
<thead>
<tr>
<th>Bundles Purchases</th>
<th>No of Learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>R5.00</td>
<td>1</td>
</tr>
<tr>
<td>R10.00</td>
<td>5</td>
</tr>
<tr>
<td>R15.00</td>
<td>3</td>
</tr>
<tr>
<td>R20.00</td>
<td>2</td>
</tr>
<tr>
<td>R25.00</td>
<td>1</td>
</tr>
<tr>
<td>R30.00</td>
<td>0</td>
</tr>
<tr>
<td>R35.00</td>
<td>0</td>
</tr>
<tr>
<td>R40.00</td>
<td>1</td>
</tr>
<tr>
<td>R50.00 and more</td>
<td>4</td>
</tr>
</tbody>
</table>

Graph 4.18: Purchase Value of Airtime Bundles
To this question, like in the case of School A (Table 4.2 and Graph 4.8), there are learners who did not respond to it at the time of completing the questionnaire. However, it was also revealed during the focus group interview with the learners from School B that they felt the question was not relevant, since they use free bundle option of their cell-phone contracts.

9. **Time spent on communication on Facebook for school work**

The investigation on the time learners in School B spent on Facebook for school work provided the following results.

**Table 4.6: The percentage of time each learner used for Facebook activities**

<table>
<thead>
<tr>
<th>Airtime Spent</th>
<th>School Work</th>
<th>Personal</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 10%</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>11 - 20%</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>21 - 30%</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>31 - 40%</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>41 - 50%</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>51 - 60%</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>61 - 70%</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>71 - 80%</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>81 - 90%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>91 - 100%</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Graph 4.19: The percentage of time each learner used for Facebook activities**
The results presented in Graph 4.19 indicate that the majority of the learners in School B tended to use Facebook slightly more for personal reasons than for school work. This finding differs slightly from that of School A (Graph 4.9), where the learners seamlessly used Facebook for personal reasons, while learning and enhancing school activities.

10. **Attitude toward Facebook use**

The responses from School B reflect the following attitudes toward Facebook use.

**Graph 4.20: The attitudes of learners towards Facebook use for school purposes**

![No of Learners](chart)

Like in School A (Graph 4.10), generally all learners in School B indicated positive attitudes towards Facebook use both for private use and educational use.

**4.3.3 Synoptic analysis**

The responses provided by the learners that participated in this study indicated that they use Facebook for socialisation, i.e., communication for private use with their friends and relatives. In both schools, they indicated that they use Facebook for communication. However, it became apparent during focus group interviews that the learners used the words socialisation, communication and chatting interchangeably.
Both the teachers that participated in this study indicated that they use Facebook to communicate with friends and exchange information with learners. Both educators responded positively that they would engage with their learners on Facebook for discussing educational issues. This is an indication that these teachers use Facebook for teaching and their attitude towards learners using Facebook for learning is positive.

All the learners responded positively claiming that they use Facebook. Generally, the learners in both schools spent an hour or less per day on Facebook with the exception of two learners, who indicated that they spent up to two hours per day on Facebook. They used Facebook for learning purposes because it was found to be efficient.

Both teachers also engaged their learners through Facebook in class activities. Teachers from School A and School B use Facebook for conducting English activities, such as sentence construction and providing feedback to questions posed by learners. The trends which showed up during the group focus interview and Facebook page analysis, also showed up in this group. The difference with this group is that spending time with parents on Facebook comes up to be a third activity, as opposed to group A learners. The rest of the ratings match with the responses received in the interviews and Facebook page analysis.

The learners at both schools indicated that they spent much of their time on Facebook, communicating with friends and other learners. This was also confirmed during the interviews and again by the Facebook page analysis. The learners at both schools indicated the exchange of educational information as being the second most important activity on Facebook which was confirmed by the Facebook page analysis. The least option, which is also reflected in both groups, is sending music and pictures. This was confirmed by the Facebook page analysis and group focus interview. Therefore, the main activity of both the groups of learners on Facebook was centred on socialising and school activities.

The learners of both schools share common views on how Facebook could be used to improve a learner’s school work. They all rated the last option, i.e., posting web links on the internet to
solve learning area problems and information for subject tasks as being the most important one. That was followed by ‘exchanging information relating to school work’, which they all rated the second. This finding indicates that communication with classmates and educators about school work on Facebook enhanced learning. Table 4.6 provides the reader a summary of Section 4.3.3.

