



**AN INVESTIGATION OF MOBILE-MEDIATED SOCIAL LEARNING USING SOCIO-
CONSTRUCTIVISM: A CASE STUDY OF CONVERGENCE OF INFORMAL AND FORMAL
LEARNING AT THE POLYTECHNIC OF NAMIBIA**

ELINA TANGENI ITHINDI ITHELI001

**A minor dissertation submitted in partial fulfilment of the requirements for the award
of the degree of Master of Philosophy
(ICTs in Education)**

Faculty of the Humanities

University of Cape Town

2014

COMPULSORY DECLARATION

**This work has not been previously submitted in whole, or in part, for the award of any
degree. It is my own work. Each significant contribution to, and quotation in, this
dissertation from the work, or works, of other people has been attributed, and has been
cited and referenced.**

Signed by candidate

Signature Removed

Signature:

Date:24/09/2014

SUPERVISOR: ASSOCIATE PROFESSOR DICK NG'AMBI

The copyright of this thesis vests in the author. No quotation from it or information derived from it is to be published without full acknowledgement of the source. The thesis is to be used for private study or non-commercial research purposes only.

Published by the University of Cape Town (UCT) in terms of the non-exclusive license granted to UCT by the author.

Abstract

Mobile phones are hardly used for teaching and learning in the study setting, the Polytechnic of Namibia. Formal learning that is widespread in the study setting does not allow the design of authentic learning tasks. Nevertheless, mobile learning allows the design of authentic learning tasks and enables students to construct knowledge socially in an informal learning environment that facilitates interaction and collaboration. Learning is a boundless social activity that takes place through engagement with others. As learning takes place through interaction, it cannot be confined to the classroom; it should involve transition between formal and informal learning. Learning is hence not confined to didactic methods and does not only take place through transmission of knowledge. New forms of learning are emerging whereby student interaction is enabled by technological tools, unlike formal learning that does not necessitate online tools. Mobile devices might thus be used to mediate convergence of formal and informal learning.

This study was aimed to investigate how mobile-mediated social learning converges formal and informal learning, using a socio-constructivist approach. The study was conducted in the Department of Languages at the Polytechnic of Namibia in two phases, the pilot phase that was conducted in 2012, and the main study that was conducted in 2013. The study involved a total of ten students doing Language in Practice.

Mobile applications, social media tools inclusive, have potential to change the traditional pattern of learning. They enable social construction of knowledge. As a social media tool, WhatsApp was used in this study as a platform for the participants in the study to exchange ideas and construct knowledge collaboratively.

The WhatsApp tool that was used in the study is popular among students and is used both in and out of the institution and could thus be used to establish convergence of formal and informal learning. In addition to instant messaging, another key affordance of WhatsApp is its ability to form a closed group of participants that interact with other

students, the instructor and the community at large. This tool paved the way for authentic learning that led to convergence.

The study was a case study of qualitative nature but also drew on action research, and it adopted an interpretive approach to data analysis and interpretation. Multiple sources of evidence were used to collect data, i.e. individual open-ended guided interviews, artefacts in the form of an authentic task using WhatsApp, and focus group discussion. The study revealed that the pedagogical design of an authentic task mediated by a social media tool, WhatsApp, where a sub-community of students interact with others and the larger community results in cognitive convergence of formal and informal learning. A closed group of students using the tool has potential to converge formal and informal learning cognitively through shared understanding. Thus, using a social media tool that students find motivating in an authentic context brings in cognitive convergence of formal and informal learning if the instructor observes activities and provides guidance.

Key words: socio-constructivism, convergence, formal learning, informal learning, mobile-learning, social learning, authentic learning

Acknowledgements

This piece of work would not have been accomplished without constructive guidance and supervision from my academic supervisor, Associate Professor Dick Ng'ambi. A big word of thanks goes to him in the first instance, and then to all in the Centre of Educational Technology unit at UCT, the Mellon Foundation inclusive, who made my dream of pursuing studies in educational technology a reality.

The support I got from my colleagues who have experience in Information and Communication Technologies in Education, specifically from the Centre of Open and Life Long Learning (COLL) at the Polytechnic of Namibia, was also valuable, as well as some of my ex-class mates who were enrolled for the same course of study in the Centre of Educational Technology at the University of Cape Town, those who stood by me through thick and thin.

A special word of thanks also goes to Ms J. Pasi and Dr C. Murray who generously agreed to proof read my thesis, as well as members of my family who had been patient and supportive throughout the lengthy period of my study, especially my little girl that I had almost abandoned.

List of Figures

[Figure 1.3.1](#) Conceptual framework

List of Tables

[Table 2.5.1](#) Characteristics of formal, informal and converged learning contexts

[Table 3.2.6.1](#) Data analysis approach

[Table 3.4.2.1](#) WhatsApp affordance analysis matrix

[Table 4.3.1](#) Sample analysis of coded pilot interviews, Stage 1: Data reduction

[Table 4.3.2](#) Sample matrix of coded pilot interviews, Stage 2: Data display

[Table 4.5.1](#) Sample analysis of an authentic task using WhatsApp, Stage 1: Data reduction

[Table 4.5.2](#) Sample matrix of an authentic task using WhatsApp, Stage 2: Data display

[Table 4.7.1](#) Sample analysis of focus group interviews, Stage 1: Data reduction

[Table 4.7.2](#) Sample matrix of coded focus group interviews, Stage 2: Data display

List of Acronyms

AT – Activity Theory

AL – Authentic learning

CHAT – Cultural-historical Activity Theory

CTL – Centre for Teaching and Learning

DL – Digital literacy

DoL – Department of Languages

ETs – Emerging technologies

FL – Formal learning

GBV – Gender-based violence

ICTs – Information and Communication Technologies

IL – Informal learning

IM – Instant messaging
ITU – Instructional Technology Unit
LIP – Language in Practice
NBC – Namibian Broadcasting Corporation
PoN – Polytechnic of Namibia
SN – Social networking
UCT – University of Cape Town
ZPD – Zone of proximal development

List of Appendices

[Appendix A](#) – Pilot interview questions

[Appendix B](#) – Informed consent form

[Appendix C](#) – Permission to conduct research at PoN

[Appendix D](#) – Social media task

[Appendix E](#) – Analysis of pilot interviews, Stage 1: Data reduction

[Appendix F](#) – Matrix of coded pilot interviews, Stage 2: Data display

[Appendix G](#) – Analysis of an authentic task using WhatsApp, Stage 1: Data reduction

[Appendix H](#) – Matrix of coded authentic task using WhatsApp, Stage 2: Data display

[Appendix I](#) – Analysis of focus group interviews, Stage 1: Data reduction

[Appendix J](#) – Matrix of coded focus group interviews, Stage 2: Data display

[Appendix K](#) – Sample transcribed audio file: Social media task

Table of Contents

Abstract.....	ii
Acknowledgements	iv
List of Figures	v
List of Tables.....	v
List of Acronyms.....	v
List of Appendices.....	vi
Chapter One: Introduction.....	1
1.1 Contextual background and overview	1
1.1.1 Statement of the problem	4
1.2 Research focus	6
1.2.1 Research questions	7
1.3 Conceptual framework	7
1.4 Overall research aim and objectives	9
1.5 Introduction to the research design	10
1.6 Significance of the study	11
1.7 Structure of the dissertation	13
Chapter One: Introduction.....	13
Chapter Two: Literature review	13
Chapter Three: Research Design	13
Chapter Four: Analysis, findings and discussion.....	13
Chapter Five: Conclusion and recommendations	14
1.8 Chapter summary	14
Chapter Two: Literature Review.....	15
2.1 Introduction.....	15
2.2 Socio-constructivism and social learning	15
2.2.1 Key principles	16
2.2.2 Constructivism and authentic learning design	17
2.2.2.1 Matching technological tools with theory, learning strategies and tasks	20
2.3 Defining mobile learning	21
2.4 Formal and informal learning environments	24
2.4.1 Formal learning	26
2.4.2 Informal learning.....	26
2.5 Convergence of informal and formal learning	28

2.6 Chapter summary	35
Chapter Three: Research Design and Methodology	36
3.1 Introduction.....	36
3.2 Research design	36
3.2.1 Research orientation.....	36
3.2.2 Research type.....	37
3.2.3 Research strategy	37
3.2.4 Selection of site and participants.....	38
3.2.5 Data collection methods	40
3.2.5.1 Qualitative interviewing.....	40
3.2.5.2 Artifacts.....	41
3.2.5.3 Focus group discussion.....	41
3.2.6 Framework for data analysis	42
3.3 Validity and ethical considerations	45
3.4 Data collection procedure	45
3.4.1 Qualitative interviewing	46
3.4.2 Artifacts: WhatsApp trails of interactions	47
3.4.3 The task.....	51
3.4.4 Focus group discussion.....	53
3.5 Chapter summary	54
Chapter Four: Analysis, Findings and Discussion.....	55
4.1 Introduction.....	55
4.2 Overview of analytical framework.....	55
4.3 Analysis of pilot interviews	57
4.4 Discussion: Uses of mobile phones and SN tools at PoN.....	63
4.4.1 Social learning uses that leverage informal learning activities.....	65
4.5 Analysis of WhatsApp learning dialogue	66
4.6 Discussion.....	70
4.7 Analysis of focus group discussion	74
4.8 Discussion	78
4.9 Chapter summary	80
Chapter Five: Conclusion and Recommendations.....	81
5.1 Brief overview.....	81
5.2 Review of research questions.....	82

5.2.1	How PoN students use mobile phones and social media for learning	82
5.2.2	Uses of social learning that leverage informal learning activities	83
5.2.3	The social networking pedagogy that facilitates cognitive convergence of informal and formal learning.....	84
5.2.4	How student experiences of social networking uncover convergence of informal and formal learning	85
5.3	Strengths and limitations of the study.....	86
5.4	Implications of the findings	86
5.5	Conclusion	87
5.6	Recommendations	88
	References	92
	Appendices	97

Chapter One: Introduction

1.1 Contextual background and overview

Global, social, political, technological and learning research change pressures have an impact on traditional ways and roles of higher educational institutions and consequently necessitate educational reform (Siemens, 2009). The nature of work, information and learning have thus changed over the last few years due to technological developments, and new ways of learning are emerging, such as e-learning, mobile learning and transformative learning (Herrington, Herrington, Mantel, Olney & Ferry, 2009; Lefoe, Olney, Wright & Herrington, 2009; Ng'ambi, 2013; Shank, 2008 & Siemens, 2009). It is the postgraduate course in Information and Communication Technologies ICTs in Education that is offered by the Centre for Educational Technology at the University of Cape Town (UCT) that opened my eyes to this crucial issue of concern regarding educational ICTs, especially in developing context.

The use of ICTs in education is a priority in terms of Namibia's developmental goals (Commission, 2004), but educational institutions have still a long way to go to meet these developmental goals. In response to global trends, a call has been made at governmental level regarding the development of ICT skills in educational programmes (Namibia ICT Policy for Education, 2005). Like other tertiary institutions in the country, the Polytechnic of Namibia (PoN) that is referred to as the study context in this research project has responded to this call, but a need still exists to explore opportunities afforded by educational technology. Learning has changed from rote repetition and memorization of facts to interactive ways of learning, e.g. constructing knowledge collaboratively, and there is a shift to learning that is enabled by communication technologies where people learn by networking with each other to share knowledge and resources (Shank, 2008).

At the heart of discussion in this study is the fact that although an increasing number of students use mobile devices for social interaction outside the formal curricula as it is a trend in other contexts (Bo-Kristensen, Ole, Neutzsky-Wulff & Schelde, 2009; Ford & Leinonen, 2009; Jones, Issroff & Scanlon, 2006 and Santos & Ali, 2012), the potential for integrating the two learning experiences still remains underexploited. This is particularly the case at PoN where the majority of students own mobile phones with Internet connectivity, yet the formal and informal learning experiences are polarized. The students' informal learning environment that is afforded by social networks is uncultivated at PoN, though it is a perfect reflection of the socio-constructivism theory of learning that views learning as constructing knowledge socially and culturally (Vygotsky, 1982). Little is understood about how students draw from formal and informal learning in a socio-cultural context. This type of understanding might provide a way of designing learning that cognitively converge the two learning situations effectively. Socio-constructivism can therefore serve as a bridge for the two learning environments.

Although the PoN management is committed to training and encouraging staff to use ICTs in delivering their services, there is low usage of these resources by end-users, students and staff, in comparison to global trends. Epistemological access is still required to enable effective pedagogical uses of resources, a situation that has also been observed by Sharples (2006) who points out that although there has been a growth in using mobile devices globally, e.g. in social networks and learning informally, it is a regrettable fact that informal networked interaction is not yet categorized as a legitimate way of learning in many schools and higher institutions of learning. PoN is not exempted from this scenario.

Though a bone of contention, it remains a fact that we are working with a new generation of students, and this could be the reality we are facing at PoN, based also on the assumption that there is a dramatic change in the nature of learning, just as the nature of learners has changed as per Shank (2008). This links well with Veletsianos's (2010) observation that current ways of teaching and designing learning contexts might not effectively serve the purpose of education in the 21st century. Learning does not

only take place through transmission of knowledge; new forms of learning are emerging, e.g. students learning through interactions with others, enabled by technology.

The mismatch between traditional teaching and today's students was also pointed out by a mobile learning workshop group at the Kaleidoscope Network of Excellence Mobile Learning Initiative that concludes that traditional classroom teaching that is teacher mediated clashes with the culture of today's students in terms of peer collaboration and sharing of knowledge (Sharples, 2006). Additionally, Lombardi is of the opinion that "to be competitive in a global job market, today's students must become comfortable with the complexities of ill-defined real-world problems" (2007: 10). The views articulated here are indicative of the fact that a need exists to reconsider the teaching and learning approaches we use in higher education, especially when traditional forms of teaching and learning don't seem to fully benefit the new generation of students.

In an effort to reconsider our teaching and learning approaches at PoN, mediating learning with emerging technologies (ETs), e.g. mobile phones, could be a step forward. This idea is consequential to Ng'ambi's (2006 & 2013) view that ETs are more appropriate for the African context in terms of new teaching and learning approaches, e.g. collaborative and "transformative learning" which is understood as learning that results from interactions between learners and their environment, people and resources inclusive. Veletsianos defines ETs as "tools, concepts, innovations and advancements utilized in diverse educational settings (including distance, face-to-face, and hybrid forms of education) to serve varied education-related purposes e.g. instructional, social, and organizational goals" (2010: 17). ETs for education are not therefore limited to tools; they involve ideas, theories and approaches that are emerging. Mobile phones and ETs, as per Ng'ambi (2006 & 2013), are such type of technologies that are worth exploring and exploiting in higher institutions of learning in Africa due to a variety of affordances they provide. Additionally, research studies indicate that students find mobile phones motivating to learn with, especially in informal learning environments (Jones, Issroff, Scanlon, Clough & McAndrew, 2006 & Laurillard, 2007). Likewise, the idea of converging formal and informal learning contexts can be regarded as an

emerging technology, in line with Veletsianos's (2010) definition of ETs that are not limited to tools. As such, in this study using ETs should not only be understood in terms of using a tool that converges formal and informal learning as the idea of converging the two learning environments fits in well with the definition of ETs.

Based on research findings in developing context (Ford & Leinonen, 2009) as well as developed context (Bo-Kristensen, et al., 2009; Jones et al., 2006 and Santos & Ali, 2012), it can be assumed that PoN students use mobile phones for learning informally as it is a trend in other contexts, but their engagement with mobile phones amongst each other is uncultivated. As formal and informal learning are polarized at PoN, mobile devices might be used to mediate convergence of formal and informal learning either cognitively, or physically as reflected in Cook, Pachler and Bradley's (2008) study where mobile phones were used to develop connections between formal and informal learning contexts. Consequently, this would narrow the gap between formal and informal learning.

1.1.1 Statement of the problem

A number of studies (Bo-Kristensen, et al., 2009; Cook, Bradley, Lance, Smith & Haynes, 2007; Cook, et al., 2008; & Sharples, 2006) have observed the gap between informal learning and formal learning and call for the need to converge the two learning environments. An ideal situation would therefore be to converge informal student engagements with formal learning. Cook, et al., made it categorically clear that "there is a need for answers to this question (integration of learners' informal space and learner's formal education) in a diverse set of contexts" (2007: 56).

Nkusi, the Head of the Instructional Technology Unit (ITU) at the Centre for Teaching and Learning (CTL) at PoN, points out how mobile learning is still in its infancy stage at PoN, therefore an emerging technology in this context, and how academics are reluctant to use it for students' benefit (Villager, 2011). Nkusi has consequently made a call for more researchers at PoN to make use of mobile technology in teaching and learning, such as engaging students in virtual classroom discussions, assessment and collaboration (Villager, 2011). Despite the fact that many students in the study context

own mobile phones, these devices are hardly used for formal teaching and learning at PoN, though the use of these devices could be a step forward to improve students' social and cognitive skills. As a researcher I am of the opinion that students' informal mobile learning environment is a perfect reflection of the socio-constructivism theory of learning that views learning as constructing knowledge socially and culturally in a supportive environment that facilitates interaction and collaboration (Vygotsky, 1982). Mobile devices would therefore enable students to collaboratively construct knowledge in a socio-cultural context, and it is this social construction of knowledge that would facilitate cognitive convergence of formal and informal learning.

With reference to Cook, et al., (2008), there is very little research that has been carried out on how mobile devices can be used to converge formal and informal learning environments. This adds value to the necessity of a study of this nature as the concept of merging or converging informal and formal learning is still an unresolved matter in educational technology. Nevertheless, an observation has also been made that "learners often find their informal learning activities more motivating than learning in formal settings" (Jones, et al. 2006:15). This situation prompts for the need to explore students' mobile mediated informal learning environment so that educators construct a learning environment replicating an informal learning environment that students find motivating in the process of juxtaposing the two learning environments.

A social learning platform enabled by a technological tool would enable convergence of informal and formal. The tool would narrow the gap between the two learning environments, and it would enable better observation of both learning environments. However, Ravenscroft (2003), and Mayes and De Freitas (2004), state that implementation or innovation of e-learning tools should be based on underlying principles of learning theory. Understanding complexity of how people learn and the conditions under which they learn would guide instructors to make informed decisions when selecting or designing ICT tools. This is what draws in the following section that enlightens the underlying theory.

1.2 Research focus

The title for this research is: An investigation of mobile-mediated social learning using socio-constructivism: a case study of convergence of informal and formal learning at the Polytechnic of Namibia. It is essential at this stage to briefly define key concepts emerging from this title, such as socio-constructivism, convergence, informal and formal learning, and mobile-mediated social learning. The concept of socio-constructivism that briefly refers to the social process of constructing knowledge through interactions or connections in a specific context (Anderson, 2010) is detailed in Chapter 2, Section 2.2 where social learning theory is explained. In the context of this study convergence should be understood as the process that facilitates shared knowledge of formal and informal learning contexts through social interactions enabled by a tool, and this concept is also explained in detail in Chapter 2, Section 2.5. The concept of FL that refers to in-class teacher centred learning is also defined, as well as informal learning that basically takes place out of class and is student led as defined in Chapter 2, sub-sections 2.4.1 and 2.4.2 respectively. Mobile mediated social learning refers to learning or construction of knowledge through social interaction mediated by a social media tool. Social media or networking tools, which are in the category of Web 2.0 technologies, can be regarded as pedagogical tools as they afford opportunities for sharing, communication and discovering information (Lee & McLoughlin, 2010).

Hence, learning is understood as a social activity in this study, whereby students are social learners. Learning takes place through engagement with other people and is not confined to didactic methods, and this is how the concept of informal learning that is also closely linked to authentic learning (AL) emerges. With reference to Ravenscroft (2003), as a pedagogic model, AL is grounded on situated learning theories that are also based on the constructivist theory of learning. Participation in an authentic activity, as per Ravenscroft (2003), is thus a key feature of the situated learning approach that views learning as development of human minds through social situations in which tools and other representational media are used to support the functioning of the mind. Consequently, the emergence of new technological tools enables educators to provide students with AL experiences that motivate them to solve real world problems

(Lombardi, 2007), and this explains how the use of a tool emerges in this study. Social networking (SN) tools facilitate teamwork, collaborative online investigation, an opportunity to share resources and also to construct knowledge (Lombardi, 2007). However, the need for online interaction is redundant in a face-to-face learning environment, but when students transit to IL the need for online presence increases, and it is a learning tool that would facilitate interaction with others and activate the online presence of students as reflected in the conceptual framework in [Figure 1.3.1](#) in sub-section 1.3. This will then optimize students' social learning skills.

1.2.1 Research questions

In view of how learning should be understood in the context of this study, the **primary research question** is:

How can social media be used to converge formal and informal learning among students in the Department of Languages at PoN?

The **secondary research questions** are:

1. How do PoN students use social media tools for learning?
2. What uses of social learning leverage informal learning activities?
3. How do social media tools facilitate convergence of informal and formal learning?
4. How do students' experiences of using social media for learning bring to light cognitive convergence of informal and formal learning?

1.3 Conceptual framework

Drawing on the work of Miles and Huberman (1994), a conceptual framework serves to depict in graphic or narrative form the key constructs of the study and how they are interrelated. The key constructs of this study are detailed in Chapter 2: Literature review, but a graphic representation of how key constructs are conceptualized in the

study is illustrated in [Figure 1.3.1](#) underneath that displays informal learning (out-of-class learning) and formal learning (in-class learning) in a larger socio-cultural historical context, mediated by a social media tool, WhatsApp. The key characteristics of the two learning environments are also highlighted e.g. natural, personal and student-led learning for informal learning and pedagogy, curriculum oriented and teacher-led learning for formal learning. The introduction of a social media tool, WhatsApp in this case, facilitates authentic learning that enables cognitive convergence of formal and informal learning by creating a closed group that is a sub-community of students who are able to interact in a larger socio-cultural historical context as they are simultaneously members of a larger community. Convergence would then blur the division between informal and formal learning and facilitate shared knowledge that results from interactions irrespective of the learning context.

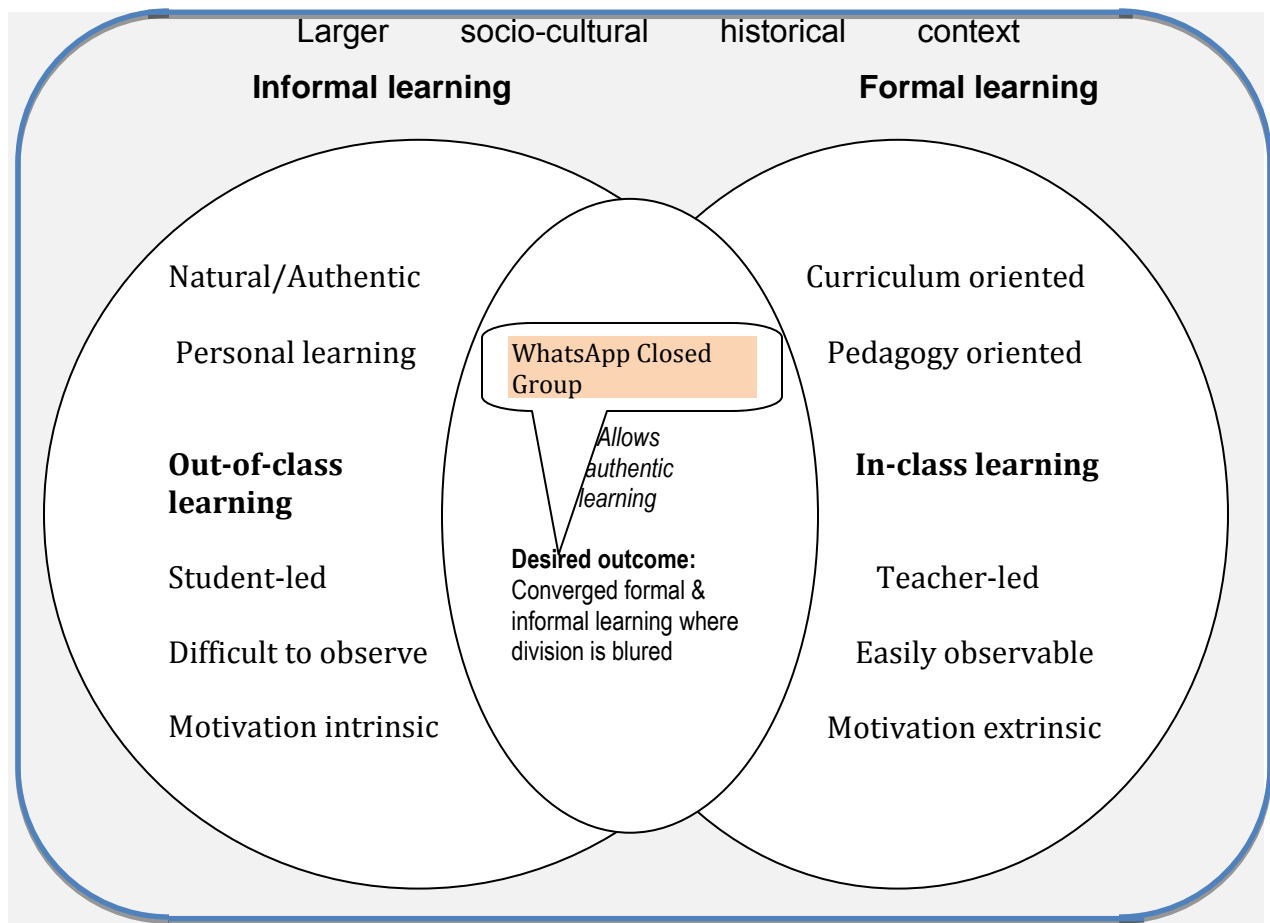


Figure 1.3.1 Conceptual framework

In view of Lombardi (2007), the conceptual framework above is based on the principles that interaction with the community is a key factor to the success of an authentic learning experience, and educators can use Web-based communication tools to enable students to interact with each other and the community at large to construct and share knowledge.

1.4 Overall research aim and objectives

The overall aim of this study is to explore mobile-mediated social learning by investigating how a social media tool paves the way for authentic learning that has

potential to converge formal and informal learning in a socio-cultural historical context. Consequently, the main aim of the study was to investigate whether learning from informal and formal contexts converge and how or where if they do.

In the context of higher education, the research objectives are therefore:

1. To explore how PoN students use social media for learning.
2. To identify uses of social learning that leverage informal learning activities.
3. To investigate how social learning facilitates cognitive convergence of informal and formal learning.
4. To find out how cognitive convergence of informal and formal learning could be possible through students' experiences of using social media for learning.

1.5 Introduction to the research design

As the study puts emphasis on the socially constructed nature of reality which is a trend for qualitative researchers (Denzin & Lincoln, 2008), the study adopts a qualitative approach and employs an interpretivist paradigm which is normally associated with qualitative research (Merriam, 1998 & Patton, 2002). A constructivist interpretive paradigm (Denzin & Lincoln, 2008) is adopted as a base of understanding the actions and interactions of the people in the setting being studied. Although the study adopts a case study research strategy of exploratory nature, it also draws on action research due to the involvement of the researcher in the study. The collection of data involved three methods: individual face-to-face interviews during the pilot study that focused on the uses of SN at, artefacts in the form of interaction trails that were produced in the second phase of the study when participants were using a social media tool, WhatsApp, as well as focus group interviews that took place in the third phase of the study whereby participants shared their experiences of participating in an authentic learning experience mediated by a social media tool.

The research participants were purposefully selected from a group of students enrolled for LIP at PoN, and they were ten students that were enrolled for Language in Practice

(LIP) in the Department of Languages (DoL) at PoN. This is the course that the researcher was presenting at the time, but participants were from different class groups doing the same course with different lecturers. This is what brings in the element of action research in this study.

The pilot study that was of exploratory nature took place in 2012, and individual open-ended interviews were conducted to investigate how PoN students use SN tools for learning. The pilot study informed the second phase of the study that took place the following year, 2013, in the sense that it informed the design of the intervention task that was used in the second phase of the study. The tool that was used for AL in the second phase of the study, WhatsApp, emerged from face-to-face interviews in the first phase of the study (Appendix E), and an AL activity involving the use of WhatsApp (Appendix D) was designed accordingly. This led to the production of artefacts that were also used for data analysis

An interpretivist approach to data analysis (Miles & Huberman, 1994) combined with authentic learning elements that can be used in educational settings (Herrington & Oliver, 2000) was adopted to analyse and interpret the data. Ethical considerations, in particular informed consent to conduct interviews and anonymity of participants, were adhered to in the process of data collection and analysis.

1.6 Significance of the study

The concept of converging IL with FL is still an unsolved subject matter in ICTs in education (Cook, et al., 2008). There are a few studies that have been conducted in other contexts in efforts to provide new insights, e.g. Bo-Kristensen, et al. (2009) and Cook, et al. (2008), yet the need to conduct more research has been pointed out in these studies. Cook, et al.'s (2008) case study on how to merge the two environments proves how teaching and learning hints, equated to scaffolding, contribute to effective teaching and learning, and a call is made for further studies on appropriate scaffolding. However, it should be noted at this stage that the term “convergence” of the two ways of

learning is preferable for the purpose of this study as opposed to merging the two, and WhatsApp was employed to uncover how convergence could be possible.

Unlike the FL environment that is characterised by “a prescribed learning framework or schedule” (and) “specified learning tasks” (Hall, 2009: 31), the mobile mediated IL environment is sophisticated as it is used where there is “no defined curriculum, learning goals, formative/summative assessment or formal task structures” (Laurillard, 2007:168). Although anticipated to be of collaborative learning nature, i.e. involving joint intellectual effort by students working together, or students and teachers working together in search for knowledge, (Smith & MacGregor, 1992), little is understood about how social media mediates convergence of the two environments.

At contextual level a study of this nature would enlighten the use of social media for learning at PoN, while in a broader context it would contribute to understanding on how convergence of informal and formal learning could be established. In the context of this study informal learning is to be understood as what students learn naturally outside the formal curricular, that is outside the class, while using mobile devices among each other and the community at large, while formal learning is teacher-led learning that takes place in class or at school and is curriculum oriented and does not necessitate the use of online tools for interaction. The study would also enhance the understanding that new forms of learning enabled by technology that optimizes interaction and authentic learning among students are emerging (Herrington, et al., 2009, Lefoe, et al., 2009; Shank, 2008 & Siemens, 2009). Finally, yet equally important, a study of this nature might change the thinking of a number of educators who still need to be convinced that learning does not only take place through didactic methods; it is a boundless activity and cannot be confined to the classroom, especially in the Information Age.

1.7 Structure of the dissertation

Chapter One: Introduction

This chapter provides an introduction to the study by giving contextual background information. The focus of the research is presented, taking into account the research questions. The conceptual and theoretical frameworks that uncover key concepts such as formal, informal and authentic learning are put forward, as well as the overall research aim. The research design is briefly introduced, and the value of the research is highlighted. The chapter ends by presenting an overview of the dissertation chapters.

Chapter Two: Literature review

In this chapter a theoretical review of literature in light of mobile learning is presented, addressing key concepts of formal and informal, AL and the social learning theory, as well as convergence of formal and informal learning. The chapter opens with a discussion on the learning theory adopted and highlights the pedagogical design of AL activities based on socio-constructivism. Also, the chapter draws attention to the principles and processes that should guide the selection of an intervention tool. Then, the concepts of mobile learning, formal and informal learning, as well as convergence are explained at length.

Chapter Three: Research Design

The chapter presents the research design as well as procedures that were used to conduct the research. The chapter opens with the research strategy adopted; and techniques for collecting data are presented, including methods for selecting the participants. The process that was used to analyse and match the technological tool to the research task is highlighted as well. Lastly, the analytical framework and other procedures used to analyse and interpret data are presented.

Chapter Four: Analysis, findings and discussion

This chapter adopts an interpretative analysis approach to analyse the data and present the findings of the study. Phases 1 and 2 transcribed interviews data were simplified and coded, then, a description of what was found is provided in the form of tables and

matrices. The artefacts that resulted from the WhatsApp intervention in Phase 2 of the study are also presented and analysed. Finally, an explanation of what is happening is presented in light of the research questions.

Chapter Five: Conclusion and recommendations

A summary of the findings of the study is presented in this chapter in light of the research objectives. The strengths and limitations of the study are highlighted, including potential problems pertaining to the research. Finally the chapter concludes by summing up key findings of the study and presenting recommendations for further research.

1.8 Chapter summary

This chapter provided an introduction to the research process. The chapter opened with the presentation of the contextual background and proceeded with the focus of the research whereby the research questions are outlined. The conceptual and theoretical framework is presented, as well as the overall research aim. The research design is briefly introduced, and the significance of the study is brought to light. The chapter ends by presenting an overview of the dissertation chapters.

Chapter Two: Literature Review

2.1 Introduction

This chapter defines the key concepts that are discussed in this study and makes reference to related studies that have been previously conducted. Also, the gaps that have been observed are highlighted. The chapter starts with the concepts of socio-constructivism and social learning that originate from Vygotsky's (1982) cultural historical activity theory. Then, the concepts of constructivism and authentic learning (AL) design are elaborated on, as well as mobile learning, informal and formal learning. Furthermore, the chapter presents a discussion surrounding the issue of convergence of informal and formal learning.

2.2 Socio-constructivism and social learning

The study is underpinned by the social learning theory of socio-constructivism. In accordance with socio-constructivist thinking, mobile technologies facilitate constructivist learning environments as they provide opportunities to create knowledge and products collaboratively and share them with peers (Herrington, et al., 2009). Additionally, all forms of constructivism theory, socio-constructivism inclusive, share an understanding that "individuals construct knowledge that is dependent upon their individual and collective understandings, backgrounds, and proclivities (inclinations)" (Anderson, 2010: 27). This is of significance in this study as it hints on the importance of socio-cultural historical background in the context of IL. This line of thinking is also brought to light by Siemens (2009) who among others define learning as a social process emerging from interactions among learners, but then this definition does not take into account the FL aspect of the curriculum, hence the need for convergence of informal and formal learning. Thus, as guidance to IL design, constructivists argue that effective learning takes place when the task and context are authentic and meaningful to the learners, which necessitates constructivist learning activities to be problem-based, ill-structured and open-ended (Anderson, 2010). These are a few examples

demonstrating how socio-constructivism and the concept of social learning are understood in research literature.

2.2.1 Key principles

The social constructivism theory of learning is rooted in the Vygotskian view of socio-cultural learning where the emphasis is on the context in which learning takes place, e.g. within a socio-cultural historic context, as well as the social experiences that learners bring to the learning environment (Vygotsky, 1982). With reference to Kim (2001), socio-constructivism is based on the assumptions that:

- reality is constructed through human activity;
- learning is constructed collaboratively;
- people create meaning through their interactions with each other and the objects in the environment;
- learning is a social process that occurs when people are engaged in social activities;
- the learning environment provides multiple representations of reality;
- knowledge construction is emphasized as opposed to knowledge reproduction;
- authentic tasks are provided for learners in meaningful contexts;
- real world settings or situations are provided in the learning process;
- prior learning is integrated in the learning process.

This summarised view of learning guides how learning should be interpreted in the context of this study that adopts a socio-constructivist approach to learning, i.e. a collaborative social activity involving interactions with other people using tools in an authentic environment, which makes learners social learners. The concept of social learning is of utmost significance in this study as it cannot be separated from socio-constructivism, and it is social learning that enables students to get exposed to diverse experiences that shape learning, e.g. involving a larger community in the learning process. To substantiate this notion, Conole, Dyke, Oliver and Seale articulate that “exposure to the experience of others is a key ingredient to effective learning and a

potential affordance of ICT” (2004:117). As stated earlier in Chapter 1, echoing Sharples, Taylor and Vavoula (2005) with reference to Council (1999), socio-constructivism is a fitting theory as it accommodates nearly all features essential for successful social learning.

2.2.2 Constructivism and authentic learning design

Anderson (2010) notes that though a philosophy of learning but not teaching, constructivism provides guidelines for the design of learning contexts. Our beliefs on how learners learn are shaped by learning theories (Dabbagh, 2005 & Anderson, 2010) that are then determinants of pedagogical models, which give rise to matching instructional strategies. As clarified by Dabbagh and Bannan-Ritland (2005), instructional strategies are derived from pedagogical models, and pedagogical models are determined by the learning theory. Dabbagh defines pedagogical models as “cognitive models or theoretical constructs derived from knowledge acquisition models or views about cognition and knowledge, which form the basis for learning theory” (2005: 32), while instructional strategies are “what instructors or instructional systems do to facilitate student learning” (Dabbagh & Bannan-Ritland, 2005: 203). It is hence pedagogical models that determine instructional and learning strategies applicable to any given context. As a pedagogic model, AL is grounded on situated learning theories that are based on constructivism, and one of the key principles of situated learning is interaction that promotes authentic activities (Ravenscroft, 2003).

Thus, with reference to Dabbagh and Bannan-Ritland, the matching instructional strategy for constructivist-based pedagogical models is promoting AL activities, and “promoting AL activities is the core of all instructional strategies” (2005: 206), thus enabling learners to get involved in real world and meaningful activities as per the principles of the socio-constructivism theory of learning. Dabbagh and Bannan-Ritland define AL activities as “learning tasks anchored in a realistic setting in which the focus is on solving a problem rather than learning a body of content” (2005: 205), while Lombardi defines AL tasks as learning that “focuses on real-world, complex problems and their solutions, using role-playing exercises, problem-based activities, case studies, and participation in virtual communities of practice” (2007:2). These explanations

present the research literature viewpoint of how social learning that takes place in an informal context paves the way for problem solving through AL activities, and how AL activities promote collaboration. Hodgkinson-Williams also emphasises how a constructivist learning process should engage learners in a “culturally authentic activity” (2006:10). This explains the pedagogical design of an AL activity in this study that is explained in detail in Chapter 3: Research design and methodology, as it was a means for students to explore the situation in a real world, cultural and meaningful context.

Lombardi (2007) and Herrington and Oliver (2000) identify ten attributes that inform the design of AL activities as follows:

- real world relevance – real world tasks/problems;
- should be ill-defined – open to diverse interpretations;
- comprise complex tasks involving sustained investigation - students to investigate tasks over a certain period of time;
- provide opportunities for students to use multiple sources and perspectives - using a variety of resources to investigate tasks;
- provide opportunities for collaborative learning – learners work within the course and interact with the real world;
- provide opportunities for reflection (meta-cognition) – learners reflect on learning both as individuals and as a team or members of community;
- can be integrated across different subject areas – not confined to a single domain or subject;
- are seamlessly integrated with assessment – assessment integrated within the major task, reflecting real-world evaluation;
- create polished products valuable in their own right – conclusion culminated in the creation of a whole product; and
- allow multiple interpretations and outcomes - there is no single correct answer, activities open to different solutions and interpretations.

All these design principles were considered in the design of the AL activity presented in the following chapter for research design as it was earlier stated. The intervention task promotes AL, and it promotes solution of a real world problem using multiple resources.

With reference to the cultural historic activity theory (Engeström, 1999; Vygotsky, 1982) constructivist instructional learning design should also consider the fact that mediating learning with ICTs involves the use of cultural tools, and it is not an individual goal-directed activity as it is part of a larger context, the larger activity system (Jonassen & Rohrer-Murphy, 1999 & Lim, 2002). This is how the concept of Activity Theory (AT) emerges in this study. Drawing on AT, individuals that are involved in a certain activity system are simultaneously members of other activity groups that have different goals and relations and could even be using different tools (Jonassen & Rohrer-Murphy, 1999). This understanding is also crucial as it forms the basis for the design of a research activity that is detailed in Chapter 3: Research design and methodology, where the key principles involved in the design of an activity system are presented.

In terms of the socio-constructivism theory of learning, with reference to Vygotsky's (1982) socio-cultural theory that focuses on instructional dialogue but of "scaffolding" nature, Ravenscroft highlights another key principle of this theory, the fact that "learning occurs through internalizing dialogical activity and its signification systems that occur in the social" (2003:9). This line of thinking draws a parallel with Conole, et al. (2004) and Anderson (2010) who are of the opinion that ICTs, especially asynchronous technologies, provide means for students to reflect on their learning and develop critical analytical skills by engaging in discussions over a longer period of time, unlike in face-to-face discussions. These ideas originate from Vygotsky's (1982) notion of learning through participation in social situations, using language in the process of sharing ideas and then internalizing these ideas, connecting them to complex networks of knowledge (Lee & McLoughlin, 2010). It therefore makes sense to affirm that a social learning activity is a building block to the process of learning, thus contributing to the development of high order thinking skills. The social learning activity that was designed in this study facilitates production and internalization of dialogic activity through collaborative sharing of ideas on how to solve a real life problem, hence leading to the development of high order thinking skills.

A constructivist learning environment paves the way for the dialogue and arguments to be created, which then need to be internalized for the development of high level thinking

skills that are also a prerequisite for a constructivist learning environment as pointed out by Lowerison, Côté, Abrami and Lavoie (2008). The AL activity that is explained in details in the following chapter was designed in accordance with these key principles of the socio-constructivist theory of learning. The WhatsApp tool that was employed in the research design facilitated a platform for dialogic activity to take place, hence allowing critical thinking skills resulting in diverse solutions and outcomes.

