STUDENTS' EXPERIENCES OF ONLINE SUPPORT IN BUSINESS MANAGEMENT EDUCATION

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DECLARATION

I, Muntuwenkosi Abraham Mtshali, declare that this thesis is my own work and has never been submitted for examination in any other institution. Where the work of others has been used it is indicated and acknowledged.

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ABSTRACT

Learning using online technology has become a popular strategy for addressing diverse learning needs of students in higher education institutions. This strategy is often used to enable students in overcrowded classrooms to gain extended access to their lecturers as not all students are able to consult with their lecturers during normal consultation times. This study was also conducted in the context of a course offering with a large class size where students encountered problems with consultation times that clashed with other lectures they had to attend. The use of online support to complement face-to-face lectures in this course was inspired by the adoption of the Modular-object-oriented and dynamic learning environment (Moodle) learning management system (LMS) by the university as its official LMS. LMS was initially used as an online consultative-forum but was then used as a mechanism to support teaching and learning.by using its various functional properties. Case studies as learning activities were analysed and discussed through online chats and online discussion forums while assignments were accomplished and submitted electronically via Turnitin. Learning resources such as lecture notes and work schedules were also conveyed to students through the LMS. The purpose of this study therefore was to explore students' experiences of online support in Business Management Education by pursuing the following critical research questions:

1. What are student's experiences of online-support in Business Management Education?
2. How do these experiences relate to students learning in Business Management Education?
3. Why do these experiences relate to students' learning in Business Management Education the way they did?

Fifteen students in a BME second-year level of study were selected using phenomenographic sampling for purposive variation. This sample was varied according to age, gender, race, background and the regularity with which students engaged with the LMS during the semester. A Mixed-method research was used where a combination of qualitative and quantitative methods of collecting data were deployed. Phenomenography was used as an approach to qualitative research. This approach guided the methods according to which qualitative sampling was

conducted, data was collected and also analyzed. A questionnaire was used as a means to confirm the validity of qualitative findings. The research process led to the emergence of the following categories of description as findings in phenomenographic research: repository of resources, support for learning, complexities of epistemological access, conduit for communication, the social effect on learning, and the cognitive effect on learning.

The study proposes insights for pedagogy in BME. It goes on to suggest the design of a method of socializing students into online-supported learning, and also to augment the basic computer-literacy course offered to new students at entry level to include elements of online learning. It also proposes a shift from traditional ways of transacting teaching and learning in BME that heavily rely on face-to-face lectures, to include online learning. Importantly, the study deepens insights into the epistemological access challenges that contemporary South African students are likely to encounter. Finally, this study proposes a model for LMS mediated case-based pedagogy for Business Management Education.

ACKNOWLEDGEMENTS

DEDICATION

This study is dedicated to my late mother, Thembi Beauty Mtshali and late father, Mpondo Piet Mtshali. Their teachings have always been the source of my inspiration and pillar of support.

LIST OF ACCRONYMS

ABSA   Amalgamated Banks of Southern Africa

BME   Business Management Education

CE   Commerce Education

CHE   Council on Higher Education

CMC   Computer mediated communication

CMS   Course Management System

CoI   Community of Inquiry

CSCL   Computer Supported Collaborative Learning

DP   Duly Performed

FGD   Focus group discussion

HEI   Higher Education Institution

HEIs   Higher Education Institutions

ICT   Information and Communication Technology

J6   Journal 6

J11   Journal 11

J23   Journal 23

J26   Journal 26

J29   Journal 29

J37   Journal 37

J38	Journal 38
J39	Journal 39
J41	Journal 41
J42	Journal 42
J43	Journal 43
J45	Journal 45
J47	Journal 47
J49	Journal 49
LAN	Local area network
LMS	Learning Management System
MBA	Master-in-Business Administration
MOOC	Massive Open Online Course
Moodle	Modular Object-Oriented and Dynamic Learning Environment
NIH	National Institutes of Health
RBL	Resource based learning
SA	South Africa
SASSA	South African Social Security Agency
SPSS	Statistical Package for Social Sciences
SRC	Students' Representative Council
SSSE	School of Social Science Education

UK   United Kingdom

UKZN   University of KwaZulu-Natal

USA   United States of America

VLE   Virtual Learning Environment

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CHAPTER 1

BACKGROUND AND CONTEXT

1.1. Introduction

Successful learning in higher education is often influenced by access to resources which are placed at the disposal of students in support of their learning. One of these resources is online learning technologies in the form of the learning management systems (LMSs) that higher education institutions have adopted in an attempt to enhance student learning. The need to establish a learning context that is associated with enriched student learning, and where channels of consultation are expanded within a framework of educational policies that are compatible with social inclusion, necessitates the merging of online support and face-to-face learning (Jonas & Burns, 2009). The availability of information and communication technologies (ICTs) has since become a key indicator for determining the extent to which the knowledge society is inclusive (Education, 2003). The use of ICTs is also being applied as a strategy for achieving greater attainability of social inclusion to educational provision at a variety of levels of the education system, ranging from primary school to senior secondary and higher education (Webb, 2006).