**Table 4.7: A synoptic analysis of learner use of Facebook .**

<table>
<thead>
<tr>
<th></th>
<th>Learn</th>
<th>Social</th>
<th>Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exchange web links to support learning</td>
<td>Exchange school work information</td>
<td>Socialise with family and friends</td>
</tr>
<tr>
<td>School A</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Sometimes</td>
</tr>
<tr>
<td>School B</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Sometimes</td>
</tr>
</tbody>
</table>

**4.4 Discussion**

**4.4.1 General affordances of Facebook for education**

Findings from the two schools revealed the same Facebook teaching activities as the affordances identified by Munoz and Towner (2009). In the two schools, affordances being used are profile page or the wall, posting or exchanging both social and educational matters on the wall, and all these are carried out within the school Facebook group. The analysis of the Facebook page of both schools supplemented by the interview and questionnaire indicate the first three ways cited by the authors, which reveal the following applications of these affordances in their education practice of Facebook integration into a course, namely, profile page, creating a group page for each class, posting information on the wall or profile, and integrating of Facebook applications into their activities. Manca and Ranierit (2013) conducted studies which revealed that the Facebook feature is used in only four studies to expose students to resources and or deliver course contents. In these two schools, learners have been quoted referring to “Geleza Nathi”. Facebook page acknowledges its significance in their teaching and learning processes. This commonality of Facebook use in the four studies is important, as it does not only show the depth
and length of Facebook use in the two schools compared to the general practice at large but also helps in responding the Research Question 1 “What teaching activities are teachers using through Facebook?” Facebook affordances as expressed in this study are also reflected in the study by de Villiers (2010) who states that “Facebook’s group feature is designed to support discussions on defined topics.” In the next discussion, the focus is on the pedagogical affordances of these features.

4.4.2 What are the pedagogical affordances of these features?

Facebook page analysis from School B confirms learners connecting with other learners and creating a learning community. Learners are found sharing resources such as bursary application web links, motivating one another and supporting learning activities such as providing assistance to one another on subject matter. Learners are seen sharing issues of common interest in and around their community. Munoz and Towner (2009) posit that Facebook is a network that connects students with other students indirectly creating a learning community.

In both schools, students contact their teachers and fellow learners about school activities. In School B, learners collaborate about educational activities involving the community, while in School A, there is evidence of educational rapport between learners and teachers created by this online activity, thus affirming Munoz and Towner (2009) who asserts that students can use Facebook to contact classmates about questions regarding class assignments or examinations as well as collaborate on assignments and group projects in an online environment. The use of Facebook in the two schools reveals similar trends, as in the study by Wang et al. (2011), in which Facebook group feature being studied as a learning management system, for putting up announcements, sharing resources, organising weekly tutorials and conducting online discussions at a teacher institute in Singapore. Although in the case of these two schools no tutorials were posted for learners to view, there is much commonality in how Facebook is being used in both scenarios. The following interview responses shed light on the pedagogical affordances of these features in the two schools.

Question two: What teaching activities are you engaged in through Facebook?
Facebook, in this study, has been shown as a tool that enables learners acquire knowledge through a social way done in communicating with peers and teachers as some participants declared in the next quotations:

School A: “I have liked a mind-set learn to knowledge what they are up to channel, so that I can get links that will be useful to my learners”

School B: “clear misconceptions on what would have been taught, make announcements, and post questions for learners practice”

School A: “English activities, sentence constructions and feed back to learners”

Question three: How do you use Facebook in conducting your learning activities?

School A: “To send activities and memorandums after we have discussed it in class”

School B: “Encourage the learners to visit the group page or page every day before going to bed and also respond quickly when they have posted questions”

4.4.3 How are these features being used for educational purposes?

Teachers of the Grade 11 classes use Facebook for teaching and learning purposes. This study draws a comparative analysis of teaching and learning activities from the two schools with empirical Facebook studies. Similarities of themes in the reviewed studies have been noted. In School B the researcher saw a replication of the study by Selwyn (2009). Although in School A themes such as reflecting, exchange of practical information, academic information and display of supplication emerged. In school B evidence of exchange of humour and nonsense also emerged as a theme (see Annexure B1). Selwyn (2009) analysed the Facebook wall activity of 909 undergraduate students at a UK university to understand their purpose for using Facebook and five themes (the same themes evidenced in School B) emerged from his analysis of over 200 posts about education: 1) recounting and reflecting 2) exchange of practical information, 3) exchange of academic information, 4) displays of supplication and 5) exchange of humour and nonsense.