In summary, the design of the authentic task in the following chapter, Chapter 3, was guided by the AL framework (Dabbagh, 2005; Dabbagh & Bannan-Ritland, 2005; Herrington & Oliver, 2000 and Lombardi, 2007), but it was supplemented by AT framework (Engeström, 1999; Jonassen & Rohrer-Murphy, 1999 & Vygotsky, 1982). Both frameworks have roots in the constructivist view of learning, e.g. promoting collaboration, interaction and using tools and multiple resources in the process of knowledge construction. The deliberations in this sub-section bring to light the reasons why socio-constructivism is adopted as the fitting theory to converge FL with IL in this study. However, the selection of a matching technological tool should also be guided by learning theory and design principles, and this is how the following section comes into view.

2.2.2.1 Matching technological tools with theory, learning strategies and tasks

As it was earlier expressed in Section 2.5 above, the notion of convergence of formal and informal learning has implications on curriculum design, delivery, assessment, as well as teaching and learning strategies (Hall, 2009). This is what necessitates a brief review of online learning design principles and processes and how they are linked to the selection of technological tools.

Educational design literature emphasises the importance of “affordance” analysis, i.e. matching a learning task with an e-learning technology to determine its “perceived affordances” (Bower, 2008). Also, Ng’ambi (2013) points out how it is of utmost importance for educators to be aware of the affordances of ETs for teaching. Affordance is a term that is used in ICT literature to refer to the “perceived and actual properties of the thing, primarily those fundamental properties that determine just how the thing could possibly be used” (Norman, 1988 cited in Bower, 2008: 5). As an

example, WhatsApp is a SN tool that was primarily designed for chatting, but it also provides certain educational affordances.

When matching technology to the task and context, one needs to take into account the design principles and processes (Dabbagh & Bannan-Ritland, 2005). The design principles were already earlier discussed in Section 2.5 above, thus this section merely highlights the design processes that include exploration of learning theories and the learning context, implementation of teaching and learning strategies, enactment and then how evaluation of learning should be done, based on Dabbagh & Bannan-Ritland's (2005) online learning design model. These are key steps involved in the process of matching a learning task with the relevant technology, but it is worth noting at this point that there are many other online learning design models that could be applicable. As such, Dabbagh & Bannan-Ritland's (2005)'s model was used as a guide for the selection of the tool that was used for intervention as discussed later in Chapter 3, Section 3.4.2.

The selection of the matching pedagogical model and consequently the instructional strategies and tools brings in the concept of mobile learning that facilitates social construction of knowledge (Lee & McLoughlin, 2010) as enlightened in the following section.

2.3 Defining mobile learning

Mobile learning can be regarded as an emerging technology in the context of this study. As it was pointed out earlier in Chapter 1, mobile learning is still at an infancy stage at the Polytechnic of Namibia (PoN) (Villager, 2011), and it meets the five characteristics of ETs outlined by Veletsianos (2010) as:

- may or may not be new technologies (depending on the context);
 - are evolving organisms that exist in a state of “coming into being”;
 - go through hype cycles (technologies and ideas go through different cycles);
 - satisfy two “not yet” criteria: *not yet* fully understood and *not yet* fully researched;
- and

- are potentially disruptive but their potential is mostly unfulfilled.

All these characteristics complement the state of mobile learning at PoN where the concept of mobile learning is still unpopular as it is just “coming into being”. Educational affordances of mobile devices are “not yet” fully understood and researched and using mobile devices for learning could be regarded disruptive.

In a broader context, it is a well-known fact that collaboration enables social construction of knowledge (Blaschke, Brindley & Walti, 2009 and Lee & McLoughlin, 2010). It has also been observed that mobile learning enables learners to create products collaboratively and share them among each other (Switzer & Csapo, 2005). Yet, (Winters, 2006) argues that the role of mobile devices in social learning is under explored, a situation that could be genuine in some contexts. But then, how is mobile learning interpreted in ICTs research literature? Is the focus on the learner, the device, or the learning environment? Even in the context of this study it becomes a challenge to specifically focus the research on only one of the aspects hereby highlighted, i.e. e-learning, the mobile devices, mobility of the learners or IL environments.

As illustrated underneath, one can conclude from the review of literature that there is a variety of definitions provided by different scholars on the concept of mobile learning in the context of e-learning, hence the need to elaborate on how mobile learning should be understood in the context of this study. At times mobile learning is associated with e-learning; sometimes the focus is on the devices, and sometimes it is focused on the mobility of the learners, whereas some researchers focus on learning in informal environments (Winters, 2006). This is hence a situation that makes it tricky and complex to arrive at an explicit definition of what mobile learning should be.

Amongst various definitions of mobile learning provided by literature (Lefoe, et al., 2009; O'Malley, Vavoula, Glew, Taylor, Sharples, & Lefrere, 2003; Seppälä & Alamäki, 2003; Sharples, et al., 2005; Walker, 2006 & Winters, 2006), there are a few that are singled out to be more appropriate for this study. Seppälä and Alamäki define mobile learning as “an extreme form of flexible learning where the mobile environment integrates studies that take place on campus, at home or outside university facilities into one shared flexible learning environment” (2003: 330). Moreover, Lefoe, et al. define

mobile learning as “personal access to mobile technologies providing learners with opportunities to be flexible in the way they collect, store and share information to support their problem solving” (2009: 18). These two characterizations of mobile learning fit in with how mobile learning should be understood in the context of this study.

Another more appropriate definition is derived from O’Malley et al. (2003) whereby mobile learning is defined in terms of space as the learner is not restricted to a fixed learning location, and learning occurs when the learner takes advantage of opportunities provided by mobile technologies. Surely, using social media for learning does not require a fixed location for learning, and it narrows the gap between informal and formal learning in terms of content and can therefore be equated to taking advantage of opportunities provided by mobile technologies in the learning process.

Coupled with selected definitions of mobile learning, and perhaps most importantly, are Sharples, et al., (2005) who resolve that mobile learning accounts for the mobility of learners and theorises learning as a constructive process. These are focal features of mobile learning in the context of this study whereby mobility of the learners is accounted for, and learning is theorised as social construction of knowledge mediated by technology, e.g. social networking (SN) tools. It is appropriate to theorise learning as social construction of knowledge in the context of this study as social media enables students to create knowledge collaboratively in a socio-cultural historical context.

As per Kaleidoscope Network of Excellence Mobile Learning deliberations, it was concluded by a certain workshop group that a specific definition of mobile learning is unfeasible, but to a certain extent mobile learning is characterised by the following:

- enables knowledge building by the learners in different contexts;
- enables learners to construct understandings;
- changes the pattern of learning/work activity; and
- context is beyond time and space (Winters, 2006: 6).

A combination of all these features of mobile learning is essential in determining how mobile learning should be understood in the context of this study. At institutional level, mobile learning enables knowledge building in higher education context. The technology,

SN tools in this case, enables social construction of understandings, and also changes the traditional way or pattern of learning. Finally, as stated earlier in this section, the use of social media for learning does not require any fixed space as learning can take place anywhere anytime.

Of importance is the conclusion reached by this workshop group, that mobile learning should be understood as “an intervention in terms of guiding what the learner is constructing” (Winters, 2006: 6). The notion of providing guidance to students in the process of converging informal and formal learning is critical to this study. Echoing Walker (2006), mobile learning should not thus be limited to delivering lesson content on a mobile phone screen; it should be focused on what learners learn and how they learn. This links evidently with the second objective of this study: to explore how PoN students use social media for learning. This takes into account the notion that mobile learning applications are only mediating tools in the learning process; they are not end means on their own (Milrad, 2006; Shank, 2008 & Winters, 2006). This scenario justifies the need to explore and understand how students converge learning from informal and formal learning contexts.

Taking into account diverse though closely linked definitions of mobile learning provided by different scholars in this sub-section, one can wrap up that it is almost impractical to separate the mobile devices from the learners, and it is the mobile devices that enable the mobility of the learners in the learning process. Hence, in the context of this study, drawing on deliberations on the definition of mobile learning highlighted in this sub-section, mobile learning should be understood as a form of learning mediated by a tool that facilitates the mobility of learners in order to access learning resources anywhere anytime.

2.4 Formal and informal learning environments

From my point of view, there has been a divide between informal and formal learning in the education sector. We have been accustomed to traditional ways of learning that characterise formal education. Some educators that have been in the teaching profession for many years are accustomed to traditional ways of teaching and learning

and consequently reluctant to embrace new ways of learning in which IL could be categorized. This deprives the new generation of students that finds these new ways of learning fun and motivating (Jones, Issroff and Scanlon, 2006 & Laurillard, 2007).

Nevertheless, with innovations brought along by educational technology, IL can equally be regarded as a legitimate way of learning, and this explains the need to converge the two modes of learning. As pointed out earlier in Chapter 1, this notion is not far from an observation made by Sharples (2006) that informal networked interaction is not yet recognized as a legitimate form of learning. This is irrespective of the fact that the use of mobile devices for media sharing and SN enables the users, especially the young generation, to develop amazing skills beneficial to employers (Sharples, 2006). It is perhaps on this basis that Sharples concludes that “there is an urgent need for teachers, parents and policy makers to understand the new technologies and also the new forms of online interaction” (2006: 25). Similarly, Ng’ambi’s (2013) study explored and brought to light the fact that using ETs in institutions of higher learning enables interactions between the learners and their environment which consequently results in effective and meaningful student learning. As students are social learners, they are already in interaction with others and the community at large, and since learning takes place through interaction, it should not be confined to the classroom or to didactic methods.

With reference to Schwier, existing research places focus on FL contexts as opposed to IL, but then “the excitement, the potential and the future of learning is on the informal side of the ledger (and) perhaps most importantly, it is where the fun is hiding” (2010: 90). Sharing the same sentiment in the context of higher education is Herington, et al., (2009) by expounding that there is lack of theoretical foundation to the learning environments that make use of mobile technologies in teaching and learning. This state of affairs calls for a meaningful discussion and analysis of informal and formal learning environments which leads to better understanding of the nature of the two learning environments, and why convergence of the two learning environments is a priority in the education sector, hence Sections 2.4.1 and 2.4.2 that follow where formal and informal learning are explained at length.

2.4.1 Formal learning

Eraut (2000) defines FL environments as contexts consisting of a prescribed learning framework; specific learning tasks; instructor led; and learning structure that is defined externally. This is still how the concept of learning is characterised in many contexts where IL is not yet recognised as a legitimate way of learning. In support of Schwier (2010), the centre of attention in formal education is the teacher/instructor and content, as opposed to IL that is often characterised by the absence of an instructor.

In differentiating between formal, non-formal and informal learning, Eshach (2007) describes FL as learning that usually takes place at school; it may be authoritative, structured, teacher-led and compulsory, and motivation is more extrinsic, while learning is sequential, and is evaluated. Thus, historically a school has always been perceived as a perfect place for learning to take place, where the curriculum is externally defined, motivation is extrinsic, and without the presence of a teacher such form of learning could be regarded unjustifiable.

The definition of FL is merely hereby presented to differentiate between the two domains of learning, i.e. formal and informal, as the bone of contention in this study is whether these two contexts, formal and informal, converge and how or where if they do.

2.4.2 Informal learning

Before arriving at how IL should be understood in the context of this study, it could be worth establishing how this concept is understood in a broader context. There are a variety of terminologies that are associated with IL, such as “education ‘owned’ and ‘directed’ by the learner; independent study; non-formally timetabled education; education using non-institutional technologies; and engaging learning that takes place away from traditional, educational contexts” (Hall, 2009: 31). This classification of IL is not much different from the way other researchers interpret the concept of IL. Cook, Bradley and Pachler view IL as “a natural activity by a self-motivated learner ‘under the radar’ of a tutor, individually or in a group, intentionally or tactically, in response to an immediate or recent situation or perceived need, or serendipitously with the learner mostly being unaware of what is being learnt” (2008: 4). Clearly analysed, this

explanation of IL is similar to how Hall (2009) defines the concept of IL, and corresponds closely with Schwier who defines IL as learning that is characterised by:

- a learning environment that is chosen, controlled and in some cases, invented, by the person(s) doing the learning;
- learning that may be intentional or casual and serendipitous;
- the absence of an identified instructor or assigned leader who controls the environment-IL is self-directed;
- learner defined goals that may range from amorphous to precise, and which guide the learning path;
- no organizational expectations around participation, investment, persistence and completion (Schwier, 2010: 91).

In the context of this study, the concept of IL is not much different from how it is understood by others and should hence be understood in terms of the definitions hereby presented (Cook, et al., 2008; Hall, 2009 & Schwier, 2010), i.e. learning that occurs naturally and is not formally structured, where a learner is self-motivated, and learning takes place through interactions, knowingly or unknowingly and is also characterised by the absence of an instructor. In short, it should be understood as out-of-class learning that is student-led.

In addition to various definitions of IL hereby presented, it is sensible to take into account Shank's (2008) characterisation of IL which seems to be all inclusive as it presents a broader view of what IL entails. Shank defines informal learning as "the lifelong process by which individuals acquire and learn to apply knowledge and skills from on-going life experiences and activities – at home, work, and play, and from friends, family members, co-workers, books, articles, television, radio, films, travel, conversations, and all the people and things an individual comes into contact with" (2008: 255). This conceptualization of IL covers a broader range of aspects associated with IL and goes beyond students to other members of the community, hence signalling the socio-cultural historical context of learning. Echoing Schwier (2010), understanding

of IL environments, and the type of learning that occurs in online social environments, enables us to better support learners in their learning process.

It can be deduced from the definitions of formal and informal learning presented in this sub-section that it is IL that effectively facilitates collaborative construction of knowledge with peers as it is community centred, which is in accordance with social learning theory and the concept of AL. Considering that learners find the IL environment motivating compared to a FL environment (Jones, et al., 2006 & Laurillard, 2007), these are the characteristics that should feature in a converged learning environment. This provides justification for the need to converge the two contexts cognitively through mobile devices, which is at the centre of discussion in this study. More insights on the concept of convergence of the two learning contexts are provided in the following sub-section.

2.5 Convergence of informal and formal learning

The new ways of learning with educational technology necessitate change in pedagogy, and this explains why convergence of what is learnt outside and what is learnt within schools is needed. Drawing on Schwier (2010), the new ways of learning afforded by educational technology, e.g. SN, necessitate change in educators' roles, to change from an educational scenario where the educator's key role is to manage content to an educator whose key role is to create connections among learners, resources, knowledge and skills. Should educators then move away from a teacher-led traditional learning environment? On the other hand, Veletsianos (2010) advises educators to avoid technology-based instruction that replicates face-to-face teaching. Creating a balance in efforts to narrow the gap between formal and informal learning is thus a matter that requires critical thinking.

It has been observed that SN is a new opportunity of social learning in educational technology, but it is regrettable to note that formal institutions of learning are reluctant to embrace opportunities offered by new ways of learning, of which SN is inclusive (Shank, 2009; Schiewer, 2010 & Veletsianos, 2010). Bull, Thompson, Searson, Garofalo, Park, Young & Lee (2008) also make an observation that there is little connection between

people who work in formal environments and those who make use of IL environments where social learning is a dominant feature. It is on this basis that Bull, et al., (2008) suggests that the experiences that students possess in communication technologies should be explored and connected to FL.

The social learning support that is provided by SN tools or Web 2.0 technologies includes conversational interaction, scaffolding, social feedback and support for social networks and relations between people, therefore catering for the affective dimension of learning, as well as development of digital literacy skills (Lee & McLoughlin, 2010). According to Lee and McLoughlin, Web 2.0 is a term that is used to describe a “second generation or improved form of the World Wide Web that emphasizes collaboration and sharing of knowledge and content among users” (2010: 61), and examples of Web 2.0 technologies are blogs, wikis, YouTube, Really Simple Syndication (RSS), podcasting feeds, MySpace and Facebook.

Shank (2008) indicates how many other Web 2.0 tools providing new ways of learning individually and collaboratively are continuously emerging. In the context of this study WhatsApp is regarded as such a tool and is hence referred to as an emerging technology, taking into account Veletsiano’s (2010) definition of an emerging technology as presented in Chapter 1, Section 1.1 and Chapter 2, Section 2.3. Lee and McLoughlin are of the opinion that Web 2.0 tools provide educational affordances as they can be used to stimulate and generate learning conversations through interactions, and SN sites specifically enable users “to connect, develop rapport, share interests, create community, and collaborate with peers (2010: 72). Since all these inspiring forms of SN learning that are hereby put forward are only associated with IL, this points to the need to explore how this form of learning could benefit formal learning.

Although SN has various benefits to the young generation, Sharples (2006) provokes a critical issue of concern, the fact that some forms of knowledge can only be gained via teacher-led pedagogic support. This forms the basis for Sharples’s (2006) argument that it is impossible for SN to substitute FL, and a feasible alternative is to integrate ETs and new forms of learning with traditional forms of learning and this is what leads to uncertainty and debates surrounding the issue of whether to merge or converge formal

and informal learning contexts and how. Hall (2009) explains merging, that is translated into convergence in the context of this study, as a process of developing connections between formal and informal networks and spaces, but the concept of ETs should also be clarified at this stage. As earlier defined in Chapter 1, ETs are not limited to tools as they can also be concepts, emerging approaches and advancements in different educational settings (Veletsianos, 2010). Similarly, Veletsianos continues, ETs could be new or not new technologies, depending on the context as they may be emerging in one context but already established in another area.

In simple terms, convergence can be described as a process of figuring out things that fit together (Patton, 2002). In this study convergence should be understood as both a physical and cognitive construct. This study demonstrates how a pedagogical design of an authentic task establishes cognitive convergence that is socially constructed knowledge in other words. With reference to Jeong and Chi (2007), cognitive convergence entails three aspects: the process of convergence, the resulting outcome also referred to as mutual understanding which should be the outcome of convergence, and the source of convergence, e.g. joint construction of activities. For the purpose of this research project, shared knowledge should be the outcome of convergence, and this knowledge that is collaboratively constructed should be understood as a result or product of student interactions mediated by a SN tool.

Convergence of the two learning environments could be a viable option in this study, as opposed to merging them. As it was earlier explained in this section, merging involves making connections between formal and informal networks and spaces (Hall, 2009), while convergence preserves the naturalistic attributes of both learning environments. Research literature in educational technology proves that learners find IL more motivating than FL (Jones, Issroff & Scanlon, 2006). Accordingly, it is sensible to preserve this naturalistic attribute of an IL environment in the process of converging the two learning environments. Moreover, Sharples (2006) compares FL and IL as two domains of learning opposing each other, whereby tension occurs when attempts are made to merge them. Additionally, when students attempt to bring a culture of peer collaboration and knowledge sharing through online SN to the formal classroom that is

teacher-led and curriculum oriented, tension occurs between the two areas of learning (Sharples, 2006). A harmonious solution could then be to converge the two domains.

In attempt to overcome the conflict between mobile-mediated IL and FL, Sharples (2006) foresees a scenario in which mobile technologies and online SN are neither prohibited nor welcomed in formal education but alternatively adapted to new technologies and ways of learning. This means that, Sharples (2006) continues, educational institutions will benefit by intensifying students' existing skills of SN learning, and then formal and informal learning are converged instead of being merged. This provides justification for the need to explore how the two learning environments can be converged, which leads us to the inclusive goal of this study. In terms of collaborative learning, convergence occurs through joint interpretation of a situation or problem, then understanding is coordinated, and a solution to a problem is found jointly (Jeong & Chi, 2007). Hence, joint construction of activities that results in coordinated solution to real life problems paves the way for convergence.

A number of studies carried out in efforts to create a link between formal and informal learning environments, (Bul, et al., 2008; Cook, et al., 2008 & Hall, 2009) also draw attention to the need to employ scaffolding strategies in collaborative learning as they have been found to be fitting to create a link between the two learning environments. For instance, Cook, et al.,'s (2008) study aimed to investigate how students integrate mobile phones in the informal and formal learning environments. Their study results pointed out that guidance from the tutor, i.e. scaffolding, plays a major role in the process of narrowing the gap between formal and informal learning. Learning guidance is closely linked to the concept of the zone of proximal development (ZPD). The ZPD is defined as "the distance between what an individual can achieve on her own and what she can accomplish when guided by more capable peers or adults" (Barab, Evans & Baek, 2004: 201). This stresses the significance of collaborative learning or social relations in the process of constructing knowledge in a constructivist learning environment.

The concept of converging formal and informal learning should not be looked at peripherally; it needs in-depth discussion and understanding. In agreement with Hall

(2009), it is worthwhile concluding that the notion of converging formal and informal learning environments has far reaching implications in the education sector in terms of strategic and operational issues, such as in:

- curriculum design, delivery and assessment;
- enhancing personal, technological access and participation;
- the development and ownership of personalised learning environments;
- institutional strategies for learning and teaching, IT, staff development; and
- staff-student and student-student relationships.

Another aspect worth considering surrounding debates around convergence of formal and informal learning is the depth and quality of learning gained through social networks. Siemens (2009) classifies the depth of learning in two categories: weak tie learning that occurs when networks and connections are formed at basic level, and strong tie learning that is facilitated by sufficient time and more effort, and requires expertise and sustained focus. A converged learning context would enhance the depth and quality of learning gained through social networks as it brings in the dimensions of more effort, expertise and sustained focus as opposed to diverged learning environments, thus ensuring strong tie learning that is hereby only peripherally discussed.

Hall's study that aimed to fuse web-based tools with task oriented personalized learning environments using read/write web, concludes that "user centred, participative, SN tools enable learners to create informal associations or communities of practice, in which to develop their own subject-based mastery (2009: 38). This is an indication that SN makes provision for the development of cognitive skills collaboratively, which when combined with some form of guidance, lead to effective knowledge construction. Combined with the assumption that the IL that takes place when learners are using social media provides opportunities for enhanced engagement of students in FL (Bull, et al., 2008 and Ivala & Gachago, 2010), it is sensible to conclude that the convergence of formal and informal learning has a potential to produce a viable learning environment. In view of Vygotsky's (1982) socio-constructivism theory, ideas expressed in social

interactions are internalized and then connected cognitively to complex networks of knowledge, and this is how learning takes place in a converged learning environment.

Based on the literature reviewed in this chapter, the key characteristics of informal and formal learning contexts are better summarised below, and a converged social learning context feasible is illustrated in Table 2.5.1 that follows. The converged social learning context accommodates both intrinsic and extrinsic motivation, and it makes it possible for learning to be observed to a certain degree. Learning could be structured to a certain extent through guidance by the instructor, yet it facilitates natural and collaborative learning through the use of both institutional and non-institutional technologies. These features mirror a learning environment that enables learning to transit between informal and formal learning environments.

Table 2.5.1 Characteristics of formal, informal and envisaged converged learning contexts

Informal Learning	Envisaged converged learning	Formal Learning
Student-led (Hall, 2009)	Student-led, teacher guided	Teacher-led (Eshach, 2007, and Sharples, 2006))
Learning is community centred and takes place away from traditional educational contexts (Hall, 2009)	Learning transits between formal and informal environemnts, is collaborative, community centred and takes place anywhere any time	Learning takes place at school (Eshach, 2007)
Learner self-motivated (Cook, et al., 2008)	Motivation is both intrinsic and extrinsic	Motivation is extrinsic (Eshach, 2007)
Learning is a natural activity (Cook, et al., 2008), no defined curriculum (Laurillard, 2007)	Learning is a guided natural activity occurring through connections among learners and the community, using both institutional and non-institutional technologies	Curriculum oriented, and learning structure externally defined (Eraut, 2000 & Sharples, 2006)
Self-directed (Schwier, 2010)	Facilitates semi-independent study, learning tasks ill-defined	Specifies learning tasks (Eraut,2000)
No formative or summative assessment (Laurillard, 2007)	Processes and products of learning are end products on their own	Learning is evaluated (Eshach, 2007)

This matrix presents a view of how an envisaged converged learning environment preserves the naturalistic attributes of both informal and formal learning environments. It is mobile devices that would mediate the envisaged converged learning environment by making the division between the two learning environments fluid. As students find mobile devices motivating to learn with (Jones, et al., 2006 & Laurillard, 2007), they could be effectively used to mediate convergence of the two learning environments due to the fact that students would be both intrinsically and extrinsically motivated to use them for learning.

2.6 Chapter summary

The review of literature revealed the complexity of key concepts for this study, i.e. mobile learning, formal, informal and AL, as well as convergence, due to the fact that there are a variety of definitions associated with some of these concepts in educational technology, hence the need to define them. Additionally, the review of literature provided deeper understanding of the complex matter of convergence of the two domains of learning. Also, the pedagogical design principles and processes of AL activities based on socio-constructivism are highlighted. The next chapter presents the research design that was adopted, inclusive of the methods for selecting the research participants, the research procedure, as well as techniques that were used to collect and analyse the empirical data.

Chapter Three: Research Design and Methodology

3.1 Introduction

This chapter provides an overview of the methodology that was used to conduct the study, the research strategy, selection of the research participants, methods that were used to collect and analyse data, as well as the research procedure. The study aimed to investigate the actions and interactions of a group of students using a social media tool in an authentic context to establish the potential to converge informal and formal learning. The chapter opens with an explanation of the research orientation, and then sheds light on the type of research that was conducted. Furthermore, the research strategy adopted is explained, as well as the methods that were used to select the site and participants. Validity and ethical considerations are discussed, and finally the procedures that were used to collect and analyse the data are discussed.

3.2 Research design

3.2.1 Research orientation

The study adopts an interpretive or hermeneutic paradigm that leads to an empirical qualitative research that contrasts quantitative research that takes a positivism paradigm (Patton, 2002). According to Patton, the term hermeneutic is derived from the Greek word *hermeneuein* which means “to understand or interpret” (2002: 114). An interpretive paradigm is used as a base for understanding processes, meaning and purposes (Cohen, Manion & Morrison, 2007 and Merriam, 1998), and according to Wills, Thompson and Sadera (1999), interpretivist is linked to constructivism learning theory, and is normally associated with qualitative research. With reference to Merriam (1998), interpretivism, that is also used to refer to interpretivist, is based on the assumption that there could be different ways to interpret a phenomenon so as to understand the meaning that people construct of their world through their experiences.

3.2.2 Research type

With reference to Biggam, qualitative research involves “in-depth exploration” and provides “an opportunity for quality responses” (2008: 86), and does not deal with quantifiable data. As this study involves an in-depth investigation of the possibility of converging informal and formal learning and how it could be done, the qualitative approach was found ideal as opposed to a quantitative approach that does not focus on processes but puts emphasis on measurement and analysis of relationships between variables (Denzin & Lincoln, 1984). Furthermore, Biggam (2008) states that it is the research objectives, the research strategy and data collection methods that determine the nature of research, whether it is qualitative or quantitative. The research objectives that were earlier presented in Section 1.4 in Chapter 1 as well as the data collection methods discussed in Section 3.2.5 below are all indicative of qualitative research.

Strauss and Corbin (1998) explain how qualitative methods are suitable when the researcher wants to get better understanding of a phenomenon where not much is known, to gain new insights on what is already known, or to gain in-depth information that cannot easily be expressed using a quantitative approach. In the context of this study the main goal was to get better understanding of the phenomenon of SN at PoN in terms of convergence of informal and formal learning, hence the primary research question: How can social media be used to converge formal and informal learning among students in the Department of Languages at PoN? In a broader context, new perspectives could be gained regarding what is already known about the concept of SN and its linkage to formal and informal learning, hence enhancing student learning.

3.2.3 Research strategy

In terms of the research strategy this study can be categorised as a case study, but it also draws on action research due to the involvement of the researcher. Drawing on Robson, a case study methodology is “a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon in its real life context using multiple sources of evidence” (1993: 52). Similarly, this study investigates the

phenomenon of social networking (SN) in the Polytechnic of Namibia (PoN) setting, a real world setting. Biggam (2008) also indicates how a case study involves a study of an individual unit, e.g. part of an institution, a group or a class, in order to investigate a certain phenomenon in depth. Similarly, in this study a group of students using a social media tool in an authentic context was investigated at course level. Merriam (1998) classifies case studies in four categories:

- ethnographic case study;
- historical case study;
- psychological case study; and
- sociological case study.

Based on this classification, this case study can be classified as ethnographic. According to Merriam (1998), an ethnographic case study describes and analyses a social unit or phenomenon of study focusing on socio-cultural analysis and interpretation. As such, this study investigated a social unit, a group of students, in their socio-cultural historical context as per Vygotsky (1982).

However, this study also draws on action research. Action research is defined as research where the researcher starts with a certain problem that needs a solution or better understanding, especially in the setting where the researcher is working, and it requires the researcher to contribute to action and intervention (Cohen, et al., 2007). Similarly, this study is also problem-based as it investigates how to converge informal and formal learning, and the setting is PoN, the environment where the researcher works. Also, the researcher contributed to action and intervention by providing online guidance to the participants while working on the research task.

3.2.4 Selection of site and participants

The research was based on a case study of SN at an institution of higher learning, PoN that did not yet have university status by the time the research was conducted. The research was conducted in the Department of Languages (DoL) at PoN, which falls under the School of Humanities. This is the department where the researcher was

based during the study period, and the researcher was one of the four lecturers teaching Language in Practice, the English language course that the research participants were doing at that particular time. Conducting research in the department where the researcher is based, and also with students in that department, gave the researcher easy access to the research participants. Additionally, working closely with the participants enabled the researcher to probe rich qualitative data by asking for clarification of issues, depending on the responses. This added value to the reliability of the study.

Another key reason behind selecting the DoL is the fact that it is a service department which caters for students from all other departments at PoN. Consequently, though the views expressed do not represent the institution as a whole, the research participants are students majoring in different courses that are offered at PoN, therefore representing different departments indirectly. The study participants were ten students enrolled for LIP over a period of two semesters. Four of these students participated in the pilot phase of the study in the first semester, and the other six in the main study the following semester. These students were from six different LIP class groups which on average have about thirty students per class group.

In the first phase of the study the researcher asked students who had experience using SN tools to approach her to participate in the study on a voluntary basis, but only four participants were needed. In the second phase of the study, which was informed by the pilot phase, the researcher posted a note on the LIP noticeboard requesting LIP students who had experience in using WhatsApp to contact her to participate in the study but on a voluntary basis, and only six students were needed as this was the maximum number of participants that could be grouped in a WhatsApp group. Thus the participants were self-selected. The research participants do not therefore represent the institution as a whole, and were therefore deliberately selected by the researcher but on a voluntary basis. As per Patton (2002), qualitative inquiry focuses only on a relatively small number of participants selected purposefully to enable better understanding of a phenomenon, as opposed to quantitative methods that make use of

randomly selected larger samples. Maxwell (2008) states that in qualitative research only a small number of individuals are studied.

3.2.5 Data collection methods

Multiple sources of evidence were used, i.e. face-to-face interviews, artefacts and focus group discussion, to establish if convergence of informal and formal learning is possible, as well as how technology facilitates learning through student interactions in both formal and informal learning environments. Morgan (1997) points out that combining research methods has a potential to add value to the research project, irrespective of which research method is predominant. A mix of data collection techniques, i.e. triangulation, was thus employed. According to Denzin and Lincoln (2008), triangulation is the integration of data using a variety of methods and sources of information. Individual semi-structured face-to-face interviews, artefacts and focus group discussions were used to elicit information from the participants.

3.2.5.1 Qualitative interviewing

Individual qualitative interviewing was one method that was found relevant for the study; hence preliminary individual interviews were conducted during the first phase of the study. Echoing Patton (2002), qualitative interviewing enables the researcher to understand the respondents' perception of the world, as well as to get a grasp of their experiences. Moreover, with reference to Morgan (1997), preliminary individual interviews are advantageous in the sense that they provide a focus for group interviews as they provide insights into how people think about topics that will be discussed in a focus group. Thus, preliminary individual interviews that were conducted during the first phase of the study informed the second phase of the study that involved focus group interviews. The interviews were semi-structured in the sense that although there was a set of pre-prepared questions that were used as a guide, the interviewer could intervene and ask to get clarification on issues that were not clearly stated by the participants, therefore enabling the interviewer to generate more accurate responses. The questions also assisted the interviewer to stay focused during the interviews with different

respondents. Echoing Patton (2002), semi structured interview questions using open-ended questions encourage meaningful responses from the research participants.

3.2.5.2 Artifacts

In addition to face-to-face interviews, the study participants were also required to use WhatsApp in a natural setting to enable the researcher to get closer to their unique world of networking. WhatsApp activates the online presence of students when they transit from formal to IL as it enables production of a visible learning dialogue, i.e. post-interaction trails. This facilitates better understanding of the phenomena being studied and adds value to the reliability of the study. Although not participant observation per se, the researcher participates in the setting to be studied by participating in the learning activity as a facilitator and “onlooker”.

WhatsApp would result in a trail of artefacts that are a reflection of students’ learning interactions while using the SN tool informally. These artefacts are equivalent to case study documents that, in Denzin and Lincoln’s (1984: 21) terms can be referred to as “verbal and written expressions of meaning given by the individuals studied”. Highlighting the importance of artefacts and visual texts, Denzin and Lincoln (1984) point out that they make individuals’ world visible in a unique way. In this study this explains how artefacts created by the research participants can be valuable in understanding the phenomenon of SN at PoN, therefore making their unique world visible.

3.2.5.3 Focus group discussion

A focus group discussion was used as a follow-up to get in-depth understanding of the participants’ experiences of using the WhatsApp learning intervention, as well as differences and similarities in their opinions. As defined by Morgan, focus group is “a research technique that collects data through group interaction on a topic determined by the researcher” (1997: 6), and, as Morgan further clarifies, the focus of discussion is determined by what the researcher is interested in, while the data come from group members. The purpose is to get in-depth views, for continuity, and also to get “direct evidence about similarities and differences in the participants’ opinions and experiences”

(Morgan, 1997:10). Focus group discussion would therefore make similarities and differences of participant opinions and experiences evident to a certain extent.

Nevertheless, it should be noted that focus group discussion has both advantages and disadvantages. On the positive side, drawing on Wisker (2001), focus group discussions encourage shy and nervous study participants to participate effectively. When discussing as a group, even the shy students would be able to express their views and opinions freely. However, it is worth noting that a focus group discussion could be a disadvantage in the sense that it does not provide in-depth details for any given participant (Morgan, 1997).

3.2.6 Framework for data analysis

An interpretivist approach to qualitative data analysis, with roots in hermeneutic philosophy (Patton, 2002), is adopted for data analysis. The analytical approach adopted to organize and describe the data is informed by the work of Miles and Huberman (1994) and involves three stages: data reduction, data display and conclusion drawing and verification that are explained in detail in Chapter 4, Section 4.2. Analytic induction, where data are analysed in terms of predetermined theory-derived concepts (Patton, 2002), was partially used to analyse the data as some codes, a priori codes (Miles & Huberman, 1994), were created from the theoretical and conceptual framework and research questions. As it is informal learning that better facilitates authentic learning (AL), the codes that were used as a basis of analysis were derived from Herrington's model of 9 authentic learning elements that can be used in educational contexts (Herrington & Oliver, 2000) that are listed in Chapter 4, Sub-section 4.2.

The data analysis approach that was adopted is illustrated in Table 3.2.6.1 below. The first step to data analysis, data reduction (Miles & Huberman, 1984) was to code the data by breaking it in manageable pieces and placing items in categories surrounding AL in order to look for patterns and relationships within and across categories. As enlightened by Maxwell (2008), coding involves breaking down the data and rearranging

it in categories that facilitate comparison of things or patterns between or within categories. These categories could be “derived from existing theory, inductively generated during research, or drawn from categories of the people studied” (Maxwell, 2008: 237). Coding is useful in the early stages of analysis as it helps the researcher to be able to identify categories, patterns and themes (Patton, 2002). This would then lead to discovery and sorting out of the data that needs further investigation, and this is how WhatsApp that was used to facilitate AL and collaboration in the second phase of the study came into view.

In the second stage of analysis, data display (Miles & Huberman, 1994), the researcher organized information in matrices for easy understanding. This involved comparing and contrasting themed participant responses in order to build and display a full picture of what the data reflect. Then, in the final stage of analysis, conclusion drawing (Miles & Huberman, 1994), the researcher interprets what is happening, i.e. the relationships between concepts, in order to come to a conclusion about the phenomena being studied, whereby the researcher translates the findings into a story line that can be read by others, making reference to related literature review findings.

Table 3.2.6.1 Data collection and analysis approach

Research Design Phase	Data Source	Motivation	Analytical Approach	Envisaged Outcome	Theoretical Support
Phase 1: Pilot Study EXPLORATION	Individual open-ended face-to-face interviews	Exploration of context: How mobile phones and social media are used for learning at PoN, and uses of social learning leverage informal learning activities	Coding and content analysis of transcribed face-to-face interviews	Results to inform the online learning design principles and process of Phase 2/main study intervention	Dabbagh & Bannan-Ritland (2005) Herrington & Oliver (2000) Miles & Huberman (1994)
Phase 2: Main Study INTERVENTION	Artefact: Trails of WhatsApp mobile interactions	To investigate and establish if and how an authentic task mediated by WhatsApp makes convergence of formal and informal learning possible	Artefact analysis: Coding and content analysis of authentic WhatsApp mobile interaction trails using authentic learning elements	To establish how a social media tool enables authentic learning that has potential to converge informal and formal learning	Dabbagh & Bannan-Ritland (2005) Herrington & Oliver (2000) Lombardi (2007) Miles & Huberman (1994)
Phase 3: Focus Group Discussion EVALUATION	Focus group interviews	To find out how convergence of informal and formal learning could be possible through participants' social learning experiences of using WhatsApp	Coding and content analysis of transcribed focus interviews , using authentic learning elements	The views of participants to enlighten educators if convergence is possible, and how social construction of knowledge mediated by a social networking tool could be beneficial to formal learning	Dabbagh & Bannan-Ritland (2005) Herrington & Oliver (2000)Miles & Huberman (1994) Morgan (1997)

3.3 Validity and ethical considerations

Participation in the study was voluntary. The research participants were given a clear purpose of the study and what was expected from them, i.e. to participate in given activities with the intent to find an answer to the key research question: How can social media be used to converge formal and informal learning among students in the Department of Languages at PoN? Participants were also informed from the beginning about their right to withdraw from the study. Consent from participants ([Appendix C](#)) was sought to participate in the study voluntarily, e.g. to be interviewed, for interviews to be recorded and transcribed, and to participate in the WhatsApp activity. Confidentiality regarding the identity of study participants was adhered to by using pseudonyms. To make data analysis reliable, the study participants were given the opportunity to check and comment on their transcribed data to ensure accuracy of their responses, and the researcher was open to comments from participants. The analysed data were also to be forwarded to a colleague from the Centre of Open and Lifelong Learning (COLL) at PoN who has a qualification in ICTs in Education for a second opinion. The UCT Code of Ethics for Research was used as a guide in conducting the research. Permission to conduct the research at PoN was requested and obtained from relevant authorities on the 9th of October 2012 as it transpires in ([Appendix B](#)).

3.4 Data collection procedure

As expressed by Patton, “the purpose of qualitative interviewing is to capture how those being interviewed view their world, to learn their terminology and judgments, and to capture the complexities of their individual perceptions and experiences” (2002: 348). Considering the challenges of observing an IL environment as stated earlier, this could be a relevant approach for the informants to shed light on their views and experiences, i.e. to get to understand their world and experiences. Participants were first interviewed to shed light on their experiences of using SN tools when learning informally, with the intent to provide answers to open-ended semi-structured interview questions set around secondary research question 1: How do students use mobile phones and SN tools for

learning? To leverage IL across FL, semi-structured interview questions set around secondary research questions 3 and 4 were set: How does the use of SN help students with their studies? Regarding the third secondary research question, the type of SN pedagogy that converges informal and formal learning, a tool, WhatsApp, was used for learning intervention to investigate how a SN tool facilitates construction of knowledge, as well as the SN pedagogy that converges formal and informal learning. The focus group discussion that followed the WhatsApp learning intervention task provided hints to the fourth and last secondary research question: How students' experiences of using social media for learning bring to light cognitive convergence of informal and formal learning.

3.4.1 Qualitative interviewing

The first phase of the study intended to find out if students in the setting of the study use mobile phones and SN tools for learning and how if they do. This would inform the design of the main study in Phase 2. A set of open-ended interview questions was set around the research questions to collect data that were needed. The students who had experience in using SN tools were purposefully requested to participate in the study, but on a voluntary basis. They were expected to have been using social media to interact with other students out of the classroom. The interview protocol was adhered to, i.e. asking for permission to interview the students, explaining the nature of the study and how participation in the study was voluntary, provided participants had experience of using SN tools. The issue of confidentiality whereby the identity of the students was not to be disclosed at any stage of the research was explained, including using pseudonyms. Four students were interviewed, and they were all asked the same open-ended guiding questions that are listed in ([Appendix A](#)). However, in some instances the researcher had to briefly repeat or emphasize some phrases from the interview questions to avoid complete break-down of communication due to language barriers.