The quality of education that higher education institutions provide in South Africa has received much attention in the last few years (Maphosa, Mudziewelwana, & Netshifhefhe, 2014). This is happening at a time when various universities in South Africa are experiencing high failure rates among students. A study tracking students' consequential progress from one year of study to another, revealed that an overwhelming 40% of students in South African universities drop-out in their initial study year, with only 15% acquiring their intended qualifications within normal completion time (CHE, 2010). This has given rise to serious concerns about the quality of teaching and learning in South Africa in general, and in higher education in particular (Morrow, 2009). Excellence in teaching has come under constant scrutiny given the changing needs of students and other interested stakeholder. These concerns coupled with massive class sizes necessitate a greater variation in the ways in which teaching and learning is conducted in the South African classroom (Gamede, 2005). Online-supported teaching and learning is presumed to be an option in providing this diversity required to enhance learning in higher education (Barret, Higa, & Ellis, 2012).

This study foregrounds students' experiences of learning using such online support. It focuses on students' experiences of online support in Business Management Education (BME). The primary purpose of this study is to explore the experiences of the participants' as they engage with learning using online support, by eliciting their thoughts and feelings about this mode of learning, and also to understand its influence on students' learning in BME. This chapter presents an outline of the study which includes the critical questions and their relationship to my dual involvement as both the teacher of the module and as a researcher in this study. The rationale for deploying online support in a module that traditionally used to be delivered through face-to-face lectures will also receive attention. The chapter will end with an overview of the chapters that are still to follow.

1.2. Importance and significance of the study

BME first-year and second-year level modules at the University of KwaZulu-Natal are characterized by class sizes with enrolments ranging from 156 to 386 students. This made it difficult for students to consult with the lecturer during the two-hour scheduled consultation times, as many students with a variety of concerns sought consultation during these limited consultation hours. This often manifested in long queues that stretched from the corridors outside leading into offices during consultation times, suggesting that at least four hours should be scheduled for such consultations. However, this may not guarantee that all students would consult during these hours as consultation hours often coincided with other lectures students had to attend in other modules they were registered for. This indicated a need to devise an alternative strategy that would ensure that the students affected would also find other ways to consult with the lecturer. UKZN adopted the Modular object oriented and dynamic learning environment (Moodle) as its official LMS in year 2009. Informed by Stewart's (2004) view that perpetual learning in virtual learning contexts emerges from advancements in online education, a decision was taken to use this LMS (description to follow in chapter 2) to enable consultation with students in BME.

When Moodle as an LMS was used for purposes of consultation, it became evident that more could be done through the LMS to enhance student learning. While this initially started as an attempt to improve consultation with students, it eventually developed into an extended practice of communicating and engaging with learning beyond face-to-face lectures.

The Bachelor of Education qualification for students taking BME as their major in Commerce Education requires that they complete at least five modules over a period of four years. With the first-year level module, online support extended to students was limited to communicating announcements and general news to students via the News Forum, as well as circulating lecture-notes using news forum attachments. This support was confined to the News Forum for the simple reason that at this level of their learning, students were still doing their fundamental computer-literacy course and were still not that familiar with the use of the computer, let alone the LMS. It was thought to be prudent not to burden students with a complicated interface in their initial year of university education, given that for many students in this research context, exposure to computers and ICT may well have been their very first. It was decided to provide advanced online applications in their second year once they had developed basic computer literacy.

Students taking the second-year BME module would have already completed the basic computer-literacy course that is offered to newly registered students at first-year level of their university education. The second year Business Management students were exposed to the Discussion Forum, the Chat Room and the Turn-it-in Assignment (online space that detect levels of plagiarism when assignments are submitted). By doing this, it was hoped that the use of the LMS would enhance student learning. The Chat Room was appropriate for smaller groups of students since interactions occur synchronously (with everyone logged onto this space at the same time) while the Discussion Forum was a convenient space for facilitating discussions among large groups of students because interactions occur asynchronously (without having everyone logged onto this space at the same time). It is for such reasons that online chats had to be scheduled to take place according to a timetable while the discussions in the forum did not have to be scheduled to take place at a particular time. Turn-it-in Assignment is an activity space (space for conducting learning tasks constituting an activity) where students had to complete their assignments and submit these electronically via the same space.

BME had three sessions allocated in each week according to the faculty timetable, of which two were for face-to-face contact in the lecture room and one was for engaging in tutorial activity with students. Acknowledging that BME is a module that has been traditionally heavy in

theoretical content, chat activities were conducted during the tutorial sessions so that the two contact sessions in the lecture room were exclusively used for presentation of theoretical content.

It is hoped that the findings from this study will contribute to current and future practices in higher education in both local and international contexts, especially in developing countries. This study, which serves to confirm whether the deployment of online learning to courses normally delivered through face-to-face lectures is able to enhance learning or not, has made major contributions to current and ongoing debate on challenges of online and blended learning. Findings emerging from the study confirm these challenges and relate them to complexities of epistemological access. Based on this, the study recommends that computer literacy courses offered to new students at HEIs be augmented to include elements of online learning using an LMS and this constitutes a significant policy position finding for learning in HEIs. The capacity of HEIs to extend learning opportunities that cannot be derived from face-to-face learning alone is grounded on workable solutions the study has established and provided to how blended learning must best be implemented in unique environments where students with diverse personalities and learning styles are located.

The significance of this is the flexibility with which teaching and learning is conducted as students with distinct personalities are able to benefit from ways of learning that suit their personalities, thus enhancing inclusivity in the process. Face-to-face teaching is not the most effective delivery strategy in contexts where a learner-centred approach has to be pursued, as students' learning can be enhanced through a blend of delivery techniques that complement learning resources and nurture students' involvement (Badenhorst, 2009).