The two schools under study had much in common with the study conducted by Manca and Ranierit (2013), with exception to theme number 4. In terms of using Facebook for educational
purposes, this study revealed five main uses, namely, supporting discussion and allowing students to support each other through mutual understanding and critical thinking exercises, sharing resources, delivering content to expand the curriculum, exposing students to external resources, and using Facebook to support self-managed learning. To supplement comparative analysis of these studies, interview responses by both respondents are presented below, to further indicate the manner in which these features are used.

When asked how Facebook can help learners in coping with their learning activities, these are some of the teacher responses.

School A:

School B: “It encourages learners to work independently while they are on Facebook they may follow links that will educate them on different aspects of life”

School A: “Learners are confident to express themselves”

When asked what they uses Facebook for, these were some of their responses:

School A: “I use Facebook to socialise; to pass information to my learners; for inspirational purposes and to keep tabs on my learners and children.”

School B: “...socialise with learners and also with friends and relatives”

School A: “...communicating with friends; colleagues; tags in events and uploading photos and motivation

4.4.4 Reasons for using Facebook and its features in teaching and learning

The themes which emerged from these two schools are: motivation, discussion and exchange of educational matters, formal and informal learning. Those themes also emerged in the study conducted by Manca and Ranierit (2013) who reviewed 11 Facebook studies focused on its impact on different aspects of teaching and learning, such as, content delivery, community building, informal learning, academic conversation, and learning outcomes in two cases. The authors maintain that Facebook has proven to be effective as a means of providing students with
extra-curricular content resources, e.g., exposing pre-service teachers to resources and content delivery by professional organisations.

The analysis of data as mentioned above indicates that both learners and teachers use Facebook for communication, socialising and sharing ideas for learning purposes. This is manifested by the learners’ and teacher’s responses to the two respective questionnaires. The summary of the analysis of the responses from the learners’ questionnaire indicates that learners use Facebook mostly for communicating with peers, exchanging educational information and sharing school work with classmates and communicating school work with teachers. The learners’ communication on Facebook was mainly found to be of a socialisation nature but, depending on the daily time-span they spend on Facebook, it was found that they also accessed school-related information. Asali and Kohun (2006,) in Ryan, Margo, Sharp, and Tarleton (2011), put it, “Socialisation, whether it would be educational or otherwise, leads to more inclusion, support, and understanding”. This shows how the use of Facebook provides double benefits: social and academic. That is the reason Ali and Kohun (2006) suggest it is important to provide a mechanism for socialisation among students because it is one of the ways to help them learn from each other. The following is the presentation of interview extracts to indicate how Facebook and its features are being used in the two schools:

When asked if they think Facebook can help learners in coping with their learning activities, teacher responses included:

School A: “It encourages learners to work independently while they are on Facebook they may follow links that will educate them on different aspects of life”

School B: “learners are confident to express themselves”

School A: “It is current and relevant to our time”

The data gleaned from the interviews complement the questionnaire findings and show that by using Facebook, learners enjoy it and learn from it as this learner stated:
“I use the ‘GelezaNathi Facebook page’ which is also an educational programme on SABC 1. The page is very active and one thing that I like about this page is that a lot of people with different ideas participate in the group. The other important thing is that there is a very good teacher in that group” (Learner/school A).

This statement, like many others in the samples, bears reference to Bowers-Campbell (2008) in Ryan et al. (2011) who states that Facebook is student-friendly, student-centred and student-controlled and the social nature of Facebook invites participation instead of mandating it. Ryan et al. (2011) argue that exploring SNS such as Facebook in an educational context is both relevant and timely. Four Learners from School B also stated that socialising and communicating with people on Facebook enables them to access school information.

A learner from School A commented on the reason for using Facebook in schools, “Yes, because some learners couldn’t ask questions in class or in front of their peers, so they are able to ask teachers and some learners so that they can get help. In my school we are also engaged in Facebook for teaching and learning - our group is Leonard Ntshuntshe Grade 11.

A learner from School B: “Yes Facebook can be able to help learners coping with their learning activities by joining learning groups, simply because they will be able to enjoy the lessons and it will be more fun because there will be discussions concerning different kinds of topics. And not to forget that we can also make friends through learning.”