The interview length ranged from twenty to forty minutes per session. The interviews were recorded using Audacity, an online voice recording tool, and were later transcribed and analysed. Though Audacity is designed for editing audio recordings, the researcher

found it as a tool that also affords an opportunity for audio recordings as the researcher did not have access to an ordinary digital recorder. It was also easy to transcribe Audacity audio recordings as compared to an ordinary recorder. Due to the noise on campus, all the interviews took place in the researcher's office which is located at the research site, the DoL at PoN, but on different days and times. The office was also convenient to both the researcher and the participants as it is located at the research site, and audio recordings could therefore be done in a quiet environment. This means the researcher had easy access to students. All the interviews were transcribed, and then edited for accuracy before analysis started. Copies of the transcribed interviews were also handed to the respondents to verify their responses.

Due to the emergent nature of qualitative inquiry, the gaps found during analysis of the data necessitated more data collection which was collected during the second phase of the study through the WhatsApp research task (Section 3.4.2) and focus group discussion (Section 3.4.3) in order to clarify or deepen pilot phase interview responses. The main study was conducted during the following semester but with a different group of participants doing the same course, LIP.

3.4.2 Artifacts: WhatsApp trails of interactions

As it was earlier pointed out in Chapter 2: Literature review, socio-constructivism is based on the belief that learning is achieved by constructing knowledge in a socio-cultural context, hence the need to provide students with a tool and resources to enable them to construct knowledge (Lowerison, et al., 2008). The AL research activity for this study was therefore designed accordingly, i.e. engaging students in active construction of knowledge, exploration, collaboration and communication, reflection, and assessment was integrated with the task. As it was earlier expressed in Chapter 2, Section 2.2.2.1, Dabbagh and Bannan-Ritland's (2005) online learning design model, as well as Bower's (2008) affordance analysis theory were used as a guide for the selection of WhatsApp as a technological tool and also to analyse the technological, educational and social affordances WhatsApp provides, i.e. matching the learning task with the technology.

Additionally, Hodgkinson-Williams puts across how a constructivist learning process should also engage learners in a “culturally authentic activity” (2006:10). Of importance is also the fact that a constructivist learning process involves exploration, communication and reflection (Jonassen, Howland, Marra & Crismond, 2008) and it involves active construction of knowledge as it is authentic and collaborative, while assessment is integrated with the task (Herrington & Oliver, 2000). These design principles were also used to guide the design of the research task in this study.

Implementation of teaching and learning strategies required an analysis of the technological tool to determine its strengths and weaknesses, as well as to determine how it could be used. Accordingly, a technological affordances analysis ([Table 3.4.2.1](#)) was essential to match the design of the task with the choice of a tool, WhatsApp, as well as to determine the technological, educational and social affordances the tool provides for collaborative learning.

Table 3.4.2.1 WhatsApp affordance analysis matrix, adapted from Bower (2008)

Type	Degree of interaction		Type	Degree of interaction	
WhatsApp Media Affordances	read-ability	√	WhatsApp Navigational Affordances	data-manipulation-ability	√
	view-ability	√		browse-ability	√
	listen-ability	√		link-ability	√
	watch-ability	√		search-ability	x
	write-ability	√			
	draw-ability	x			
	speak-ability	√			
	video-produce-ability	x			
WhatsApp Spatial Affordances	resize-ability	√	WhatsApp Synthesis Affordances	combine-ability	√
	move-ability	√		integrate-ability	√
WhatsApp Temporal Affordances	accessibility	√	Access-control	permission-ability	√
	play-back-ability	x		share-ability	√
	record-ability	√			
	synchronous-ability	√			
Emphasis	highlight-ability	x			
	focus-ability	√			

The analysis of the tool brought to light the fact that WhatsApp could be viewed publicly by the participants using the tool; and it allows collaborative construction of knowledge, as well as sharing of resources, images and audio clips. Most importantly, the WhatsApp instant messaging (IM) attribute automatically produces post interaction trails

that could be further used in various ways, including artefact analysis. Based on these principles, a research activity that required the participants to use WhatsApp that affords a variety of technological, educational and social affordances was designed. The task was to involve collaborative construction of knowledge, writing and reading of the texts, and also uploading and downloading audio and image clips that could be shared.

Furthermore, WhatsApp was found more suitable for a variety of other reasons. Some participants indicated during Phase 1 of the study that they were familiar with it. It enables free SMS for a period of one year, and users can also send each other images, videos and audio messages, and this explains how Phase 1 of the study informed the design of Phase 2, the main study. Also, the WhatsApp affordances allow a closed group of participants to interact with the community at large. Participants could therefore be in touch with each other as well as the community at large. Based on Dabbagh and Bannan-Ritland's (2005) online learning design principles and processes, WhatsApp was thus found as a matching tool for socio-constructivism. It was suitable for the context as Phase 1 pilot interviews revealed that students were familiar with it, and it enabled social construction of knowledge through authentic learning. The tool was accordingly enacted as it is, and the trails of online interactions that the tool generates automatically were regarded fit for evaluation of participants' performance.

As the first phase of the study indicated that some students were familiar with WhatsApp, the researcher approached students in a classroom setting, gave some information about the research and asked those who had experience of using SN tools, especially WhatsApp, to approach her if they were interested to participate in the study on a voluntary basis. Six students volunteered to participate in the research and were given more information about the research task, the research itself, including confidentiality regarding their identities, the right to withdraw from the research, as well as consent forms that they were required to sign before participating in the research.

The WhatsApp learning intervention participants were three female and three male students. The discussion was initiated by the researcher/instructor by posting a

summary of the task on WhatsApp. The participants had already been given hand-outs with detailed information about the task in class before it was initiated on WhatsApp. Regarding IL, the participants had to interview 3 to 4 members of the community about gender-based violence and passion killings that had increased in the country and report their findings on WhatsApp. This takes into account the AL aspect of the task. Then, as part of FL, the participants had to relate their findings to the short story that was earlier done in class, *The Suit*, by Can Themba. The participants were given a period of about two weeks, i.e. ten days to work on the task ([Appendix D](#))

The participants started joining the discussion as soon as the task was posted. They started asking for clarification, e.g. when to start or even what exactly to do. The instructor kept intervening occasionally to provide guidance. The participants interviewed members of the society and posted the interview results on WhatsApp. One of the participants posted her interviews as audio files of which a sample transcription is provided in ([Appendix K](#)). The group members kept responding to the postings of their peers, discussing the problem of gender-based violence and passion killings in the country and tried even to come up with ideas for the solution to this national problem, but it was impractical to implement these ideas within such a short period of time. The discussions resulted in a long mobile WhatsApp learning dialogue ([Appendix G](#)) that was later e-mailed from the researcher's mobile phone to the researcher's e-mail account to be converted into a word document for analysis. Face-to-face contact with the participants was avoided throughout the period they were using the WhatsApp tool, but the researcher kept observing the mobile learning interactions of the participants on WhatsApp.

3.4.3 The task

The research task that was designed is linked to activity theory (AT) to a certain extent, but it should be made clear that AT is not per se adopted as a learning theory in this research. AT cannot be fully separated from constructivism learning theory as it has roots in cultural-historical Psychology and hence socio-constructivism theory of learning (Engeström, 1987). It was thus used as a framework for designing the WhatsApp

learning activity, in combination with the AL framework (Herrington & Oliver, 2000). Some of the key tenets of AT are the fact that mediating learning with a tool is part of a larger activity system (Lim, 2002) and every activity is object oriented, and this is what differentiates one activity from another (Rasmussen & Ludvigsen, 2009).

It has been established in educational technology research that the emergence of technological tools offer students the authentic learning experiences whereby they are able to act on real-world problems, but then the involvement of the community is a key factor to authentic learning experience, and it is the tools that enable students to interact with a broader community, thus constructing knowledge collaboratively (Lombardi, 2007). This explains the emergence of WhatsApp as a technological tool in the pedagogical design of the research task, as well as why involvement of the community was essential. Lombardi (2007) further explains how social networking tools enable students to connect with the larger community that would then share knowledge and resources. This is how the research task aligns with authentic learning elements (Herrington & Oliver, 2000) that enable students to construct knowledge collaboratively in an authentic learning context, to articulate and reflect on what they are learning, to guide each other, and to access expert thinking by interacting with the community at large.

As part of the syllabus, a short story, *The Suit*, by Can Themba, was assigned to LIP students to read, but it was only briefly discussed in class as per the syllabus. As a post reading activity the research participants were assigned a task to critically analyse *The Suit* and relate it to gender-based violence, especially passion killings that had increased in the country ([Appendix D](#)). The goal was to find out if there were any similarities between the story and the problem of gender based violence or passion killings in the country, and to find out the lesson(s) the Namibian nation can learn from *The Suit* regarding gender based violence or passion killings. However, since the task involved students from different class groups and they did not know each other, the researcher created a WhatsApp group for them to use as a platform for their interactions. The task was explained to the participants in class before they started with

the production of the WhatsApp learning dialogue. The discussion was initiated by the researcher by posting the task ([Appendix D](#)) to the participants' WhatsApp group. This facilitated better triangulation of the study as the WhatsApp task supplemented Phase 1 individual interviews and Phase 2 focus group discussion as data collection methods.

Reverting to the design principles of authentic learning tasks earlier deliberated on in Chapter 2 Section 2.2.2, the task hereby presented displays a variety of authentic learning features. It is a thought-provoking undertaking that gives participants access to expert thinking by interacting with the society at large, e.g. through interviews on GBV, hence demonstrating authenticity and real world relevance. It is collaborative, thus paving the way for guidance from one another, and it is an appropriate platform for participants to reflect on the short story that was done in a formal setting and share their opinions. Furthermore, the trails of interactions that the technology, WhatsApp, generates automatically serve as illustration of participants' performance during the task.

3.4.4 Focus group discussion

A focus group discussion was conducted after the WhatsApp task had been completed. It aimed at finding out how students' experiences of using social media for learning bring to light cognitive convergence of informal and formal learning. A group of six students, three females and three males, participated in the WhatsApp task. However, one of the group members could not participate in the discussion due to an unforeseen circumstance; thus, only five students participated, three females and two males. The discussion was initiated by the researcher, but there were no pre-arranged questions; only about four guiding questions that were likely to change, depending on the type of answers the students would provide. This was due to the fact that, with reference to Morgan (1997), an unstructured focus group discussion would enable the researcher to probe deeply should the need arise, skip probing questions that were already answered during interactions, and follow new topics that were likely to arise.

The key point for discussion was the participants' experiences of constructing knowledge as a group while using WhatsApp. The four tentative guiding questions were:

- How do you describe your experience of using WhatsApp to do the task that was assigned to you?
- What did you find interesting regarding the use of WhatsApp to construct knowledge as a group?
- What problems did you encounter/experience in the process of using WhatsApp to construct knowledge as a team?
- What type of knowledge and skills do you think you gained while using WhatsApp to construct knowledge?

The discussion was about fifty minutes long. It was audio recorded and was later transcribed to produce a transcript that was later used for analysis.

3.5 Chapter summary

The chapter presented an overview of the research methods that were used to conduct the study, the methods to collect and analyse the data inclusive. The research orientation is introduced; and the research strategy adopted and the type of research that was conducted are discussed. Ethical issues pertaining to conducting research are also highlighted, and the data collection procedures are presented at length. The next chapter sheds lights on how the data was analysed and presents the findings of the study.

Chapter Four: Analysis, Findings and Discussion

4.1 Introduction

This chapter presents the data analysis method adopted in order to understand how the process of social learning takes place at the Polytechnic of Namibia (PoN) as well as how convergence of out-class learning and in-class learning could be viable. The data were collected in two phases: the pilot phase that is hereby referred to as Phase 1 where individual face-to-face interviews were conducted with four participants to share their experiences of social learning mediated by mobile phones, and the main study, referred to as Phase 2, where a WhatsApp tool was used with six participants. The idea of using WhatsApp emerged from the analysis of pilot interviews as explained in detail in sub-section 4.3, and then a focus group discussion was used as a follow-up for participants to share their experiences of using WhatsApp in order to find out how it enables convergence of formal and informal learning. In line with Miles and Huberman (1994) whose analytical approach was adopted, data analysis involved three stages that are explained in Section 4.2 below: data reduction, data display and then conclusion drawing and verification. The themes that were used in the process of coding the data were predetermined based on the review of literature and the research questions. Finally, the results of the study are presented after each analysis in light of the research questions.

4.2 Overview of analytical framework

In order to understand the actions and interactions of participants in the setting being studied, inductive analysis, that Strauss and Corbin (1998) refer to as open coding, was employed. It is a method of data analysis that is used to discover patterns, themes and categories in the data that needs further investigation (Strauss & Corbin, 1998). The analytical approach used to analyse and interpret the data is informed by the work of Miles and Huberman (1994), and it involves three stages:

- data reduction: selecting, simplifying, abstracting and transforming the data, e.g. through thematic coding;
- data display: producing organized and compressed information in the form of matrices for easy understanding; and
- conclusion drawing and verification: deciding what concepts mean, drawing conclusion from data display and verifying the meanings that emerged from the data, e.g. by noting patterns and themes.

Considering the fact that a social media tool facilitates authentic learning as it was earlier stated in the review of literature in Chapter 2, the data was to a large extent analysed by employing Herrington's nine elements of authentic learning (AL) that can be used in educational contexts (Herrington & Oliver, 2000) that are:

- **authentic context:** setting a scene for a real problem;
- **authentic activity task:** tasks/activities that have clear goals and real world relevance;
- **expert performances:** providing students with access to expert thinking;
- **multiple perspectives:** different views to be examined from different perspectives;
- **collaboration:** joint problem solving and social support;
- **reflection:** opportunity to think, reflect and make choices;
- **articulation:** opportunities for students to speak and write about their growing understanding;
- **coaching and scaffolding:** support by teacher or able partner; and
- **authentic assessment:** seamless integration of assessment and task.

A few other themes, **formal learning** and **convergence**, were derived from the review of literature and research questions. It should also be noted that the integrated assessment element was not used as a code for analysis as assessment was integrated seamlessly in the authentic task itself. The goal of these themes and elements was to bring to light the interface between informal and formal learning, as

well as how the social media, WhatsApp, acts as a vehicle to enable convergence of the two learning domains.

The analytical approach involved the re-reading of transcripts in order to identify and create codes and themes surrounding AL enabled by a tool within a larger socio-cultural context, the community. The data were further analysed and coded by putting together all words, theories and short phrases matching with the AL elements (Herrington & Oliver, 2000), leaving out duplications. The reduced list is displayed in a matrix that leads to conclusion drawing, in line with Miles and Huberman (1994). These analytical categories and themes are illustrated in the form of tables and matrices in the subsections below and are used to explain at length social learning and its link to the core curriculum (formal learning), that is, how the use of WhatsApp can give insights on convergence of formal and informal learning, as well as how the research participants' experiences of using social media for learning bring to light cognitive convergence of informal and formal learning.

4.3 Analysis of pilot interviews

In order to make meaning of what the respondents expressed during the first phase of the study the researcher had to engage with the interview transcripts extensively, with the intent to get an explanation and interpretation of the social learning phenomenon at PoN. With reference to Herrington's model of AL (Herrington & Oliver, 2000), the information that fits under each code was derived from the transcribed interviews by first sorting out, shortening and listing the research participants' responses to the interview questions as illustrated in [Appendix E](#). A sample of this appendix is presented in Table 4.3.1.

Table 4.3.1 Sample analysis of coded pilot interviews, Stage 1: Data reduction
(Appendix E)

Codes: AUCONT = authentic context, AUACT = authentic activity, EXPER = expert performance, MULRP = multiple perspectives, COLCO = collaborative construction, REFL = reflection, ARTIC = articulation, COA/SC = coaching/scaffolding, FL = formal learning, CONV=convergence

Text no.	Authentic unedited transcribed text of pilot interviews	Coded key phrases and statements	Emergent codes
302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336	<p>Researcher: Ja. You talked about mmh, the Internet. Mmh, but when you're talking about mmh, for example, communicating mmh, maybe with... with your friends, or mmh, do you think there might be some connection mmh, between what you do with other friends informally and what you learn in classes?</p> <p>Student B: Mmh, yes, because mostly <u>what you do with other friends outside class mostly it relates to what you've done in class, sometimes you debate with friends about something that you did in class or... or maybe something that you heard in class if you're in different classes, so, it... sometimes it..., sometimes correlates.</u></p> <p>Researcher: Ok, mmh, thank you, don't become... become tired, this is now the last question, what skills have you acquired mmh, through SN that you think mmh, could be used to support formal classroom learning?</p> <p>Student B: Mmh, (long pause).</p> <p>Researcher: Skills.</p> <p>Student B: Mmh, skills like, mmh, how to access ... how to access information, <u>how to access information using SN tools,how to... m... to... to... to communicate with other people or institutions,</u> mmh, ja, (long pause).</p> <p>Researcher: Ok, mmh, thank you, I think this is it, this is the end of our interview, and mmh, thank you, mmh, for all your efforts. Thank you.</p> <p>Student C Interview Transcript</p> <p>Researcher: This is an interview with Student C, mmh, one of the students mmh, doing LIP. Mmh, the interview took place mmh, in the lecture's office, on the 23rd of mmh, October, and permission to interview the student was asked in advance, and mmh, the student was given a consent form mmh, to... to... sign, and mmh, the content of the form was mmh, discussed mmh, with the student. Mmh, and then mmh, here we go.</p> <p>Researcher: Mmh, Student C, because your name is not going to be used mmh, during this interview, by any means, so I'm only going to call you Student C instead of... because I don't have to reveal your true name, your real name. So, how do you use your mobile phone outside mmh, the classroom?</p> <p>Student C: (Pause). Thanks for the opportunity given, mmh, obviously mmh, I use it... <u>outside the classroom we use my phone like for asking questionslike... questions that I don't understand, mmh, like when we're... when you...,whenever we're at home sometimes you get to ask questions to friends or family that ... because sometimes if you... sometimes we'll try to... to research on the Internet and the internet might stuck so, you've... you've to use that opportunity to ask questions to other learner by texting them or calling them.</u>(Pause) And, other..., you can also use your... <u>your cellphone outside the classroom to... to... keep you busy whenever you're like bored, (pause) and you can also... ok you can also use it to... find friends, texting friends, mmh,... mmh,... ok. That's all</u></p>	<p>What is done outside class is related to what is done in class, (REFL&CONV) e.g. debating about things done or heard in classes on SN sites (AUACT&CONV).</p> <p>Skills acquired on SN sites: accessing information, and communicating with other people or institutions (AUACT,AUCONT,COLCO)</p> <p>Uses phone outside class to ask questions concerning what is not understood, (COLCO,COA/SC) ask friends and family members, researching on the Internet, texting other learners to ask, (AUACT) calling other learners, and when bored, and also to find and text friends (AUCONT)</p>	<p>REFL,AUACT& CONV</p> <p>AUACT,COLCO& AUCONT</p> <p>AUCONT,AUACT, COA/SC&COLCO</p>

After coding the participants' responses the data were further analysed by comparing and matching key shortened participants' responses with the relevant a priori codes derived from Herrington's nine elements of AL (Herrington & Oliver, 2000). The coded data were then transformed into a matrix that clearly illustrates groups or categories of matching items, a process that can be equated to data display in Miles and Huberman's (1994) terms. A sample of these categories of matching items is illustrated in Table 4.3.2 below.

Table 4.3.2 Sample matrix of coded pilot interviews, Stage 2: Data display ([Appendix F](#))

Codes: **AUCONT** = authentic context, **AUACT** = authentic activity, **EXPER** = expert performance, **MULRP** = multiple perspectives, **COLCO** = collaborative construction, **REFL** = reflection, **ARTIC** = articulation, **COA/SC** = coaching/scaffolding, **FL** = formal learning, **CONV**=convergence

Text no.	Coded key phrases and statements	Authentic context	Authentic activity	Expert performances & modelling processes	Multiple roles and perspectives	Collaborative construction of knowledge	Reflection	Articulation	Coaching and scaffolding	Formal learning	Convergence
F115-133	Instructor should encourage and motivate the learners, interacting with students on SN sites (AUACT), posting about topics discussed in class (CONV) -learners find it difficult to concentrate in class (FL), on SN sites learners at the comfort of their homes and they access SN sites on free will (AUCONT). Learners to give input if lecturer posts something on topics discussed in class (COLCO&CONV), then he/she tries correcting them on SN sites (COA/SC&CONV)-is kind of learning and should be encouraged (ARTIC).	x	x			x		x	x	x	x
F138-156	Lecturer creates a group on SN sites for certain students to join (AUCONT&CONV), and lecturer uses the same group to communicate and discuss issues with students in the comfort of his/her home as they would in class (CONV, AUACT&COLCO)-social networks sites very attractive to teenagers (ARTIC), different environment from the one in class (ARTIC&FL), learners feel free, confident and at ease (ARTIC).	x	x			x		x		x	x
F159-177	Learned that on SN sites there are things one can do in his/her course that one didn't know, (ARTIC)e.g. In IT course a I asked a friend how to rectify a password (AUACT) and was given a solution, just from past experiences (EXPER&COA/SC), what he said was quite similar to what I learned in class (CONV). Later in class the lecturer mentioned slightly the same thing I was told (by a friend) (CONV). Just because of that status/ post/ comment, you suddenly know (COLCO). SN sites inform you indirectly, and in most cases indirect manners are the way we learn how to remember things (MULRP). Still knows things learnt from SN sites (AUCONT).	x	x	x	x	x		x	x		x
F306-308	What is done outside class is related to what is done in class, (REFL&CONV) e.g. debating about things done or heard in classes on SN sites (AUACT&CONV).		x				x				x
F344-353	Mobile phone enables learning from each other, (ARTIC, AUACT&COLCO) e.g. spelling, and enables learning from mistakes with the help of friends (ARTIC&COA/SC), one learns by asking friends questions (COLCO), and asking friends that know better than you (COA/SC) about class work (CONV).	x	x			x		x	x		x
F392-395	Has learnt a lot (REFL)-one learns things that were not even taught in class (FL), you bring up discussions in class, you get to find out new stuff outside and bring them in class for others to know (AUACT, COLCO&CONV)		x			x	x			x	x

As indicated in the sample analysis in Table 4.3.2 above, the pilot interviews informed the second phase of the study. This is due to the fact that the idea of using WhatsApp in this study originated from the participants as they introduced WhatsApp to the researcher through face-to-face interviews ([Appendix E242-254](#)). The researcher was unfamiliar with WhatsApp, but as the researcher was interested in emerging technologies in the study context, this is what made WhatsApp more favourable in comparison with other tools that featured during interviews. Furthermore, the pilot interviews uncovered the link between IL and AL and also gave insights on how to converge informal and formal learning as reflected in the three extracts below where participants provided clues on how informal and formal learning could be converged:

Instructors can “post certain statuses about certain topics that were discussed in class; sometimes learners find it difficult to concentrate in class but on social networking [SN] sites it’s different because they’re at the comfort of their own homes, they access them [SN sites] on their own free will.” Student A, (E124-127)

“When using SN you get to know things that you were not even taught in class, you get to bring up some discussion in class, you get to find out some new stuff outside and you bring them in class just for everybody to know.” Student C, (E393-395)

“When the lecturer explains something in the class, and then maybe you visit the net, or the social networks, you still ask and analyse it and compare it to what you were taught in class. “ Student D, (E554-556)

This valuable input from participants in Phase 1 of the study provided insights on how convergence could be possible, as well as how it could be achieved, e.g. by posting tasks about something discussed or taught in class (which can be equated with formal learning), for students to access them in the comfort of their homes (which is informal

learning). Thus, the SN tool they are using to connect the two modes of learning brings in convergence cognitively.

The following excerpt by one of the participants in Phase 1 of the study also supports the notion of convergence of formal and informal learning, how it is viable and how it benefits students:

“[Through SN tools] you get to know things that you were not even taught in class; you get to bring up some discussion[s] in class, you get to find out some new stuff outside and you bring them in class just for everybody to know.” Student C, (E393-395)

Furthermore, as [Appendix E](#) reveals, Facebook emerged to be the most popular social network among others. Nevertheless, for the purpose of this study Facebook was not considered to be a priority as the concentration was on ETs; but then comparing it to WhatsApp, in the context of this study, Facebook does not quite well meet the requirements for ETs (Veletsianos, 2010) that were earlier presented in the review of literature in Chapter 2. WhatsApp, that one of the participants in the pilot interviews indicated is a new SN tool that people started using in 2012 ([Appendix E](#)242-244), was considered to be more appropriate among others, due to the fact that:

“...it [also] has status like if you maybe want advice on something, then you can write on your status, and then other friends will comment, or inbox you to help you understand.” Student B, (E252-254)

In addition, it reflects later from the focus group interviews ([Appendix I](#)), where participants shared their experiences of using WhatsApp, that many of them had been familiar with it and had been using it for a while before participating in the study, e.g.

“I have been using WhatsApp for two years now, and it’s a good platform, I get to meet different people, you get to share your ideas with different

*people, and it's something nice; you get to upload images.” Student AA,
(114-16)*

Hence, for the purpose of this study WhatsApp was considered to be more appropriate to be used as a platform for interaction among the participants in order to construct knowledge socially. It is a tool that affords the learning processes required in a constructivist learning environment, such as exploration, communication and reflection (Jonassen, et al., 2008) that were earlier presented in Chapter 3: Research design and methodology. It provides an opportunity for active and social construction of knowledge in an authentic context.

4.4 Discussion: Uses of mobile phones and SN tools at PoN

The first phase of the study provided valuable insights regarding the uses of SN by PoN students. As reflected in [Appendix E](#), these students exploit a variety of social media and SN tools, such as Facebook (E49 & E50), Twitter (E242 & E367), MySpace (E368), YouTube (E367), WhatsApp (E242) and Skype (E66), and they use them for learning in many instances. Students engage in a variety of AL activities, such as social support by getting different ideas from other students: **collaborative learning** (E29-30 & 61-62), They also engage in real world activities such as viewing comments from different people and providing input: **authentic activity and collaborative learning**, expressing opinions from different perspectives: **multiple perspectives** (E60-61) and getting support from others when they don't understand: **coaching and scaffolding** (E330-331&E350-353). These AL activities are also indicative of the fact that **convergence** of IL and FL is feasible, e.g. by analysing and comparing things students see or discuss on SN with what they were taught in class (E554-557) as indicated earlier.

Furthermore, the study shed light on the fact that PoN students are not in a closet in their learning process; they interact with other students and the community at large in the process of constructing knowledge which qualifies them as social learners, as shown in the excerpt below:

“We learn a lot of things outside the classroom, because as a lot of people say learning doesn’t stop at school, so, basically we learn new things like how to interact with different types of people.” Student A, (E35-37)

Thus, this study supports the assumption that “a community can help and support an individual to develop” (Jones, et al., 2006: 16). This is also highlighted in the excerpt below from pilot interviews, which points to how they revealed the possibility of informal and formal learning convergence:

“... if you had a talk or a discussion in a class or a topic that you didn’t understand then you can use it [mobile phone] to ask friends, people that... that knows better than what you learned.” Student C, (E351-353)

The findings of this study are therefore in agreement with Lee & McLoughlin’s (2010) observation that SN tools or Web 2.0 technologies provide social learning support such as conversational interaction, scaffolding, social feedback and support for social networks and relations between people, thus catering for the affective dimension of learning, as well as development of digital learning (DL) skills. In addition, in respect of affective factors of learning, both phases of the study indicated how relationships or interactions play an integral role in the AL process as revealed by the collaborative construction (COLCO) element of AL in Appendices F, H and J. Communicating with others is thus important in the learning process as one learns a lot by interacting with the instructor, other students, members of the community and even people in other countries through networking. Most importantly, it is SN tools that facilitate this type of interaction, and in this study it was WhatsApp that facilitated a platform for collaborative knowledge construction.

The **reflection** and **articulation** elements of AL provided insights into how participants understand the SN phenomena as they were able to reflect and speak about their experiences. As reflected in [Appendix E](#), the participants emphasized how SN sites are attractive to them (E149), how SN sites are a different learning environment where they

are free to say what they want (E155-156), and how SN tools have a role to play in building relationships (E360-361). Thus, just as it was earlier pointed out in the review of literature in Chapter 2 that students find IL fun and motivating (Jones, et al., 2006; Laurillard, 2007, Schwier, 2010), the study proved this to be the reality as reflected in this excerpt by one of the participants:

“You can even meet up on Facebook, in the comfort of your own home, and just discuss certain issues that you would in class and make them a lot more interesting, because SN sites are very attractive to teenagers...”

Student A, (E147-149)

4.4.1 Social learning uses that leverage informal learning activities

As it emerges in [Appendix E](#), the selected shortened extracts contain a variety of authentic learning elements that are linked to IL, e.g. authentic context, authentic activities, collaboration etc. These elements are indicative of social learning uses that influence IL activities as it was earlier illustrated in [Table 4.3.2](#). Most importantly, these extracts, combined with AL elements, serve as proof that convergence is possible, e.g. by finding out new stuff outside [informal learning] and bringing them in class for everybody to know [convergence], Student C (E393-395), as well as by asking, comparing and analysing what you learn in social media [informal learning] as compared to what was taught in class [convergence] as per Student D (E554-556).

Hence, social media exposes students to a lot of issues informally that lead to better understanding, and consequently cognitive convergence, as clearly illustrated in this quote:

“...you will find or come across a certain thing that you never knew about, but just because of that status, or post, or that comment, then you ... you suddenly know about it. So it kind of informs you, but not really in a direct manner but in an indirect manner. And in most cases indirect manners are the way we learn how to remember things, like [up] to now to this very day I still know the things I learned from them [SN sites].” Student A, (E174-177)

4.5 Analysis of WhatsApp learning dialogue

Phase 2 of the study, the main study, involved the use of an authentic task using WhatsApp. The task provided insights on how students use social media for learning in an AL situation. Moreover, and perhaps significantly, the WhatsApp learning tool played a key role in investigating the SN pedagogy that converges informal and formal learning, which is linked to the third research question.

In order to investigate how the social media enables convergence of the two learning domains, the WhatsApp learning dialogue ([Appendix G](#)) was reduced by analysing it and looking for responses illustrating the nine elements of AL (Herrington and Oliver, 2000) that are closely linked to IL. The codes used were predetermined, based on insights from literature, hence a priori codes that, according to Miles and Huberman (1994) are a set of codes that already exist. The information that suits each code was derived from the transcribed AL task. A sample of the first stage coded AL task ([Appendix G](#)) is presented in Table 4.5.1 below. Responses illustrating the nine elements of AL (Herrington & Oliver, 2000) were analysed and clustered next to the relevant codes, as well as those illustrating combined formal and informal learning, hence signalling convergence.

Table 4.5.1: Sample analysis of an authentic task using WhatsApp: Stage 1, Data reduction ([Appendix G](#))

Codes: **AUCONT** = authentic context, **AUACT** = authentic activity, **EXPER** = expert performance, **MULRP** = multiple perspectives, **COLCO** = collaborative construction, **REFL** = reflection, **ARTIC** = articulation, **COA/SC** = coaching/scaffolding, **FL** = formal learning, **CONV**=convergence

Text no.	Unedited WhatsApp AL activity	Coded key phrases and statements signalling to codes	Emergent codes
302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327	<p>18:26, 2013/22/7 - You: What a good start to relate this problem in our society to our short story! Let's wait to hear what other group members have to say.</p> <p>17:28, 2013/22/7 - Student CC: Ok</p> <p>21:17, 2013/22/7 - Student AA: My finding compare 2 th short story THE SUIT r that <u>there r similarity</u>. Th1st person I interviewed talked about <u>lack of respect being the major cause of gender-base violence & passion killing</u>. Philemon did not have respect 4 Matilda as he embrassed her infront of her guests by making her serve the suit. The 2nd person I interviewed talked about <u>men being the provider. Making them more superior over women</u>. Philemon was the bread winner and Matilda was a house wife. This could have made Philemon think that he can treat his wife the way he want to. The 4th person I interviewed said <u>Alcohol is the cause of gender-base violence</u>.The night of the party Philemon was reeling drunk. That can even be th reason why he did not behave well infront of the guests. This can be the leading cause of Matilda's death.</p> <p>21:27, 2013/22/7 - Student CC: Good contribution from you but <u>from all what you have said men are the major cause of this issue ,don't you think Tilly was the cause of this actions from her husband ? Anyways there are many Matildas in our nation and is time for them to change for the best .</u></p> <p>21:31, 2013/22/7 - Student AA: <u>Let's reason 2gether! Men cheat on women also, bt women dont kill men.</u></p> <p>21:32, 2013/22/7 - Student DD: True that, <u>i also agree that mathilda was th main cause of th harsh treatment, btphillimon was also 2 harsh towards tilly untill it cost her life.</u></p> <p>21:38, 2013/22/7 - Student AA: <u>I dont agree</u> with you both. Have u guys ever considered why Matilda cheated on Philemon? Was it <u>perhaps that she was not getting enough or that Philemon did not show her much love</u> as the young guy?</p> <p>21:40, 2013/22/7 - Student CC: <u>You right there but Philemon's intention was not to kill but to make Matilda think that she have done something wrong</u> ,unfortunately Matilda was a soft hearted somebody .Philemon action is of making sense.</p> <p>21:43, 2013/22/7 - Student DD: <u>Bttht still dntgve her a reason 2 cheat, she was supose 2 discuss th situation with philemonsince its her husband before taking any further steps, communication is th best tool 2 solve problems within a relationship, which philemon was also supposed 2 do before treating mathilda in that way.</u></p>	<p>There are similarities between interview findings (EXPER) and The Suit . Lack of respect is the major cause of GBV& passion killing (ARTIC,MULRP,AUCONT).Philemon did not have respect for Matilda (CONV) and was superior to her, thinking as a bread winner he could treat her as he wanted. Also, as alcohol causes GBV, the night of the party Philemon was really drunk. (REFL, CONV, COLCO, AUACT)</p> <p>If men are the major cause of GBV (EXPER), was Tilly (Mathilda) not the cause of her husband's actions? (ARTIC,COLCO) There are many Matildas in the nation and need to change. (AUCONT, MULRP,CONV)</p> <p>Let's reason together. (COLCO,AUACT) Men cheat on women also, but women don't kill them. (ARTIC,MULRP)</p> <p>Agreement: Matilda the main cause of harsh treatment, but Philemon was also too harsh that it cost Tilly's life. (FL,ARTIC, COLCO,AUACT,MULRP)</p> <p>Disagreement: Perhaps Philemon did not show Matilda enough love. (ARTIC, COLCO,AUACT,MULRP)</p> <p>Philemon's intention was not to kill but to make Matilda think. (ARTIC, COLCO,AUACT,MULRP)</p> <p>No reason to cheat, Matilda had to discuss the problem with husband- (ARTIC,COLCO,AUACT) communication the best tool to solve problems. (MULRP,CONV)</p>	<p>EXPER,ARTIC, MULRP,AUCONT, CONV,REFL, COLCO&AUACT</p> <p>EXPER,ARTIC, COLCO,AUCONT, MULRP&CONV</p> <p>COLCO,AUACT, ARTIC&MULRP</p> <p>FL,ARTIC,COLCO, AUACT&MULRP ARTIC,COLCO, AUACT& MULRP</p> <p>ARTIC,COLCO, AUACT& MULRP</p> <p>ARTIC,COLCO, AUACT,MULRP& CONV</p>

As the sample analysis of the authentic task using WhatsApp in Table 4.5.1 above indicates, a variety of AL elements (Herrington and Oliver, 2000) that are indicative of IL emerged from the WhatsApp task. These elements range from authentic context (AUCONT) to coaching and scaffolding (COA/SC), as well as the two additional codes, formal learning (FL) and convergence (CONV). The CONV code indicates how learning that took place outside the class converged with learning that took place in class, (The Suit short story) during the process of carrying out the task through WhatsApp. An illustration of these AL elements is displayed in Table 4.5.2 that follows.

Table 4.5.2: Sample matrix of coded authentic task using WhatsApp: Stage 2, Data display ([Appendix H](#))

Codes: **AUCONT** = authentic context, **AUACT** = authentic activity, **EXPER** = expert performance, **MULRP** = multiple perspectives, **COLCO** = collaborative construction, **REFL** = reflection, **ARTIC** = articulation, **COA/SC** = coaching/scaffolding, **FL** = formal learning, **CONV**=convergence

Text no.	Coded key phrases and statements	Authentic context	Authentic activity	Expert performances & modelling processes	Multiple roles and perspectives	Collaborative construction of knowledge	Reflection	Articulation	Coaching and scaffolding	Formal learning	Convergence
H305-312	There are similarities between interview findings (EXPER) and The Suit . Lack of respect is the major cause of GBV& passion killings (ARTIC,MULRP,AUCONT).Philemon did not have respect for Matilda and was superior to her, thinking as a bread winner he could treat her as he wanted (CONV). Also, as alcohol causes GBV, (EXPER,AUCONT) the night of the party Philemon was really drunk. (REFL, CONV, COLCO, AUACT)	X	X	X	X	X	X	X			X
H313-315	If men are the major cause of GBV (EXPER), was Tilly (Mathilda) not the cause of her husband's actions? (ARTIC,COLCO) There are many Matildas in the nation and need to change. (AUCONT,MULRP,CONV)	X		X	X	X		X			X
H316	Let's reason together! Men cheat on women also (AUCONT), but women don't kill them. (ARTIC,COLCO,AUACT,MULRP)		X		X	X		X			
H317-318	Agreement: Matilda the main cause of harsh treatment, but Philemon was also too harsh that it cost Tilly's life. (FL,ARTIC,COLCO,AUACT,MULRP)		X		X	X		X		X	
H319-321	Disagreement: Perhaps Philemon did not show Matilda enough love. (ARTIC, COLCO,AUACT,MULRP)		X		X	X		X			
H322-324	Philemon's intention was not to kill but to make Matilda think. (FL,ARTIC, COLCO,AUACT,MULRP)		X		X	X		X		X	
H325-327	No reason to cheat, Matilda had to discuss the problem with husband-communication the best tool to solve problems. (ARTIC,COLCO,AUACT,MULRP,CONV)		X		X	X		X			X

4.6 Discussion

[Appendix H](#) brings to light how participants were able to point out similarities between the short story and the problem of gender-based violence and passion killings in the society, which reveals the authenticity of the task and the activities the research participants were involved in, e.g. [Appendix H](#): H34-36 and H79-85. Regarding authenticity, it should also be noted that news about gender-based violence and passion killings was continually broadcast on the Namibian Broadcasting Corporation (NBC) national television during the period of this task as reflected in the authentic task using WhatsApp of the 20th of July 2013 ([Appendix G](#): G317 & G423 - 431). Another factor that reveals the authenticity of the task is its integration with assessment since the focus was on the process that brought up a complete product on its own, the WhatsApp artefact of interactions that was finally produced ([Appendix G](#)), and valuable on its own.

While using WhatsApp the participants were able to integrate class activities with IL activities, such as relating interviews with members of the community to the short story, “The Suit”, by Can Themba that started in class (as shown in H304-312, H313-315 and H325-327) in [Appendix H](#). This reveals how an authentic learning task using WhatsApp made convergence of informal and formal learning possible. WhatsApp enabled the participants to construct knowledge collaboratively (COLCO) as revealed by the AL elements used for analysis, to present and defend arguments through articulation (ARTIC), to access expert thinking (EXPER) by interacting with members of the community while conducting interviews ([Appendix H](#)), and many other valuable IL skills that were integrated with in-class learning through WhatsApp. The authentic task that was designed, [Appendix D](#), started in class, but then the nature of FL does not allow authentic learning. Reverting to the conceptual framework ([Figure 1.3.1.](#)) in Chapter 1, Section 1.3, it was then the social media that allowed an authentic learning experience, which made convergence of informal and formal learning possible in this study. This is revealed in the extracts that follow where in-class learning is combined with out-of-class learning by means of WhatsApp:

1. *“My findings [IL] compared to the short story The Suit [FL] are that there are similarities. The first person I interviewed talked about lack of respect being the major cause of gender-based violence and passion killings [IL]. Philemon did not have respect for Matilda as he embarrassed her in front of her guests by making her serve the suit [CONV].”* Student AA, (G305-308)

2. *“Similarities: Firstly there is lack of faith in women [IL]. Women cheat on their men and this turns men into mad dogs [IL]. Referring to the short story [FL], Matilda was not faithful to Philemon, hence she was punished to the extent of her death [CONV].”* Student BB, (G361-363)

This reveals how an authentic task makes it possible for a social media tool, WhatsApp in the context of this study, to mediate convergence of informal and formal learning. The learning task started in class where there was no need for the WhatsApp tool and transited to IL where a closed community of students who were using the tool was also part of a larger community that they interacted with while using the tool, i.e. by conducting interviews, a process that facilitated convergence. Therefore, as an emerging technology that was used in an authentic context in this study, WhatsApp enabled what Ng’ambi (2013) refers to as transformative learning, i.e. learning that results from interactions between the learners and their environment.