"(R)esearch problems are educational issues, controversies, or concerns that guide the need for conducting a study" (Creswell, 2012, p. 59). The research problem that this study attempts to address is related to the learning experiences of students as they engage in the online support. While at face value it may appear reasonable to expect that online support is likely to enhance learning, there is still much uncertainty as to how students in a South African context are likely to experience learning using this innovation, given that students at UKZN have had very wide ranging schooling experiences relating to exposure to learning using ICT. The problem therefore is that I do not know as to how students will experience learning using online support in BME. Moreover, existing literature in online and blended learning focuses on the fields such as science

with very little research conducted in the field of business and management studies especially in the developing countries hence; this study will thus focus on the critical questions outlined in the next paragraph under aim and objectives of the study.

1.3. Aim and objectives of the study

This study is concerned with exploring students' experiences of learning using online support in Business Management Education and the various ways in which these experiences relate to their learning in this course offering. These experiences have as their source, the manner in which students find learning to be as soon as learning is moved from a face-to-face context to a computer-mediated communication environment. The purpose is an attempt to explain why students' experiences relate to their learning the way they do in the context of BME. In exploring students' experiences of learning using online support, I set out to develop a better understanding of what they did, and how that translated into learning as they engaged with online support. The study therefore has as its focus, students' experiences of learning using online support and seeks to pursue the following critical questions.

1.3.1. What are students' experiences of online-support in BME?

1.3.2. How do these experiences relate to students' learning in BME?

1.3.3. Why do these experiences relate to students' learning in BME the way they did?

1.4 My role as both teacher and researcher

I need to clarify my dual role and position in the research process. My being a lecturer to the students who participated in the module and subsequently in the study was a stimulus to the choice of the focus of the research and I acknowledge this. My choice of collection methods and methods in paradigm was also motivated by my position in the project. My position as the lecturer in the module had an influence in the manner in which participants responded to the questions asked during the individual interviews. The key issue is the conflict of interest between two competing positions, namely, one of being the practitioner and that of being a researcher. Thus when I encountered positive responses that students offered to questions I asked during these interviews, I felt that this was influenced by my role as a lecturer and I therefore solicited the services of an independent interviewer who then conducted a second round of interviews

pursuing the same questions as I did. I had initially intended to elicit and understand the qualitatively different ways by which students experienced online support using a phenomenographic approach (a methodological framework for researching experiences of learning) within a qualitative study. I later had to consider a methodological shift to a mixed-methods research just to see if quantitative data would support or oppose qualitative data. Attempts to alleviate this conflict of interest therefore led to the deployment of an independent interviewer and the introduction of a questionnaire in addition to the data collection protocol that existed prior to the first level analysis.

1.5. The need to integrate online support into a face-to-face module

Given the fact that 156 students were registered in the module, there was a need to consider techniques for enabling students to engage effectively with the lecturer. Since the relationship between online support and student learning in BME is to be explored, describing this module is important and this will be done in the second chapter.

When the minutes (dated 18th August 2010) of the faculty board meeting containing a report that suggested that the UKZN's Faculty of Education had made the least effort in integrating Moodle into face-to-face modules were circulated, a special appeal was also made to faculty academics to consider using this LMS to avoid depriving students of the benefits to learning offered by the LMS. I therefore had to integrate online with face-to-face methods of teaching and learning in my course offering to ensure that students learn in ways that would enable them to reap the benefits of using online resources the university placed at their disposal. Government policy on the provision of higher education and training (Higher Education and Training, 2014) seeks to encourage the integration of ICT in our pedagogic practices to influence the manner in which learning takes place in South African higher education institutions so as to enhance the achievement of learning outcomes. Furthermore, through globalisation technological innovation spreads rapidly all over the world (Education, 2003). The Edgewood campus as the teacher education institution of the UKZN seeks to graduate teachers for South Africa at an internationally accepted standard in terms of ability to use ICT. This substantiates the need to expose students to ways of learning through ICT if they are to compete in a globalised world.

The changing higher education landscape that is characterised by a shift from teacher-centred methods of instruction towards learner-centred approaches, and the fact that students grow up in an era in which information technologies are powerful, necessitate the integration of online learning and face-to-face courses (Barret et al., 2012). Learning in the context of a globalised world requires that learners have access to a variety of the sources of knowledge. One of these sources of knowledge is the Internet. For students to gain knowledge that the Internet possesses, it is imperative that they are familiarised with ways that engage computer-mediated learning (Garrison, Cleveland-Innes, & Fung, 2010). This will ensure that teachers graduate with the ability to pass on web-based learning skills from the present generation to the next generation. Integrating computer-mediated learning in the form of a learning management system (LMS) in higher education, especially in developed countries, has over the past number of years gained momentum and has made an impact on how universities conduct teaching and learning (Coates, James, & Baldwin, 2005). Thus in 2001, the formation of the Presidential National Commission on Information Society and Development made provision for an advisory body to the Government on how ICTs could be used to address South Africa's development problems and improve South Africa's international competitiveness (Education, 2003).