Another learner from school B: “Learners will cope as long as at their own comfort. Because as learners we are different in many ways some do not like to ask in class lesson but rather they can do it on Facebook”

The implications indicated above draw a parallel with Reid’s (2011) research, whose findings reveal that Facebook provides a means of social communication that enables collaborative learning over the internet, thus encouraging learning. Reid (2011) shows how Facebook establishes mini communities, enables tutorial groups and encourages participation for learning purposes. Research in the two studies reveals that Facebook has the potential to be used as a
learning management system (LMS). Looking at the analysis done with other empirical studies, Facebook use in these two schools denote enormous pedagogic potential in teaching and learning. As for Mazer, Murphy, and Simonds (2007), engaging learners with Facebook at the school level prepares them for the university educational environment, since some universities are now pioneering the use of SNS tools for communication with their students. Most universities in South Africa are currently using Facebook as a supplementary learning management system. Facebook practice in the two schools stands a chance to ease the trepidation of secondary learners as they enter the university level, since such practice, as indicated above has already proliferated in most universities.

**How Facebook benefits teaching and how is it used in teaching**

Generally, all the participants, with the exception of one learner, see Facebook as beneficial in teaching and learning.

**Exchange educational matters**

The following interview extracts in the two schools reflect some of the cited benefits of Facebook.

When asked if they think Facebook can be used for teaching and learning purposes, these were some teacher responses.

- **School A:** “Yes, for the fact that it is accessible to the larger community at school”

- **School B:** “Yes, mainly because it catches learners attention”

When asked if they think Facebook can be used for learning, the following were some learner responses:

- **Learners from School A:** “Yes we use Facebook to socialize with our teacher and friend. It help us a lot because we improve our English in terms of writing spelling. It is very helpful because most of the time we are scared to ask question in class because of our peer, so we get enough time to ask our teachers on Facebook and we understand them easily because they gave us their all attention”.
Learners from School B: “Yes, because it can help us to post problems and others will solve them and share the different methods of solving these school problems that concern out subjects or learning areas”.

Learner from School B: “True because in learning it involves two people a learner and a teacher which will make it easy to share questions to teachers anytime and anywhere even if not in a classroom”.

Answers provided to the questionnaire reveal many benefits of using Facebook in the classroom. As the responses for Questions 4 and 6 revealed, all the learners (seventeen out of seventeen) indicated that Facebook helps them cope with their studies because they can chat with their teachers and classmates, and ask questions about that which they do not understand. The results from the questionnaire show that Facebook actually helps learners and their teachers to be regularly connected to each other for addressing any learning problem that may arise. This finding is closely associated with Ryan et al.’s (2011) assertion that “Facebook can be used as a means to foster a sense of “connectedness” between the instructor and students, to further increase self-efficacy.

The use of Facebook was also found to be highly relevant among the learners themselves for different learning reasons - which pushed them to chat to each other, whether in or out the classroom. The study revealed a number of reasons which motivate people to use Facebook: The most relevant to this study are: (1) exchange information, music, pictures, video, etc, (2) learn more about individuals, (3) communicate with classmates and friends, and (4) express and view opinions and professional activities. The Facebook pages of the two schools show teachers and learners exchanging educational matters, including that of learners amongst themselves. Facebook pages also show learners using Facebook to share matters in their community and school related ones. The interview, questionnaire and document analysis all indicate learners communicating with classmates for social and educational purposes. This finding correlates with the findings in this study as outlined below.
In this study, five learners from School B emphasised that “sharing ideas and information” on Facebook was what they most liked in their use of Facebook. Bowers-Campbell (2008) posed the argument that “using features of Facebook may help students to better connect with college reading expectations”. This finding is closely associated to an assertion by a learner from School B, who stated that, “I am not always on Facebook for learning, but I always make sure that I do conduct with different learning activities and also look out for bursaries through Facebook”. The view by this learner is also expressed by Bosch (2009) and Mazer et al. (2007) who argue that although SNS constitutes common tools used as a means of communication among youth, they are not being equally used by high school learners and teachers in school activities. According to the learners from School B, “We use Facebook to interact with education page administers to answer our questions and these comments. We also discuss a lesson that is broadcasted on TV on that same page (Learn Extra) Channel. They further assert that this has the potential of developing mutual student support. This view is also expressed by learners from School A, “Yes, because some learners couldn’t ask questions in class or in front of their peers so they are able to ask teachers and some learners so that they can get help. In my school we are also engaged in Facebook for teaching and learning. Our group is Leonard Ntshuntshe Grade 11.