An observation was also made during the social media task that there was a high level of engagement on the side of the participants. This observation corresponds with the findings of (Bull, et al., 2008 and Ivala & Gachago, 2010) in their studies regarding engagement of students in learning when using social media in higher education context, as pointed out earlier in Chapter 2. They concluded that the IL that takes place when learners are using social media paves the way for increased engagement of students in FL. Similarly, selected responses in [Appendix H](#) illustrating the articulation (ARTIC) and multiple perspectives (MULRP) codes display high level thinking skills, whereby participants demonstrate critical thinking and reasoning skills, thus signalling a

high level of engagement in the task. The WhatsApp tool enabled students to engage in debates and other constructive arguments. It also allowed them to analyse and examine issues from different perspectives and arrive at sensible conclusions, hence using reasoning skills, as well as synthesizing, e.g. by summing up the analysis with the intent to find a solution to a real world problem. Accordingly, the WhatsApp task allowed diverse interpretations and a variety of potential solutions to a real world problem. It enabled a closed group of students using it to interact with others in order to engage in constructive debates and arguments, a situation demonstrating cognitive convergence of informal and formal learning. This view is articulated in the following extracts from [Appendix G](#):

1. *“In most incidences men are dominantly the perpetrators and there is a myth that men are not genetically designed to deal with emotions and handle heartbreaks as well as women do. I think it’s more about their social upbringing [how boys were raised] than it being factual [ARTIC]; this excuse is old and over-rated; it’s about time men learn to handle/deal (with) emotions, accept themselves and accept failure and be men of honour [MULRP].”* Student EE, (G248-257)

2. *“One can conclude that women are the main causes of passion killings, they do [things]without thinking about the consequences [MULRP], but on the other hand men are also to blame, because they lack communication skills and the fact that they want to show their man power adds to the problem [ARTIC, MULRP]. From my point of view, couples should learn to communicate, coz that’s the most powerful tool to problem solving, especially in relationships [ARTIC].”* Student DD, (G433-437)

These extracts prove how SN gives students an opportunity to think over issues critically as the time is not restricted like in a classroom setting. Instead, they have ample time to analyse, compare and debate issues as they did in this study while using WhatsApp. This view is also articulated by Conole, et al., (2004) and Anderson (2010)

who are of the opinion that ICTs, especially asynchronous technologies, provide means for students to reflect on their learning and hence develop critical analytical skills as they get engaged in tasks over a longer period of time, a situation that might not be possible in FL.

Similarly, Jeong and Chi (2007), during their study on collaborative interaction in naturalistic learning contexts and knowledge convergence, found that group interaction facilitates knowledge convergence. They emphasize that it facilitates the production of new knowledge and is thus responsible for convergence. Likewise, this research proved how co-construction or joint construction of knowledge facilitated the production of new knowledge and ideas that could be used to solve a real world problem, namely GBV, and passion killings that had increased in the country. Co-construction proved to be responsible for convergence in the sense that the interaction between the WhatsApp closed group of students and the community at large facilitated convergence of informal and formal learning. This was possible due to the fact that the WhatsApp group members were also members of the larger socio-cultural context.

In this study WhatsApp promoted interaction, discussion and knowledge production among the closed community of students, and also with the community at large as the students in the WhatsApp group are also members of the larger community. These findings draw a parallel with Ivala & Gachago's observation during their study on using social media to enhance student engagement in higher learning context. They conclude that Facebook, which facilitates group interaction as opposed to a tool that facilitates only a one way communication, "promoted interactive student discussion" (2010: 9). Similarly, WhatsApp enhanced interactive knowledge construction among the closed group of students using the tool, as well as through interactions between the group and other members of the society, hence establishing convergence of informal and formal learning.

4.7 Analysis of focus group discussion

In line with Miles and Huberman (1994), the transcribed focus group discussion data (Appendix I) were first reduced by identifying and listing all key phrases and statements illuminating how student experiences of using social media, WhatsApp, enable convergence of informal and formal learning. The codes that were used to analyse the experiences of the students were derived from Herrington's AL elements that can be used in educational settings (Herrington & Oliver, 2000). The first stage of analysis was aimed at data reduction (Miles & Huberman, 1994) and is illustrated in Table 4.7.1 underneath.

Table 4.7.1: Sample analysis of focus group interviews, Stage 1: Data reduction ([Appendix I](#))

Codes: **AUCONT** = authentic context, **AUACT** = authentic activity, **EXPER** = expert performance, **MULRP** = multiple perspectives, **COLCO** = collaborative construction, **REFL** = reflection, **ARTIC** = articulation, **COA/SC** = coaching/scaffolding, **FL** = formal learning, **CONV**=convergence

Text no.	Unedited transcribed focus group interviews	Coded key phrases and statements signalling to codes	Emergent codes
126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154	<p>Student GG: Mhmm, my experience... I chat with people through WhatsApp, especially when I'm asking about something, especially like my friend... many of my friend are using WhatsApp and one day I remember using WhatsApp is that I'm... I'm trying to get a... an assignment from my friend, then he just take a picture of the assignment and upload it to me, that's... to upload a picture is quite cheaper than a... than a video or whatever, so actually I use it to upload those picture to check what you've search or even for assignments, to... to check what we've searched and for other what they've said about.</p> <p>Student AA: I don't really use WhatsApp for academic purposes, only for entertaining each others, such things, ja, asking where you are, those things, ja.</p> <p>Student EE: Mhmm, the other thing is one of the people I interviewed is a student in Brazil, Rio de Ja Negro.</p> <p>Researcher: Ok, Rio...</p> <p>Student EE: And I used WhatsApp 'cause obviously I won't be able to sms from Namibia to Brazil, so meaning WhatsApp was reall... is really a great thing, 'cause you can... you can have access to people in other countries as well.</p> <p>Researcher: Well, that's quite interesting. Now, mhmm, so that person in Rio de Ja Negro, is that person mhmm, a Namibian, mhmm, as well?</p> <p>Student EE: Ja. He is a Namibian, but is just a student there in Brazil.</p> <p>Researcher: Wow, that is quite interesting, that mhmm, WhatsApp enabled you even to go beyond Namibia to do your task, and mhmm, well, I guess it was quite a learning experience to you guys. Now, did you encounter some problems or did you experience some problems in the process of using mhmm, WhatsApp to learn, to do what you were doing?</p> <p>[Pause, no response]</p> <p>Researcher: Any problems?</p> <p>Student DD: Mhmm, my problem that I experienced is that sometimes your'e quite busy doing something and even of, with even ... with a phone and sometimes you never expected someone to text on WhatsApp and sometimes texted and you need to check or up... or download that what is recorded to check and to listen, so, sometimes it's quite a problem or challenging.</p> <p>Researcher: Mhmm, ok, in other words for you to respond you had to check what other...</p>	<p>Chats through WhatsApp, e.g. when asking about something (AUACT). Many of my friends are using WhatsApp (AUCONT). Tried getting an assignment from a friend (EXPER) who took a picture of it and uploaded it (AUACT) to check what others have said (COLCO)-uploading a picture is cheaper than a video (ARTIC,MULRP). Use it to upload pictures searched (AUACT), even for assignments (CONV)</p> <p>Doesn't really use WhatsApp for academic purposes, only for entertainment (AUCONT&AUACT)</p> <p>One person I interviewed is a student in Brazil, Rio de Ja Negro (COLCO)</p> <p>Used WhatsApp as unable to sms from Namibia to Brazi (AUCONT)!. WhatsApp a great thing (REFL), you can access people in other countries. (EXPER&COLCO)</p> <p>Sometimes you are quite busy and someone texts (AUCONT), then you need to check or download what was recorded (AUACT)-quite a problem or challenge sometimes (MULRP)</p>	<p>AUACT&AUCONT, EXPER,COLCO, ARTIC,AUACT, MULRP,COLCO& CONV</p> <p>AUCONT&AUACT</p> <p>COLCO</p> <p>REFL,AUCONT, ARTIC,EXPER &COLCO</p> <p>AUCONT,AUACT& MULRP</p>

The first stage of coding led to the second stage of analysis as illustrated in Table 4. 7.1 underneath that is data display (Miles & Huberman, 1994), where suitable responses were categorized under appropriate AL element codes. A complete analysis of this data is displayed in [Appendix J](#).

Table 4.7.2: Sample matrix of coded focus group interviews, Stage 2: Data display
([Appendix J](#))

Codes: **AUCONT** = authentic context, **AUACT** = authentic activity, **EXPER** = expert performance, **MULRP** = multiple perspectives, **COLCO** = collaborative construction, **REFL** = reflection, **ARTIC** = articulation, **COA/SC** = coaching/scaffolding, **FL** = formal learning, **CONV**=convergence

Text no.	Coded key phrases and statements	Authentic context	Authentic activity	Expert performances & modelling processes	Multiple roles and perspectives	Collaborative construction of knowledge	Reflection	Articulation	Coaching and scaffolding	Formal learning	Convergence
J89-92	WhatsApp is quite interesting (REFL) but time consuming (ARTIC&MULRP). Typing with cellphone not recommendable (ARTIC), typing with PC faster, saves time, but WhatsApp time consuming (ARTIC&MULRP)				x		x	x			
J93-95	Was an easy experience (REFL), had to only record-did not write anything (AUACT), asked people, they answered (COLCO)and I uploaded (AUACT)		x			x	x				
J96-98	You can really see how people are (AUCONT), what they wrote and what they uploaded (AUACT&CONV), you can see at that time (AUCONT) and get an idea (COLCO)	x	x			x					x
J100-102	Was very great (REFL)-made sure I typed right sentences (AUACT). Was learning (REFL), was adding to my knowledge of English. (CONV)		x				x				x
J103-106	Was improvement in writing (CONV,REFL)-used full words when writing and right punctuations AUACT)-was kind of improvement to my grammar. (CONV)		x				x				x
J115-116	Was a beginning (REFL)-never studied asking questions from other students (AUCONT)	x					x				
J117-121	Was an alternative thing to me (REFL) because I chat a lot.(AUACT&AUCONT). Use WhatsApp to ask friends (COLCO) about homework (CONV). WhatsApp was good alternative to smses. (REFL)	x	x			x	x				x
J122-125	Doesn't use WhatsApp for academic purposes (AUCONT), use it to chat (AUACT)-friends that I can ask things related to studies have no access to WhatsApp(AUCONT)	x	x								
J126-132	Chat through WhatsApp, e.g. when asking about something (AUACT).Many of my friends are using WhatsApp (AUCONT) Tried getting an assignment from a friend (EXPER) who took a picture of it and uploaded it (AUACT) to check what others have said (COLCO)-uploading a picture is cheaper than a video (ARTIC,MULRP).Use it to upload pictures searched (AUACT), even for assignments (CONV)	x	x	x	x	x		x			x

4.8 Discussion

The reflection (REFL) element that emerged strongly in comparison to other AL elements in [Appendix J](#) illustrates how the focus group interviews gave an opportunity for participants to reflect on the AL task they participated in through WhatsApp. It transpires from the reflection (REFL) code that together with the authentic context (AUCONT) code emerged stronger in [Appendix J](#) that the students enjoyed using WhatsApp to a great extent, and it provided an authentic platform for them to construct knowledge collaboratively. This is in line with findings from research literature as it was earlier pointed out in Chapter 2 that students find mobile phones motivating to learn with, especially in IL environments (Jones et al., 2006 & Laurillard, 2007). The authentic activities (AUACTION) and multiple roles and perspectives (MULRP) codes that also emerged stronger in Appendices I and J illustrate how WhatsApp enabled integration of authentic activities and multiple skills, e.g. development of the language skills, such as writing that took place throughout the process of carrying out the task, and even grammar as illustrated in the following extract:

“To me it was, let me say improvement especially in writing, ‘cause usually when I write an sms on my cellphone I use sms language, but when I was writing my comments or whatsoever on WhatsApp I use[d] like full words, with the right punctuation marks and stuff like, meaning it was kind of an improvement to my grammar.” Student EE, (I103-106)

This scenario is also an example of how WhatsApp enabled convergence of informal and formal learning as the task enabled development of the skills that were acquired in the formal curriculum.

Furthermore, as it was earlier pointed out in the conceptual framework ([Figure 1.3.1](#)) in Chapter 1, IL is difficult to observe while FL is easily observable. However, the affordances of WhatsApp make both learning environments easily observable as the tool facilitates the online presence of the students, which makes it possible for the instructor to keep track of students’ interactions within their closed group. The same

sentiment was shared by one of the research participants who indicated during the focus group discussion on student experiences of using WhatsApp that:

“...you can really see how people are, what they wrote, and what they uploaded, you can see at that time, and you can get an idea of what had been interviewed and how [it was] questioned [and how] to deal with [it]...” Student DD, (I96-98)

It is thus the tool, WhatsApp, that provided an opportunity for participants to construct knowledge collaboratively while interacting with members of the community and other students, e.g. when conducting interviews, uploading and downloading audio files as illustrated by the collaborative construction (COLCO) element. The tool was also able to facilitate the online presence of the participants while learning out of the class as it was indicated earlier in this section.

Although none of the male students uploaded a file or image, what one of them shared with others in the process of sharing experiences of using WhatsApp for learning ([Appendix I](#)) indicates some competency in DL skills as shown in this extract:

“I chat with people through WhatsApp, especially when I’m asking about something, especially like many of my friends are using WhatsApp and one day I remember using WhatsApp is that I was trying to get an assignment from my friend, then he just took a picture of the assignment and uploaded it to me, to upload a picture is quite cheaper than a video or whatever, so actually I use it to upload [download] those pictures to check what was searched, or even for assignments, to check what we’ve searched and what others have said.” Student GG, (I128-132)

As a final point, like previous studies in ICTs in education (Jones, et al., 2006 & Laurillard, 2007), it can be concluded that today’s students find it interesting and motivating to study using new forms of learning, e.g. social media, and this was also

revealed in the excerpts that follow from the focus group discussion ([Appendix I](#)) whereby students shared their experiences of using WhatsApp for learning:

1. ***“What I would like to ask the expertise also is to bring up more of the social networks, because I think firstly we were just communicating on Facebook, and Twitter and other social networks but now that we can use WhatsApp ...the fact that it is cheaper it can be afforded by many students, especially many of us...”*** Student EE, (I138-140)

2. *“...I used WhatsApp ‘cause obviously I won’t be able to sms from Namibia to Brazil, so meaning **WhatsApp is really a great thing**, ‘cause you can have access to people in other countries as well ... “* Student EE, (I175-179)

4.9 Chapter summary

This chapter opens by presenting a review of the analytical framework adopted to analyse the data and present the findings of the study. Phases 1 and 2 transcribed interviews data were simplified and coded, then, a description of what was found is provided in the form of tables and matrices. The artefacts that resulted from the WhatsApp intervention in Phase 2 of the study are also presented and analysed. Finally, an explanation of what is happening is presented in light of the research questions.

Chapter Five: Conclusion and Recommendations

5.1 Brief overview

This chapter provides an overview of the research objectives, summarises the findings of the study, and then provides recommendations for future research, based on the findings of the study. The research was mainly aimed at finding out how the process of social learning mediated by a technological tool takes place at the Polytechnic of Namibia (PoN) in higher education context, as well as to investigate how learning that takes place out of class (informal learning) could be converged with learning that takes place in class (formal learning), with the intent to establish the social networking (SN) pedagogy that converges informal and formal learning. Additionally, the study was intended to find out how convergence could be established through participants' experiences of using social media for learning. Accordingly, in the context of higher education, the research objectives were:

- to explore how PoN students use social media for learning;
- to identify uses of social learning that leverage informal learning activities;
- to investigate and recommend the social networking pedagogy that facilitates cognitive convergence of informal and formal learning; and
- to find out how the research participants' experiences of using social media for learning bring to light cognitive convergence of informal and formal learning.

Thus, this chapter reverts to the research objectives, summarises the findings of the research and highlights the strengths and limitations of the study as well as implications of the findings. Finally, the chapter presents recommendations for future research.

5.2 Review of research questions

5.2.1 How PoN students use mobile phones and social media for learning

The first objective of this study was to explore how PoN students use social media for learning. It transpired from the pilot study that is referred to as Phase 1 in this research that the phenomenon of SN is not peculiar to PoN students. With reference to [Appendix E](#), the study brought to light the fact that PoN students participate in a variety of authentic learning (AL) activities involving SN, such as learning new concepts, learning general concepts and creating study groups in order to learn school related matters. This is an indication that social media has potential to converge informal and formal learning as it can converge out-of-class learning and in-class learning.

It also became apparent that SN tools are both interesting and beneficial to students. They participate in collaborative activities such as chatting or “inboxing” (which turned out to be their favourite expression), exchanging pictures, activities involving reflection such as uploading and downloading files and images, etc., hence demonstrating digital learning (DL) skills to a certain extent. This proved that though in developing context, PoN students are not lagging behind in learning with technology. They use technological tools, namely Web 2.0 for informal learning, and it benefits them in a variety of ways. This observation adds value to the call for converging informal and formal learning in ICTs in education literature.

In this study it was WhatsApp that created a platform for interaction with other students, the instructor and the community at large in the process of constructing knowledge collaboratively. This draws a parallel with findings from literature review that support the notion that SN tools provide social learning support in a variety of ways. It can hence be concluded from the pilot interview findings that communicating and interacting with others is an important dimension of the learning process, and social media has a potential to enhance this type of interaction.

5.2.2 Uses of social learning that leverage informal learning activities

The second objective of this study was aimed at identifying uses of social learning that leverage informal learning (IL) activities. In this research the participants were provided with the WhatsApp platform to construct knowledge personally, integrating multiple skills through social learning. As [Appendix H](#) points out, the social media tool, WhatsApp, enabled students to participate in a variety of AL tasks that leverage IL. Authentic learning activities such as posting interview findings on WhatsApp, guiding each other (coaching and scaffolding), uploading and downloading audio clips and images (reflection) and interviewing members of the community (collaborative learning and getting exposed to multiple perspectives) are all indicative of IL.

The social media task ([Appendix G](#)), facilitated semi-independent learning, e.g. when students demonstrated their DL skills. WhatsApp enabled students to demonstrate their DL skills, e.g. by uploading and downloading audio clips and images illustrating the real world problem that was under discussion, namely gender-based violence (GBV). These skills imply engagement of participants in both authentic activities and reflective skills that cannot be separated from IL. This reveals how social learning leverages IL activities as DL skills were not gained from classroom learning. These are skills that students gained while interacting with each other and members of the community, with minimal guidance from the instructor, if any. Learning occurred through the use of “non-institutional technologies (WhatsApp) ...away from traditional, educational contexts” as per Hall (2009: 31), and all these characterise social learning that takes place in an IL environment.

The main lesson that can be drawn from this research on these issues is that when students are provided with resources, e.g. social media tools, they are able to construct knowledge personally by interacting with others out of the classroom with only minimal or even no guidance from the instructor. This blurs the division between informal and formal learning.

5.2.3 The social networking pedagogy that facilitates cognitive convergence of informal and formal learning

The third and probably the most important objective of this study aimed to investigate and recommend the SN pedagogy that facilitates cognitive convergence of informal and formal learning. The research made evident how an authentic task makes it possible for WhatsApp to mediate convergence of formal and informal learning where both learning environments become easily observable through the tool. With reference to the conceptual framework ([Figure 1. 3. 1](#)), this scenario makes evident how students using a social media tool (WhatsApp) in a closed group, were able to interact with each other as well as with other members of the community in a larger socio-cultural historical context. This illustrated how convergence of informal and formal learning was established in this study.

In line with socio-constructivist thinking, as was discussed earlier in the review of literature in Chapter 2, this research also revealed how mediating learning with a tool is not an individual goal-directed activity but part of a larger socio-cultural historical context (Engeström, 1999; Jonassen & Rohrer-Murphy, 2009; and Vygotsky, 1982). It was then that the WhatsApp tool facilitated guidance to students within their closed study group, whether it was guidance from the instructor, other students or members of the community at large. This also established convergence of formal and informal learning. Drawing on cultural historical activity theory, specifically in terms of the concept of the zone of proximal development (ZPD), this study supports the assumption that “a community can help and support an individual to develop” (Jones, et al., 2006: 16).

As scaffolding has been found to be one of the factors that narrow the gap between formal and informal learning, as discussed earlier in the review of literature in Chapter 2, it also transpired from the authentic learning task involving WhatsApp in Phase 2 of this study. The research participants needed a lot of guidance in the process of carrying out the task while learning informally, especially at the beginning of the task as illustrated in [Appendix H](#), and this prompted the instructor to intervene occasionally in order to provide guidance, which then also established convergence of the two learning environments in this study.

5.2.4 How student experiences of social networking uncover convergence of informal and formal learning

The student experiences of using WhatsApp revealed how it has potential to be used as a technological tool that can effectively converge informal and formal learning. The student experiences illustrated how IL takes place out of the class, and how the tool was able to blur the division between informal and formal learning in this study. The participants indicated how SN tools enabled them to upload formal learning tasks that were given in class and check what others have contributed while learning informally (J126-132). This demonstrates convergence of the two domains of learning under discussion.

The focus group interviews also revealed how WhatsApp has become a popular SN tool that many students are fond of. Only one of the six participants in the WhatsApp task ([Appendix G](#)) had limited exposure to this social media tool. The fact that a little charge is payable for one to be able to use WhatsApp did not emerge as a constraint to the utilisation of WhatsApp, because many of the participants indicated that payment was minimal and did not deter them from carrying out the task effectively. However, the high level of student engagement in the task in this study should not only be attributed to the tool, WhatsApp. The fact that the participants were dealing with a real problem facing the nation was a motivating factor as well. Lombardi (2007) indicates how students engaged in authentic learning get motivated to act on real world problems. Similarly, the participants in the authentic task using WhatsApp were actively involved and got confidence to act on GBV that had increased in the country.

The main lesson from these findings is that using a social media tool, which students are comfortable with and find interesting, solve a real world problem and has potential to converge out-of-class learning with learning that takes place in class. The fact that the instructor had been physically invisible throughout the period of carrying out the authentic task involving WhatsApp made the participants feel at ease as reflected in the focus group interviews ([Appendix I](#)). They did not thus feel intimidated by the online presence of the instructor and could freely contribute and share their ideas with others

as opposed to a face-to-face class scenario. This, once again, takes us back to the notion that the social media tool blurs the division between informal and formal learning, and this is how cognitive convergence was established in this study.

5.3 Strengths and limitations of the study

Although a complete piece of work that provides valuable insights on the subject of convergence of informal and formal learning in ICTs in education, this study is not without limitations. The research journey that led to the production of this dissertation was full of stumbling blocks. Lots of hiccups were experienced, and it was a matter of trying to fit puzzles, demolishing them and then starting from scratch again. In the first place, it should be noted that this study cannot be generalised to other contexts or higher education institutions, including PoN as a whole. The study represents only a small portion of the PoN student population, but it meets requirements for the sample required for a qualitative study design.

Additionally, the analysis of the data did not involve a qualitative data analysis tool that could perhaps have produced better results; the data was analysed manually. However, the analysed data were checked by a colleague who has some knowledge of ICTs in education for a second opinion, and valuable input was provided. The fact that data were analysed and presented separately but not as an aggregate could also be an oversight on qualitative data analysis that should be acknowledged.

5.4 Implications of the findings

Although this research has achieved its key aim of investigating the possibility of converging informal and formal learning, it is not without implications. The participation of the researcher in this study, which makes it partially action research, could be regarded as a threat to the study due to the objectivity nature of action research (Biggamy, 2008). However, even though the researcher played the double role of both the instructor and researcher, this study could be acceptable as the required research procedures were followed in conducting the research. Furthermore, face-to-face

contact with the participants was avoided throughout the period they were using the WhatsApp tool. Each and every correspondence with the participants is revealed in the WhatsApp mobile dialogue that was electronically produced during that period ([Appendix G](#)). The researcher could not tamper with this dialogue as it is highly technical, displaying the times and content of each correspondence with the participants. Additionally, the participants were from different Language in Practice (LIP) class groups that belonged to different lecturers, and the researcher happened to be only one of those lecturers but did not know all of the WhatsApp participants personally. Nevertheless, the researcher carried out all the tasks in good faith and was not biased, and this study is a faithful account of what took place, which makes the results reliable but perhaps with room for improvement.

Finally, it should be noted that this study could be erroneous in one way or another, but overall, it provides valuable input regarding the use of social media in an authentic learning setting. Also, it contributes to debates surrounding convergence of informal and formal learning in higher education context.

5.5 Conclusion

The study established that authentic learning mediated by a social media tool enables diverse interpretations and multiple solutions to a real life problem through interactions of a closed group of students with the larger community, and this is how convergence of informal and formal learning materializes. Also, the tool enables knowledge production to transit between formal and informal learning, and a closed group of students using the tool facilitates convergence. Thus, the study concludes that using a social media tool that students find motivating in an AL environment brings in convergence of formal and informal learning if the instructor observes their activities and provides the type of guidance needed.

In addition, the study reaffirms Herrington and Oliver's observation that "the combination of authentic context, authentic activity, and authentic assessment, with the collaborative

arrangement of students into pairs enable students to reflect, to articulate, to assist with scaffolding, and to interact with the program and each other in the most meaningful of contexts” (2000: 21). In the context of this study it is the WhatsApp tool that enabled this type of interaction and collaborative construction of knowledge. WhatsApp enabled participants to create and share novel ideas on how to solve a real-world problem, GBV that had escalated in the Namibian society. As such, social construction of knowledge mediated by a social networking tool is beneficial to formal learning as it results in shared understanding, and this is how convergence is established.

The high level of engagement in the WhatsApp task could be regarded as a wake-up call for educators, especially in higher institutions of learning, to reconsider the ways we teach and perhaps start designing problem-based and real-world activities that students find enlightening. It is the emerging technologies, of which social media is inclusive, that paved the way for this type of learning.

5.6 Recommendations

Regarding the use of mobile phones and social media for learning, the study conducted by Ivala & Gachago (2010) as pointed out earlier indicates how it is cheaper and easier for students in developing countries to access Facebook via cell phones as opposed to a computer. As such, the participants in this study indicated that they basically access the Internet and SN tools on their mobile phones, and the lengthy learning dialogue that was produced by participants in this study was created with mobile phones. Thus, the study concluded that there is an increased need to use mobile technologies to promote interaction and engagement with learning material among today’s students as they are social learners. This study conceptualizes learning as a social activity that takes place through interaction with other people in a socio-cultural historical context and not thus confined to didactic methods. Opportunities should thus be created for students to interact with others and the community at large in their quest for and production of knowledge, e.g. by using technological tools in AL contexts.

ETs should thus be fully exploited to investigate how they can enhance the learning process in different learning contexts. Nevertheless, drawing on ICTs in education literature (Milrad, 2006; Shank, 2008 & Winters, 2006), it should be noted that when designing technology-enhanced learning activities, it is not the technology per se that is important; it is rather the pedagogy and learning theory that are more important. Hence, WhatsApp does not overshadow other technologies that might even afford better opportunities for social construction of knowledge as the pedagogy and learning theory are more important than the tool itself. It is recommendable that educators, particularly in higher education, should expose students to a variety of affordable technological tools that afford opportunities for social construction of knowledge, depending on the context, with the intent to narrow the gap between formal and informal learning. As the pedagogy and the theory are of utmost importance, the engagement of students in the authentic activity in this study points to the need of supplementing lectures with problem-based activities that promote AL.

Coupled with this, in terms of learning design and practice as it was earlier pointed out in the review of literature in Chapter 2, (Ravenscroft, 2003 & Mayes & De Freitas, 2004) the implementation or innovation of e-learning tools should be based on underlying principles of learning theory. As such, this study serves as a prototype of how the selection and design of ICT tools to mediate learning should be informed by pedagogical and learning theory, so that instructors make informed decisions when selecting and designing ICT tools in order to enhance the students' learning process.

With respect to uses of social learning that leverage informal learning activities, this study signifies the fact that today's students are social learners due to exposure to a variety of social media in their learning process. Educators should not thus deprive the new generation of students by confining them to a single mode of learning that they (educators) are comfortable with. It is recommended that students be exposed to new forms of learning that facilitate interaction and collaboration in the process of constructing knowledge, particularly in developing context. However, it should be noted that this research does not necessarily imply that new forms of learning that facilitate interaction and collaboration improve cognition. Studies need to be conducted to

determine the extent to which students who are exposed to learning collaboratively using technology perform in terms of cognitive development as opposed to students who still rely on pure formal teaching and learning methods and don't have any exposure to learning with technology, especially in developing context.

The participants in the study also demonstrated some DL skills to a certain extent, e.g. by uploading and downloading audio clips and an image, but did not demonstrate outstanding DL skills. However, this study is not sufficient to produce an informed argument and conclusion regarding the exposure and competency level of research participants in terms of DL. It is a subject matter that needs further investigation. Nevertheless, the study recommends the need to support students to use mobile devices or gadgets they already use informally to converge informal and formal learning, hence integrating the creativity of students that emerges out of class and learning that takes place in class. Based on debates in the field of educational technology, the key role of the instructor in this instance should be to create connections among students and provide resources for them to create knowledge collaboratively, thus demonstrating their creativity.

On the subject of the social networking pedagogy that facilitates cognitive convergence of informal and formal learning, the study revealed how the pedagogical design of an authentic task mediated by a social media tool, WhatsApp, where a sub-community with members of a class interact with the larger community, results in cognitive convergence of formal and informal learning. As educators we should thus create opportunities for learning to take place out of the classroom as there is plenty of information out there that can assist students with formal learning, and social media facilitates such a platform. It enables students to articulate and reflect on what was taught in class, hence converging informal and formal learning.

Finally, an observation was made in this study through student experiences of using mobile phones and WhatsApp that a social media tool blurs the division between informal and formal learning. This is how social media would narrow the gap between learning that takes place out of class and learning that takes place in class in the DoL at

PoN. The study proved how social media facilitated students in the DoL to interact with each other out of class as well as the community at large to generate and share novel ideas on how to solve a real-life national problem, GBV. The formal learning that started in the classroom created the foundation for discussions on GBV. The social media tool facilitated a platform to converge the learning that took place in the classroom and learning that occurred through student interactions with each other and the larger society out of the classroom, thus demonstrating socio-constructivism.

References

- Anderson, T., 2010. Theories for learning with emerging technologies. In: G. Veletsianos, ed. *Emerging Technologies in distance Education, Theory and Practice*. Edmont: AU Press, pp. 1-22.
- Anon., n.d. s.l.:s.n.
- Barab, S., Evans, M. & Baek, E.-U., 2004. Activity Theory as a lens for characterizing the participatory unit. In: D. Jonassen, ed. *Handbook of Research on Educational Communication Technology*. 2nd ed. Mahwah(NJ): Lawrence Erlbaum, pp. 199-124.
- Biggam, J., 2008. *Succeeding with your master's dissertation: A step-by-step handbook*. Glasgow: Bell and Bain.
- Blaschke, L., Brindley, J. & Walti, C., 2009. Creating effective collaborative learning groups in an online environment. *The International Review of Research in Open and Distance Learning*, 10(3).
- Bo-Kristensen, M., Ole, A. N., Neutzsky-Wulff, C. & Schelde, H., 2009. Mobile City and Language Guides-New links between formal and informal learning environments. *Electronic Journal of e-Learning*, 7(2), pp. 85-91.
- Bower, M., 2008. Affordance Analysis - Matching Learning Tasks with Learning Technologies. *Educational Media International*, Volume 45, pp. 13-15.
- Bull, G. et al., 2008. Connecting Informal and Formal Learning: Experiences in the Age of Participatory Media. *Contemporary Issues in Technology and Teacher Education*, 8(2), pp. 100-107.
- Cohen, L., Manion, L. & Morrison, K., 2007. *Research Methods in Education*. 6th ed. New York: Routledge.
- Commission, N. P., 2004. *Namibia Vision 2030*. Windhoek: NPC.
- Conole, G., Dyke, M., Oliver, M. & Seale, J., 2004. Mapping Pedagogy and Tools for Effective Learning Design. *Computers and Education*, 43(1-2), pp. 17-33.
- Cook, J. et al., 2007. Generating Learning Contexts with Mobile Devices. In: N. Pachler, ed. *Mobile learning: Toward a Research Agenda*. London: WLE Centre, IoE.
- Cook, J., Pachler, N. & Bradley, C., 2008. Bridging the Gap? Mobile Phones at the Interface Between Informal and Formal Learning. *Journal of the Research Center for Educational Technology*, 4(1), pp. 3-18.
- Council, U. N. R., 1999. *How People Learn: Brain, Mind, Experience, and School*. Washington: National Academy Press.
- Dabbagh, N., 2005. Pedagogic Models for e-Learning: A Theory-Based Design Framework. *International Journal of Technology in Teaching and Learning*, 1(1), pp. 25-44.
- Dabbagh, N. & Bannan-Ritland, B., 2005. Instructional Strategies and their Role in Designing Authentic Learning Activities for Online Learning: Concepts, Strategies and Application. In: N. Dabbagh & B. Bannan-Ritland, eds. *Online Learning: Concepts, Strategies and Application*. New Jersey: Pearson, pp. 199-231.
- Deniz, N. & Lincoln, Y., 1984. *Handbook of Qualitative Research*. Newbury Park: Sage.
- Deniz, N. & Lincoln, Y., 2008. *Collecting and Interpreting Qualitative Materials*. London: Sage.
- Engestrom, Y., 1987. *Learning by expanding: an activity-theoretical approach to developmental research*. Helsinki: Orienta-Konsultit.

- Engeström, Y., 1999. Activity Theory and Individual and Social Transformation. In: R. Miettinen & R. Punamaki, eds. *Perspectives on Activity Theory*. Cambridge: Cambridge University Press, pp. 1-18.
- Eraut, M., 2000. Non-formal Learning and Tacit Knowledge in Professional Work. *British Journal of Educational Psychology*, 70(1), pp. 113-136.
- Eshach, H., 2007. Bridging in-School and out-of-School Learning: Formal, Non-Formal, and Informal Education. *Journal of Science Education and Technology*, 16(2), pp. 171-190.
- Ford, M. & Leinonen, T., 2009. MobilED - Mobile Tools and Services Platform for Formal and Informal Learning. In: A. Mohamed, ed. *Mobile Learning: Transforming the Delivery of Education and Training*. Edmonton: AU Press.
- Hall, R., 2009. Towards a Fusion of Formal and Informal Learning Environments: The Impact of the Read/write Web. *Electronic Journal of e-Learning*, 7(1), pp. 29-40.
- Herrington, J. et al., 2009. New Technologies, New Pedagogies: Using Mobile Technologies to Develop New Ways of Teaching and Learning. In: *New Technologies, New Pedagogies: Mobile Learning in Higher Education*. Wollongong: University of Wollongong, pp. 1-14.
- Herrington, J. & Oliver, R., 2000. An instructional Design Framework for Authentic Learning Environments. *Educational Technology Research and Development*, 48(3), pp. 23-48.
- Hodgkinson-Williams, C., 2006. Revisiting the Concept of ICTs as 'Tools': Exploring the Epistemological and Ontological Underpinnings of a Conceptual Framework. *ITFORUM*, March, pp. 13-17.
- Ivala, E. & Cachago, D., 2010. *Social Media for Enhancing Student Engagement: The Use of Facebook and Blogs at a University of Technology*, Cape Town: Cape Peninsula University.
- Jeong, H. & Chi, M., 2007. Knowledge Convergence and Collaborative Learning. *Instructional Science*, 35(4), pp. 287-315.
- Jonassen, D., Howland, J., Marra, R. & Crismond, D., 2008. *Learning with Technology*. 3rd ed. New Jersey: Prentice Hall.
- Jonassen, D. & Rohler-Murphy, L., 1999. Activity Theory as a Framework for Designing Constructivist Learning Environments. *Educational Technology Research and Development*, 47(1), pp. 61-79.
- Jones, A., Issroff, K. & Scanlon, E., 2006. Affective Factors in Learning with Mobile Devices. In: S. M, ed. *Big Issues in Mobile Learning: Report of a Workshop by the Kaleidoscope Network of Excellence Mobile Learning Initiative*. Nottingham: University of Nottingham, pp. 17-22.
- Jones, A. et al., 2006. *Using Mobile Devices for Learning in Informal Settings: Is it Motivating?*. Dublin: IADIS.
- Karasavvidis, I., 2009. Activity Theory as a Conceptual Framework for Understanding Teacher Approaches to Information and Communication Technologies. *Computers and Education*, 53(2009), pp. 436-444.
- Kim, B., 2009. *Social Constructivism*. [Online] Available at: <http://projects.coe.uga.edu/epltt/> [Accessed 13 July 2011].
- Laurillard, D., 2007. Pedagogical Forms of Mobile Learning. In: N. Pachler, ed. *Mobile Learning: Towards a Research Agenda*. London: WLE Centre, IoE.
- Lee, M. & McLoughlin, C., 2010. Beyond Distance and Time Constraints: Applying Social Networking Tools and Web 2.0 Approaches in Distance Education. In: G. Vetsiano, ed.

- Emerging Technologies in Distance Education: Theory and Practice*. Edmonton: AU Press, pp. 1-22.
- Lefoe, G., Olney, I., Wright, R. & Herrington, A., 2009. Faculty Development for New Technologies: Putting Mobile Learning in the Hands of the Teachers. In: A. Herrington, et al. eds. *New Technologies New Pedagogies: Mobile Learning in Higher Education*. Wollongong: University of Wollongong, pp. 15-27.
- Lim, C., 2002. A Theoretical Framework for the Study of ICT in Schools: A Proposal. *British Journal of Educational Technology*, 33(4), pp. 411-421.
- Lombardi, M., 2007. Authentic learning for the 21st Century: An Overview. A White Paper Presented at the EDUCAUSE Learning Initiative. In: G. Oblinger, ed. *Advancing Learning Through IT Innovation*. EDUCAUSE Learning Initiative: EDUCAUSE, pp. 1-12.
- Lowerison, G., Côté, R., Abrami, P. & Lavoie, M.-C., 2008. Revisiting Learning Theory for e-Learning. In: S. Carliner & P. Shank, eds. *The e-Learning Handbook: Past Promises, Present Challenges*. California: Pfeiffer.
- Maxwell, J., 2008. Designing a Qualitative Study. In: L. & R. D. Bickman, ed. *The Sage Handbook of Applied Social Research Methods*. London: Sage, pp. 214-253.
- Mayes, T. & De Freitas, S., 2004. *Review of e-learning theories, frameworks and models*. JISC e-Learning Models Desk Study, Stage 2: JISC.
- Merriam, S., 1998. *Qualitative Research and Case Study: Applications in Education*. San Francisco: Josse-Bass.
- Miles, M. & Huberman, A., 1994. *Qualitative Data Analysis*. 2nd ed. California: Sage.
- Milrad, M., 2006. How Should Learning Activities Using Mobile Technologies Be Designed to Support Innovative Educational Practices?. In: M. Sharples, ed. *Big Issues in Mobile Learning: Report of a Workshop by the Kaleidoscope Network of Excellence Mobile Learning Initiative*. Nottingham: University of Nottingham, pp. 29-31.
- Ministry of Basic Education, S. a. C. & Ministry of Higher Education, T. a. E. C., 2005. *Namibian ICT Policy for Education*. Windhoek: MoE.
- Morgan, D., 1997. *Focus Groups as Qualitative Research*. 2nd ed. California: Sage.
- Ng'ambi, D., 2006. *ICT and Economic Development in Africa: The Role of Higher Education Institutions*. Cape Town: University of Cape Town.
- Ng'ambi, D., 2013. Effective and Ineffective Uses of Emerging Technologies: Towards a Transformative Pedagogical Model. *British Journal of Educational Technology*, 44(4), pp. 652-661.
- Norman, D., 1988. *The Psychology of Everyday Things*. New York: Basic Books.
- O'Malley, C. et al., 2003. *Guidelines for Learning/Teaching/Tutoring in a Mobile Environment*. [Online]
Available at: <http://www.mobilearn.org/results/results.htm>
[Accessed 5 March 2012].
- Patton, M., 2002. *Qualitative Research and Evaluation Methods*. 3rd ed. London: Sage.
- Rasmussen, I. & Ludvigsen, S., 2009. The Hedgehog and the Fox: A Discussion of the Approaches to the Analysis of ICT Reforms in Teacher Education of Larry Cuban and Yrjö Engeström: Mind, Culture and Activity. *LEA*, 16(1).
- Ravenscroft, A., 2003. From Conditioning to Learning Communities: Implications of Fifty Years of Research in e-Learning Interaction Design. *ALT-J*, 11(3), pp. 4-18.
- Robson, C., 1993. *Real World Research*. Oxford: Blackwell.