In South Africa various approaches to the delivery of curriculum content have been introduced and discarded, leading to new teacher-competencies being sought (Education, 2003). It can therefore be argued that online teaching and learning competencies are necessary for a new generation of teachers (Barret et al., 2012). This study attempts to explore teaching and learning in ways that meet the need to improve the achievement of learning outcomes in changing learning environments. Besides the expectation that the modern educator has to be the interpreter of learning programmes, this educator now also has to be familiar doing this in contexts with large class sizes. The larger the class, the greater the need for considering learner-centred approaches (Jones, 2007) such as online support. I decided to use an online-supported learning model to complement face-to-face classroom learning. This model could help students carry-out learning operations more effectively than can regular pedagogies currently available (Kose, 2010)

Through constant engagement with literature on online learning, I became familiar with the practices of computer-mediated pedagogy. This enabled me to choose activities and resources

suitable for students' use and then pursued cost-free and unrestricted training on how activities and resources could be uploaded and disseminated to students online. I then made a presentation to students on how they were going to log-on and manoeuvre their way in the online module window and this prepared students to start experiencing online support in a BME second-year module at the beginning of the first academic semester in year 2012.

Whilst online learning is relatively new and has not endured the same scrutiny as classroom teaching especially in developing countries, this study has attempted to explore how online-support is used to complement conventional face-to-face classroom learning, an approach conveniently known as blended learning (Seng & Mohamad, 2002).

1.6. The nature of online support offered to students in BME

This study pursued the participants' experiences of online support in this context with the purpose of understanding how learning in BME took place using this support. Both 'teacher-learner' and 'learner-learner' interactions using online methods sought to enable cognitive development through a student-centred approach to learning. According to Jones (2007), a student-centred context is not a place for students to determine what they want to learn but rather a place where consideration is given to the needs of students as a group and as individuals, and encourage them to participate in the learning process. Student-centred learning is epitomised by inventive teaching techniques which aim at advocating interactive learning with teachers and other learners. It considers students as active participants in their own learning, while also promoting both critical and reflective thinking (Attard, Di Lorio, Geven, & Santa, 2010).

The study explored students experiences of learning using online support in the BME second-year module hence; online delivery was added to complement the face-to-face delivery mode during the course of the first semester in 2012. Case studies, the signature pedagogy used to familiarise students with the practical aspects of the firm as the object of study in the Business and Management Studies Discipline (Chick, Haynie, & Gurung, 2012), were not discussed in face-to-face lectures during lecture periods as there was not enough time to do this. Instead, these were discussed and analysed online to create extended opportunities for students to comprehend and deepen their knowledge of content within the context of a particular case. Labelling the case study as the signature pedagogy of BME denotes that, for students to understand various aspects

of the firm as depicted in the course content, a scenario should be cited from the real world as a case in point for students to explore in line with the content described in the course. These cases or scenarios were often extracted from local newspaper publications and business pages from the world-wide web. This has been adopted as a way of teaching Business and Management Studies Education as it enables students to learn the intended outcomes of the course.

In accordance with Knowles' (1980) call on teachers, I considered how the assumptions of andragogy as presented in chapter 2 of this study could inform the nature of online support to be offered to BME students. This process entails seven steps that proceed as follows:

Step 1: creating a cooperative learning climate by circulating case studies to students prior to the day on which these were going to be discussed and analyzed in the Chat Room/Discussion Forum and explaining that every idea posted during the activity would significantly count in favour of their learning.

Step 2: planning goals mutually in the sense that the purpose of each activity required students' input and was formulated such that whatever students had to do was informed by the manner in which they were going to be assessed in the module.

Step 3: diagnosing learner needs and interests by identifying the challenges that impeded students' efforts to work with the online tool and also responding to the requests students constantly made in an effort to secure operational and academic assistance.

Step 4: helping learners to formulate learning objectives based on their needs and individual interests. Once areas of concern were identified, a desirable plan to address these was devised according to how students felt they should be assisted taking into account the importance of students' developing at their own pace.

Step 5: designing sequential activities to achieve these objectives by selecting from, uploading and disseminating on the module window not only relevant tasks but also material and/or resources that were necessary to support student learning.

Step 6: carrying out the design with selected methods, materials and resources by ensuring constant monitoring of students during the process of accomplishing the tasks designed.

Step 7: evaluating the quality of the learning experience and identifying needs for continued learning by requiring students to update online reflective-journals. These journals served both as a research tool for this study and as an assessment instrument in generating their duly-performed (DP) status.

1.7. An overview of the research design and methodology

The purpose of this section is to present an introductory impression of aspects relating to the design of the research. Further details of the design and the choice of method and paradigm will follow in chapter 3.

1.7.1. Research approach and paradigm

Phenomenography (details of which to follow in chapter 3) is a theoretical approach to qualitative research and is located in the interpretive paradigm. As a theoretical approach, it has its own ontological (nature of reality), epistemological (nature of knowledge) and methodological (how to go about researching the phenomenon) assumptions. This approach provides the foundation for the design of this study and assumes that there is a number of qualitatively different ways of experiencing an aspect of the world (Marton & Booth, 1997). The choice of this approach was motivated by the desire to understand the phenomenon through the experiences of other people as the approach has long ago been identified as a useful framework for studies researching experiences of learning (Ireland, Tambyah, Neofa, & Harding, 2008). Since human experience differs qualitatively from one person to another, it can best be explored and described in qualitative terms, hence qualitative research was the most appropriate design for this study.