According to Mazer, Murphy, and Simonds (2007), engaging learners through Facebook at the school level prepares them for the university educational environment. Since some universities are now pioneering the use of SNS tools for communication with their students. Three learners from School B confirmed that Facebook has been really helpful as one stated, “Yes creating links relating to school work actually helps”. According to Ryan, Margo, Sharp, and Tarleton (2011), Facebook affordance, which enabled the creation of groups, “lends a great deal of control to the students in terms of defining their own learning goals”. This view is also expressed by a learner from School B in the statement, “Yes Facebook can be able to help learners coping with their learning activities by joining learning groups, simply because they will be able to enjoy the lessons and it will be more fun because there will be discussions concerning different kinds of topics and not to forget that we can also make friends through learning”. This view expressed by this learner is also a finding of Bouwers-Campbell (2008, p.82) who asserts that, “Facebook is student-friendly, student-centred, and student-controlled.”
Attitudes towards the use of Facebook

The quantitative data indicates that six out of seventeen learners regard Facebook as a positive learning tool. They say that it is good for sharing information on Facebook, and they confirm that they learn more because of their full engagement with Facebook, which helps them express themselves freely. As one of them stated: “It’s a positive perception because the culture of classroom learning is not only to be taught but also it is to interact and free our opinions”. This statement is strengthened by another who believes that Facebook mostly serves for communication with other learners, exchange of educational information, and interactional work with teachers and classmates.

Another aspect in relation to learner perceptions of Facebook is their rating of their Facebook use. For both School A and B, chatting with friends has the highest score, ‘communicating with other learners is followed by ‘chat for school use’.

The fact that there is a close relation between the data purchase of personal and educational use shows that learners find value in Facebook activities for educational use. This is consolidated by the interview responses, which show that most learners spend 80% of their Facebook use on school work and 20% on personal issues. Consider the next example:

“To be honest I spend much time on Facebook chatting with friends than on learning activities. My percentage is 80% with friends and 20% dealing with my school work. I don’t spend much time learning activities and I’m willing to”

There were two learners whose percentages were markedly different from the general tendency. One shows that she uses 35% of her time for school work while 65% is spend on personal issues. For the other learner, however, more time (60%) is spent on school work while personal issues take 40%.

From these data, one can see that learners perceive the use of Facebook for school positively because the higher percentages support the use of it for school work instead of its use for personal issues.
All the participants responded positively on their perception of Facebook use in teaching and learning. Here is one quote:

   Learner from School B “It’s a positive perception because the culture of classroom learning is not only to be taught but also it is to interact and free our opinions”

**How are the Facebook features used by learners for learning?**

On the question of how Facebook features are used for learning, the following were some of the learner’s responses.

Learners from both schools were asked about the learning activities they are engaged in through Facebook and these were some of their responses:

Learners from School A: “I am involved in Facebook. The activity which I am engaged in is ‘Leonard Ntshuntshe Grade 11 Facebook page’ where we interact with teachers where we encounter problems while we are studying. It really helps a lot because you are free when you use it”.

Three learners from School B: “Communicating with classmates and teachers”.

Learner from School B: “I have joined learning groups like a learning channel (Mindset Learn Extra) on Facebook. I usually ask questions when there is something that I don’t understand on Physical Science, Life Science and Mathematics”.

Four Learners from School B: “Socializing and communicating with people”.

Learners from School A: “I use the ‘GelezaNathi Facebook page’ which is also an educational programme on SABC 1. The page is very active and one thing that I like about this page is that a lot of people with different ideas participate in the group. The other important thing is that there are very good teachers in that group”.

88
This chapter demonstrated that the data from questionnaires and documents correlates with data from interviews. Although there has not been much evidence from Facebook pages about the frequency of the use of Facebook for learning purposes, questionnaires and interviews highlighted a kind of respondents’ enthusiasm in relation to using Facebook for learning. This is significant for this study because the more respondents are attracted to using Facebook, the more they learn from it.
CHAPTER FIVE

GENERAL CONCLUSION AND RECOMMENDATIONS

This study examined the themes which emerged from the data collected from the two secondary schools of Mpumalanga Province, in South Africa, about their use of Facebook as an educational tool. The analysis of the data collected by means of two specially prepared questionnaires, group focus interviews (conducted with seventeen learners) and semi-structured interviews (conducted with two teachers) and Facebook page document analysis confirmed similar themes, as discussed in the earlier chapters of this study.