- Santos, I. & Ali, N., 2012. Exploring the Uses of Mobile Phones to Support Informal Learning. *Education and Information Technologies*, 17(2), pp. 187-203.
- Schwier, R., 2010. Focusing Educational Technology Research on Informal Learning Environments. *Contemporary Educational Technology*, 1(1), pp. 90-92.
- Seppälä, P. & Alamäki, H., 2003. Mobile Learning in Teacher Training. *Journal of Computer Assisted Learning*, 19(3), pp. 330-335.
- Shank, P., 2008. Web 2.0 and Beyond: The Changing Needs of Learners, New Tools and Ways to Learn. In: S. Carliner & P. Shank, eds. *The e-Learning Handbook: Past Promises, Present Challenges*. California: Pfeiffer.
- Sharples, M., 2006. *Big Issues in Mobile Learning: Report of a Workshop by the Kaleidoscope Network of Excellence Mobile Learning Initiative*, Nottingham: University of Nottingham.
- Sharples, M., 2006. How can We Address the Conflicts Between Personal Informal Learning and Traditional Classroom Education?. In: M. Sharples, ed. *Big Issues in Mobile Learning: Report of a Workshop by the Kaleidoscope Network of Excellence Mobile Learning Initiative*. Nottingham: University of Nottingham, pp. 23-25.
- Sharples, M., Taylor, J. & Vavoula, G., 2005. *Towards a Theory of Mobile Learning*. [Online] Available at: <http://www.eee.bham.ac.uk/sharplem/Papers/Towards%20a%20theory%20of%20mobile%20learning.pdf> [Accessed 26 February 2012].
- Siemens, G. & Tittenberg, P., 2009. *Handbook of Emerging Technologies for Learning*. [Online] Available at: http://lrc.umanitoba.ca/wikis/etl/index.php/Handbook_of_Emerging_Technologies_for_Learning [Accessed 01 January 2013].
- Smith, B. & MacGregor, J., 1992. What is Collaborative Learning?. In: M. Goodsell, V. Maher, B. L. B. Tinto & J. MacGregor, eds. *Collaborative Learning: A Sourcebook for Higher Education*. Pennsylvania: National Center on Postsecondary Teaching.
- Strauss, A. & Corbin, J., 1998. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. 2nd ed. California: Sage.
- Strauss, A. & Corbin, J., 2008. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. 3rd ed. California: Sage.
- Switzer, S. & Csapo, N., 2005. Survey of Student Usage of Digital Technology: Teaching Implications. *Issues in Information Systems*, vi(1), pp. 127-133.
- Veletsianos, G., 2010. A definition of Emerging Technologies for Education. In: G. Veletsianos, ed. *Emerging Technologies in Distance Education: Theory and Practice*. Edmonton: AU Press, pp. 1-22.
- Villager, 2011. *E-Learning for out of school youth in Usakos*. [Online] Available at: http://www.thevillager.com.na/news_article.php?id=304&title=E-%20Learning. [Accessed 23 April 2012].
- Vygotsky, L., 1982. *Mind in Society*. Cambridge, MA: Harvard University Press.
- Walker, K., 2006. Mapping the Landscape Mobile Learning. In: M. Sharples, ed. *Big issues in Mobile learning: Report of a Workshop by the Kaleidoscope Network of Excellence Mobile Learning Initiative*. Nottingham: University of Nottingham, pp. 5-6.

- Wills, J., Thompson, A. & Sadera, W., 1999. Research on Technology and Teacher Education: Current Status and Future Directions. *Educational Technology Research and Development*, 47(4), pp. 29-45.
- Wink, J. & Putney, L., 2002. *A Vision of Vygotsky*. London: Allyn and Bacon.
- Winters, N., 2006. What is Mobile Learning?. In: M. Sharples, ed. *Big Issues in Mobile Learning: Report of a Workshop by the Kaleidoscope Network of Excellence Mobile Learning Initiative*. Nottingham: University of Nottingham, pp. 7-11.
- Wisker, G., 2001. *The Postgraduate Research Handbook: Succeed with your MA, MPhil, EdD and PhD*. New York: Palgrave.

Appendices

Appendix A: Pilot interview questions

1. How do you use your mobile phone outside the classroom?
2. How does your mobile phone enable you to learn from each other?
3. What do you learn from each other outside the classroom?
4. What social networking tools do you use for learning out of the classroom?
5. What device do you use to access social networking tools, i.e. your mobile phone, desktop computer or both?
6. Describe your experience of using social networking tools out of the classroom.
7. What do you think should be the role of the instructor when students are learning informally using social networking tools
8. Do you think the instructor's role is sufficient to ensure effective learning outside the classroom? Explain why/why not.
9. Describe the relationship between what you learn in social networks and what is learnt in class.
10. What skills have you acquired through social networking that you think could be used to support formal classroom learning?

Appendix B: Permission to conduct research at PoN

Department of Languages
Polytechnic of Namibia
05 October 2012

INTER-OFFICE MEMO

To: Dr S. Krishnamurthy
Dean: School of Humanities

Cc: Ms. E. Wittmann
Head of Department: Languages

From: Ms. E. Ithindi
Lecturer: LIP (LIP411S)
Department of Languages

RE: Permission to Conduct Research and Interview Students

This memo serves to inform you that I am busy with the second year of my studies toward M Phil with the University of Cape Town, writing a mini thesis. As a requirement for the mini thesis, I am expected to conduct research. The topic of my research is: An investigation of mobile-mediated social learning using socio-constructivism: a case study of convergence of informal and formal learning at the Polytechnic of Namibia. I have completed the proposal for my research successfully, and the first two chapters are currently with my supervisor for guidance.

Meanwhile, I would like to start conducting interviews for my research. This necessitates permission from the Polytechnic of Namibia as I will interview about four students from this institution. The students will be given informed consent forms, adapted from a UCT consent form, in which the purpose of the study and data collection methods will be explained, as well as how the research participants, the Polytechnic of Namibia students, will be involved. The research participants will then give permission to be interviewed by signing the consent forms.

Approved / Rejected

The Dean
School of Humanities

Appendix C: Informed Consent Forms



University of Cape Town

Faculty of Humanities

Consent Form

Title of research project: An investigation of mobile-mediated social learning using socio-constructivism: a case study of convergence of informal and formal learning at the Polytechnic of Namibia.

Name of the researcher: Elina T. Ithindi

Email: eithindi@gmail.com

Purpose of the study

This research is to be carried out to fulfill requirements for the Masters in Philosophy at the University of Cape Town. The study focuses on mobile-mediated social learning at the Polytechnic of Namibia, with the intent to understand ways of converging formal and informal learning.

Nature of the research

The research to be conducted is of exploratory nature, using a case study strategy. Selected study participants will be interviewed to provide the data needed on a voluntary basis, and anonymity and confidentiality will be adhered to in the process of disseminating the results of the study. The data collected will be used to write my thesis that will be read by my supervisor and two external examiners, and will later become the property of the University of Cape Town library.

Participant's involvement

- I agree to participate in this research project voluntarily, and I have the right to withdraw from this project anytime I wish.
- I have read this consent form and the information it contains and understand it.
- I agree to my responses being used for education and research on condition that I will not be personally identifiable to anyone verbally or in written form in the thesis or anywhere else.
- I have read this consent form and the information it contains and understand it.

Name of the participant: _____

Signature of the participant: _____ Date: _____

Signature of the researcher: _____ Date: _____

Adapted from: <http://www.humanities.uct.ac.za>

Appendix D: The social media task

As continuation of our short story *The Suit* by Can Themba that we did in class, we are going to critically analyze this story by relating it to gender based violence, in particular passion killings that have recently increased in Namibia. The goal is to compare and contrast the story and the problem of gender based violence or passion killings in the country, and to comment on the lesson(s) the Namibian nation can learn from *The Suit* regarding gender based violence (GBV) or passion killings.

Requirements:

- a. The task will involve the use of a mobile phone. Ensure that you have a WhatsApp account.
- b. You will be required to join a WhatsApp group for this project. The instructor will create a WhatsApp group of about six students.
- c. You are going to interview 3 to 4 members of the society in order to get their opinions or views regarding GBV in general and passion killings in the country in particular. Share your key findings on WhatsApp to solicit comments from your peers.
- d. Consolidate the opinions from step c) to form your own position on the topic. Post your comments on the relationship between the *Suit* story and what people and peers posted in WhatsApp. You are specifically asked to focus on two questions: Are there any similarities? What can the Namibians learn from this story?

You are expected to use WhatsApp as you do on a daily basis, e.g. sending pictures/images, video clips and audio messages. You have about two weeks to complete the task. This means your task starts on 15 July 2013 and ends on 24 July 2013. Feel free to consult with your group members or me, the lecturer/researcher, if there is something you need clarification on, but only through the WhatsApp tool.

Appendix E: Analysis of pilot interviews, Stage 1: Data reduction

Codes: **AUCONT** = authentic context, **AUACT** = authentic activity, **EXPER** = expert performance, **MULRP** = multiple perspectives, **COLCO** = collaborative construction, **REFL** = reflection, **ARTIC** = articulation, **COA/SC** = coaching/scaffolding, **INTASS** = integrated assessment, **FL** = formal learning, **CONV**=convergence

Text no.	Authentic unedited transcribed text of pilot interviews	Key phrases and statements signaling to codes	Emergent codes
<p>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34</p>	<p>Student A Interview Transcript Researcher: This is an interview with mmh, Student A, one of the students mmh, doing LIP, mmh, the interview took place mmh, in the researcher's office, on the 19th October, mmh, and permission to interview the student was asked for in advance, and mmh, the student was given an informed, mmh, consent form to read and sign mmh, before the interview has started, and mmh, the content of the form was explained mmh, to the participant. And, for confidentiality, mmh, the real name of the student was not used mmh, during the interview. Researcher: Mmh, Student A, I'm studying ICTs in Education, with the University of Cape Town, concentrating mmh, in the field of mobile learning. And, I'm conducting research mmh, focusing on the use of social networking tools. I'm going to ask you mmh, a few questions for you to provide me with mmh, the data that I need in order to be able to research, mmh, to wr... write my research paper. Mmh, ok, here are the questions, and if there is any question that is mmh, not clear to you, you are free mmh, to maybe ask. Researcher: How do you use your mobile phone outside mmh, the classroom? Student A: Ok thank you for this opportunity. Mmh, well, <u>there are various ways we use mobile phones</u>, mmh, for example I personally like <u>listening to music</u>, because there are certain features mmh, that allow you to do that, you can also <u>play certain games</u> on the mobile phones, and most importantly you can <u>access the Internet</u> via your mobile phone, which allows you to <u>access different social networking sites</u>, for example Facebook and even Skype. Some phones are able to even mmh, <u>video recording</u>, <u>you can basically chat to the... to... to whoever you want to chat to face-to-face</u>. So there are various ways to mmh, use them <u>outside the classroom</u>. Researcher: Well, thanks a lot. And then, mmh, how does your mobile phone enable you to learn from each other, that is mmh, to learn from other students? Student A: Well, it helps us to <u>learn from each other</u> because mmh, we can... mmh, especially <u>using social networking sites</u> it allows you to mmh, <u>communicate with certain students</u>, and certain <u>students who are even studying at different uni... universities</u>, with different knowledges and say for example you... they allow you to like mmh, <u>create groups</u>, so we can like <u>meet mmh, on that group and discuss certain topics</u> mmh, that mmh, that... mmh, say for example for an assignment or something, we can <u>discuss certain topics</u> and they allow us to mmh, mmh, <u>get different ideas from different people</u> from different situations, just their thoughts, and it's... its's the fastest way basically on communicating to people out of the country, so it helps a lot, and it's also cheap. Researcher: Well, thank you. Mmh, then, mmh, what do you learn from each other outside mmh, the classroom? Some of the things could feature in your second question, but can you add if there's something else that you learn from each other outside mmh, the classroom?</p>	<p>Mobile phone used in various ways outside the class (ARTIC,MULRP): listening to music, playing games, accessing the Internet, accessing SN sites, video recording and chatting . (AUCONT,AUACT)</p> <p>Mobile phones help with learning from each other (ARTIC,COLCO,MULRP), using SN sites, communicating with other students, creating groups, meeting and discussing certain topics, and getting different ideas from different people (AUCONT,AUACT,COLCO)</p>	<p>ARTIC,AUCONT, AUACT&MULRP</p> <p>COLCO,ARTIC, AUCONT,AUACT &MULRP</p>

<p>35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78</p>	<p>Student A: Well, mmh. We <u>learn a lot of things outside the classroom</u>, because as a lot of people say <u>learning doesn't stop at school</u> mmh, so, basically we <u>learn new things like how to interact with different types of people</u>, mmh, you get people who are very straightforward, and some even basically, mmh, are like, for example mmh, mmh, my family tends to... to... mmh, invite mmh, foreigners like people from United States into our homes and mmh, just to do research and mmh, and know how we live as Africans, know our culture, mmh, so basically th... the way they speak to you is different to how most mmh, people do, they speak to you in a different type of language, and their English is s... somehow advanced than ours in a way mmh, and even the way they look at you they look you straight in the eye which sometimes is quite weird but it's..., it's... it's mmh, it's necessary, so it gives you those, those..., mmh mmh, those... it gives you that information you know on <u>how to act around people and also to find out mmh, their thoughts on certain topics</u> like I said before, and it just <u>helps you</u>, mmh, basically mmh, <u>upgrade yourself</u>, as a person.</p> <p>Researcher: Ok, that sounds good, mmh, then what social networking tools do you use for learning out of the classroom?</p> <p>Student A: <u>The main one I use is Facebook</u>, because it's the most popular so... social networking site, I mean most of my friends, in fact all of my friends are on Facebook, and it's also <u>easily accessible</u> because you can access them on the phones, mmh, Facebook is, mmh, my first choice because it enables you to mmh, mmh, get information, mmh, there are cert... say for example mmh, mmh, IT, which is a subject I'm studying, if you like it, ...there's a ... there's a certain mmh, mmh, account on Facebook, mmh, specifically for IT, so if you go on <u>Facebook</u> and you like it, it mmh, <u>provides you with information on new devices</u> an... that will pop-up on your phone, like if you aks... when you go on Facebook so, it enables you to do basically anything. <u>You can get information that... that you might need for an assignment</u> or something, and it gives you mmh, mmh, especially for certain topics say for example, mmh, the IT account will post something like mmh, "How do you use... how... how do you use an operating system called Linux?" So, basically when you go on that site mmh, on or on that status you can <u>view comments from different type of people all around the world</u>, and <u>they give their input</u>, and in other words you ... in... in most cases <u>you learn from them</u> because, mmh, <u>there are different types of people with different opinions with different knowledges</u>, and somehow mmh, certain things will be similar, but some... some of them won't, it actually helps you a lot to learn.</p> <p>Researcher: Mmh, ok. Mmh, but you only mentioned mmh, Facebook, I want just to make sure if that's the only social networking tool that you use.</p> <p>Student A: Mmh, ok, ja. There are others, mmh, for example Skype, <u>Skype is mainly for business</u> though, because businesses like prefer using Skype mmh, to contact individuals perhaps who are abroad mmh, and it's also cheaper to... to contact them, but, mmh, I wouldn't really recommend Skype because, mmh, <u>Skype isn't as popular as Facebook</u> and there are certain people that I know that don't even know what Skype is, but mmh, it is also a social... social networking tool that can be used, and it's main feature is that you can video-call, and that you can also do with Facebook, mmh, and it also... the good part about Skype is that when you mmh, when you call somebody it's free of charge, as long as a person is on Skype, but if he's not, then it costs some money. But it helps you mmh, because wh... it's... <u>it's easier to chat to someone or to ask someone questions if it's face-to-face</u>, rather than texting because texting kind of prevents you from getting certain knowledge, and sometimes a person might not even understand what your'e trying to say, so texting mmh, is not really advisable, but mmh, and sometimes a person might even speak a different language, but <u>Skype enables you to...</u> there's even a part where you can t... you can allow the person to <u>translate whatever he says</u>. There is a certain</p>	<p>Learning a lot of things outside the class as learning doesn't stop at school ,(CONV) like how to interact with different people, (COLCO) getting information on how to act around people and find out their thoughts and upgrading oneself (AUCONT,AUACT, MULRP)</p> <p>Facebook the main one, (ARTIC) easily accessible, provides information on new devices, and assignments, (AUCONT,CONV) enables viewing comments from different people, and they give input, (AUACT,COLCO) Enables learning from different people (COLCO)</p> <p>Skype is mainly for business, not as popular as Facebook (ARTIC,AUCONT). Is easier to chat to someone or to ask someone questions if it's face-to-face (MULRP, AUACT), Skype enables translation (AUCONT)</p>	<p>COLCO,ARTIC, AUCONT,AUACT, CONV&MULRP</p> <p>ARTIC, AUCONT,AUACT MULRP,COLCO& CONV</p> <p>ARTIC,AUCONT, AUACT &MULRP</p>
--	---	--	---

<p>79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122</p>	<p>programme that allows you... say is not from Namibia then he speaks into some mhh, the mice, and the mice... the... the voice will get the words and automatically translate them for you. So, there are programmes that can do that and enable you to basically gain knowledge, for someone who doesn't speak your language and is living very far away from you.</p> <p>Researcher: Ok, thank you, mmh, what device do you use to mmh, to access mhh, social networking tools, mmh, for example is it your mobile phone or what is it?</p> <p>Student A: Basically what I use, <u>in most cases is my phone</u>, but <u>sometimes I do access using the computer</u>, so I'll go for both. Because mmh, what happens is, <u>the phone is easier</u>, because <u>you can access it any place</u>. Sometimes the laptop might be at home and sometimes it is hard to carry but the phone is always with you, I mean always, in most cases, every time you always have your phone, so mmh, I use my phone and <u>it is also cheaper to use the phone than to use the laptop</u>. I don't know why it's that but mmh, usually the <u>service providers mmh, seem to be lenient on mmh, mmh taking credit on mobile phones than on the laptop</u>. So, in most cases if I'm to access mmh, social networking sites using the laptop I have to either use mmh, s... mmh, my mom's device, which allows me to access it free of charge, then she pays unlimited Internet free of charge and she pays end of the month, which is also a good bargain but <u>In most cases, I use my phone</u>.</p> <p>Researcher: Ok, thank you. Mmh, now how do you describe your experience of using mmh, social networking tools out of the classroom? Just your experience.</p> <p>Student A: Well, basically <u>I've experienced, mmh, certain things, and mmh, that I'm not really used to, and that I wasn't aware of, because mmh, when... mmh, when you're like on a social networking site, it's not really... you don't really interact with people that you know</u>. It's people that you don't know. Some of them even add you, and you don't know them that well. That's why in most cases they tell you not to give personal details and certain things to strangers. But, besides that mmh, <u>you meet certain people</u>, like mmh, for example there was this case on Facebook where a s... mmh, a father was reunited with a son, mmh, on Facebook, and because the son... I don't know. Because he went missing, and he was able to be located on Facebook, so, I see <u>Facebook as something that can be us... used even for tracking people</u>, or mmh, because so many people are on there, even most of the famous celebrities that you see are on Facebook. So, basically Facebook is something or <u>social networking sites are something that enables you to... mmh, mmh, communicate with different people</u>, mmh, it <u>brings you closer, even to relatives</u>. Say for example mmh, <u>my aunt in UK, I chat to her basically everyday and that's because of social networking sites</u>. If they weren't there I basically couldn't do that, and mmh, they're cheap. I mean they're easily accessible, if you just have Internet and if you have a phone that can accommodate Internet, then you're basically set.</p> <p>Researcher: Thank you. Mmh, do you think, ok, sorry, what do you think should be the role of the instructor, in our case a lecturer, when students are learning informally using social networking tools? Do you think mmh, the instructor or lecturer needs to play any role there?</p> <p>Student A: I feel mmh, the <u>instructor should try encourage the learners</u>. Because, mmh, one thing I've noticed is that when you... when a learner is encouraged to do something that he/she is not expected to be encouraged mmh, mmh, to do, mmh, basically he... he ends up using it for good, and the person can mmh, even the lecturer can try even mmh, <u>motivate the students</u>, like "Ok, who of you are on Facebook?" Then, obviously most of the learners will lift their hands. "Well, I'm also on Facebook". And then that will already give them that type of mentality: "Oh, he's really cool", because usually these social networking sites, mmh, give the... say if you're not on Facebook you're usually ranked as not cool, or if you're not on social networking sites you're like seen as "Ok, he's... he's different." So, basically if you</p>	<p>Uses mobile phone in most cases, but also computer sometimes (AUCONT,. Phone easier, easily accessible, cheaper, and service providers lenient on taking credit on mobile phones than laptops. (ARTIC,AUCONT,MULRP)</p> <p>Have experienced things not used to or was not aware of (ARTIC,AUCONT), interacting with unknown people on SN sites, and tracking people on Facebook (AUACT). SN sites enable communication with different people; they bring people closer to each other. (COLCO,MULRP)</p> <p>Instructor should encourage and motivate the learners, interacting with students on SN sites (AUACT), posting about topics discussed in class (CONV) -learners find it difficult to concentrate in class (FL),_on SN sites learners at the comfort of their homes and they access SN sites on free will (AUCONT). Learners to give input if lecturer posts</p>	<p>ARTIC,AUCONT& MULRP</p> <p>ARTIC,AUCONT, AUACT,COLCO& MULRP</p> <p>FL,ARTIC, AUCONT,AUACT, COA/SC, COLCO&CONV</p>
---	--	--	--

<p>123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166</p>	<p>was to say "Ok, I'm on Facebook, mmh, who of you are on Facebook?" So, some of them could even friend him and then <u>you can interact with them</u>, like mmh, say for example, <u>post certain statuses</u>, mmh, <u>about certain topics that you discussed in class</u>, mmh, sometimes <u>learners find it difficult to concentrate in class</u> but on social networking sites it's different because <u>they're at the comfort of their own home</u>, they... they... they <u>access them on their own free will</u>, and in most cases they even mmh, strive to get credit just to access these sites, so if you're like to post, if the <u>lecturer was like to post statuses on certain topics that they discussed in class</u> mmh, and then they s... and then say for example mmh, "Is glob... is global warming good or bad? Discuss." So, then, the... the <u>learners from this class could basically</u> mmh, mmh, <u>put their input</u>, and then he could mmh, mmh, <u>try correcting them where they go wrong, on Facebook or on social networking site, which in other words is kind of learning</u>. So, I feel that it <u>should be encouraged</u>.</p> <p>Researcher: Ok, thank you. We're about to finish, mmh, do you think the instructor's role is sufficient to ensure effective learning outside mmh, the classroom? Mmh, for example you said mmh, the instructor needs to encourage learners, to motivate them, to correct them mmh, where they go wrong, do you think that role is mmh, sufficient to ensure mmh, effective learning outside the classroom?</p> <p>Student A: No, there are other methods that can be used, that was just an example, but there are certain methods, say for example, mmh, I'm trying to think of another method now but... say for example the <u>lecturer were to mmh, mmh, create a group</u>, because that is possible. <u>You can create a group, and certain individuals can join if they feel like it, and then mmh, that group mmh, he can use basically to communicate with the students as well</u>, he doesn't necessarily have to be friends with them or to... to... to... to say that he's on Facebook, but he could create a group, and on that group all you need to do is access it, al... all you need to do to access it is to just s... say, because usually you have a like, on the s... on the site, say for example mmh, IT students group. Then, you have like if you like it instantly, you access the group. So, that alone will be also another method, and mmh, there are also ways you can mmh, <u>talk with the students</u>. You can even <u>meet up on Facebook, in the comfort of your own home</u>, mmh, and just <u>discuss certain issues that you would in class</u> and make them a lot more interesting, because <u>social networks ... networking sites are very attractive to mmh, teenagers</u>, especially now, mmh, you'll find that the majority of people mmh, feel, like, honestly when you go on... on... on certain sites, ... social networking sites, you can see that certain students who probably are quiet or shy due to certain friends, because honestly some... some students don't participate in class because they feel afraid to participate, say if they're wrong, they feel like, ok, everyone will laugh, but that's different on a social networking sites, because there no one really sees who you are, ok there are pictures but you just feel diff... <u>it's just a different environment from the one you are in class because you feel more free to say what you want, and you just feel at ease and confident</u>.</p> <p>Researcher: Ok, thank you, can you please mmh, describe the relationship between what you learn in social networks, and what is learnt or taught in classes?</p> <p>Student A: Mmh, what I've learnt, <u>in social networking sites</u>, mmh, for example I've ... <u>I realized that I mmh, there are certain things you can do in... in my course, for example IT, that mmh, that I didn't know</u>. For example <u>I asked a friend, mmh how exactly</u>, say I forgot my mmh, password, on my laptop. How exactly could I <u>mmh, mmh, rectify it or... or... correct the password</u>, because usually on Windows 7 they don't give you a choice, like if you forgot your password or they just give you a hint. Or sometimes the hint doesn't really help. So, basically <u>he gave me a solution</u>, someone who basically has never done IT before <u>but just from past experiences</u> mmh... knew what to do. So he gave me the solution, and when I did it, <u>I was able to fix my laptop, and in a way what he said was quite similar to what I learned in class,</u></p>	<p>something on topics discussed in class (COLCO&CONV), then he/she tries correcting them on SN sites (COA/SC&CONV)-is kind of learning and should be encouraged (ARTIC).</p> <p>Lecturer creates a group on SN sites for certain students to join (AUCONT&CONV), and lecturer uses the same group to communicate and discuss issues with students in the comfort of his/her home as they would in class (CONV, AUACT&COLCO)- social networks sites very attractive to teenagers (ARTIC), different environment from the one in class (ARTIC&FL), learners feel free, confident and at ease (ARTIC).</p> <p>Learned that on SN sites there are things one can do in his/her course that one didn't know, (ARTIC)e.g. In IT course a I asked a friend how to rectify a password (AUACT) and was given a solution, just from past experiences (EXPER&COA/SC), what he said was quite similar to what I learned in class (CONV). Later in class the lecturer</p>	<p>COLCO, ARTIC,AUCONT, AUACT,FL& CONV</p> <p>ARTIC, COLCO, CONV, AUCONT,AUACT, MULRP,COA/SC &EXPER</p>
--	---	---	---

<p>167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210</p>	<p>because, mmh, when I... <u>when I went in class the lecturer mentioned sl... slightly the same thing that he told me about rectifying</u>, or if you forgot your password, how to rectify oo... oo reset your computer so that your password disappears and you can enter a new one. So, basically what I feel is that mmh, social networking sites aren't all that bad, because they help you, mmh, with certain things. And it's not like you always have to ask... you always have to ask the question. Sometimes just see the certain thing on... on... on the social networking sites, because all the information is there. And all you need to do is just read through it. And one or other time you will find or come across a certain thing that you never knew about, but <u>just because of that status, or post, or that comment, then you ... you suddenly know</u> about it. So it kind of <u>informs you</u>, but not really in a direct manner but in an indirect manner. And in <u>most cases indirect manners are the way we learn how to remember things like to now to this very day I still know th... the... the thing I learned from them</u>, so I feel that they're very helpful, and..., ja.</p> <p>Researcher: Ok, thank you, and this is finally our last question. What skills have you acquired mmh, through social networking that you think could be used to support mmh, formal classroom learning?</p> <p>Student A: Definitely, mmh, confidence. <u>Social networking sites gives me confidence</u>. Especially mmh, I'm... I'm that type of person who, when I go to a certain environments, <u>I usually keep to myself, because I don't really know anyone and I don't know how to act</u> around there, and, in most cases I feel that when I'm <u>on a social networking site that doesn't matter</u>. And I can <u>interact with whoever I want, mmh, mmh, mmm, confidently, not being afraid</u>, mmh, that in a way has... mmh, is helpful, because a... and is a skill <u>I learned because usually what I do is, I ask certain individuals that I know in my class, if they're on F... Facebook or if they are on a certain social networking site, then if I add them on that social networking site they allow me to like mmh, get to know them better, so that when we meet physically then I... I all of a sudden feel comfortable</u> because I know how to... I know the person, not... not physically, not because I met him or I spoke to him, but just because he added me, so basically mmh, it's very helpful and one other thing is, mmh, it helps you mmh, because one thing I've mmh, mmh, scientists have noticed is that mmh, <u>some phones allow mmh, has actually made our thumbs to be more advanced</u>, Because usually back in the day, people weren't really that advanced. So, <u>texting, smsing gives your ... th..., mmh, mmh, gives you that certain skill</u> that enables you to... you know, do things like probably <u>typing</u> mmh, because there are some phones that the <u>keypad is similar to the one on the laptop</u>. So, basically <u>when you type you'll be faster</u> than... than you'll be like fas... say <u>if you like chat on... on mmh, social networking site</u>, and the keypad is similar to the laptop, then it will somehow <u>increase your speed on a laptop</u>, say if you were to write mmh, an article or something. It will also <u>improve your English, because you speak a lot</u>, and sometimes you... <u>your writing skills, especially if you're texting</u> for that because that's something that I really try hard to do, sometimes it could be bad because in most cases people prefer texting in short and mmh, that's not really good because especially with essay writing it comes in-between but <u>if you text in full, it kind of improves your vocab</u>, it kind of <u>helps you mmh, mmh, write better, read better, read faster</u>, basically, and mmh, ja, <u>it gives you a lot of skills</u>. Mmh, and also <u>it gives you information and knowledge that you most probably nee... you'll need one day</u>.</p> <p>Researcher: Well,, thanks a lot, you've provided a lot of information that I guess will be useful for my research, and mmh, thank you a lot, it was a p... a pleasure working with you.</p> <p>Student A: Thank you.</p> <p>Student B Interview Transcript</p> <p>Researcher: Mmh, this is an interview with mmh, Student B, one of the students doing mmh, LIP. Mmh, the interview took place on the 22nd of October, in the ... the... the researcher's office, and permission to</p>	<p>mentioned slightly the same thing I was told (by a friend) (CONV). Just because of that status/ post/ comment, you suddenly know (COLCO). SN sites inform you indirectly, and in most cases indirect manners are the way we learn how to remember things (MULRP). Still knows things learnt from SN sites (AUCONT).</p> <p>SN sites give confidence skills, e.g. I usually keep to myself, but on SN sites that doesn't matter-can interact with anyone. (ARTIC) Learned a skill to get to know people better on SN sites to feel comfortable when they meet physically. (AUACT) Texting and smsing improves typing skills, chatting increases typing speed on laptop and improves English as you speak a lot, and also improves writing skills (CONV,MULRP). Texting in full improves vocabulary-you write and read better & faster. (CONV) SN sites give you information and knowledge you'll need one day (AUCONT)</p>	<p>ARTIC,AUCONT, AUACT,MULRP& CONV</p>
--	--	--	--

<p>211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254</p>	<p>interview the student was asked for well in advance. Mmh, and for confidentiality, mmh, the name of the participant was not used during the interview.</p> <p>Researcher: Mmh, Student A [meaning B!], I'm going to ask you mmh, a few questions, mmh, concerning mmh, the research that I'm conducting in the field of mmh, mobile learning, mmh concentrating on the use of social networking tools. I have a few questions mmh, to ask you, mmh, and the first one is, how do you use your mobile phone outside the classroom?</p> <p>Student B: Mmh, thank you for the question, mmh, <u>outside the class</u> I use my mobile phone to...<u>going on the Internet</u>, let's say after class maybe there's something the le... lecturer or the teacher said that I don't understand, then I go on that sentence, and <u>go on the Internet and google</u> it up to find out what it means. Or sometimes I ..., I maybe <u>inbox a friend on Facebook</u> and <u>ask whether that... m..., the friend knows that something on...mmh,... mmh,...</u> (long pause).</p> <p>Researcher: Mmh, ok, there is something that you mentioned that mmh, I'm not quite familiar with. Did you say in book or what is it in Facebook?</p> <p>Student B: On Facebook. Inboxing.</p> <p>Researcher: Ok.</p> <p>Student B: You inbox a friend just like you're <u>writing an sms or text message</u>.</p> <p>Researcher: Ok, thank you, so you said inboxing a friend, thank you. It's now it is clear to me. Mmh, how does your mobile phone enable you to learn from each other? That is to learn from other students?</p> <p>Student B: Mmh, mmh, mmh, most of us have mmh, different phones, so, sometimes you... s... there's something in your phone that another person doesn't have so, when you ... when you ... when you get a y... a friend's phone you look for things that are not in your phone, then you <u>ask information</u> about them, and then that's how you learn (pause) the different features in your... in each other's phones.</p> <p>Researcher: Mmh, ok, mmh, then, what do you learn from each other outside the classroom? In other words, what do you learn from other students when you are learning outside the classroom using your mobile phones?</p> <p>Student B: <u>We learn a lot, we learn things like, how to opera..., how to operate mmh, different mobile phones, how to search for different information, how to... how to communicate with other people, to different social networks, using phones, and... ja, that's it.</u></p> <p>Researcher: Mmh, ok, mmh, then, What social networking tools do you use for learning outside mmh, the classroom?</p> <p>Student B: Mmh, I use like mmh, Facebook, Twitter, mmh, Gmail, mmh, WhatsApp, and <u>WhatsApp it's a... it's a new social network, mmh, it's a new social network... tool that, just mmh, that was introduced in 2012. Yes m... (pause).</u></p> <p>Researcher: Mmh, thank you, and mmh, mmh, since I'm not familiar with this mmh, WhatsApp, can you just maybe tell more about it?</p> <p>Student B: Ok. Mmh, WhatsApp it only operates on some phones, like Nokia phones, Black Berries, Sumsang... Samsung phones, and in order to <u>register for WhatsApp, you download it first, and (pause) the way it works, its mmh, when you... when you... when you... install it in your phone, it... it... you have to download mmh, no, when you install it, you..., you..., you (pause) you... you... update it, so that all your contacts, like your other friends that mmh, that have WhatsApp in their phones also show on it. And then you ... sometimes you can... you... it also has status like if you maybe want advice on something, then <u>you can write on your status, and then other friends will comment, or inbox you to help you understand, and that's all.</u></u></p>	<p>Uses phone outside class to go on the Internet and google (ARTIC,AUCONT) inboxing friends and asking them if they know something.(COLCO,AUACT,COA/SC)</p> <p>Writing sms or text messages (AUACT)</p> <p>Asking for information (AUACT)</p> <p>A lot is learnt, e.g. operating different mobile phones, searching for information (AUCONT)andcommunicating with others on SN sites (AUACT,COLCO)</p> <p>WhatsApp a new SN tool-introduced in 2012. (ARTIC,AUCONT)</p> <p>Registering WhatsApp requires downloading and installing it in your phone, updating contacts to show on it (ARTIC,AUCONT), has a platform where to write for others to comment, or inbox you to help you understand (AUACT,COLCO,COA/SC)</p>	<p>ARTIC,COLCO, AUCONT,AUACT, &COA/SC</p> <p>AUACT</p> <p>AUACT</p> <p>AUACT,AUCONT, COLCO</p> <p>ARTIC, AUCONT</p> <p>AUCONT,ARTIC, AUACT,AUCONT, COA/SC&COLCO</p>
--	---	---	---

<p>255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298</p>	<p>Researcher: Ok, mmh, thank you. Then, what device mmh, do you use to access social networking tools, mmh, for example do you use your mobile phone, mmh, desk computer... desktop computer, or what?</p> <p>Student B: Mmh, I <u>use both the phone and the computer</u>. (Long pause). I use both the phone and the computer, mmh, mmh, when I'm not close to the computer, then I use the phone and when I have the computer, I only use it when I have a 3G. A 3G is a type of thing where you insert your sim card then you go on the Internet.</p> <p>Researcher: OK, mhh, thank you, mmh, then, can you please describe your experience of using social networking tools outside the classroom?</p> <p>Student B: Mmmh, mmh, sometimes when you..., when you... you... when you... go on the Internet and you want to search for something, sometimes it's difficult because when you..., when you type in something you get a lot of options, and you don't know which one to choose, or you don't know which one is the correct one 'cause there are so many options, mmh, the... (pause) and... (long pause).</p> <p>Researcher: Ja, but can you comment on just your experience, like when you are using these social networking tools with friends, like... or learning, just your... what you have experienced?</p> <p>Student B: Mmh, what I've experienced is, I..., I <u>learnt a lot, things that I didn't know, how to use, I learn how to use them and you also... you also help..., I also experienced helping other friends indirectly</u>. Even sometimes you don't know whether the person does not know something, or doesn't know how to use something, then you... later <u>when you say something, or you access something you help them 'cause, you help them indirectly</u>. Yes.</p> <p>Researcher: OK, thank you, mmh, then, what do you think should be the role of the instructor when students are learning informally using social networking tools?</p> <p>Long pause.</p> <p>Researcher: The role of the instructor, (pause) or lecturer.</p> <p>Student B: The instructor should just mmh... sh... mmh, show or ja, <u>show mmh, the students how to access</u>, mmh, or how to go on the mmh, on <u>the Internet</u>, like if maybe they want to find something, the instructor should just like <u>show them the website where they should go on and should let the other... the... the... the learners do the rest themselves</u>. In that way it will help the learners learn how to use it, how to use social networking tools.</p> <p>Researcher: Ok, so you're saying mmh, the instructor or lecturer needs to show students, mmh, how to do whatever they need to do. Mmh, then, do you think mmh, this role of the instructor, of showing students what they need to do is mmh, sufficient to ensure effective learning outside the classroom?</p> <p>Student B: (Long pause). Mmh, yes, I think so, because if..., if..., if the instructor have to (pause) if... <u>if the instructor have to like show everything to the students like from (pause) A to Z on how to do everything like the instructor will be like spoon feeding them</u> and then later the students when they are alone they will not know how to use that social networking tool because they will just get used to get helped all the time, so the in..., the <u>instructor just needs just to like show them how to access the social networking</u>, ... how to use the social networking tool, and from there let them do the rest, or the instructor can just... just mmh, show them once, and then from there they go on themselves. That way it will help them (pause).</p> <p>Researcher: Ok, thank you, mmh, and mmh, can you please describe mmh, the relationship between what you learn in social networks and what you learn in class? Is there any connection?</p> <p>Student B: Mmmh, I think there is a connection, because what mostly... <u>what you learn in class, when</u></p>	<p>Uses both the mobile phone and computer (AUCONT,ARTIC)</p> <p>(Answer not relevant to question)</p> <p>Has learnt a lot of things he/she didn't know (ARTIC). Has helped friends to learn indirectly (COLCO,COA/SC)</p> <p>Instructor needs to show students how to access Internet, websites where students should go (COA/SC), and let learners do the rest themselves (ARTIC)</p> <p>Showing learners how to do everything is like spoon feeding them (ARTIC). Instructor should only show learners how to access SN tools (COA/SC), then they do the rest themselves.(AUACT)</p> <p>What is searched on Internet correlates with</p>	<p>ARTIC&AUCONT</p> <p>ARTIC,COLCO&COA/SC</p> <p>ARTIC,COA/SC</p> <p>ARTIC,AUACT &COA/SC</p> <p>AUCONT&</p>
--	--	---	---

<p>299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342</p>	<p>you go out on the Internet and go look it up it...it... mmh, it... (long pause) it... mmh, it correlates, and, sometimes what you learn in class is not enough, so when you go look it up on the Internet there is more information.</p> <p>Researcher: Ja. You talked about mmh, the Internet. Mmh, but when you're talking about mmh, for example, communicating mmh, maybe with... with your friends, or mmh, do you think there might be some connection mmh, between what you do with other friends informally and what you learn in classes?</p> <p>Student B: Mmh, yes, because mostly <u>what you do with other friends outside class mostly it relates to what you've done in class, sometimes you debate with friends about something that you did in class or... or maybe something that you heard in class if you're in different classes</u>, so, it... sometimes it..., sometimes correlates.</p> <p>Researcher: Ok, mmh, thank you, don't become... become tired, this is now the last question, what skills have you acquired mmh, through social networking that you think mmh, could be used to support formal classroom learning?</p> <p>Student B: Mmh, (long pause).</p> <p>Researcher: Skills.</p> <p>Student B: Mmh, skills like, mmh, how to access ... how to access information, <u>how to access information using social networking tools,how to... m... to... to... to communicate with other people or institutions</u>, mmh, ja, (long pause).</p> <p>Researcher: Ok, mmh, thank you, I think this is it, this is the end of our interview, and mmh, thank you, mmh, for all your efforts. Thank you.</p> <p>Student C Interview Transcript</p> <p>Researcher: This is an interview with Student C, mmh, one of the students mmh, doing LIP. Mmh, the interview took place mmh, in the lecture's office, on the 23rd of mmh, October, and permission to interview the student was asked for in advance, and mmh, the student was given a consent form mmh, to... to... sign, and mmh, the content of the form was mmh, discussed mmh, with the student. Mmh, and then mmh, here we go.</p> <p>Researcher: Mmh, Student C, because your name is not going to be used mmh, during this interview, by any means, so I'm only going to call you Student C instead of... because I don't have to reveal your true name, your real name. So, how do you use your mobile phone outside mmh, the classroom?</p> <p>Student C: (Pause). Thanks for the opportunity given, mmh, obviously mmh, I use it... <u>outside the classroom we use my phone like for asking questionslike... questions that I don't understand</u>, mmh, like when we're... when you...,<u>whenever we're at home sometimes you get to ask questions to friends or family that ...</u> because sometimes if you... sometimes we'll try to... <u>to research on the Internet</u> and the internet might stuck so, you've... you've to use that opportunity to <u>ask questions to other learner by texting them or calling them</u>.(Pause) And, other..., you can also <u>use your... your cellphone outside the classroom to... to... keep you busy whenever you're like bored</u>, (pause) and you can also... ok you can also use it to... <u>find friends, texting friends</u>, mmh,... mmh,... ok. That's all</p> <p>Researcher: Mmh, ok. You said you can also use it when bored. Can you somehow explain just how you use it when you're bored?</p> <p>Student C: Ok, as I said it first mmh, you can use it when you're bored. Sometimes when ... <u>whenever you're bored you can sometimes call a friend and you have a discussion</u> and some... your friend can keep you busy by calling him or her then you'll feel better that way.</p> <p>Researcher: Mmh, ok mmh, how does your mobile phone enable you to learn from each other, that</p>	<p>what is learned in class (AUCONT,CONV)</p> <p>What is done outside class is related to what is done in class, (REFL&CONV) e.g. debating about things done or heard in classes on SN sites (AUACTION&CONV).</p> <p>Skills acquired on SN sites: accessing information, and communicating with other people or institutions (AUACTION,AUCONT,COLCO)</p> <p>Uses phone outside class to ask questions concerning what is not understood, (COLCO,COA/SC) ask friends and family members,researching on the Internet, texting other learners to ask, (AUACTION calling other learners, and when bored, and also to find and text friends (AUCONT</p> <p>Calling friends to discuss when bored (AUACTION,AUCONT)</p>	<p>CONV</p> <p>FL,REFL,AUACTION &CONV</p> <p>AUACTION,COLCO& AUCONT</p> <p>AUCONT,AUACTION, COA/SC&COLCO</p> <p>AUACTION& AUCONT</p>
--	--	---	--