Due to circumstances that emerged during the analysis of the interviews conducted by the researcher (where participants provided overwhelmingly positive responses to questions), the

need to deploy a questionnaire arose, necessitating a change from qualitative to a mixed-methods research. The interpretive paradigm primarily commits to provide rich and thick descriptions of phenomena as studied in their natural settings, making it the appropriate choice of paradigm in pursuance of experiential knowledge (Visconti, 2009) under these circumstances. It could be expected that the change in design should necessitate a change from the interpretive to a pragmatic paradigm. However, this would not be necessary in this study as the use of the questionnaire was meant to ascertain whether quantitative data either supported or opposed qualitative data.

1.7.2. Sampling

Participants in this study were selected from the second-year BME class of 156 students who experienced online support in the first semester of year 2012, using purposive sampling as normally used in phenomenographic research (sampling for purposive variation). Coincidentally 2012 was proclaimed by the *New York Times* as the "Year of the massive open online course (MOOC)" amid fears that putting courses online would render the roles of college professors and the quality of these courses obsolete, and the bachelor's degree insignificant (Kelly, 2014). To ensure that I was reaching the full range of participants, with regard to different ways of experiencing online learning, I sampled on the basis of different levels of participation in the online component of the course. This ranged from those who logged onto the system and participated in learning activities frequently, moderately and those who infrequently engaged with the system. This was accomplished by way of perusing each student's log file in the Moodle LMS to ascertain the frequency with which each student participated in online activities (Petropoulou, Kasimatis, Dimopoulos, & Retalis, 2014).

Petropolou et al., (2014, p. 2) view the essence of browsing students' log files and cordially motivating those with a low participation rate to participate, as an attempt to stimulate inclusivity in learning and to nurture the "21st Century Skills" that include collaboration, critical thinking and creativity. Data analyzed and presented in chapter 6 of this study will demonstrate how collaboration and critical thinking was inspired in participants through online support.

1.7.3. Data production techniques

In most phenomenographic research, interviews are predominantly the instrument used to generate data, but this does not suggest that other collection instruments cannot be used (Hasselgren & Beach, 1997). Booth (2008) reported that short essays reflecting on students' experiences of learning in a particular programme, complemented by group discussions, were used to collect data before phenomenographic interviews were conducted in her study. Likewise, this study solicited the use of personal reflective-journals, focus group discussion and interviews. Phenomenographic interviews, which have a unique way of commencing with a contextualizing statement that seeks to portray the participant as an expert in a particular subject/event/incident, were used in combination with other data collection techniques.

Personal reflective-journals were used to encourage students to reflect on the online learning in place of the traditional use of face-to-face lectures only. Personal reflective journals provided the initial data from which preliminary conceptions of students' experiences were identified as the basis for the construction of the focus group discussion schedule. Students had to update these journals during the course of their experiencing online support in BME. I therefore had to upload the activity known as 'The Journal' from the list of activities on the module window onto their online files for them to engage with this activity as their personal reflective-journals online.

The focus group discussion in this study was used to obtain in-depth information on participants' perceptions and ideas as a group of people directly affected by online support (Debus, 1988). The relevance of this discussion as a collection instrument for my study is its capacity to extend opportunities for all the participants in the group to interact and share their views, while allowing flexibility in the process (Campbell, 2008). It also offered opportunities for all participants to question each other and to provide detailed ideas on this approach to learning.

Interviews in the phenomenographic tradition are semi-structured. This ensures that all participants have equal opportunity to respond to similar questions, while the interviewer also has an opportunity to probe questions contained in the interview schedule where necessary. The first round of interviews was conducted personally by the researcher. When overwhelmingly

positive responses from participants emerged from the analysis of interviews conducted by the researcher, the need to have the same interviews conducted by an independent person arose. This independent person was a post-graduate student who was solicited from the ranks of the student representative council (SRC), a structure set up to represent the interests of students in higher education institutions like a university.

As has already been stated, a questionnaire was also circulated to students. This was a means to check, in addition to the interviews conducted by the independent person, whether participants' responses to questions during the focus group-discussion and interviews conducted by the researcher could be justified as valid.

1.7.4. Data analysis techniques

Analysis of qualitative data in phenomenographic research is inductive and iterative in nature. Categories of description that represent the different ways of experiencing the phenomenon emerge from the data transcripts and are not imposed by a research framework. This suggests that data analysis in phenomenographic research is a process of unearthing what is yet to be known (Mann, Dall' Alba, & Radcliffe, 2007) since the outcomes or findings are still concealed and must therefore be discovered. While qualitative data in this study was analysed using inductive analysis, quantitative data that emerged from the questionnaire was analysed using the Statistical Package for Social Sciences (SPSS).

1.7.5. Scope of the study

While the primary purpose of this study is to explore students experiences of online support and to understand how these experiences relate to their learning in the domain of BME, its scope will now be described. Owing to the lack of research conducted in BME, related literature on the nature of BME as the context of this study had to be sourced from business and management studies education. This study has students' experiences of learning in this domain initially explored using phenomenography, a theoretical approach to the qualitative component of this mixed methods study. This approach has become popular with studies researching students'

learning and is located in the interpretive paradigm. With the quantitative component of the study applied to confirm whether findings emerging from the analysis of qualitative data are justifiable or not, validity and trustworthiness are enhanced in the process. The methodological limitations of the study are located in the sample, which is not open to students who learn using online support in other disciplines since the title of the study emphasise BME as its context. While sampling in quantitative research seek to identify individuals who are representative of the population to which results can be generalised, this cannot be done in this study since its paradigmatic purpose is to understand these experiences rather than to use them for purposes of generalisation.