As provided in the Facebook screen prints, this study revealed similar trends in Facebook features usage. In a typical study, Wang et al. (2011) provides steps for setting up a Facebook group and continue to say that the wall in the Facebook group was used to disseminate just-in-time information. This means that the wall allowed the publication of announcements, which also allowed publication of resources and other educational aspects. In this study, a triangulation of data from questionnaires, interviews and Facebook pages from both the learners and teachers revealed that Facebook is generally used for communicating on social aspects, and exchanging educational knowledge of both teachers and learners. This finding concurs with the study by Bower-Campbell (2008), in Ryan, Margo, Sharp, and Tarleton (2011) who states that Facebook is students-friendly, student-centred and student-controlled and the social nature of Facebook invites participation instead of mandating it. This view is further asserted by Charmigo and Barnett-Ellis (2007) in Ryan et al. (2011) who suggest that by exploring a new type of internet service such as Facebook instead of quickly dismissing them as irrelevant. We might learn new ways of reaching out and communicate with a larger segment of our academic library users. Ryan et al. (2011) argue that exploring social network services (SNS) such as Facebook in an educational context is both relevant and timely.

The findings of this study showed that participants believed that Facebook has the ability to foster learners’ and teachers’ collaboration. Teachers collaborate on issues of mutual educational
interest, while learners support educational matters for one another on this platform. This was also found by Reid (2011) in her study on Facebook as an alternative pedagogical space, which revealed that Facebook provides a means of communication that enables collaborative learning over the internet. In other words, Reid’s (2011) study shows how Facebook establishes mini communities and enables tutorial groups to function, which encourages participation. In this study, the teachers generally believed that Facebook is suitable for enhancing educational interventions or as a learning resource but not as a formal learning platform, a view which has been cited by many other researchers in their investigation of Facebook in teaching and learning.

The availability of other educational Facebook groups and the popularity of their use by teachers and learners reveal interesting facts such as communication of teachers and learners through Facebook for effective learning and their ability and affordances to use Facebook. Wang et al. (2011) argue that Facebook, as a popular social networking site, like many other new technologies, has potential for teaching and learning because of its unique built-in function that offer pedagogical, social and technological affordances.

Teacher and learner participation and exploitation of smart-phones reveals interesting facts about Facebook, its potential for educational use, and thought - provoking to those with keen interest in educational studies. Since many Facebook research studies were primarily focussed on higher institution of learning, the researcher recommends advancement of this study. The researcher would like to acknowledge the limitations of this study on a few aspects such as the sample strategy employed. The researcher used purposeful sampling based on time-limitation criterion, and the target population could be enlarged to yield more validity.

Considering the data presented in the previous chapters, the research questions namely, ‘What teaching activities are teachers using through Facebook?’, ‘How do teachers use Facebook for teaching and learning purposes in Grade 11 classes?’, ‘What Facebook activities are learners engaged in at home for learning purposes?’, and ‘What are learner’s perceptions of the use of Facebook for teaching and learning purposes?’ have been answered because it has been demonstrated that the use of Facebook for learning is a frequently and consistently used by the learners and teachers in the two schools selected for this study.
However, this research is a case study limited to two schools. The data were not enough to be able to generalize the findings on the whole country. It is recommended that an extensive study be conducted in all provinces of South Africa in order to see how Facebook is used to enhance learning. If this study revealed positive attitudes towards using Facebook for learning at school, an extended study can reveal more on this issue. In addition, since this study has been conducted on a small scale limited to the use of Facebook, future research can tackle the use of other SNS such as Twitter, use of various websites and so on. This would provide a clear image of how ICT is used as a meditational tool in education.
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School A

CATEGORY/ THEME: Facebook for teaching and learning

Caption: Facebook for teaching and learning

Figure A1
Figure A 2 Theme: Facebook for teaching and learning
Figure A3 Facebook for teaching and learning
ma'am shosana...according to the rubric you gave us, is it a need 4 us 2 cum along wit newspaper articles?
Matiyenga Tendai: Leonard Nhuntshe Grade 11
Sep 15