<p>343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386</p>	<p>is mmh, to learn maybe from other students? Student C: Ok. My mobile phone enable me to learn from mmh, from each other in a way that sometimes, even if you don't know how... <u>how to spell the certain word mmh</u>, you'll,... you can... <u>you can learn it through by... you can learn it by...</u> if you receive a specific tex... <u>text from a friend</u>, then at the moment you'll know that this or this word is spelt like this and <u>sometimes you can also learn from mistakes</u>. Your friend... <u>if you made a mistake on your pho... on a phone sometimes your friend can help you to tell you in this way that no, this is... this is not how you... you pronounce the word, is not how you write the word</u>. Mmh, you can also learn it by <u>asking other... other friends questions</u> in a... mmh, in a way that you... even if you can do it like this if you had a... <u>if you had a talk or a discussion in a class or a topic that you didn't understand then you can use it to... to ask friends, people that... that knows better than what you... what you learned</u>. Researcher: Mmh, thank you, then what do you learn from each other outside mmh, the classroom? What type of things do you learn from each other outside mmh, the classroom? Student C: Ok, mmh, let me say it or we learn... there are things mmh, things mmh, sometimes <u>things that we don't know that are around the world</u>, so sometimes if... even if, for example even if you don't know mmh, the name of... the s... the president of a specific country you can ask from a friend mmh, you can also <u>learn school stuffs</u> mmh... mmh, things which are like mmh, goes in hand in hand with the school, mmh, you can also mmh, learn the mmh, <u>the interests of others</u> (pause) what...what do you have mmh... like what do you have in common with a specific friend, mmh, <u>that will build up a relationship between you... two</u>. Researcher: Thank you. Mmh, then, what social networking tools do you use for learning out of the classroom? Student C: (Long pause) mmh,... (pause) mmh, social networking tools,... mmh, this... (long pause) ok, you can mmh, use, let me... let me start with <u>Facebook, mmh, which... (pause) have more than eight hu... 800 million users</u> in the world and, <u>also Twitter.... mmh, and YouTube where you can check latest videos</u>, the 3D videos, mmh, and... mmh, the other one <u>Welcome to MySpace where friends meet</u> (pause) also, mmh, <u>Eskimi Eskimi</u>, (long pause) and... last one but not...mmh, <u>Mix</u>. Researcher: Mmh, ok, I'm sorry for being a bit illiterate, mmh, can you please mmh, maybe say more about Eskimi and Mix? Because I'm not familiar with those two, Eskimi and mmh, Mix. Ooh! Mix It. Ok Mix It I know. It is only Eskimi. Student C: Eskimi is more like, let me say, <u>it's more like Facebook also, you can also chat with friends, exch... exchange pictures</u> and chat with friend and exchange pictures, you can also like <u>find the interest of others</u> what sample... what type of a friend you can have (pause) and you... mmh, s... you can also download... you can also <u>download a friend's picture, just like as you should do... do it on Facebook</u>. Researcher: Ok, Thank you. Now I know. Mmh, what mmh, device do you use to access mmh, social networking tools, mmh, these things that you mentioned like Mix It, YouTube, Twitter etc. So, what device mmh, do you use to access these mmh, social networking tools? Mmh, such as is it your mobile phone, mmh, the desktop computer or what? Or both or what? Student C: Mmh, I use..., the tool that I..., the tools that's... that obviously I use <u>most is the computer</u>, because sometimes a <u>phone is not user friendly</u>, so the computer I use..., <u>use the computer liketo login like the types of networking tools that I mentioned...</u> (long pause). Mmh, mmh, sometimes you can also (pause) use mmh, a... a PSP cause you can use... <u>you can use a 4Gig... a 4 Gigbyter and put it in the computer then you can log in to Facebook or Eskimi</u>. Researcher: Mmh, ok mmh, thank you, mmh, can you please describe your experience of using</p>	<p>Mobile phone enables learning from each other, (ARTIC,AUACT & COLCO) e.g. spelling, and enables learning from mistakes with the help of friends (ARTIC&COA/SC), one learns by asking friends questions (COLCO), and asking friends that know better than you (COA/SC) about class work (CONV).</p> <p>Learning general things around the world, (AUCONT,AUACT) school related stuff (FL), and learning the interests of others to build relationships (COLCO).</p> <p>Uses Facebook – has more than 800 mil users. (AUCONT) Also usesTwitter, and You Tube to check latest videos and 3D videos (AUCONT,AUACT) Uses Welcome to MySpace, Eskimi to chat with friends, exchange pictures and find the interests of others (COLCO)and Mix It.</p> <p>Eskimi more like Facebook (ARTIC), used for chatting with friends, for exchanging pictures, finding the interests of others and downloading pictures (AUACT,AUCONT) – like on Facebook</p> <p>Mostly uses the computer, mobile phone not user friendly sometimes (AUCONT,MULRP), uses a computer to log in to SN sites. Uses a 4Gigbyter to log on to Facebook or Eskimi (AUCONT)</p>	<p>ARTIC,AUACT, COA/SC,COLCO & CONV</p> <p>AUCONT,AUACT, FL&COLCO</p> <p>AUCONT,AUACT & COLCO</p> <p>ARTIC,AUCONT& AUACT</p> <p>AUCONT,AUACT & MULRP</p>
--	---	--	--

<p>387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430</p>	<p>mmh, social networking tools out of mmh, the classroom? How did you find it? Your experience. Student C: (Long pause). I don't understand this question. Can you please repeat the question? Researcher: From your experience of using mmh, the things that you mentioned, social networking tools like Twitter, Facebook, YouTube, mmh, all other things that you mentioned, Mix It etc. So, from your experience, how is it using those things out of the classroom, how is it? Student C: (Long pause) Ok. Experience of using the social networking is that... ok, from my side I... mmh, I've... ok I've learned a lot like from this. (Pause). You get... <u>you get to know things that you were not mmh, you were not even taught in class, you get to bring up some discussion in class, you get... you get to... to... to find out some new stuff outside and you bring them in class just for everybody to know.</u> (Pause). Researcher: Ok, mmh, ok, mmh, thank you. Now, mmh, what do you think should be the role of the instructor in our case mmh, the lecturer, when the students are informally using social mmh, networking tools? If mmh, the instructor, or the... the... the lecturer could come in, what role do you think he... he or she needs to play? Student C: Mmh, from my side I think the the... instructor should...should... should or let me say, should, should <u>advise us more</u>, and... and bri... bring us... <u>bring us close to these social networking</u>, just because <u>they help they build us</u>. They build us in the way that <u>we get to know a lot of things</u>, they build us in the way that we get to... to know to get to mmh, <u>find a lot of friends</u> and to know... <u>to know what type of... what type of person we</u>... mmh, people we are, and just in mmh, let me say for example like sometimes a perso... sometimes you wouldn't know who you are, but if the instructor... ok if <u>the instructor plays this ro... role by bringing us together</u>, then <u>you'll get to know who you are by asking friends</u>, you... <u>getting to know what... what type of friends is this and what interest</u> then you can put like your category into... mmh, the ca... your category into the same (friend) you're having. For example like my friend likes this and this, so I think that's the same thing I like but... I ne... but if you never realized it first but you can... know it at the moment. Researcher: Mmh, ok, so you said the... the instructor's role should be to advise, and to bring the students closer to social networking tools. Mmh, do you think that role of advising and bringing students closer to social networking tools, is sufficient to ensure effective learning outside mmh, the classroom, and can you just explain ye... why yes or why not? Student C: I think is sufficient, mmh, just because mmh, we can do learning we... <u>is not that we can only do learning inside the classroom but we can also do it outside the classroom. We can ask questions mmh, for example, for example on Facebook.</u> You can ask questions on Facebook. <u>You can do also classroom on Facebook. Things that you didn't und... you didn't understand in class you can ask a friend on Facebook.</u> Some... for example sometimes you didn't understand, we're different we've different characters. <u>So, sometimes a friend that you had in class, she... understands everything but for you you have to ... mmh, re-read or get another information</u>, just for you to... to join them together for you to understand. <u>So Facebook also helps us to do these things online</u>, without us wasting time to... like to... to... be in groups or do something else but we can also do it on Facebook. <u>Which's very... good.</u> Researcher: Ok, thank you, mmh, then mmh, can you please describe mmh, the relationship between what you learn in social networks and what is learn or taught in classes? Student C: (Long pause). Researcher: Is there any relationship between what you learn socially and what mmh, is learnt in class? Student C: There's a bit or... let me say <u>there's a relationship</u> but not that much, as... be... because <u>sometimes things that you ge... you learn in class... mmh, thing... things that you learn in class and</u></p>	<p>Has learnt a lot (REFL)-one learns things that were not even taught in class (FL), you bring up discussions in class, you get to find out new stuff outside and bring them in class for others to know (AUACT,COLCO&CONV)</p> <p>Instructor should advise students and bring students closer to SN (FL). SN sites build learners – they get to know a lot, help finding a lot of friends and help finding out who you are by asking friends (ARTIC,AUCONT,COLCO)</p> <p>Learning does not only take place in class (FL), but also outside by asking questions, (ARTIC,MULRP) e.g. on Facebook, by presenting a class on Facebook (CONV) and asking friends things not understood (COA/SC,COLCO). Some students get to understand easily, others need extra information to understand (MULRP). Facebook helps doing learning online, e.g. study groups, which is very good. (AUACT,AUCONT,REFL)</p> <p>There is relationship between what is learnt</p>	<p>AUACT, REFL, COLCO,FL& CONV</p> <p>FL,AUCONT, ARTIC&COLCO</p> <p>FL,AUCONT, AUACT,ARTIC, COLCO,COA/SC, MULRP,CONV& REFL</p>
--	--	---	--

<p>431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474</p>	<p>things that you ,you learn in social networking mmh, they're, there would be a big different... (Pause) mmh, th... that's why even <u>sometimes teachers or lectures, they use mmh, like mmh, information that a learners have researched</u>, students have researched, like for example they... they use the ideas of the... students (pause) for... for let me say in this way like, they'll..., <u>they'll even ask... things that they don't know, things that happens on Facebook, Facebook or Twitter, they'll even know...</u> they'll even ask in a way that mmh, what discussion do you guys have on Facebook, but <u>sometimes things that happens in class mmh, don't even go, let me say they don't even go hand in hand with the social networking</u> because there's... (long pause) mmh, (Researcher: Just continue.) mmh, the social networks, it helps, ok let me say in this way that, people when (pause) when you..., when you don't understand something, when you... <u>things that you don't understand in class, sometimes in social net... they're explained well in a way that'll make you more understand than in class.</u> Researcher: Mmh, ok, just mmh, to conclude that I understand exactly what you said, so you're saying the things that you learn in social networks... mmh..., did... you said they are more understandable (Student C: Ja) than what you learn in mmh, class? Student C: Yes. Researcher: Ok, thank you. Researcher:What skills have you acquired mmh, through social networking that you think mmh, could be used to support formal classroom learning? In other words learning in the classroom? Student C: (Long pause.) Researcher: The skills. Student C: (Long pause). Ok. (pause) Mmh, ok in this way the skills are... for example how..., the skills how to s... ok how to study, <u>you get to know how to study o... o... from social le... networking</u> just in the way that mmh, sometimes you're given examples like, when... if you want to stu ... to study and know what you've stud... to recall what you've studied, you can jot down a specific... specific important point and ways that you don't understand, just to get the... the example, to get the meaning later on when you're done. Mmh, also, (pause) ok, how... <u>also how how to concentrate on a specific task that done,</u> that you don't know (pause) mmh, and the other... the other thing is <u>how... (pause) ja, how to find friends</u> (long pause). Researcher: Ok. Mmh, thank you, mmh, and this was our last question, so we're done with the interview and...aa...thank you. Student D Interview Transcript Researcher: Mmh, this is an interview, with Student D, one of the students mmh, doing LIP, mmh, the interview took place in the researcher's office, and on the...mmh, 31st of October, this year, and mmh, permission to interview the student was asked for well in advance, and mmh, for confidentiality, the real name of the student was not used mmh, during the interview. Researcher: Mmh, Student D, I'm going to ask you mmh, a few questions, so that you provide me with mmh, the data that I need in order to write my mmh, research paper. Mmh, the first question is: How do you use your mobile phone outside the classroom? Student D: Mmmh, (pause). Researcher: Take your time. Student D: Thank you, mmh, normally <u>outside the classroom I use my mo... my mobile phone for many things.</u> Sometimes if I'm ... maybe I missed a class at school I'll just <u>text my friends to ask them about something which have been taught which I missed,</u> I text them. Normally I text them. And <u>sometimes in the evening I call,</u> because sometimes I have free calls. And <u>I've friends who're on some social networks</u></p>	<p>socially and things learnt in class (CONV). Sometimes there is a big difference between things learned in class (FL) and in SN. Sometimes instructors use information/ideas researched by students (CONV, COLCO). Instructors ask about things that have happened on Facebook that they don't know, but sometimes things learned in class don't go hand in hand with SN (MULRP), sometimes things are explained well in social networking, in a way that will make you understand than in class. (MULRP, ARTIC)</p> <p>Gaining study skills from SN, as well as concentration skills (AUACTION), and you learn how to find friends. (ARTIC)</p> <p>Using mobile phone for many things outside class, (ARTIC) e.g. texting friends to ask about subjects missed (AUACTION, COLCO), calling other students, and searching friends</p>	<p>FL,AUCTION, ARTIC, COLCO, MULRP&CONV</p> <p>AUACTION,ARTIC</p> <p>AUCTION, AUACTION,ARTIC& COLCO</p>
--	--	--	---

<p>475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518</p>	<p>on the Internet, sometimes I search for them I even ask them on the Internet. So, normally it's my phone which I use.</p> <p>Researcher: Thank you. Mmh, how does your mobile phone enable you to learn from each other, that is to learn from other students?</p> <p>Student D: Mmh, in <u>terms of maybe you attended a class and you were in the class and you didn't understand anything that a lecture taught</u>, sometimes maybe you are scared of facing your friend you're... that you are not used to, the best way you can is <u>you just text them and you ask them about everything they'll tell you</u>, because sometimes even <u>when you call them you'll be more active to talk to them rather than in person</u>. You've a lot to ask them. Sometimes <u>you note down what you don't understand, anything from class, or maybe something which was taught back... back in days, you ask them and you know them</u> and they'll explain to you. That's how normally I learn from my... from my friends using a mobile phone.</p> <p>Researcher: Mmh, thank you, then mmh, what do you learn from each other outside the classroom?</p> <p>Student D: <u>Outside the classrooms with my friends sometimes a... at school ground since we spend more hours at school</u>, sometimes you'll sit and... and <u>chill outside the environment of Polytech</u>. Ok, <u>what we normally talk about is not only about the school things or ed... academic related information, sometimes we go much into the details to talk about our family issues and how we live, and ho... how emotional we are, just to express our feelings to our friends</u>, especially to the people that you don't know more because for me <u>I love spending time with the people that I don't know than the people that knows me</u>.</p> <p>Researcher: Ok, thank you, mmh, then, mmh, what social networking tools do you use for learning out of the classroom?</p> <p>Student D: <u>Out of the classrooms normally our lectures advice us to... to visit some le... to visit some learning websites, normally for English we also visit some... some sites, and of... we have sites like this one, the sites... the famous sites now in the world, Facebook and the Twitters</u>, but normally <u>I use Facebook</u>. Mmh, and when I... <u>when I first came at Polytech I had friends but I didn't know their names and I didn't ask them in person</u>. But when <u>I saw their pictures on Facebook I logged in</u>, I asked them, everything about them, and sometimes they'll tell you, like <u>I have a friend who was schooling here at Polytech but then now she's studying in Phillipines</u>. I n... <u>I had a problem with Mathematics, so I'll... I ask her through Facebook and then she send me all the formulas</u>, everything from a book and advise me. And every time she'll tell me: "Around ten text me and ask me, inbox me and to tell me something that you don't understand, I'll help you out".</p> <p>Researcher: Ok, thank you, mmh, then, what device mmh, do you use to access mmh, social networking tools? For example, is it your mobile phone, mmh, desktop computer, or what?</p> <p>Student D: Mmh, <u>normally I use my mobile phone</u>, mmh, and sometimes I use desktop computer. That's <u>when I... visit home, or maybe when I visit the library</u>, because <u>where I... where I stay I don't have a desktop computer</u>. Ok, so, sometimes when the co... the deskto... or what? <u>My phone won't show everthing that I need like when you search for information on the Internet sometimes it won't view everything</u>. Sometimes it will state that <u>the document is too large, so you have to use a desktop computer</u>. Like when you have to... to search about something <u>to practice the listening skills for English</u>, you have to... to use a desktop computer so that you can be able to listen to a lot of examples in the world.</p> <p>Researcher: Ok. Mmh, thank you, mmh, then, mmh, can you please describe your experience of using social networking tools out of the classroom? What experience do you have in using social</p>	<p>on social networks/Internet to ask them. (AUCONT),</p> <p>Texting and asking about class work you didn't understand (FL,AUACT,COA/SC), calling friends to ask about class work, noting down what you don't understand in class and ask friends later outside the class (CONV, COLCO)</p> <p>While chilling out in the environment of PoN, students talk about family issues, express feelings to friends, (AUCONT,AUACT) loves spending time with unknown people (ARTIC)</p> <p>Lecturers advise visiting some websites (FL), Facebook & Twitters famous (ARTIC,REFL), had friends when came to PoN but didn't know their names but did not ask them in person, saw pictures on Facebook and logged in. (EXPER,AUCONT) Has a friend who was at Poly but now studying in Phillipines, had a problem with Maths and asked her through Facebook and was send all the formulas. (COLCO,COA/SC,CONV))</p> <p>Normally uses a mobile phone, sometimes a desktop computer when at home or in library. (AUCONT) No access to computer at home. Phone doesn't show everything e.g. when searching for information on the Internet, sometimes document too large, so you have to use a computer, (ARTIC,AUACT) a.g. when practicing listening skills for English</p>	<p>FL,AUACT, COLCO,COA/SC & CONV</p> <p>AUCONT,ARTIC& AUACT</p> <p>FL,AUCONT, AUACT,ARTIC, COLCO,REFL, EXPER,COA/SC& CONV</p> <p>AUCONT,ARTIC& AUACT</p>
--	--	---	--

<p>519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562</p>	<p>networking tools out of the classroom? Student D: Mmh, it has taught me a lot, and mmh, <u>in the classroom sometimes I wouldn't know more,</u> but when I started <u>using social networking tools outside the classrooms I've... I've... I've started to gain more information,</u> and <u>it... it improved my... my... my concent... my concentrating skills</u>and the things of... <u>sometimes in the class you won't really... you'll be there but you miss out things.</u> But then <u>when you go visit a... the learning social networking tools you have this I... you're alone and you start concentrating more and... and understand the things.</u> Researcher: Ok, mmh, thank you, mmh, then, what do you think mmh, should be the role of the instructor, in our case mmh, the role of the lecturer, when students are learning informally using social networking tools? Can the instructor maybe do something there? What... could it be? Student D: Yes, the instructor can do a lot of things or nor... when students use informal... when they use social networks informally you... as an instructor you have to tell them that for e... for example <u>when you use Facebook. You have to tell them is not about only chatting and posting things which are not valid.</u> Sometimes on your wall you can <u>post some... something when you don't understand a question.You post a question on Facebook wall so that people can comment and help you answers.</u> And sometimes you... you shouldn't misuse like the social network tools, the informally ones. Instead of spending time on Facebook maybe get time to search about things that are related to learning, so you can balance, rather than spending more time on Facebook doing things which are not part of learning. Researcher: Ok, thank you. Do you think the role of the... the instructor, like mmh, to give advice to students, mmh, is sufficient to ensure effective learning outside the classroom? Student D: Mmh, I think yes, why because s... some... we're different... people are different,<u>people are different on how they take advices.</u> So may... some... some will be able to... to... to get... to get the what? The stuff... the instructor's advices of using effecting learning outside, and why not because <u>some people are ignorant,</u> like today's world, even if you tell some... a... a student not to... to misuse... to misuse the what? the effective learning outside the... outs... outside the classroom they won't... they won't listen to you, so people are different on how they take advices. But somehow the <u>instructor can... can... can show ... can even like give out examples which for e... reality examples of people of how to like a student to understand this (how can I say this now) (long pause).</u> And sometimes our... it's not only the instructor's role it's <u>meti... our parents also can help us... can help us to... to ensure effective learning outside the classroom.</u> And sometimes it is not only the intru... the instructors, <u>sometimes you can visit a lot of people in the world that can help you out with this learning from outside.</u> Researcher: Ok,mmh, thank you, and then can you please describe the relationship between what you learn in social networks, and what is learnt in class? Is there any relationship or connection? Student D: Mmh, ok, I'll start with what we learn in class,What we learn in... <u>in class is just like we highlight the view... they shorten it... they just summarise it</u> like sometimes <u>what you learn in social networks it's more into details.</u> You... you... when... when you... when the teacher e... <u>when the lecture explains something in the class,</u> mmh, <u>and then maybe you visit the net,</u> or some... or <u>the social networks, you still... ask and analyse it and compare it to what you were taught in class.</u> Yes. (Long pause). Researcher: Ok. Mmh, what skills have you acquired mmh, through social networking, mmh, that you think could be used to support formal learning or, formal classroom mmh, learning? Student D: Mmh, the skills that I have acquired are <u>using typing skills.</u> I've learnt to <u>type very... quite fast,</u> 'cause when you <u>chat with your friends through Facebook...</u> the social networks you'll end up... the more you chat sometimes... because for me I don't use... I don't shorten... I don't use sms languages.</p>	<p>Sometimes would not know more in class (FL), started gaining more information after using SN tools outside the class (ARTIC), it has improved concentration, in class you miss out things (MULRP). When using SN sites you are alone and concentrate more-it enables understanding. (AUCONT)</p> <p>Instructor needs to guide students when using SN tools (ARTIC,COA/SC), e.g telling students to post when they don't understand, (AUACT) e.g. posting a question on Facebook, people comment and help you (CONV,COLCO) .</p> <p>People different in taking advice (ARTIC), some people are ignorant, instructor can also show real examples (AUCONT), parents can also help, to ensure effective learning, (COLCO,COA/SC) students can also visit a lot of people in the world that can help. (COLCO)</p> <p>In class lessons are only highlighted or summarised (FL,MULRP,ARTIC),in SN lessons are in details. In social networking students ask, analyse and compare with what they were taught in class. (CONV,AUACT, COLCO)</p> <p>Typing skills acquired through SN, (AUACT) Chatting through Facebook improves writing skills (CONV,ARTIC), computer corrects</p>	<p>FL,AUCONT, ARTIC&MULRP</p> <p>ARTIC,AUACT, COA/SC,COLCO &CONV</p> <p>ARTIC,AUCONT, COA/SC&COLCO</p> <p>FL,ARTIC, AUACT,MULRP, COLCO&CONV</p> <p>ARTIC,AUACT, MULRP&CONV</p>
--	--	---	--

<p>563 564 565 566 567 568</p>	<p>So, sometimes when... <u>especially when you use a desktop computer, when you type they always correct you that what you're typing is wrong.</u> So, my wr... <u>my writing skills have improved</u> also, ja, that's... that's <u>the skills that I see that I a... acquired.</u> And <u>this will support me in the formal classroom learning.</u> Researcher: Ok, mmh, thank you Student D, mmh, thank you for taking mmh, off your time to help me, thank you.</p>	<p>typing errors and this helps with formal learning. (MULRP)</p>	
--	---	---	--

Appendix F: Matrix of coded pilot interviews: Stage 2: Data reduction

Codes: **AUCONT** = authentic context, **AUACT** = authentic activity, **EXPER** = expert performance, **MULRP** = multiple perspectives, **COLCO** = collaborative construction, **REFL** = reflection, **ARTIC** = articulation, **COA/SC** = coaching/scaffolding, **INTASS** = integrated assessment, **FL** = formal learning, **CONV**=convergence

Text no.	Coded key phrases and statements	Authentic context	Authentic activity	Expert performances & modeling processes	Multiple roles and perspectives	Collaborative construction of knowledge	Reflection	Articulation	Coaching and scaffolding	Integrated assessment	Formal learning	Convergence
F15-21	Mobile phone used in various ways outside the class (ARTIC,MULRP): listening to music, playing games, accessing the Internet, accessing SN sites, video recording and chatting . (AUCONT,AUACT	x	x		x			x				
F24-31	Mobile phones help with learning from each other (ARTIC,COLCO,MULRP), using SN sites, communicating with other students, creating groups, meeting and discussing certain topics, and getting different ideas from different people (AUCONT,AUACT,COLCO)	x	x		x	x		x				
F35-46	Learning a lot of things outside the class as learning doesn't stop at school ,(CONV) like how to interact with different people, (COLCO) getting information on how to act around people and find out their thoughts and upgrading oneself (AUCONT,AUACT, MULRP)	x	x		x	x						x
F49-63	Facebook the main one, (ARTIC) easily accessible, provides information on new devices, and assignments, (AUCONT,CONV) enables viewing comments from different people, and they give input, (AUACT,COLCO) Enables learning from different people (COLCO)	x	x			x		x				x
F66-82	Skype is mainly for business, not as popular as Facebook (ARTIC,AUCONT). Is easier to chat to someone or to ask someone questions if it's face-to-face (MULRP,AUACT), Skype enables translation (AUCONT)	x	x		x			x				
F85-94	Uses mobile phone in most cases, but also computer sometimes (AUCONT). Phone easier, easily accessible, cheaper, and service providers lenient on taking credit on mobile phones than laptops. (ARTIC,AUCONT,MULRP)	x			x			x				

F97-111	Have experienced things not used to or was not aware of (ARTIC,AUCONT), interacting with unknown people on SN sites, and tracking people on Facebook (AUACT). SN sites enable communication with different people; they bring people closer to each other. (COLCO,MULRP)	x	x		x	x		x					
F115-133	Instructor should encourage and motivate the learners, interacting with students on SN sites (AUACT), posting about topics discussed in class (CONV) -learners find it difficult to concentrate in class (FL),on SN sites learners at the comfort of theirF homes and they access SN sites on free will (AUCONT). Learners to give input if lecturer posts something on topicsF discussed in class (COLCO,CONV), then he/she tries correcting them on SN sites (COA/SC,CONV)-is kind of learninFg and should be encouraged (ARTIC).	x	x			x		x	x		x	x	
F138-156	Lecturer creates a group on SN sites for certain students to join (AUCONT,CONV), and lecturer uses the same group to communicate and discuss issues with students in the comfort of his/her home as they would in class (CONV, AUACT,COLCO)- social networks sites very attractive to teenagers (ARTIC), different environment from the one in class (ARTIC,FL), learners feel free, confident and at ease (ARTIC).	x	x			x		x			x	x	
F159-177	Learned that on SN sites there are things one can do in his/her course that one didn't know, (ARTIC)e.g. In IT course a I asked a friend how to rectify a password (AUACT) and was given a solution, just from past experiences (EXPER,COA/SC), what he said was quite similar to what I learned in class (CONV). Later in class the lecturer mentioned slightly the same thing I was told (by a friend) (CONV). Just because of that status/ post/ comment, you suddenly know (COLCO). SN sites inform you indirectly, and in most cases indirect manners are the way we learn how to remember things (MULRP). Still knows things learnt from SN sites (AUCONT).	x	x	x	x	x		x	x				x
F181-204	SN sites give confidence skills, e.g. I usually keep to myself, but on SN sites that doesn't matter-can interact with anyone. (ARTIC) Learned a skill to get to know people better on SN sites to feel comfortable when they meet physically. (AUACT) Texting and smsing improves typing skills, chatting increases typing speed on laptop and improves English as you speak a lot, and also improves writing skills (CONV,MULRP). Texting in full improves vocabulary-you write and read better , faster. (CONV) SN sites give you information and knowledge you'll need one day (AUCONT)	x	x		x								x
F217-221	Uses phone outside class to go on the Internet and google (ARTIC,AUCONT) inboxing friends and asking them if they know something.(COLCO,AUACT,COA/SC)	x	x			x		x	x				
F226	Writing sms or text messages (AUACT)		x										
F230-233	Asking for information (AUACT)		x										
F237-239	A lot is learnt, e.g. operating different mobile phones, searching for information (AUCONT)andcommunicating with others on SN sites (AUACT,COLCO)	x	x			x							
F242-244	WhatsApp a new SN tool-introduced in 2012. (ARTIC,AUCONT)	x						x					
F247-254	Registering WhatsApp requires downloading and installing it in your phone, updating contacts to show on it (ARTIC,AUCONT), has a platform where to write for others to comment, or inbox you to help you understand (AUACT,COLCO,COA/SC)	x	x			x		x	x				
F258-261	Uses both the mobile phone and computer (AUCONT,ARTIC)	x						x					

F270-274	Has learnt a lot of things he/she didn't know (ARTIC). Has helped friends to learn indirectly (COLCO,COA/SC)							X			X	X					
F279-283	Instructor needs to show students how to access Internet, websites where students should go (COA/SC), and let learners do the rest themselves (ARTIC)										X	X					
F288-295	Showing learners how to do everything is like spoon feeding them (ARTIC). Instructor should only show learners how to access SN tools (COA/SC), then they do the rest themselves.(AUACT)		X								X	X					
F298-301	What is searched on Internet correlates with what is learned in class (AUCONT,CONV)	X															X
F306-309	What is done outside class is related to what is done in class, (REFL,CONV) e.g. debating about things done or heard in classes on SN sites (AUACT,CONV).		X														X
F315-317	Skills acquired on SN sites: accessing information, and communicating with other people or institutions (AUACT,AUCONT,COLCO)	X	X					X									
F329-336	Uses phone outside class to ask questions concerning what is not understood, (COLCO,COA/SC) ask friends and family members, researching on the Internet, texting other learners to ask, (AUACT calling other learners, and when bored, and also to find and text friends (AUCONT)	X	X					X				X					
F339-341	Calling friends to discuss when bored (AUACT,AUCONT)	X	X														
F344-353	Mobile phone enables learning from each other, (ARTIC,AUACT,COLCO) e.g. spelling, and enables learning from mistakes with the help of friends (ARTIC,COA/SC), one learns by asking friends questions (COLCO), and asking friends that know better than you (COA/SC) about class work (CONV).		X					X			X	X					X
F356-362	Learning general things around the world, (AUCONT,AUACT) school related stuff (FL), and learning the interests of others to build relationships (COLCO).	X	X					X								X	
F365-369	Uses Facebook – has more than 800 mil users. (AUCONT) Also uses Twitter, and You Tube to check latest videos and 3D videos (AUCONT,AUACT) Uses Welcome to MySpace, Eskimi to chat with friends, exchange pictures and find the interests of others (COLCO)and Mix It.	X	X					X									
F373-376	Eskimi more like Facebook (ARTIC), used for chatting with friends, for exchanging pictures, finding the interests of others and downloading pictures (AUACT,AUCONT) – like on Facebook	X	X								X						
F381-385	Mostly uses the computer, mobile phone not user friendly sometimes (AUCONT,MULRP), uses a computer to log in to SN sites. Uses a 4Gigbyter to log on to Facebook or Eskimi (AUCONT)	X						X									
F392-395	Has learnt a lot (REFL)-one learns things that were not even taught in class (FL), you bring up discussions in class, you get to find out new stuff outside and bring them in class for others to know (AUACT,COLCO,CONV)		X					X	X						X	X	

F401-411	Instructor should advise students and bring students closer to SN (FL). SN sites build learners – they get to know a lot, help finding a lot of friends and help finding out who you are by asking friends (ARTIC,AUCONT,COLCO)	X				X		X			X	
F416-424	Learning does not only take place in class (FL), but also outside by asking questions, (ARTIC,MULRP) e.g. on Facebook, by presenting a class on Facebook (CONV) and asking friends things not understood (COA/SC,COLCO). Some students get to understand easily, others need extra information to understand (MULRP). Facebook helps doing learning online, e.g. study groups, which is very good. (AUACT,AUCONT,REFL)	X	X		X	X	X	X	X		X	
F429-441	There is relationship between what is learnt socially and things learnt in class (CONV). Sometimes there is a big difference between things learned in class (FL) and in SN. Sometimes instructors use information/ideas researched by students (CONV,COLCO). Instructors ask about things that have happened on Facebook that they don't know, but sometimes things learned in class don't go hand in hand with SN (MULRP), sometimes things are explained well in social networking, in a way that will make you understand than in class. (MULRP, ARTIC)				X	X		X			X	X
F451-457	Gaining study skills from SN, as well as concentration skills (AUACT), and you learn how to find friends. (ARTIC)		X					X				
F471-476	Using mobile phone for many things outside class. (ARTIC) e.g. texting friends to ask about subjects missed (AUACT,COLCO), calling other students, and searching friends on social networks/Internet to ask them. (AUCONT)	X	X			X		X				
F479-486	Texting and asking about class work you didn't understand (FL,AUACT,COA/SC), calling friends to ask about class work, noting down what you don't understand in class and ask friends later outside the class (CONV, COLCO)		X			X			X		X	X
F488-494	While chilling out in the environment of PoN, students talk about family issues, express feelings to friends, (AUCONT,AUACT) loves spending time with unknown people (ARTIC)	X	X					X				
F497-506	Lecturers advise visiting some websites (FL), Facebook ,Twitters famous (ARTIC,REFL), had friends when came to PoN but didn't know their names but did not ask them in person,saw pictures on Facebook and logged in.(EXPER,AUCONT) Has a friend who was at Poly but now studying in Phillipines, had a problem with Maths and asked her through Facebook and was send all the formulas. (COLCO,COA/SC,CONV)	X		X		X	X	X	X		X	X
F509-516	Normally uses a mobile phone, sometimes a desktop computer when at home or in library.(AUCONT) No access to computer at home. Phone doesn't show everything e.g. when searching for information on the Internet, sometimes document too large, so you have to use a computer, (ARTIC,AUACT) a.g. when practicing listening skills for English.	X	X					X				
F520-525	Sometimes would not know more in class (FL), started gaining more information after using SN tools outside the class (ARTIC), it has improved concentration, in class you miss out things (MULRP). When using SN sites you are alone and concentrate more-it enables understanding. (AUCONT)	X			X			X			X	
F529-536	Instructor needs to guide students when using SN tools (ARTIC,COA/SC), e.g telling students to post when they don't understand, (AUACT) e.g. posting a question on Facebook, people comment and help you (CONV,COLCO) .		X			X		X	X			X
F539-549	People different in taking advice (ARTIC), some people are ignorant, instructor can also show real examples (AUCONT), parents can also help, to ensure effective learning, (COLCO,COA/SC) students can also visit a lot of people in the world that can help. (COLCO)	X				X		X	X			
F552-	In class lessons are only highlighted or summarised (FL,MULRP,ARTIC),in SN lessons are in details. In social networking students ask, analyse and compare with what they were taught in class. (CONV,AUACT,		X		X	X		X			X	X

556	COLCO)												
F560-566	Typing skills acquired through SN, (AUACTION). Chatting through Facebook improves writing skills (CONV,ARTIC), computer corrects typing errors and this helps with formal learning. (MULRP)		x		x			x					x

Appendix G: Analysis of WhatsApp authentic learning activity, Stage 1: Data reduction

Codes: **AUCONT** = authentic context, **AUACT** = authentic activity, **EXPER** = expert performance, **MULRP** = multiple perspectives, **COLCO** = collaborative construction, **REFL** = reflection, **ARTIC** = articulation, **COA/SC** = coaching/scaffolding, **FL** = formal learning, **CONV**=convergence

Text no.	Authentic unedited WhatsApp activity	Coded key phrases and statements signaling to codes	Emergent codes
1	18:26, 2013/15/7 - Student AA joined		
2	18:26, 2013/15/7 - Student BB joined		
3	18:26, 2013/15/7 - Student CC joined		
4	18:26, 2013/15/7 - Student DD joined		
5	18:26, 2013/15/7 - Student EE joined		
6	18:26, 2013/15/7 - Student GG joined		
7	17:38, 2013/15/7 - Student CC: So <u>should i start conducting my reseachtomorrow?</u>	Asking if can start conducting research the following day.	
8	18:38, 2013/15/7 - You: I am unable to add Student FF. I guess <u>only 6 students can join. If you guys can add</u>	(Needs guidance) (COA/SC)	COA/SC
9	<u>her, pls do.</u>	Only 6 students can join, add if you can(Addressing group) (COA/SC)	
10	17:43, 2013/15/7 - Student DD: <u>Who is the one that should be added, and who are the 6 students?</u>	Asking the one that should be added, and who the 6 are.(Needs guidance) (COA/SC)	COLCO
11	17:47, 2013/15/7 - Student BB: [Name withheld], <u>check the group members to find out the 6 students</u> who are		
12	already added..	Should check the group members to find out the 6 students(Student guiding another student) (COA/SC)	COA/SC
13	17:48, 2013/15/7 - Student BB: Is added now.	I' m student what?(Needs guidance) (COA/SC)	COA/SC
14	17:59, 2013/15/7 - Student CC: <u>I m student what?</u>	Can we start from tomorrow?(Guidance) (COA/SC)	COA/SC
15	18:01, 2013/15/7 - Student CC: Ky. <u>Can we start from tomorrow?</u>	Introducing WhatsApp group (COA/SC) The Suit short story (FL), problem of gender based violence, passion killings that have increased (AUCONT). Use this platform to contribute (CONV), get opinions of 3 to 4members of the community (EXPER), share your findings with others (COLCO) in WhatsApp ,post your comments on the relationship between The Suit and what people said to WhatsApp. Are there similarities? <u>What can the nation learn from this story?</u> You have up to 29	COA/SC,FL, AUCONT,CONV, EXPER,COLCO, AUACT,REFL& MULRP
16	18:01, 2013/15/7 - Student BB: Yes		
17	19:04, 2013/15/7 - You: Hi group members. <u>This is our WhatsApp group on The Suit short story and the</u>	What can the nation learn from this story?(REFL&MULRP).	
18	<u>problem of gender based violence, in particular passion killings that have increased in the country. Use this</u>	You can start even tomorrow	COA/SC
19	<u>platform to contribute to this national problem. Remember, u are to get the opinions of 3 to 4 members of the</u>		
20	<u>community on gender based violence that has increased, in particular passion killings. Share your findings with</u>		
21	<u>others in WhatsApp group. At the end, post your comments on the relationship between The Suit and what</u>		
22	<u>people said to WhatsApp. Are there similarities? What can the nation learn from this story?</u> You have up to 29		
23	July to work on this task.		
24	19:06, 2013/15/7 - You: <u>You are welcome, you can start even tomorrow.</u>		
25	18:08, 2013/15/7 - Student AA: Ok		
26	18:09, 2013/15/7 - Student CC: Ok		
27	18:09, 2013/15/7 - Student DD: Ok		
28	18:10, 2013/15/7 - Student BB: Alright.		
29	19:12, 2013/15/7 - You: Thanks a lot student BB for adding the missing student, but let us keep the names of		
30	the participants secretiveand only use nick names.		
31	18:15, 2013/15/7 - Student DD: Sure	Findings: Most of the people interviewed	
32	18:17, 2013/15/7 - Student CC: Ky,will do so	(COLCO,AUACT) think that gender-base violence and	
33	18:55, 2013/15/7 - Student GG: Ok.	passion killings in the country are caused by money	
34	12:49, 2013/16/7 - Student AA: <u>My findings are that most of the people that I interviewed. Think that gender-</u>	issues, misunderstanding, trusting issues, cheating, as	COLCO,AUACT, EXPER,MULRP& ARTIC