1.8. Overview of the chapters

Since this chapter has outlined its content in terms of what is considered to be the fundamental sketch of the origin and background of this study, its overview has already been provided. This chapter, therefore, concludes by describing the eight chapters that constitute this study where each chapter builds on the preceding chapter.

Chapter 2 presents theoretical assumptions about the nature of online support and findings emerging from studies previously conducted by scholars who have explored this hybrid mode of learning in the past. It covers relevant aspects relating to ICT and its influence on the evolution of online support. It also explores the need for effective support of, and epistemological access to learning. It also addresses how students have experienced and perceived the phenomenon of learning in the context of higher education, with implications for learning using online support. Since online support is transacted via the medium of an LMS, this chapter explores the LMS as an agent for online-supported learning. The chapter goes on to explore conceptual issues relating to the existing gap in literature. The chapter also describes the curriculum of Business Management Education. The chapter ends with a detailed account of the Blended Community of Inquiry framework as a conceptual lens for researching online-supported learning.

Chapter 3 describes the research design of the study with regards to the choice of method in paradigm. The chapter presents phenomenography as an approach to qualitative research and addresses its relevant theoretical considerations. It reports how the participants were selected as a

relevant sample for the study. The methods according to which data was generated and analyzed are delineated. The chapter also explains procedures according to which trustworthiness and credibility were sustained throughout the study. It addresses the need to shift from qualitative to mixed-methods research that resulted from the need to deploy methods of generating data without the involvement of the researcher. The chapter, therefore, continues to address the process according to which the quantitative approach to research was integrated into the study.

Chapter 4 presents the first part of the phenomenographic analysis that has as its focal point the 'what' aspect of the phenomenon. This part constitutes the analysis of qualitative data from which the categories of description emerged, and were supported by the SPSS analysis from which descriptive statistics emerged. These categories of description present outcomes or findings of phenomenographic research and depict the participants' experiences of the phenomenon. Through the description and interpretation of these experiences, the first critical question is partially addressed.

Chapter 5 is the continued presentation of the first part of the phenomenographic analysis and supported by the SPSS analysis. This chapter advances the 'what' aspect of participants' experiences of the phenomenon and provides further descriptions of additional categories of description and the interpretation of participants' experiences of the phenomenon. Through the description and interpretation of participants' experiences, the first critical question is fully addressed.

Chapter 6 presents the second part of the phenomenographic analysis supported by the SPSS analysis and focuses on the 'how' aspect of the phenomenon. This chapter describes how the participants constructed relationships with learning in the BME second-year module. Once more, data from the transcripts provides the source from which categories of description of the participants' experiences emerge. Descriptive statistics from the analysis of the questionnaire in the form of tables serves to complement these categories of description. The second critical question is addressed through the description and interpretation of these experiences.

Chapter 7 considers the findings emerging from chapters 4, 5 and 6 in relation to what are students' experiences of online support, and why students' experiences of online support influence their learning in BME the way they do. It moves to a level beyond that of a descriptive

analysis and illustrates how this study extends our understanding of students' experiences of online support in a variety of programmes, through links with the conceptual framework.

Chapter 8 presents the summary and the conclusions of the study, highlighting the findings and their contribution to the existing body of knowledge that underpins online-supported learning. It suggests a theoretical model for LMS mediated case-based pedagogy for BME and also articulates, on the basis of the findings, recommendations for future practice and further research.

CHAPTER 2

LITERATURE REVIEW

2.1. Introduction

This section provides a theoretical perspective on developments in online support in various fields. Drawing from a variety of studies, the purpose of this section is an attempt to establish the nature of online-supported learning and the variables that influence this mode of learning. Some of these studies (Wilson, Floden, & Ferrini-Mundy, 2002) report that research into the education of teachers foregrounds the need for teachers to achieve professional expectations. Policymakers, educators, and the general public require policies that provide for increasing numbers of well-prepared teachers. In South Africa (SA) and elsewhere calls have been extended to higher education institutions that engage with teacher preparation to explore ways to increase their student intake. To be able to do this, university education faculties should extend opportunities for new forms of participation that engage the use of print and digital text as techniques through which learning can be negotiated (Carrington & Robinson, 2009).

The emergence of online support in higher education is considered to be a breakthrough to the problem of how extended learning opportunities may be offered to students in overcrowded classrooms. Improved ICT is considered to be a dependable tool for facilitating transformative and influential learning engagements in business and management education (Alavi & Gallupe, 2003). For this reason, a potential need for emerging initiatives aimed at researching the influence of technology on business and management education is developing. ICT can, according to Education (2003) be defined as

> a term used to represent the convergence of information technology and communication technology. ICTs are the combination of networks, hardware and software as well as the means of communication, collaboration and engagement that enable the processing, management and exchange of data, information and knowledge. ICTs are a diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information. These technologies include computers, the Internet, broadcasting technologies (radio and television) and telephony (Education, 2003, p. 15).