Please be advised that the test is to be written this Tuesday

Seen by TB

Perseverence Percy Mohlala
OMG
Like · Delete · Sep 15

Matiyenga Tendai
Topics to be considered: measurement, euclidean geometry, trigonometric rule, cosine rule, area rule, financial mathematics
Like · Delete · Sep 15

Welcome Obiobedi
Oh thnx sir
Like · Delete · Sep 15

Hlonie Zanele Magagada
euclidean geometry?? hahaha tjO! #shocket#
Like · Delete · Sep 15
Figure A4

Theme: Facebook is being used for promoting learning, learners asking and getting clarity from teachers.
School B

Theme: Facebook for learning and socialisation

Figure.B1
Figure B.2
Facebook for community building and socialising
Facebook for socialising and community building

Figure B.3
Facebook used for administration, announcement and community building

Figure B4
Facebook used for motivation by teachers

Figure B5
Lindwe Mabaza

Guys we see last year what social entrepreneur can do for the school. Help those learners achieve their goals. This is not for teachers but learners. They need money to paint the admin block, the roof, buy uniforms and buy more books. They conducted a study where they discovered that for every 15 learners there must be 1 dust bin. There are >3400 learners which means we need 234 or more dust bins. If you have an empty bag you can donate that to them. Any help will be appreciated.

Ernest Thobzani Stucky Ngidi

Class of 2010
Learnership, business, sales and etc
XICO FINANCIAL SERVICES GRADUATE...
Facebook for administration and class announcements

Figure B.5
Theme: Facebook for giving announcements

Figure B6
Facebook for teaching and learning through sharing (Link) documents

Figure B7
Appendix B

Focus group interview Questions for learners

1. What do you use Facebook for?
2. What learning activities are you engaging in through Facebook?
3. How do you use Facebook in conducting your learning activities?
4. Do you think Facebook can help learners in coping with their learning activities? Please explain.
5. What is your perception of Facebook use in teaching and learning?
6. Do you ever use Facebook to communicate and discuss your learning activities with your friends?
7. Of the total of your airtime, how much would you be prepared to spend on communication that relates to your school work in Percentages (e.g. 80% school work and 20% personal)
8. Do you think Facebook can be used for learning purposes?

Other documents
LETTER TO THE PRINCIPALS

1559 Siyabuswa
Siyabuswa
0472

Dear Sir

My name is TshiredoTshilidzi Baldwin I am a student in the School of Education at the University of the Witwatersrand.

I am doing research on (How is Facebook being used for educational use in the Mpumalanga school: A Case study.)

My research involves conducting interview, questionnaire and Facebook chat analysis to find out how Facebook could be used by learners and educators for educational use.

The reason why I have chosen your school is because the project would require learners to access internet to be able to access Facebook at their convenient.

The research participants will not be advantaged or disadvantaged in any way. They will be reassured that they can withdraw their permission at any time during this project without any penalty. There are no foreseeable risks in participating in this study. The participants will not be paid for this study.

The names of the research participants and identity of the school will be kept confidential at all times and in all academic writing about the study. Your individual privacy will be maintained in
all published and written data resulting from the study. All research data will be destroyed between 3-5 years after completion of the project.

Please let me know if you require any further information.

I look forward to your response as soon as is convenient.

Yours sincerely,

SIGNATURE

NAME : Tshiredo Tshilidzi Baldwin
EMAIL : tshilidzit@gmail.com
TELEPHONE NUMBERS : 082 467 0636
Letter of permission to conduct research

To: Tshredo T.B

From: e Malahleni 2 Circuit Manager

SUBJECT: REQUEST TO CONDUCT RESEARCH AT D.M MOTSOASELE AND MEHLWANA SECONDARY SCHOOLS

The above matter bears reference:

This is to confirm that permission has been granted to Tshredo T.B to conduct the above research in the two mentioned schools, D.M MOTSOASELE AND MEHLWANA.

The eMalahleni 2 Circuit Manager do not only wish you the best in your studies, however also anticipates that this will contribute in the advancement of Information Computer Technology in the circuit.

Thanks

__________________________________________  __________________________
M.I Bashele                                                                 Date
To: Tshiredo T.B

From: e Malahleni 2 Circuit Manager

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Thanks

__________________  __________________
M.I Bashele  Date
Circuit Manager