<p>35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78</p>	<p>base violence and passion killings in the country are caused by money issues, misunderstanding, trusting issues, cheating on one another, as well as alcohol and drugs abuse.</p> <p>14:04, 2013/16/7 - You: Thanks for your input, but <u>report your findings in such a way that the reader can tell how many people were interviewed</u>, e.g. The 1st person I interviewed is of the opinion that . . . etc. U can also add evidence e.g. by adding audio files, images of gender based violence etc.</p> <p>13:07, 2013/16/7 - Student AA: Ok</p> <p>13:08, 2013/16/7 - Student CC: Ok</p> <p>13:27, 2013/16/7 - Student CC: The first person i interviewed about the cause of gender based violence ,her emphasises are on women being going on with men just because of money .<u>Some women end up cheating their men</u> with men that they really love with their hearts.As a result of this they could find themselves being harshly violated or killed .She also add that most men trust their women than the way women trust them which mostly lead to <u>men feel betrayed</u> .</p> <p>15:31, 2013/16/7 - You: Good beginning, group members, <u>feel free to comment on postings</u>.</p> <p>14:39, 2013/16/7 - Student CC: Ok</p> <p>14:43, 2013/16/7 - Student AA: Ok</p> <p>15:45, 2013/16/7 - Student AA: <u>audio</u></p> <p>16:13, 2013/16/7 - Student CC: <u>The person you interviewed is right</u> , by saying we must come together and fight antill this issue come to an end .Thanks for your audio [Name withheld].</p> <p>16:43, 2013/16/7 - Student AA: Your welcome. <u>I think we should come up with awareness campaign about gender-base violence n passion killings</u>.</p> <p>17:54, 2013/16/7 - You: <u>Good job!</u> I also listened to the audio clip.</p> <p>16:55, 2013/16/7 - Student AA: <u>audio</u></p> <p>17:36, 2013/16/7 - Student AA: Ok, thanks</p> <p>17:46, 2013/16/7 - Student CC: <u>Your idea of a campaign will work</u> .If we to have a campaign on this ,how will we start with it??</p> <p>18:19, 2013/16/7 - Student AA: <u>We can start by making posters n paste them around campus</u>.</p> <p>18:20, 2013/16/7 - Student CC: Ok</p> <p>18:23, 2013/16/7 - Student AA: What do u think we can do?</p> <p>18:43, 2013/16/7 - Student CC: <u>I think your idea of posting posters gonna work</u> or you have something that you think gonna work too?</p> <p>18:50, 2013/16/7 - Student GG: Yeah,,<u>that is a good idea</u> [Name withheld],...</p> <p>19:53, 2013/16/7 - You: Good idea, <u>but it takes time to solve a problem of this nature</u>. For now, let us <u>just find out how members of the public feel about it and compare their views with our short story The Suit towards the end of our project</u>.</p> <p>19:13, 2013/16/7 - Student GG: The first men iinterviewed stated that, basically <u>passion killing is mostly caused by both us men and women, guys often spend to much on girls trying to impress them, and mostly some girls try to be inlove with guys just to get what the guy have but not to love the guy for who is he</u>, this makes girls falling in love more often even in one day. At the end <u>this will lead to guys making Decision of killing their lovers</u>. He also emphasised <u>more on what should be done to prevent this serious problem</u>, whereby he mentioned about the <u>idea of campaigning, counselling for those that need help psychologically and posters all over the country</u>.</p> <p>20:20, 2013/16/7 - You: Good contribution Student GG!</p> <p>20:00, 2013/16/7 - Student CC: Ky</p> <p>20:00, 2013/16/7 - Student CC: Ky ,i will keep up that</p>	<p>well as alcohol and drug abuse. (EXPER,MULRP, ARTIC)</p> <p>Report findings in a way that the reader can tell how many people were interviewed(Guidance) (COA/SC)</p> <p>Findings: Women cheating because of money and become victims of gender-basedviolence (GBV), and men feel betrayed. (AUACT,EXPER,MULRP,COLCO)</p> <p>Feel free to comment on postings (COA/SC)</p> <p>Uploading audio clip of an interview with a community member) (AUACT,COLCO)</p> <p>The person you interviewed is right. (MULRP,ARTIC)</p> <p>Suggesting awareness campaigns. (AUCONT,AUACT,MULRP,COLCO)</p> <p>Uploading audio clip. (AUACT&COLCO)</p> <p>Idea will work, but how do we start? (ARTIC,COLCO)</p> <p>Suggestion to start campaign by making posters and paste them around campus. (ARTIC,COLCO,AUCONT&AUACT)</p> <p>Confirming that the posters idea will work (ARTIC, COLCO)</p> <p>Supporting the idea (ARTIC,COLCO)</p> <p>Now, letus just find out how members of the public feel. (COLCO,COA/SC) Compare public views with our short story The Suit towards the end of our project. (CONV)</p> <p>Findings: passion killing is mostly caused by both men and women, (ARTIC)suggested multiple solutions, i.e. campaigns, counseling and displaying posters. (MULRP,AUCONT,AUACT,EXPER,COLCO)</p>	<p>COA/SC</p> <p>AUACT,EXPER, MULRP&COLCO</p> <p>COA/SC</p> <p>AUACT,COLCO</p> <p>ARTIC&MULRP</p> <p>AUACT,AUCONT, MULRP&COLCO</p> <p>AUACT&COLCO</p> <p>ARTIC&COLCO</p> <p>ARTIC,COLCO AUCONT&AUACT</p> <p>ARTIC&COLCO</p> <p>ARTIC,&COLCO</p> <p>COA/SC,COLCO, CONV</p> <p>ARTIC, MULRP, AUCONT,AUACT, EXPER&COLCO</p>
--	--	---	--

79	20:08, 2013/16/7 - Student EE: <u>The first person I interviewed was a lady. She clearly stated that Passion Killing is a misunderstanding or lack of understanding between girlfriend and boyfriend. It is usually caused by money or the problem arises when there is someone cheating between the two parties. In the case of a women cheating and then wanting to break up with the Guy . It causes a problem as the guy tends to claim the girl was using him and can't tend to want to accept the break up= which leads to our main problem in Namibia and around the world. " Passion Killing " In my point of view, one can look at this problem in many different ways.</u>	Findings: Passion killings in Namibia and around the world result from lack of understanding, and are caused by money and cheating-many different things. (ARTIC,AUACT,COLCO,EXPER,MULRP)	ARTIC,AUACT, COLCO,EXPER & MULRP
80	20:14, 2013/16/7 - Student CC: <u>You really right because i have heard of many women and children being killed because the man doesn't want a breakup..but some guys are selfish too.....</u>	You're right- have heard of many women and children being killed because men don't want to break up. (EXPER,ARTIC,AUACT)	EXPER,ARTIC& AUACT
81	21:13, 2013/16/7 - You: <u>Good to all of you who have started</u> conducting your interviews. You did a great job.	Good to all of you who have started (COA/SC)	COA/SC
82	20:17, 2013/16/7 - Student CC: Thanks very much for a compliment		
83	7:35, 2013/17/7 - Student BB: Morning members, i would like to ask if the emphasis	I would like to ask if the emphasis is on who is the cause, solutions or both (Needs guidance) (COA/SC, COLCO)	COA/SC&COLCO
84	7:38, 2013/17/7 - Student BB: Morning members? <u>I would like to ask if the emphasis is on who is the cause, solutions or both?</u>	Both	COA/SC
85	7:40, 2013/17/7 - Student CC: <u>Both</u>	Just ask members of the public how they feel about e.g. passion killings(Guidance) (COA/SC,COLCO)	COA/SC&COLCO
86	9:30, 2013/17/7 - You: To respond to Student BB, <u>just ask members of the public how they feel about e.g. passion killings that have increased in the country. Don't worry about the solution at this stage.</u>		
87	8:32, 2013/17/7 - Student CC: Ok		
88	13:06, 2013/17/7 - Student AA: <u>audio</u>	Uploading audio clip (Interview with public member)	AUACT&COLCO
89	13:06, 2013/17/7 - Student AA: <u>audio</u>	Uploading audio clip (Interview with public member)	AUACT&COLCO
90	13:08, 2013/17/7 - Student AA: <u>audio</u>	Uploading audio clip (Interview with public member) (AUACT,COLCO)	AUACT&COLCO
91	14:32, 2013/17/7 - You: Good job Student AA. I listened to your 2nd interview that is in an audio file. I could not open the 3rd audio file but will try again later.	What must I now do, interview more people? (Needs guidance) (COA/SC)	COA/SC
92	13:38, 2013/17/7 - Student AA: Ok, <u>what must I now do, interview more people?</u>	3 people interviewed enough, continue responding to postings (COA/SC)	COA/SC
93	16:10, 2013/17/7 - You: <u>The 3 people u have interviewed could be enough. Just continue responding to the postings of your group members</u> and be ready to compare your findings to The Suit short story next week.		
94	15:24, 2013/17/7 - Student AA: Ok		
95	17:03, 2013/17/7 - Student BB: The first man I interviewed about gender based violence is of the opinion that <u>both women and men can be the cause. He elucidated that nowadays people are no longer dating for love but for what the person has and faith is lacking. "Sometimes, women demand too much from their men and later they decide to end the relationship while the man had already spent a lot on her. Thus, they end up being violated to the extend of loosing theirlives. Besides, men can also force women to accept their offer thinking that they are taking their advantages of loving them. If the lady rejects the offer, apparently she gets from her other boyfriends. In the end when she decides to end the relationship, the guy will not accept it because he had spent a lot on her but he was the one forcing the lady to take it."</u> He clarified.	Findings: Both women and men can be the cause, people nolonger dating for love but possessions, women demanding too much from men and end relationships later, men forcing women to accept offers. (ARTIC, AUACT,COLCO,EXPER,MULRP)	ARTIC, AUACT,COLCO, EXPER & MULRP
96	17:07, 2013/17/7 - Student DD: The person iinterviwd said th following: <u>people falinluv and get attached, get jelousend think thttth females are their posesion. Thy bcomespostive and cant let go. Thy will thn have a mentality of "if i cant have her no one else will... Money is also the root of P.K, 'dirty kandeshis and th fact thttth men cant accept spending without getting, thy end up killing. Drugs and alcohol is also a big cause of P.K.</u>	Findings: Jealousy, and thinking that women are possessions and not letting anyone else have them, money, drugs and alcohol also contributing factors. (ARTIC,COLCO,AUACT,EXPER,MULRP)	ARTIC, COLCO, AUACT,EXPER & MULRP
97	18:08, 2013/17/7 - You: Good beginning Student BB. <u>Hope your group members read your posting and comment.</u>	Hope for group members to comment. (COLCO)	COLCO
98	17:11, 2013/17/7 - Student BB: Thank you		
99	18:13, 2013/17/7 - You: Another good contribution from Student DD. <u>Let's hope group members comment.</u>	Hope for group members to comment. (COLCO)	COLCO

<p>123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166</p>	<p>17:16, 2013/17/7 - Student DD: Ok, thank you 18:48, 2013/17/7 - Student BB: <u>How money can be the root of passion killings? I think you could have asked the interviewee to mphasis more on that.</u> 18:53, 2013/17/7 - Student DD: <u>She mentioned th dirty kandeshis in other words th gals chopping men's money nd for tht reason, men end up killing thmwhn thy wana end th relationship, men cant jst take it coz of th thousands thy are investing in ladies.</u> 18:56, 2013/17/7 - Student BB: Clear now. <u>And what about drugs and alcohol abuse?</u> 19:00, 2013/17/7 - Student AA: <u>Killing some1 becoz of money that u had spent on them, is abit silly. I truly believe there is more 2 it.</u> 19:02, 2013/17/7 - Student DD: <u>Brain effects leading 2 negative thoughts ndwana show thy manlihood by killing or violating.</u> 19:03, 2013/17/7 - Student BB: <u>I like you members, well explained now.</u> 19:04, 2013/17/7 - Student DD: Cul 16:09, 2013/18/7 - Student AA: <u>Come group members let us reason together. There is nothing like dirty kandeshis. Men must stop calling ladies that</u> after all they are giving their money willingly, they are not forced 10:51, 2013/19/7 - You: Group members, <u>let us finish with our interviews by the end of this weekend so that we start comparing findings with our short story by the beginning of next week.</u> 9:58, 2013/19/7 - Student CC: Ky 11:45, 2013/19/7 - Student CC: The second person i interviewed said <u>women are the causes of passion killings and gender based violence</u> .He said in case of a female student dating a male taxi driver nor a security guard <u>.The women will be demanding more of pocket money</u> at school and at the same time <u>taxi money too</u> and in this case the man have to sacrifice his wants and consider his needs. In the second year of study ,the women <u>dumped the man</u> because she got attracted to her mates and as a result the man have no other option to take neither just to kill nor beat her up 11:47, 2013/19/7 - Student CC: The second person i interviewed said women are the causes of passion killings and gender based violence .He said in case of a female student dating a male taxi driver nor a security guard .The women will be demanding more of pocket money at school and at the same time taxi money too and in this case the man have to sacrifice his wants and consider his needs. In the second year of study ,the women dumped the man because she got attracted to her mates and as a result the man have no other option to take neither just to kill nor beat her up 13:35, 2013/19/7 - You: <u>Good. But maybe killing women is not the only solution. Let's wait to hear from others.</u> 12:52, 2013/19/7 - Student CC: <u>Yathats not the solution but men find it better to do that ,but later they regret doing it.</u> 13:24, 2013/19/7 - Student AA: <u>R u sure they regret it?Becozin most cases they kill themselves after killing their girlfriends.</u> 13:31, 2013/19/7 - Student CC: Yaa! you are right . 20:15, 2013/19/7 - Student BB: The second woman i interviewed about who the major cause of gender based violance and passion killings problem said <u>that passion killings happen due to misunderstanding between lovers</u> . She added that <u>women are always the cause of misunderstanding due to the fact of jelous, lack of faith, gossips and empty promises they have made</u> and this leads to the guy blaming himself about the time and everything he had wasted on her to the extend of murdering her. Hence her point is that <u>women are the predominant cause</u> . However, she have also said that <u>gender violance is predominatly caused by men due to alcohol and drung abuse.</u> 21:23, 2013/19/7 - You: Good. We are moving.<u>Let's try finish with interviews soon so that we compare with</u></p>	<p>Explanation needed on how money causes passion killings, (COLCO,AUACT) feels interviewer had to ask for clarification. (ARTIC) Findings: Girls "chopping" men's money, and then men kill them if they want to end relationships. (ARTIC,AUACT,EXPER,MULRP) What about drugs and alcohol abuse? (ARTIC,COLCO) Killing someone because of money is silly. (ARTIC, COLCO,MULRP) Negative thoughts and showing manhood by killing as causes. (ARTIC,COLCO,MULRP) Giving compliments to group members that is well explained now Asking group members to reason together. (COLCO,AUACT). Men should stop calling women "dirty Kandeshis" (ARTIC,MULRP) Let us finish with our interviews by the end of this weekend. (COA/SC) Findings: Women are the causes of passion killings and gender based violence: demand pocket and taxi money, dump men, and then men beat or kill them. (ARTIC,COLCO,AUACT,MULRP,EXPER) (Double posting.) Killing might not be the only solution, let's hear from others (COA/SC) (Killing) not a solution, but men do it and regret later. (ARTIC,COLCO,AUACT,MULRP) Do men really regret? In most cases they kill themselves after killing girlfriends. (ARTIC,COLCO,AUACT,MULRP) Findings: Passion killings happen due to misunderstanding between lovers. Women causes of misunderstandings, but also alcohol and drug abuse. (MULRP,COLCO,EXPER,AUACT)</p>	<p>COLCO, AUACT&ARTIC ARTIC, AUACT, EXPER &MULRP ARTIC&COLCO ARTIC,COLCO&MULRP ARTIC,COLCO&MULRP COLCO COLCO,AUACT ARTIC&MULRP COA/SC ARTIC,COLCO, AUACT,MULRP&EXPER COA/SC ARTIC,COLCO, AUACT&MULRP ARTIC,COLCO, AUACT&MULRP MULRP,COLCO, EXPER&AUACT</p>
--	--	--	---

167	<u>The suit</u> and then finish.	Let's finish with interviews so that we compare them with The suit.	COA/SC&FL
168	20:24, 2013/19/7 - Student CC: <u>Drug and alcohol abuse is a big contributor too</u> because one can end up	Alcohol and drugs contributing factors. (ARTIC,COLCO, MULRP)	ARTIC,COLCO& MULRP
169	taking actions without knowing what she/he is doing.		
170	20:29, 2013/19/7 - Student BB: Alright. Im trying to finish but <u>many people i interviewed gave me the same</u>	Many people I interviewed gave me the same answers which I have already posted (COLCO,AUACT)	COLCO& AUACT
171	<u>answers which i have already posted</u> but hopefully iwll be done with this by tomorrow.		
172	21:29, 2013/19/7 - Student GG left		
173	20:33, 2013/19/7 - Student CC: K me too will be done by tomorrow.		
174	21:37, 2013/19/7 - You: It is good to hear that you have actually already interviewed a couple of individuals.		
175	<u>Lef's give Students DD and GG a chance to finish</u> tomorrow and then <u>start relating to the short story</u> on	Give one student a chance to finish (COLCO) and then start relating interviews to the short story (COA/SC, CONV)	COA/SC,COLCO, &CONV
176	Sunday.		
177	20:40, 2013/19/7 - Student CC: Ky..		
178	20:41, 2013/19/7 - Student BB: Good.		
179	9:19, 2013/20/7 - Student BB: The third man I interviewed about gender based violence and passion killings	Findings: Women major cause of passion killings.	ARTIC,COLCO, EXPER,AUACT& MULRP
180	problem said <u>that women are the major cause of this.</u> " I am saying this based on the things or the way women	Women not soft-hearted and innocent as considered: they cheat on men and get kille by men, and they are gold diggers. (ARTIC,COLCO,EXPER,AUACT,MULRP)	
181	treat men, mostly those in relationships. <u>Women are considered to be soft hearted, innocent people of God,</u>		
182	<u>but then the fact is that they are not at all.</u> Here is the proof to all I have said: Firstly most <u>women cheat on their</u>		
183	<u>men, married or not.</u> So, <u>this turns men into maddogs and women end up being killed.</u> Secondly, <u>most of</u>		
184	<u>women are Gold diggers.</u> So, what follows when all she wanted is up? She tries to dump the man and that guy		
185	will not accept that. However if it was not that the girl dated him for money and ptoperties, then it could not lead		
186	to her being killed eventhough this is not the case always." He emphasised.	Men must take other actions instead of killing women, e.g. to have their money paid back (ARTIC,COLCO, AUACT,MULRP)	ARTIC,COLCO, AUACT&MULRP
187	9:27, 2013/20/7 - Student CC: <u>I think men must learn to take other actions instead of that.They can even ask</u>	Start thinking how to relate what people said to our short story. (COA/SC,CONV)	COA/SC&CONV
188	<u>the family of the girl to pay all what he had spend on her.</u>		
189	10:27, 2013/20/7 - You: Good job. You are doing a great job. <u>Start thinking how to relate what people said to</u>		
190	<u>our short story,</u> starting tomorrow.		
191	9:28, 2013/20/7 - Student BB: I interviewed the same third man about how he feel about this issue and he said	Findings: Not a good thing, (REFL) family members won't forget about their beloved ones easily, thus men should choose their partners carefully. (ARTIC,COLCO, EXPER,AUACT,MHLRP)	REFL,ARTIC, COLCO,EXPER, AUACT&MULRP
192	that he feels <u>the issue is nuisance and families of those who their relatives are killed wont cease thinking of</u>		
193	<u>their beloved.</u> " It makes me feel that we <u>men should be careful of who you make your so called beloved one."</u>		
194	He said		
195	9:29, 2013/20/7 - Student BB: Thank you.		
196	9:32, 2013/20/7 - Student CC: Ky.. I said <u>before any action after he is dumped ,he must go straight to the</u>	Men should share their relationship problems with family members before taking action. (ARTIC,COLCO,MULRP)	ARTIC,COLCO& MULRP
197	<u>family and tell the whole story up</u> to the point of asking his refunds.	Men should stop spending money on women they are not married to. (ARTIC,COLCO,MULRP)	ARTIC,COLCO& MULRP
198	9:43, 2013/20/7 - Student BB: <u>I think men should stop spending merely on women predominandy which they</u>	Start thinking how to relate "taking other actions" to our short story. (COA/SC,CONV)	COA/SC&CONV
199	<u>are not married to.</u>		
200	10:43, 2013/20/7 - You: Student CC, you mentioned something very important, <u>for men to take other actions</u>		
201	<u>instead of killing women.</u> <u>Start thinking deeply how to relate this point to our story.</u>		
202	9:46, 2013/20/7 - Student CC: O.k.Thanks!		
203	20:15, 2013/20/7 - You: <u>Hope you watched the gender-based violence march that was just on NBC news.</u>	Hope you watched the GBV march that was just on NBC news. (COA/SC,AUCONT)	COA/SC&AUCONT
204	19:19, 2013/20/7 - Student CC: Unfortunately i just start watching 5 min past 8 .		
205	20:20, 2013/20/7 - You: Ok. They might repeat the news tomorrow morning.		
206	19:25, 2013/20/7 - Student BB: I did not even watch the news. Hope i will not miss tomorrow.		
207	19:33, 2013/20/7 - Student CC: I think so.		
208	19:33, 2013/20/7 - Student CC: I think so.		
209	19:33, 2013/20/7 - Student CC: I think so.		
210	20:33, 2013/20/7 - Student AA: <u>Good 2 know that th community is ready 2 take action against Gender-base</u>	Good to know that the community is taking action	ARTIC, AUCONT&

<p>211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254</p>	<p>violence 21:36, 2013/20/7 - You: Yes. Is quite interesting. <u>Just watch the morning news tomorrow morning if you missed the evening ones.</u> 20:38, 2013/20/7 - Student AA: Ok 7:06, 2013/21/7 - Student CC: Which time the News will be repeated today? 7:07, 2013/21/7 - Student CC: Which time the News will be repeated today? 8:13, 2013/21/7 - You: I am not sure if it will be repeated and don't know the time. Am in front of the TV screen and will let you know should it start, but never mind to be waiting if you have other commitments. 7:16, 2013/21/7 - Student AA: Mrs u dont go 2 chrch? 8:18, 2013/21/7 - You: This is why I am saying don't be waiting, because it is Sunday today and it is getting late. 7:22, 2013/21/7 - Student AA: Ok, <u>so we must compare th short story with our findings 2mrw?</u> 7:24, 2013/21/7 - Student CC: The last person i interviewed today urged that <u>men are also the cause of this becauseby today men have heard and read enough on cases of gender based violence and passion killings due to the fact of untrustworthness between women and men and yet they keep supporting them</u> instead of giving <u>Men should stop acting as if they are parents</u> .It will be good and less painful to give instead of supporting women if at the end things does'nt work . 7:26, 2013/21/7 - Student CC: I will just wait because i want this issue to come to an end soon . 8:25, 2013/21/7 - You: That is fine. <u>You can even start late afternoon today</u> if you are ready. 7:27, 2013/21/7 - Student CC: Alright 8:29, 2013/21/7 - You: Ok. I was also just informed that morning news is not read on Sundays. 7:31, 2013/21/7 - Student CC: Ok 7:33, 2013/21/7 - Student AA: <u>Give and not support?What do u think this person meant by saying men should not support women bt give to women.</u> I dnt understand that. 10:49, 2013/21/7 - Student EE: The second person I interviewed said <u>passion killing is A crime of passion as any crime in which the perpetrator commits a crime, especially assault, murder or rape, against someone because of sudden strong impulse such as sudden rage or heartbreak rather than as a premeditated crime.</u> 10:49, 2013/21/7 - Student EE: The last person I interviewed said <u>Passion killings result from various issues; I believe that most are a result of a break-up. One party fails to comprehend or accept that the other party wishes to move on with their lives without the other thus ending a relationship for his/her personal reasons. In most incidences men are dominantly the perpetrators and there is a myth that men are not genetically designed to deal with emotions and handle heartbreaks as well as women do.</u> I think its more about their <u>social upbringing</u> (how boys were raised) than it being factual, this excuse is old and over-rated; <u>it's about</u></p>	<p>against GBV. (AUCONT,ARTIC,COLCO) Watch morning news tomorrow if you missed the evening ones. (COA/SC) So, we must compare the short story with our findings tomorrow? (COA/SC,AUACT,CONV) Findings: Men are also the cause of this problem, (ARTIC,COLCO,EXPER) because they are aware of GBV and passion killings but keep supporting women- they should stop. (AUCONT,AUACT,MULRP) You can even start late afternoon today. (COA/SC) What is meant by "give and not support?" Not clear (COLCO) Findings: Passion killing is a crime of passion that is committed due to a sudden strong impulse-not premeditated. (EXPER,COLCO,ARTIC,MULRP,AUACT) Findings: Passion killings result from various issues, (MULRP,ARTIC) e.g. break-ups. Men are predominantly the perpetrators (EXPER), and there is a myth that men aren't genetically designed to deal with emotions. Is also a result of social upbringing (EXPER)- it is time for men to learn to deal with emotions and accept failure.(ARTIC,COLCO,AUACT)</p>	<p>COLCO COA/SC COA/SC,AUACT& CONV ARTIC,COLCO, AUACT, EXPER, AUCONT&MULRP COA/SC COLCO ARTIC,COLCO, AUACT, EXPER& MULRP MULRP,ARTIC, EXPER,COLCO& AUACT</p>
--	---	--	---

<p>255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298</p>	<p><u>time men learn to handle/deal emotions, accept themselves and accept failure and be men of honour.</u> 12:07, 2013/21/7 - You: <u>There are so many interesting things in the latest posting by Student EE. Think critically about 'men are genetically unable to handle emotions like women' and find out how to relate it to the characters in The suit.</u> Good job! 11:20, 2013/21/7 - Student EE: Thank you. 18:01, 2013/21/7 - Student DD: The second nd third people i interviewed said <u>tht it myt b because of unfaithfulness, a partner cheating on th other one.</u>Jalousy: maybe a couple broke up and <u>one finds it hard to move on and begins to become jalous of seeing the other moving on and dating other people, this can lead to violence or even murder.</u> <u>Control: the bread winner myt feel in control of th family since everone depends on him, so he can act any how even violently since no1 can say anything, because thy depend on him.</u> <u>Culture: some man feel its ok to beat up woman</u> since a man is the head of the family and so its his duty to instildisciplin in the house through any means necessary. 18:14, 2013/21/7 - Student CC: <u>To give i mean men should just give them gifts but not those worthing to much even and by supporting is like you are taking every pressure from the woman basically</u> 19:17, 2013/21/7 - You: Good. Nearly all of you have now interviewed about three people, therefore <u>we can .continue with the second and last stage of our task: relating what we found in interviews and discussions to our story: The Suit.</u> If you have misplaced your handout but want to check something you can google the story on the internet. Think especially about the main characters and comment. 18:19, 2013/21/7 - Student DD: Kay, will do so. 18:21, 2013/21/7 - Student CC: Ky 19:12, 2013/21/7 - Student AA: <u>Hope u guys r watchinth news</u> 19:12, 2013/21/7 - Student DD: Yah we r 20:16, 2013/21/7 - You: <u>Good to notice that you also saw that latest news report on gender-based violence!</u> 19:17, 2013/21/7 - Student AA: Did u hear thtinspite of what th ministry is doing, <u>gender-base violence is increasing, n it is a challenge 4 them n that thy urge th stakeholders 2 meet them half way about this issue.</u> 20:22, 2013/21/7 - You: Which adds value to our task! 19:24, 2013/21/7 - Student AA: Ja 19:45, 2013/21/7 - Student BB: Evenning members, im sorry that i did not manage to be with you through out the day due to hectic schedules i had. 19:46, 2013/21/7 - Student DD: Cul 19:51, 2013/21/7 - Student BB: 17:06, 2013/22/7 - Student CC: My findings from the first two people that i have interviewed ,<u>they considered women as the major cause of gender based violence and passion killings .Looking at Matilda in our short story,she is the one to be blamed for all what her husband Philemon have done to her</u> to the extend that she was unethical to him. Philemon kept all his trust in her but he ended up disappointed by her <u>.Even in our daily lives finding your woman with another man in your house it will be hurtful and shameful to yourself .Some women really need the same punishment like the one Philemon does to his wife.Passion killings and gender will not solve the problem</u> but will make the matter more worse and worse . 17:09, 2013/22/7 - Student CC: My findings from the first two people that i have interviewed ,they considered women as the major cause of gender based violence and passion killings .Looking at Matilda in our short story ,she is the one to be blamed for all what her husband Philemon have done to her to the extend that she was unethical to him. Philemon kept all his trust in her but he ended up disappointed by her .Even in our daily</p>	<p>Interesting things in the latest posting-think how to relate some of the points raised to the characters in the short story TheSuit (COA/SC,CONV)</p> <p>Findings: Unfaithfulness and jealousy lead to violence or even murder. (ARTIC,MULRP,AUCONT) Also being in control e.g. bread winner, and culture when men feel it is ok to beat up women. (COLCO,EXPER,MULRP,AUACT)</p> <p>To give I mean men should just give women gifts but not expensive ones We can .continue with the second and last stage of our task: relating what we found in interviews and discussions to our story: The Suit. (COA/SC,CONV)</p> <p>Alerting other students to the news. (AUCONT&COLCO) Good to notice that you also saw that latest news report on gender-based violence (GBV) (AUCONT,COA/SC) Was just reported thatGBV is increasing, is a challenge to the Ministry, (EXPER,AUCONT) and they urge stakeholders to meet them half way. (COLCO)</p> <p>Findings: Women the major cause of GBVand passion killings. (EXPER) In our short story, Matilda is the one to blame for all what her husband Philemon did to her. (CONV) Even in real life it is painful to find your woman with another men, (AUCONT,ARTIC,REFL) but passion killings don't solve the matter. (MULRP,ARTIC,COLCO)</p> <p>(Double posting)</p>	<p>COA/SC&CONV</p> <p>ARTIC,MULRP, AUCONT, COLCO, EXPER&AUACT</p> <p>ARTIC&COLCO</p> <p>COA/SC&CONV</p> <p>AUCONT&COLCO</p> <p>AUCONT&COA/SC</p> <p>EXPER,AUCONT& COLCO</p> <p>EXPER,CONV, AUCONT,ARTIC, REFL,MULRP, COLCO&CONV</p>
--	---	--	---

<p>299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342</p>	<p>lives finding your woman with another man in your house it will be hurtful and shameful to yourself .Some women really need the same punishment like the one Philemon does to his wife.Passion killings and gender based violence will not solve the problem but will make the matter more worse and worse . 18:26, 2013/22/7 - You: What a good start to relate this problem in our society to our short story! Let's wait to hear what other group members have to say. 17:28, 2013/22/7 - Student CC: Ok 21:17, 2013/22/7 - Student AA: My finding compare 2 th short story THE SUIT r that <u>there r similarity</u>. Th1st person I interviewed talked about <u>lack of respect being the major cause of gender-base violence & passion killing</u>. Philemon did not have respect 4 Matilda as he embrassed her infront of her guests by making her serve the suit. The 2nd person I interviewed talked about <u>men being the provider. Making them more superior over women</u>. Philemon was the bread winner and Matilda was a house wife. This could have made Philemon think that he can treat his wife the way he want to. The 4th person I interviewed said <u>Alcohol is the cause of gender-base violence</u>.The night of the party Philemon was reeling drunk. That can even be th reason why he did not behave well infront of the guests. This can be the leading cause of Matilda's death. 21:27, 2013/22/7 - Student CC: Good contribution from you but <u>from all what you have said men are the major cause of this issue ,don't you think Tilly was the cause of this actions from her husband ?</u> Anyways <u>there are many Matildas in our nation and is time for them to change for the best</u> . 21:31, 2013/22/7 - Student AA: <u>Let's reason 2gether! Men cheat on women also, bt women dont kill men</u>. 21:32, 2013/22/7 - Student DD: True that, <u>i also agree that mathilda was th main cause of th harsh treatment, btphillimon was also 2 harsh towards tilly untill it cost her life</u>. 21:38, 2013/22/7 - Student AA: <u>I dont agree</u> with you both. Have u guys ever considered why Matilda cheated on Philemon? Was it <u>perhaps that she was not getting enough or that Philemon did not show her much love as the young guy?</u> 21:40, 2013/22/7 - Student CC: <u>You right there but Philemon's intention was not to kill but to make Matilda think that she have done something wrong</u> ,unfortunately Matilda was a soft hearted somebody .Philemon action is of making sense. 21:43, 2013/22/7 - Student DD: Bttht still dntgve her a reason 2 cheat, she was supose 2 discuss th situation <u>with philemonsince its her husband before taking any further steps, communication is th best tool 2 solve problems within a relationship, which philemon was also suposed 2 do before treating mathilda in that way</u>. 21:48, 2013/22/7 - Student AA: <u>No! Matilda was a strong lady</u> just the fact that she was serving th suit n sometimes taking it out for walk. U know what, Matilda had 2 carry the suit on it's hanger over her back, people looked btsh was strong n humble. 21:53, 2013/22/7 - Student CC: <u>She deserve it but we don't know really why she have been cheating her man</u> ,mybe is because of all what you have just said . 21:55, 2013/22/7 - Student AA: Who know's, <u>maybe she died because of high blood pressure not heart attack</u> as you guys think. <u>Matilda was ready 2 change and move on bt that was not the case with the husband</u>. He could not let go of the past but kept tormenting th wife. So <u>Philemon was the weak 1 in this story</u>. 21:56, 2013/22/7 - Student DD: <u>Lack of communication as i mentioned earlier</u>. 21:58, 2013/22/7 - Student CC: Ky ,let it be like that but the fact is....lag 11:15, 2013/23/7 - You: Wow! A lot happened last night while I was sleeping-went to bed early. What a discussion you had! We are about to finish. Tomorrow is our last day, but in the mean time, <u>think about what Namibians can learn from this whole experience as part of your conclusion</u>, e.g. that communication is the key to solving relationship problems as one of you indicated last night. 10:21, 2013/23/7 - Student CC: Ok</p>	<p>There are similarities between interview findings (EXPER) and The Suit . Lack of respect is the major cause of GBV& passion killing (ARTIC,MULRP,AUCONT).Philemon did not have respect for Matilda and was superior to her, thinking as a bread winner he could treat her as he wanted (CONV). Also, as alcohol causes GBV, (EXPER,AUCONT) the night of the party Philemon was really drunk. (REFL, CONV, COLCO, AUACT) If men are the major cause of GBV (EXPER), was Tilly (Mathilda) not the cause of her husband's actions? (ARTIC,COLCO) There are many Matildas in the nation and need to change. (MULRP,AUCONT,CONV) Let's reason together (COLCO,AUACT) Men cheat on women also (AUCONT), but women don't kill them. (ARTIC,MULRP) Agreement: Matilda the main cause of harsh treatment, but Phillemon was also too harsh that it cost Tilly's life. (FL,ARTIC,COLCO,AUACT,MULRP) Disagreement: Perhaps Philemon did not show Matilda enough love. (ARTIC,COLCO,AUACT,MULRP) Philemon's intention was not to kill but to make Matilda think (FL,ARTIC,COLCO,AUACT,MULRP) No reason to cheat, Matilda had to discuss the problem with husband (REFL,ARTIC,COLCO,AUACT,MULRP)- communication the best tool to solve problems (CONV) Disagreement: Matilda was a strong lady. (ARTIC,REFL,COLCO,AUACT,MULRP) Matilda deserved it (punishment), but we don't know why she cheated. (REFL,ARTIC,COLCO,AUACT,MULRP) Maybe Matilda died due to high blood pressure, she was ready to change but Phillemon was not, so Phillemon is the weak character. (REFL,ARTIC,COLCO,MULRP) Highlighting importance of communication. (ARTIC,COLCO,AUACT,MULRP) Think about what Namibians can learn from this.</p>	<p>EXPER,ARTIC, MULRP,AUCONT, MULRP, COLCO, AUACT,REFL& CONV EXPER,ARTIC, COLCO,MULRP, AUCONT&CONV COLCO,AUACT, AUCONT,ARTIC& MULRP FI,ARTIC,COLCO, AUACT& MULRP ARTIC,COLCO, AUACT& MULRP ARTIC,COLCO,FL, AUACT&MULRP REFL,ARTIC, COLCO,AUACT, MULRP&CONV ARTIC,REFL, COLCO,AUACT& MULRP REFL,ARTIC, COLCO,AUACT& MULRP ARTIC,COLCO, AUACT&MULRP COA/SC</p>
--	---	---	---

<p>387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430</p>	<p>20:15, 2013/23/7 - Student AA: <u>I hope we were not stoping here, things that am reading n discovering nowadays, is bad.</u> 20:18, 2013/23/7 - Student CC: Everyday today will be a holiday 20:20, 2013/23/7 - Student BB: Yeah! <u>Just becoming worse and what we should do is to share our suggestions with the nation as a whole</u> 20:20, 2013/23/7 - Student AA: What? <u>What do u mean?</u> 20:21, 2013/23/7 - Student AA: Ja, u r rite. 20:22, 2013/23/7 - Student BB: Who? 20:23, 2013/23/7 - Student AA: Ja, u r rite is 4 u n <u>what do u mean</u> is 4 student HH 20:25, 2013/23/7 - Student BB: Aright, im also wonderng, icnnt get his point under 20:26, 2013/23/7 - Student CC: Ky!<u>For everything happening in todays life will be remembered in the future as a holiday.</u> 20:26, 2013/23/7 - Student AA: Is it? 20:29, 2013/23/7 - Student AA: Are u serious student HH? Every that is happening wil b remembered as holiday? 21:29, 2013/23/7 - You: I <u>agree that this is a serious problem in our nation, but solving it is a long process.</u> Let us hope that your contributions will be read by members of the public one day; it is a step toward sensitizing the public about this problem. 20:32, 2013/23/7 - Student AA: Yes! 20:33, 2013/23/7 - Student CC: It will be a holiday <u>,meaning most of day s we experience gender based violence and passion killings and these days will be remembered in our national calendar as important .</u> 20:34, 2013/23/7 - Student BB: Hopefully they will be read. 20:38, 2013/23/7 - Student AA: <u>I dont think such a thing will happen</u> student HH. 20:42, 2013/23/7 - Student CC: Kyyyyy [Name withheld],thanx for a compliment . 20:49, 2013/23/7 - Student AA: U r welcome. <u>If we have a holiday each day some1 is killed than the productivity of our country wil decrease. That will b bad 4 our economy.</u> 20:58, 2013/23/7 - Student CC: I really don't mean each day ,but days in which any unforgettable incident of that nature have happened ,atleast three days in a year. Still it doesn't make sense?? 21:02, 2013/23/7 - Student AA: It does, but <u>I think 1 day wil b enough</u> 4 that. 21:07, 2013/23/7 - Student CC: Ky 21:09, 2013/23/7 - Student AA: Ok, good contribution, u have great ideas. 21:13, 2013/23/7 - Student CC: Thanks more again ,you have also contributed meaningful ideas. 12:54, 2013/24/7 - You: Wow. Students AA and CC had a long discussion last nite. Ok. <u>Group members, today is our last day. If you have any final words regarding our task, make use of this opportunity.</u> I will close our platform for discussion at 21h00 tonight. 11:56, 2013/24/7 - Student AA: Ok 11:59, 2013/24/7 - Student CC: Ok 18:42, 2013/24/7 - You: Group members, don't forget that we are closing our discussion platform tonight. This is your last opportunity to comment, especially Student GG who has not yet made comparison between the interviews and The Suit. 18:33, 2013/24/7 - Student DD: Am sory 4 delaying th group, bt had sum complications with my fone.... By comparing th Suit story to my interviewees opinions i saw thtthr are more similarities than differences. Thy mentioned <u>women cheating on their partners, which Mathilda did to Philemon.</u> They also mentioned <u>drug nd alcohol being a contributor to passion killing,</u> which is part of th short story. Another thing thy mentioned was</p>	<p>The things that are read and discovered nowadays are bad. (AUCONT,ARTIC,COLCO,MULRP) Yes, becoming worse, and we should share suggestions with the nation. (ARTIC,COLCO,AUACT,MULRP,REFL) What do you mean? (Asking for clarification) (COA/SC, COLCO) For everything happening today, that life will be remembered in the future as a holiday. (ARTIC,COLCO,MULRP,AUACT) Agreeing that this is a serious problem, but solving it is a long process. (COA/SC) Most of the day s we experienced GBV and passion killings to be remembered in our national calendars. (ARTIC,COLCO,AUACT,MULRP) Disagreeing-such a thing won't happen. (ARTIC, COLCO,AUACT,MULRP) A holiday each day someone is killed decreases productivity of the country - bad for the economy. (ARTIC,COLCO,AUACT,MULRP) Thinks a day is enough. (ARTIC,COLCO) Last day of the task, use this opportunity for final remarks. (COA/SC) Similarities and differences between short story and interviews(CONV) : women cheating on their partners,</p>	<p>AUCONT, ARTIC, COLCO&MULRP ARTIC,COLCO, AUACT,MULRP& REFL COA/SC&COLCO ARTIC,COLCO, AUACT&MULRP COA/SC ARTIC,COLCO, AUACT&MULRP ARTIC,COLCO, AUACT&MULRP ARTIC&COLCO, COA/SC CONV,REFL,</p>
--	---	---	---