The literature reviewed in this chapter provides a comprehensive view of the key arguments and findings by researchers. These arguments and findings are essential to the generation of assumptions necessary to inform the outcomes of this study. Online-supported learning emerges among a number of recent innovations in the field of higher education that provides learner accessible ways of learning that engage the use of technology (Thorpe, 2005). Integrating computer-mediated technology in the field of education as an attempt to enhance student learning has the capacity to realize a variety of learning techniques that students may access as alternatives to traditional approaches to learning (Asunka, 2008). The purpose of this study is to see online support through students' eyes not only as an alternative to traditional approaches to learning, but also as a way of complementing face-to-face learning.

This chapter draws on the literature to understand how other researchers had conducted their studies from both the theoretical and methodological perspectives. The belief held by some academic teachers is that online learning activities are particularly appropriate for post-graduate students who study part-time while employed. However, uncertainty among other teachers regarding the pedagogic prospects of this approach has emerged, as it begins to manifest in contexts that were predominantly face-to-face and teacher-centred, giving rise to fear for their jobs (Qiyun & Huay, 2007).

Significant efforts have been made to establish the values and beliefs, and worries about online education offerings. However, current literature provides insufficient explanation on whether modern, innovative online support has indeed enhanced the manner in, and the extent to which students accept online offerings (Wyrostek, 2011). A study conducted at the University of Manitoba (Siemens, 2006) reports that research into students' experiences of learning using an online LMS, and the effectiveness of online learning management tools has been very minimal to date. This study seeks to extend this research and close the existing gap in literature.

Thorpe (2005) argues that online-supported learning facilitated through the integration of information and communications technology into education opens up new possibilities of learning for a lifetime all over the world. However, it must be emphasized that for online support to deliver desirable learning outcomes, practitioners need to develop a pedagogic will and passion to motivate students to participate in this mode of learning. Moreover, staff support that seeks to equip academics with the skills necessary to integrate online learning technology into

conventional courses, as well as the installation of resources in learning contexts could be appreciated, coming from faculty.

A learning management system is fundamental to the integrating of information and communication technology (ICT) with a face-to-face approach to teaching and learning. The literature reviewed in this chapter seeks to explore how online support conducted using an LMS (to be described later in this chapter) extends learning opportunities by making learning resources more accessible than traditional learning contexts do (Education, 2003). While improving the quality of education is a broad policy objective in SA (Education, 2003), enhancing the quality of learning by providing extended opportunities for learning through online support is a lifelong learning objective (Thorpe, 2005).

In the South African context, the significance of online-supported learning is the integration into higher education of new models of learning that rigorously transform the manner in which learning is extended to all who desire it. The enhancement of learning, which is motivated by the desire to learn in ways that offer easy access to sources of knowledge, is central to online-supported learning and promotes collaborative learning (Education, 2003). Learning and the construction of knowledge has, of late, brought about changes in technology that have created new opportunities for learning. This chapter addresses these issues, namely,

a) ICT and the evolution, and description of online-supported learning
b) Effective support of and epistemological access to learning
c) Students' experiences of learning in higher education
d) A learning management system as an agent for online-supported learning
e) Gap in the literature
f) Business Management Education as the context of the study
g) A framework for researching online-supported learning.
h) Implications of the literature review for the study

The broad conceptual framework will be outlined, clearly describing its elements and the dimensions that influence student learning when learning is conducted in a computer-mediated communication (CMC) environment (Garrison, Anderson, & Archer, 2000). CMC denotes the use of a set of computer connections to enable communication between students in different

locations. These connections comprise electronic mail, computer conferencing and online databanks (Jonassen, Davidson, Collins, Campbell, & Bannan Haag, 1995).

2.2 ICT and the evolution and description of online-supported learning

Online-supported learning is a new development in the field of pedagogy and has evolved as a result of developments in ICT (Donnelly, 2010). The influx into higher education of learning technologies rooted in ICT has brought about new challenges in accommodating changing learning paradigms (Hamalainen & Hakkinen, 2009). The online supported learning described in this study is offered using an LMS hosted by the Department of Information and Communications Technology at the university.

Online-support for learning is offered by way of making access available on a dedicated learning and teaching server. This server is password-protected and only available to staff and students (Parkinson, 2002). Online-supported learning as seen from the perspective of the online-supported, resource-based learning (RBL) environments (Armatas, Holt, & Rice, 2003) has been defined as;

> Learning where technology is deployed in the service of on-campus classroom teaching, often supplementing face-to-face teaching to enhance the quality and efficiency of teaching and learning (Armatas, Holt & Rice, p. 141).

The evolution of online-supported learning will be addressed from the perspective of ICT as a cornerstone for online-supported learning, and the desire for both effective support and epistemological access in justifying the need for ICT-oriented online-supported learning.

2.2.1 ICT as a cornerstone for online-supported learning

Developing new pedagogical techniques that integrate the use of ICT into my work requires my acceptance and recognition of the challenges imposed by technological tools on my teaching (Hamalainen & Hakkinen, 2009). Acknowledging these challenges would lead me to develop a special interest in coming to terms with how ICTs work. The new world requires the use of ICT

in a variety of contexts where people engage in a search for more knowledge and advanced techniques of accomplishing their tasks, with education, particularly higher education, being one of these contexts in which new technologies are gradually surfacing (Kose, 2010). The rate at which ICT and the Internet have evolved over a few years has led to the rapid emergence of new instructional techniques in the field of education, one of which is online-supported pedagogy to address ways of enhancing the achievement of learning outcomes by students (Haverila, 2011).