<p>431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458</p>	<p><u>men being head of th house and thinking tht thy can du whtever thy want to their families,i think ths was th same case with Philemon, coz idnt think if he was th 1 caught red handed by Mathilda, she could've dne anything tht could lead to him loosing his life. Anyway according to my findings, one can conclude thtwomen are the main causes of passion killing, thy do without thinking about thconsequenses, bt on th other hand men are also to be blame, because thy lack th communication skills and the fact tht thy wana show their man power adds to the problem...</u> From my point of view, as i mentioned before <u>couples should learn to communicate, coz thtsth most powerful tool to problem solving especialy in relationships.</u> 20:01, 2013/24/7 - You: Wow Student DD. What an interesting overview and possibly conclusion to our task! We understand that you experienced some problems with your phone. You guys have made significant contributions to this task. If only the discussion could go on, but unfortunately we have other responsibilities. If we don't get any posting before 9, a special word of thanks to all the group members! 19:04, 2013/24/7 - Student DD: You are welcum ma'am and thank you. 19:16, 2013/24/7 - Student AA: <u>What we the Nambian can learn from this storry is that we must learn 2 ggive one an other. We should move forward rather than dwelling in the past.</u> Thinking about how another person has hurted you and trying 2 look 4 revenge. <u>We must understand n accept the decisions other's make</u>, for example if a lady breakup's with her boyfriend. The boyfriend must accept not kill her, regardless of what he gave her. <u>Whatever we do should not only be about ourselves we should consider the feelings of the next person.</u> 20:24, 2013/24/7 - You: Good contribution! I like that statement, that 'Namibians should learn to move forward rather than dwelling in the past'. 19:27, 2013/24/7 - Student AA: Thanks 19:29, 2013/24/7 - Student DD: Yai agree with u totally, ndwhiti can add to tht is tht <u>killing a person does not solve any problem bt rather add.</u> U r natjst going to be punished lawfully, bt also by God... <u>Its against th law 2 take th life of anothr person</u>, nd think about our Namibian country in th future, wht will hapen if every1 decides 2 kill in order to solve a problem? Wht will hapen 2 our economy at large, wht will other countries think about us? <u>Alwys think of thconsequenses from different perspectives before making th decision of killing.</u> (this is to all namibians) 21:07, 2013/24/7 - You: <u>The discussion platform is closed:</u> THANK YOU once more for your contributions.</p>	<p>which Mathilda did to Philemon, drugs and alcohol contributing to passion killings which is part of the story, men thinking as head of households can do what they want which is what Phillemon did (REFL,CONV). Conclusion: women are the main causes of passion killings, but men also to blame due to lack of communication skills and showing man power which adds to problems. (ARTIC,COLCO)Communication a powerful tool to solve problems. (AUACT,MULRP),</p> <p>Namibians can learn to forgive each other from this story, also moving forward rather than dwelling in the past, as well as accepting the decisions we make and considering the feelings of others. (REFL,ARTIC,COLCO,MULRP,AUACT,CONV)</p> <p>Lesson to be learnt: killing a person does not solve any problem-it adds, and is against the law (REFL,ARTIC,COLCO,MULRP). Think of the consequences before making the decision to kill (ARTIC).</p> <p>Closing discussion platform. (COA/SC)</p>	<p>ARTIC,COLCO, AUACT&MULRP)</p> <p>REFL,ARTIC, COLCO, AUACT,MULRP, &CONV</p> <p>REFL,ARTIC, COLCO,MULRP&</p> <p>COA/SC</p>
--	--	---	---

Appendix H: Sample Matrix of coded WhatsApp authentic learning task ([Appendix G](#)), Stage 2: Data display

Codes: **AUCONT** = authentic context, **AUACT** = authentic activity, **EXPER** = expert performance, **MULRP** = multiple perspectives, **COLCO** = collaborative construction, **REFL** = reflection, **ARTIC** = articulation, **COA/SC** = coaching/scaffolding, **INTASS** = integrated assessment, **FL** = formal learning , **CONV**=convergence

Text no	Coded key phrases and statements	Authentic context	Authentic activity	Expert performances & modeling processes	Multiple roles and perspectives	Collaborative construction of knowledge	Reflection	Articulation	Coaching and scaffolding	Integrated assessment	Formal learning	Convergence
H7	Asking if can start conducting research the following day. (Needs guidance) (COA/SC)								x			
H8	Only 6 students can join, add if you can(Addressing group) (COLCO)					x						
H10	Asking the one that should be added, and who the 6 are.(Needs guidance) (COA/SC)								x			
H11	Should check the group members to find out the 6 students(Student guiding another student) (COA/SC)								x			
H14	I' m student what?(Needs guidance) (COA/SC)								x			
H15	Can we start from tomorrow?(Needs guidance) (COA/SC)								x			
H17-22	Introducing WhatsApp group (COA/SC) The Suit short story (FL), The problem of gender based violence, passion killings that have increased in the country (AUCONT). Use this platform to contribute (CONV), get the opinions of 3 to 4 members of the community (EXPER), share your findings with others (COLCO) in WhatsApp ,post your comments on the relationship between The Suit and what people said (AUACT&CONV). What can the nation learn from this story?(REFL&MULRP).	x	x	x	x	x	x				x	x
H24	`You can start even tomorrow (Guidance) (COA/SC)								x			

H34-36	Findings: Most of the people interviewed (COLCO, AUACT) think that gender-base violence and passion killings in the country are caused by money issues, misunderstanding, trusting issues, cheating, as well as alcohol and drug abuse (EXPER,MULR,ARTIC) .			X	X	X	X		X				
H37-38	Report findings in such a way that the reader can tell how many people were interviewed(Guidance) (COA/SC)									X			
H42-46	Findings: Women cheating because of money and become victims of gender-basedviolence (GBV), and men feel betrayed (AUACT,EXPER,MULRP,COLCO)			X	X	X	X		X				
H47	Feel free to comment on postings (COA/SC)						X			X			
H50	Uploading audio clip of an interview with a community member) (AUACT,COLCO)			X			X						
H51	The person you interviewed is right (MULRP,ARTIC)					X			X				
H53-54	Suggesting awareness campaigns (AUCONT,AUACT,MULRP,COLCO)	X	X			X	X						
H56	Uploading audio clip (AUACT,COLCO)			X			X						
H58	Idea will work, but how do we start? (COLCO,ARTIC)						X		X				
H60	Suggestion to start campaign by making posters and paste them around campus (AUCONT,AUACT,COLCO,ARTIC)	X	X				X		X				
H63	Confirming that the posters idea will work (COLCO,ARTIC)						X		X				
H65	Supporting the idea (COLCO,ARTIC)						X		X				
H66	Now, letus just find out how members of the public feel (COLCO,COA/SC). Compare public views with our short story The Suit towards the end of our project (CONV)						X			X			X
H69-75	Findings: passion killing is mostly caused by both men and women (ARTIC), suggested multiple solutions, i.e. campaigns, counseling and displaying posters (MULRP, AUCONT,AUACT,EXPER,COLCO)	X	X	X	X	X			X				
H79-85	Findings: Passion killings in Namibia and around the world result from lack of understanding, and are caused by money and cheating-many different things (ARTIC,AUACT,COLCO,EXPER&MULRP)			X	X	X	X		X				
H86-87	You're right- have heard of many women and children being killed because men don't want to break up (EXPER,ARTIC,AUACT)			X	X				X				
H88	Good to all of you who have started (COA/SC)									X			

H91-92	I would like to ask if the emphasis is on who is the cause, solutions or both (Needs guidance) (COA/SC,COLCO)						X			X			
H93	Both (COA/SC)									X			
H94-95	Just ask members of the public how they feel about e.g. passion killings(Guidance) (COA/SC,COLCO)						X			X			
H97-99	Uploading audio clip (Interview with public member) Uploading audio clip (Interview with public member) Uploading audio clip (Interview with public member) (AUACT,COLCO)		X				X						
H102-104	What must I now do, interview more people? (Needs guidance) (COA/SC)		X										
H103-104	3 people interviewed enough, continue responding to postings (COA/SC)		X										
H106-113	Findings: Both women and men can be the cause, people no longer dating for love but possessions, women demanding too much from men and end relationships later, men forcing women to accept offers (ARTIC,AUACT,COLCO,EXPER,MULRP)		X	X	X	X				X			
H114-118	Findings: Jealousy, and thinking that women are possessions and not letting anyone else have them, money, drugs and alcohol also contributing factors. (ARTIC,COLCO,AUACT,EXPER,MULRP)		X	X	X	X				X			
H119-122	Hope for group members to comment. (COLCO)						X						
H124-125	Explanation needed on how money causes passion killings (COLCO,AUACT), feels interviewer had to ask for clarification (ARTIC).		X				X			X			
H126-128	Findings: Girls "chopping" men's money, and then men kill them if they want to end relationships (ARTIC, AUACT,EXPER,MULRP)		X	X	X					X			
H129	What about drugs and alcohol abuse? (ARTIC,COLCO)						X			X			
H130	Killing someone because of money is silly. (ARTCI,COLCO,MULRP)					X	X			X			
H132-133	Negative thoughts and showing manhood by killing contributing factors (ARTCI,COLCO,MULRP)					X	X			X			
H134	Giving compliments to group members that is well explained now (COLCO)						X						
H136-	Asking group members to reason together. (COLCO,AUACT) Men should stop calling women "dirty Kandeshis" (ARTIC,MULRP)		X			X	X			X			

H196-197	Men should share their relationship problems with family members before taking action (ARTIC,COLOCO,MULRP)					X	X			X									
H198-199	Men should stop spending money on women they are not married to (ARTIC,COLOCO,MULRP)					X	X			X									
H200-201	Start thinking how to relate "taking other actions" to our short story (COA/SC,CONV)										X								X
H203	Hope you watched the GBV march that was just on NBC news. (AUCONT,COA/SC)	X									X								
H210-211	Good to know that the community is taking action against GBV. (AUCONT,ARTIC,COLCO)	X						X		X									
H212-213	Watch morning news tomorrow if you missed the evening ones. (COA/SC)										X								
H222	So, we must compare the short story with our findings tomorrow? (Needs guidance) (COA/SC,AUACT,CONV)		X								X								X
H223-227	Findings: Men are also the cause of this problem (ARTIC,COLCO,EXPER), because they are aware of GBV and passion killings but keep supporting women-they should stop. (AUCONT,AUACT,MULRP)	X	X	X	X	X				X									
H229	You can even start late afternoon today. (COA/SC)										X								
H233-234	What is meant by "give and not support?" Needs clarification (COLCO)							X											
H235-241	Findings: Passion killing is a crime of passion that is committed due to a sudden strong impulse-not premeditated (EXPER,COLCO,ARTIC,MULRP,AUACT)		X	X	X	X				X									
H242-257	Findings: Passion killings result from various issues, (MULRP,ARTIC) e.g. break-ups. Men are predominantly the perpetrators (EXPER), and there is a myth that men aren't genetically designed to deal with emotions. Is also a result of social upbringing (EXPER)- it is time for men to learn to deal with emotions and accept failure.(ARTIC,COLCO,AUACT)		X	X	X	X				X									
H258-260	Interesting things in the latest posting-think how to relate some of the points raised to the characters in the short story TheSuit (COA/SC,CONV)										X								X
H262-268	Findings: Unfaithfulness and jealousy lead to violence or even murder. (ARTIC,MULRP,AUCONT) Also being in control e.g. bread winner, and culture when men feel it is ok to beat up women. (COLCO, EXPER,MULRP,AUACT)	X	X	X	X	X				X									
H269-270	To give I mean men should just give women gifts but not expensive ones. (ARTIC,COLCO)							X		X									

H336	Highlighting importance of communication (ARTIC,COLCO,AUACT,MULRP)			X			X	X			X						
H339-341	Think about what Namibians can learn from this. (COA/SC)											X					
H343-348	Comparison between story and interview findings (CONV): Lack of communication main contributor to passion killings (EXPER). Solve problems without violence, and learn to let problems go. (AUACT,ARTIC,MULRP,REFL,COLCO)			X	X	X	X	X	X	X							X
H349-352	Communicate problems with others before taking action. (ARTIC,AUACT,MULRP,REFL)			X		X			X	X							
H361-375	Similarities: Lack of faithfulness in women (EXPER,CONV). Matilda was not faithful to Phillemon (REFL). Also, men are unable to handle anger and lack problem solving skills (CONV,ARTIC).Many women are gold diggers, while men are selfish-act like dictators. (ARTIC) Alcohol and drugs make them lose control without checking the consequences. The nation is no longer living freely, Namibians should learn that cheating is immoral and is the major cause of passion killings. (CONV,AUACT,AUCONT,MULRP,COLCO)	X	X		X	X	X	X	X	X							X
H377	Hopefully everybody else give their final words by tomorrow. (COA/SC)											X					
H379	Picture related to GBV uploaded. (REFL,AUACT,COLCO)			X				X	X								
H380-381	Needs to tell briefly what the picture shows. (COA/SC)											X					
H382-384	Picture about GBV, a drunk man abusing a woman and the baby. (REFL,AUCONT,AUACT,MULRP,COLCO)	X	X			X	X	X									
H387-388	The things that I are read and discovered nowadays bad. (AUCONT,ARTIC,COLCO,MULRP)	X				X	X		X								
H390-391	Yes, becoming worse, and we should share suggestions with the nation. (ARTIC,COLCO,AUACT,MULRP,REFL)			X		X	X	X	X								
H392	What do you mean? (Asking for clarification) (COA/SC,COLCO)						X				X						
H397-398	For everything happening today, that life will be remembered in the future as a holiday. (ARTIC,COLCO,MULRP,AUACT)			X		X	X		X								
H402-404	Agreeing that this is a serious problem, but solving it is a long process. (COA/SC)										X						
H406-	Most of the day s we experienced GBV and passion killings to be remembered in our national calendars (ARTIC,COLCO,AUACT,MULRP)			X		X	X		X								

407																			
H409	Disagreeing-such a thing won't happen. (ARTIC,COLCO,AUACT,MULRP)																		
H411-412	A holiday each day someone is killed decreases productivity of the country - bad for the economy. (ARTIC,COLCO,AUACT,MULRP)																		
H415	Thinks a day is enough. (ARTIC,COLCO)																		
H419-420	Last day of the task, use this opportunity for final remarks. (COA/SC)																		
H427-437	Similarities and differences between short story and interviews(CONV) : women cheating on their partners, which Mathilda did to Philemon, drugs and alcohol contributing to passion killings which is part of the story, men thinking as head of households can do what they want which is what Phillemon did (REFL,CONV). Conclusion: women are the main causes of passion killings, but men also to blame due to lack of communication skills and showing man power which adds to problems. (ARTIC,COLCO)Communication a powerful tool to solve problems. (AUACT,MULRP),																		
H443-448	Namibians can learn to forgive each other from this story, also moving forward rather than dwelling in the past, as well as accepting the decisions we make and considering the feelings of others. (REFL,ARTIC,COLCO,MULRP,AUACT,CONV)																		
H452-456	Lesson to be learnt: killing a person does not solve any problem-it adds, and is against the law (REFL,ARTIC,COLCO,MULRP). Think of the consequences before making the decision to kill (ARTIC).																		
H458	Closing discussion platform. (COA/SC)																		

Appendix I: Analysis of focus group interviews, Stage 1: Data reduction

Codes: AUCONT = authentic context, AUACT = authentic activity, EXPER = expert performance, MULRP = multiple perspectives, COLCO = collaborative construction, REFL = reflection, ARTIC = articulation, COA/SC = coaching/scaffolding, INTASS = integrated assessment, FL = formal learning, CONV=convergence

Text no	Authentic unedited transcribed text	Key phrases and statements signaling to codes	Emergent codes
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33	<p>Researcher: Mhmm well, good afternoon group members. I'm so glad mhmm that you helped, mhmm with our WhatsApp activity, and I could tell that you are experienced in using WhatsApp. May I please find out how long you guys have been using WhatsApp, because it looks like you are competent in using WhatsApp.</p> <p>Student DD: For me I've <u>started using WhatsApp since June this year and it was a nice experience using that platform.</u></p> <p>Student EE: Mhmm, I also <u>started a couple of months ago</u>, I think it was in March or so, and I <u>really like it</u>, its ... <u>it's kind of something new, compared to what I was using</u> in the previous years.</p> <p>Student BB: Mhmm, I <u>started using WhatsApp mhmm last year</u>, I think ... ja, it was last year, and ... ja, it's <u>very nice, it's quite impressing</u> and ... ja, I <u>like it</u>.</p> <p>Student GG: Mhmm I <u>started using What ... I think it's in March, ja it's quite cool and you can get experience from it, I really enjoy it.</u></p> <p>Researcher : Mhmm, thank you.</p> <p>Student AA: <u>I've been using WhatsApp Mhmm for... two years now</u>, and mhmm, it's ... <u>it's a good platform, I get to meet different people, you get to share your ideas with different people, and it's something nice, you get to upload images</u>, as well as <u>audios</u> as well. <u>It's a nice thing.</u></p> <p>Researcher: Ok. Good, no wonder. In my case to be honest with you, I didn't even know that we've a social networking tool called WhatsApp... till I interviewed students the other semester; they are the ones who told me about WhatsApp. I didn't even know about it, and that's how I started using WhatsApp as well. Mhmm, good. Now, mhmm, the main reason we are here is for us to describe our experiences of using mhmm WhatsApp to construct knowledge as a team, and also to see how we can contribute on the debate concerning gender based violence and mhmm, passion killings in our society. So, how was your experience? How do you experience..., I mean how do you describe this experience of using WhatsApp to construct knowledge?</p> <p>Student AA: Well, my experience mhmm, mhmm, its ... its' <u>filled with a mixture of emotions</u>, mhmm, <u>some people were willing to share their knowledge, and some were not willing</u>. Mhmm, it ... (pause, student laughs)</p> <p>Researcher: It's ok, no it's ok, you can even laugh; it's fine.) (Student AA pauses).</p> <p>Researcher: No, it's fine. (Student AA continues laughing).</p> <p>Student AA: Can I start all over? I cannot...</p> <p>Researcher: Just continue.</p>	<p>Started using WhatsApp in June (AUCONT), was a nice experience using that platform (REFL)</p> <p>Started a couple of months ago (AUCONT)-really like it (REFL), something new (MULRP)</p> <p>Started using WhatsApp last year (AUCONT)-very nice and impressing-likes it (REFL)</p> <p>Started using WhatsApp in March (AUCONT)-cool,(REFL) you get experience from it (MULRP)</p> <p>Have been using WhatsApp for... two years(REFL)- a good platform to meet different people (AUCONT), share ideas with others (COLCO), upload images and audio (AUACT)-nice thing (REFL)</p> <p>An experience filled with emotions (REFL), some people willing to share ideas (COLCO&AUACT), others not</p>	<p>REFL,AUCONT</p> <p>REFL,AUCONT& MULRP</p> <p>REFL&AUCONT</p> <p>REFL,AUCONT& MULRP</p> <p>REFL,AUCONT, COLCO,AUACT& MULRP</p> <p>REFL, AUACT,COLCO&</p>

<p>34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77</p>	<p>Student AA: I cannot.</p> <p>Student AA [continues]: As I said it was a mixture of feelings, there was a point where I felt sad, about what mmmm, about ... [Student hesitates]</p> <p>Researcher: No, it's ok, no' it's fine. (Student AA Laughs). No Ms I'm nervous...</p> <p>Researcher: It's fine, just continue, it's fine.</p> <p>Student AA: Can I try ... I will try next.</p> <p>Researcher: Ja.</p> <p>Student EE: Ok, alright. My experience was really something new, mmmm, especially when they ..., when I started, mmmm, mmmm, uploading my ... my interviewee's... mmmm, contribution. It was really something nice and the fact that I learned a lot from [name of group member protected] Mam, [Name withheld] was the ones debating like from point A to [jewel?] ... and it seems like we have like different views or something. But later on we came to a con... mmmm, conclusion. So the fact that mmmm, we could learn from each other like to... to come to a conclusion obviously there will or there are points where you have different views on something or different opinions but finally come to a conclusion. It was really something nice but the fact that mmmm, the fact that sometimes there's a lack of air time and you couldn't upload or read what other mmmm, me... group members contributed was kind of very tough... something.</p> <p>Researcher: Ok, mmmm, thank you, but just remember, I hope you are using nicknames because we shouldn't disclose the identity of anybody. And mmmm you mentioned something very important about mmmm, airtime. Does one need airtime to use WhatsApp?</p> <p>Student DD: Ja, for you to use WhatsApp you need some cents, at least two dollar and because per day they might charge you like , even like... ja, even twenty cent they... I think they really charge.</p> <p>Researcher: Mmmm, you can continue.</p> <p>Student EE: Ja, but mmmm, in my case, I don't know if it happens to everybody but if I don't have airtime I won't be able to go on WhatsApp.</p> <p>Student BB: For me if I don't have like one dollar and something I cannot get access to WhatsApp, obviously... I must have at least one dollar something so that I can read what others are posting.</p> <p>Researcher: Ok.</p> <p>Student GG: Mmmm, I bought credit, ja, at least you've you've to have at least one dollar and in doing this it's enough then. But to upload, I mean to download those even a page... even a... even like picture, a video or something that is recorded you've to use, you've to have at least three dollar two dollar there.</p> <p>Researcher: Ok, now I understand, because I didn't know that you need to have credit to use WhatsApp, I thought it was completely free. Now, you mentioned about mmmm, something about... having about two dollars or something to upload an image or something. Mmmm, but I've noticed that many of you did not really upload mmmm, images, even though one... one of you did it. Could that be the reason or... or wh... what could be the reason behind maybe not uploading mmmm,... s... images?</p> <p>Student AA: Mmmm, well, mmmm, credit wasn't a problem to me, I just couldn't find the right picture for it.</p> <p>Researcher: Ok.</p> <p>Student GG: Ja. Credit wasn't really a problem actually, but a picture that can, I can really... I</p>	<p>It was a mixture of feelings (MULRP), there was a point where I felt sad (REFL&AUCONT)</p> <p>Was really something new, something nice, learnt a lot (REFL), had different views but came to a conclusion (AUCONT,MULRP), could learn from each other (COLCO), but sometimes could not upload or read postings due to lack of air time (AUACT&AUCONT).</p> <p>You need some cents (little money) to use WhatsApp (AUCONT)</p> <p>Won't go on WhatsApp if there is no airtime (AUCONT)</p> <p>No access to WhatsApp without a dollar – must have at least about one dolla (AUCONT)r to read postings from others (COLCO) You've got to have at least one dollar.(AUCONT) To download, e.g. a picture (AUACT), you need at least two or three dollars (AUCONT)</p> <p>Credit was not a problem-could not find the right picture(AUCONT)</p>	<p>REFL,AUCONT& MULRP</p> <p>REFL,AUCONT, AUACT,COLCO, COA/SC&MULRP</p> <p>AUCONT</p> <p>AUCONT</p> <p>AUCONT&COLCO</p> <p>AUCONT&AUACT</p> <p>AUCONT</p>
--	--	--	---

<p>78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121</p>	<p>didn't really find a picture that... I think it really fits to upload. Researcher: Ok. Student BB: Mhmm, even if I have problems with credits, at least I tried to upload some files, images, so I downloaded one and I upload it. Researcher: Ok. Student DD: To me was like other students, I didn't get the right pic... picture to upload. Researcher: Mhmm, ok, so, in other words you didn't have problems uploading something, it's only that you couldn't find something suitable. Mhmm, ok, now I understand. Let's then continue with our experiences mhmm, anything that you want to share with us, concerning your experiences of constructing knowledge using WhatsApp, mhmm, the way you did this task, anything that you would like to share with us? Student BB: Mhmm, ok, I've ... I've experienced that WhatsApp is quite interesting, but it's time consuming. So like typing you've to type a long some... but typing with your cellphone is something I won't recommend like if you're typing with a PC you're quite... mhmm, you type faster and it saves time. But working with WhatsApp is time consuming. Student AA: My experience was easy, 'cause I had to record, it was only recording I didn't ... I didn't ... had to write anything, just ask and the person answer and then I just forwarded, I uploaded, so it wasn't really that tough, ja. Student DD: Mhmm, my experience is that it could be that because you can really see how people are ... what they wrote, and what they uploaded it, you can see... at... that time, and you can get the idea of what had been interviewed and how questioned had to do or deal with. Researcher: Mhmm. Student GG: To me it was very great, because I've like to make sure I typed the right sentences, in order, just for them to get what I... I really want to say, I was... learning, I was adding to my knowledge of English. Student EE: Mhmm, to me it was, let me say improvement especially in writing, 'cause mhmm, usually when I write an sms on my cellphone I use sms language, but when I was writing mhmm my comments or whatsoever on WhatsApp I use I use like full words, with the right punctuation marks and stuff like, meaning it was kind of an improvement to my grammar. Researcher: Ok, thank you. You mentioned something that I noticed in the process of using WhatsApp, because there are times when I also wanted to use sms language, and I tried my best not to do that, and I also noticed that many of you did not really use sms language and I was a bit wor... or surprised when many of you didn't do that, even though some of you did it. Anyway, there were no rules about using or not using the sms mhmm, language. Now, mhmm, concerning mhmm, your studies, how did you find using WhatsApp for learning purpo... purposes? Like mhmm, do you use it as well, like, when you are studying here on campus? Do you sometimes use WhatsApp for learning purposes with your classmates, friends, etc.? Student DD: To be honest with you, I've never use... used either like do my study or ask questions from my colleagues because it was... it was the beginning to me. Student EE: Mhmm, mhmm, let me say WhatsApp was like mhmm an alternative thing to me because I chat a lot and I only have 100 smses per day meaning my smses usually use to finish up maybe by five or so, then I can use WhatsApp. For instance, if I want to ask homework from a friend, then I can WhatsApp the person and then they respond. So, meaning WhatsApp was actually a good alternative to my smses, especially people like me who chat a lot.</p>	<p>Credit was not really a problem-did not find a picture that really fits (AUCONT,REFL) Had problems with credit (AUCONT), but uploaded some files and images (AUACT,COLCO&REFL) Did not get the right picture to upload (AUCONT) WhatsApp is quite interesting (REFL) but time consuming (ARTIC&MULRP). Typing with cellphone not recommendable (ARTIC), typing with PC faster, saves time, but WhatsApp time consuming (ARTIC&MULRP) Was an easy experience (REFL), had to only record-did not write anything (AUACT), asked people, they answered (COLCO)and I uploaded (AUACT) You can really see how people are (AUCONT), what they wrote and what they uploaded (AUACT&CONV), you can see at that time (AUCONT) and get an idea (COLCO) Was very grea (REFL)t-made sure I typed right sentences (AUACT) Was learning (REFL), was adding to my knowledge of English. (CONV) Was improvement in writing (CONV,REFL)-used full words when writing and right punctuations (AUACT)-was kind of improvement to my grammar (CONV) Was a beginning-never studied asking questions from other students Was an alternative thing to me (REFL) because I chat a lot.(AUACT&AUCONT) Use WhatsApp to ask friends (COLCO) about homework (CONV). WhatsApp was good alternative to smses (REFL)</p>	<p>AUCONT&REFL AUCONT,AUACT&COLCO&REFL AUCONT REFL,MULRP&ARTIC ARTIC&MULRP REFL,AUACT&COLCO CONV,COLCO,AUCONT&AUACT REFL&AUA REF&CONV AUACT,REFL&CONV REFL,AUCONT,COLCO&COA/SC REFL,AUCONT&AUACT CONV&COLCO, REFL</p>
--	--	---	---

<p>122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165</p>	<p>Student BB: For me mmmm, <u>I really don't use WhatsApp mmmm, like for academic purposes, I only use it maybe to chat with the friends, 'cause most of my friends like I can ask like mmmm, things related to... to... to my studies, they have no access to WhatsApp. And no ways you can chat to someone who have no access to WhatsApp.</u></p> <p>Student GG: Mmmm, my experience... I chat with people through WhatsApp, especially when I'm asking about something, especially like my friend... <u>many of my friend are using WhatsApp and one day I remember using WhatsApp is that I'm... I'm trying to get a... an assignment from my friend, then he just take a picture of the assignment and upload it to me, that's... to upload a picture is quite cheaper than a... than a video or whatever, so actually I use it to upload those picture to check what you've search or even for assignments, to... to check what we've searched and for other what they've said about.</u></p> <p>Student AA: <u>I don't really use WhatsApp for academic purposes, only for entertaining each others,</u> such things, ja, asking where you are, those things, ja.</p> <p>Student EE: Mmmm, the other thing is <u>one of the people I interviewed is a student in Brazil, Rio de Ja Neiro.</u></p> <p>Researcher: Ok, Rio...</p> <p>Student EE: And <u>I used WhatsApp 'cause obviously I won't be able to sms from Namibia to Brazil,</u> so meaning WhatsApp was real... <u>is really a great thing, 'cause you can... you can have access to people in other countries as well.</u></p> <p>Researcher: Well, that's quite interesting. Now, mmmm, so that person in Rio de Ja Neiro, is that person mmmm, a Namibian, mmmm, as well?</p> <p>Student EE: Ja. He is a Namibian, but is just a student there in Brazil.</p> <p>Researcher: Wow, that is quite interesting, that mmmm, WhatsApp enabled you even to go beyond Namibia to do your task, and mmmm, well, I guess it was quite a learning experience to you guys. Now, did you encounter some problems or did you experience some problems in the process of using mmmm, WhatsApp to learn, to do what you were doing?</p> <p>[Pause, no response]</p> <p>Researcher: Any problems?</p> <p>Student DD: Mmmm, my problem that I experienced is that <u>sometimes your'e quite busy doing something</u> and even of, with even ... with a phone and sometimes you never expected someone to text on WhatsApp and <u>sometimes texted and you need to check or up... or download that what is recorded to check and to listen, so, sometimes it's quite a problem or challenging.</u></p> <p>Researcher: Mmmm, ok, in other words for you to respond you had to check what other... [Recording stops accidentally temporarily and continues again with group members sharing their experiences]</p> <p>Student BB: Well, at first when I heard something like gender-based violence, what came to my mind was just mmmm, there are women being abused by men, but when I went conducting the research <u>I've learned that a woman can also abuse a man, but that's what I've learned. And again, I've learned that since I conducted the research most of the people I interviewed they are blaming the lady for fighting and promoting violence, and I've learned to know that, lady, mmmm, what lady should do in order not to be killed,</u> so in future I don't even want to accept any offer from a guy, because I don't want to be a victim.</p> <p>Researcher: Well, mmmm, ok ladies and gentlemen, I don't know if there is anybody else who wants to add something to this whole experience or if we should just stop here, anybody maybe</p>	<p>Doesn't use WhatsApp for academic purposes (AUCONT), use it to chat (AUACT)-friends that I can ask things related to studies have no access to WhatsApp(AUCONT)</p> <p>Chats through WhatsApp, e.g. when asking about something (AUACT).Many of my friends are using WhatsApp (AUCONT)</p> <p>Tried getting an assignment from a friend (EXPER) who took a picture of it and uploaded it (AUACT) to check what others have said (COLCO)-uploading a picture is cheaper than a video (ARTIC,MULRP).Use it to upload pictures searched (AUACT), even for assignments (CONV)</p> <p>Doesn't really use WhatsApp for academic purposes, only for entertainment (AUCONT&AUACT)</p> <p>One person I interviewed is a student in Brazil, Rio de Ja Neiro (COLCO)</p> <p>Used WhatsApp as unable to sms from Namibia to Brazi (AUCONT)!. WhatsApp a great thing (REFL), you can access people in other countries. (EXPER&COLCO)</p> <p>Sometimes you are quite busy and someone texts (AUCONT), then you need to check or download what was recorded (AUACT)-quite a problem or challenge sometimes (MULRP)</p> <p>Learned that a woman can abuse a man.(ARTIC) Learned that most people interviewed are blaming ladies for fighting and promoting violence.ARTIC&COLCO) Learned what ladies should do not to be killed (AUCON&MULRP).</p>	<p>REF&,AUCONT</p> <p>AUACT&AUCONT</p> <p>EXPER,AUCONT, COLCO,ARTIC, AUACT,MULRP& COLCO</p> <p>AUCONT&AUACT</p> <p>COLCO</p> <p>REFL,AUCONT, ARTIC,EXPER &COLCO</p> <p>AUCONT,AUACT& MULRP</p> <p>ARTIC</p> <p>ARTIC,COLCO,</p> <p>AUCONT&MULRP</p>
--	---	---	---

<p>166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187</p>	<p>who wants to add something, just give me an indication if there is something that you would like to mention or to add.</p> <p>Student AA: My final remark is that mhmm, <u>we shouldn't mhmm, blame one party or the other,</u> mhmm, really <u>this thing does not have mhmm, a thing to point out at,</u> it can be the man, it can be the... the wife or it can be whoever; <u>we mustn't point fingers that it's men or women.</u></p> <p>[Student hesitates]</p> <p>Researcher: It's ok.</p> <p>Student AA:<u>All we have to do is to find a solution to this problem mhmm, instead of... of blaming each other,</u> ja, that's it.</p> <p>Student EE: Ja, and the other thing is that, what <u>I would like to ask the expertise also, is to bring up the... to bring up more of the social network,</u> because I think like firstly we were just communicating on Facebook, and Twitter and other social network but now that we can use <u>WhatsApp</u> now ...<u>the fact that it is cheaper it can be afforded by many students,</u> especially many of us, and the other thing is mhmm, ok.</p> <p>Researcher: Thank you ladies and gentlemen; I think mhmm, you have shared enough, now I know when you guys started using WhatsApp, I've heard how this whole experience worked out for you guys, and mhmm, well, I think I would rather just say thanks for your efforts. You did a great job, you produced a long learning dialogue, and should the Namibians read what we contributed mhmm, as a team, I believe it might somehow mhmm, be something that can be used to overcome this serious problem that we are facing in our society concerning gender-based mhmm, violence and especially passion killings. Well, I don't have anything else to add, so I guess this is the end of our discussion. Thank you ladies and gentlemen.</p>	<p>No need to blame one party or the other (ARTIC&MULRP) No pointing fingers to men or women (ARTIC&MULRP)</p> <p>There is need to find a solution instead of blaming each other (AUCONT,ARTIC&MULRP) Expertise should bring up more social networking tools (MULRP)- WhatsApp cheaper and can be afforded by many students (AUCONT)</p>	<p>ARTIC&MULRP</p> <p>ARTIC&MULRP</p> <p>AUCONT,ARTIC&MULRP</p> <p>MULRP&AUCONT</p>
--	--	--	---

Appendix J: Matrix of coded Focus group interviews ([Appendix I](#)), Stage 2: Data display

Codes: **AUCONT** = authentic context, **AUACT** = authentic activity, **EXPER** = expert performance, **MULRP** = multiple perspectives, **COLCO** = collaborative construction, **REFL** = reflection, **ARTIC** = articulation, **COA/SC** = coaching/scaffolding, **INTASS** = integrated assessment, **FL** = formal learning, **CONV**=convergence

Text no.	Coded key phrases and statements	Authentic context	Authentic activity	Expert performances & modeling processes	Multiple roles and perspectives	Collaborative construction of knowledge	Reflection	Articulation	Coaching and scaffolding	Integrated assessment	Formal learning	Convergence
J5-6	Started using WhatsApp in June (AUCONT), was a nice experience using that platform (REFL)	x					x					
J7-8	Started a couple of months ago (AUCONT)-really like it (REFL), something new (MULRP)	x			x		x					
J9-10	Started using WhatsApp last year (AUCONT)-very nice and impressive-likes it (REFL)	x					x					
J11-12	Started using WhatsApp in March (AUCONT)-cool,(REFL) you get experience from it (MULRP)	x			x		x					
J14-16	Have been using WhatsApp for... two years(REFL)-a good platform to meet different people (AUCONT), share ideas with others (COLCO), upload images and audio (AUACT)-nice thing (REFL)	x	x			x	x					
J25-26	An experience filled with emotions (REFL), some people willing to share ideas (COLCO&AUACT), others not		x			x	x					
J35	It was a mixture of feelings (MULRP), there was a point where I felt sad (REFL&AUCONT)	x			x		x					
J42-51	Was really something new, something nice, learnt a lot (REFL), had different views but came to a conclusion (AUCONT,MULRP), could learn from each other (COLCO), but sometimes could not upload or read postings due to lack of air time (AUACT&AUCONT).	x	x		x	x	x					

J55-57	You need some cents (little money) to use WhatsApp (AUCONT)	X												
J59-60	Won't go on WhatsApp if there is no airtime (AUCONT)	X												
J61-62	No access to WhatsApp without a dollar – must have at least about one dolla (AUCONT)r to read postings from others (COLCO)	X				X								
J64-67	You've got to have at least one dollar.(AUCONT) o download, e.g. a picture (UACT), you need at least two or three dollars (AUCONT)	X	X											
J74-75	Credit was not a problem-could not find the right picture(AUCONT)	X												
J77-78	Credit was not really a problem-did not find a picture that really fits (AUCONT,REFL)	X						X						
J80-81	Had problems with credit (AUCONT), but uploaded some files and images (UACT,COLCO&REFL)	X	X					X						
J83	Did not get the right picture to upload (AUCONT)	X												
J89-92	WhatsApp is quite interesting (REFL) but time consuming (ARTIC&MULRP). Typing with cellphone not recommendable (ARTIC), typing with PC faster, saves time, but WhatsApp time consuming (ARTIC&MULRP)					X		X	X					
J93-95	Was an easy experience (REFL), had to only record-did not write anything (UACT), asked people, they answered (COLCO)and I uploaded (UACT)		X			X		X						
J96-98	You can really see how people are (AUCONT), what they wrote and what they uploaded (UACT&CONV), you can see at that time (AUCONT) and get an idea (COLCO)	X	X			X								X
J100-102	Was very grea (REFL)t-made sure I typed right sentences (UACT). Was learning (REFL), was adding to my knowledge of English. (CONV)		X					X						X
J103-106	Was improvement in writing (CONV,REFL)-used full words when writing and right punctuations UACT)-was kind of improvement to my grammar. (CONV)		X					X						X
J115-116	Was a beginning (REFL)-never studied asking questions from other students (AUCONT)	X						X						
J117-121	Was an alternative thing to me (REFL) because I chat a lot.(UACT&AUCONT). Use WhatsApp to ask friends (COLCO) about homework (CONV). WhatsApp was good alternative to smses. (REFL)	X	X			X		X						X
J122-125	Doesn't use WhatsApp for academic purposes (AUCONT), use it to chat (UACT)-friends that I can ask things related to studies have no access to WhatsApp(AUCONT)	X	X											

Appendix K: Sample unedited transcribed audio clip uploaded during authentic task using WhatsApp

Interview with a community member

Student AA: In your opinion, what is gender-based violence and passion killings, in your opinion?

Interviewee: Mhmm, gender-based violence mhmm, it is a bit self-explanatory. I mean mhmm, gender has got a lot to do with male or female, so if it's mhmm, gender-based violence then it's mhmm, somebody whether it's a female or a male mhmm, violating your... your rights as a person as an individual, whether you are male or female as well.

Student AA: How do you feel about gender-based violence and passion killings?

Interviewee: Mhmm, it's destructive, it's destructive, I mean it..., it..., it breaks the wealth of the country, I mean if we can't live in harmony, mhmm, whenever somebody is doing something you are offended by that and then... I mean really breaks down self-image and all that.

Student AA: What do you think causes gender-based violence?

Interviewee: Mhmm, different... there are a lot of factors that causes gender-based violence, one could say maybe mhmm, mhmm, envy mhmm, when somebody else envy you mhmm, it can mhmm, cause gender-based violence as that person is envying your... your benefits or the things that you a... acquire and the person doesn't get it, so that can be a cause as well.

Student AA: What do you ... what do you think we the Namibians can do to reduce the rate of gender-based violence and passion killings in our country?

Interviewee: Mhmm, I would say be yourself, be happy with who you are and also accommodate other people as... as... as they are different people and try to understand each other's cultures and all that. I think it will really help to... to... reduce gender violence and passion killings.

Student AA: Thank you very much.