The challenges that technological tools exert on teachers (Hamalainen & Hakkinen, 2009) retard the implementation of online support despite purposeful endeavors being made to allow learners to reap the benefits of learning using collaborative online support. However, the focus of this study is less on the challenges to teachers and more on students' experiences of online-supported learning using an ICT-hosted LMS.

A study conducted at University of the Witwatersrand reveals that, though there is globally a relatively significant history of experiencing with, and reflecting on ICT-enhanced courses in various domains, very little exploration and reflective activity have been conducted in South Africa (Thatcher, 2007). For this reason, the need to explore factors that either influence or retard the integration and application of ICT in education requires urgent attention (Peeraer & Van Petegem, 2010). In the South African context ICT is considered to be an essential element for significant participation, and is basic to the idea of unlocking educational opportunities, in the post-secondary education sector (Higher Education and Training, 2014). This is obvious when considering that numerous institutions that historically used a face-to-face instructional approach in the post-secondary sector have now broadly advocated the use of technology in support of learning. Online support efforts in higher education must be integrated into mainstream education if a change from familiarizing one's self with the use of ICT to using ICT is to be achieved (Park & van der Merwe, 2009).

To achieve the joint construction of shared understanding, meaning, experience and expertise, a viable alternative to individual, face-to-face lectures is facilitation through ICT-supported collaboration among the group or community (Hamalainen & Hakkinen, 2009). Web-based models of learning explain how individuals use online activities to promote collaboration, and these models portray students as active co-constructors of knowledge who are familiar with the use of ICT (Carrington & Robinson, 2009). These online activities help students learn from each

other by sharing information and discussing content (Park & van der Merwe, 2009). However, not all students are equally conversant with the use of ICT as they are raised in environments with different socio-economic backgrounds before coming to university. It is therefore important that learning is designed in a way that makes students conversant with the basics of using ICT in education if they are to participate in online-supported learning (Asunka, 2008).

Despite any attempt to improve access to computer hardware (facilities), it is highly improbable that online-supported learning can be conducted without connection to the Internet (Thorpe, 2005). This study seeks to unpack students' experiences in a course traditionally designed as a lecture-based module that eventually became augmented to an online-supported course offering that constituted face-to-face lectures complemented by an online component. This augmentation allowed students to experience online-supported learning.

For the integration of ICT in education to augment and/or transform learning, learners have to be empowered with links (Wakefield, Carlisle, Hall, & Attree, 2007), sufficient ICT resources and materials (Donnely, 2010), and ICT-related skills development (Thatcher, 2007) that enhance their capacity to learn online. Students in the current study also had to gain access to online-support linked to the Moodle learning management system (LMS) to engage in mutual interaction with others (Lazakidou & Retalis, 2009). For purposes of this study, the following definition of Moodle will be adopted (Moreno, Gonzalez, Castilla, Gonzales, & Sigut, 2007)

> The Modular Object-Oriented and Dynamic Learning Environment (Moodle) is an open source course management system (CMS), also known as a learning management system (LMS) or a virtual learning environment (VLE). To work, it needs to be installed on a web server elsewhere, either on one of your own computers or one at a web hosting company. While some institutions use it as a platform to conduct online courses, some use it simply to augment face-to-face courses (known as blended learning). It assists teachers in constructing online learning communities, to take active involvement in the learning act and to effect group collaboration. The collaborative activities often promote reflection, self-explanation and self-regulation. The management of content, students and teachers occur in this platform which offers a large variety of resources and activities such as quizzes, consults, diaries, workshops, among others (Moreno, Gonzalez, Castilla, Gonzalez & Sigut, 2007, p. 895).

The introduction of Moodle was in line with the university's aspirations to implement technological innovation in support of extended learning. Mutual interaction through Moodle occurred in a way that minimized limitations on time and space, while enhancing knowledge acquisition in the process (Joo, Lim, & Kim, 2011). Some blended courses are reported to have used one of the several LMSs to move the traditional lecture away from face-to-face sessions so that this was administered online, and used the face-to-face sessions only for the actual application of content (Hill, 2012). However, this study used the Moodle LMS to extend opportunities for students to engage with the actual application of content that was presented in face-to-face lectures.

Various tasks that can be completed online using the Moodle LMS include working-out solutions to practise questions for students to test their level of understanding in a particular content-topic and group discussion of assignments as assessment tasks. Online chats that allow whole class engagement, with a content-topic using text-based communication to discuss case studies and solve quizzes that stimulate online interactions, are also conducted. Reading online lecture notes with colour-coded hypertext links and analysing newspaper articles to prepare summaries complement textbook content. These tasks are performed in the LMS which supports scaffold learning and enhance creativity through collaboration that incite critical thinking and make learning stimulating (Carrington & Robinson, 2009).

Changes to material can be done immediately. As an example, a recent change in legislation is that the new Companies Act No. 71 of 2008 replaces Act No. 61 of 1973. Such material can be updated readily. Journal articles can also be retrieved to update the existing body of literature.

The impact of ICT in higher education has long been debated despite the difficulties that cripple the integration of ICTs into teaching and learning programmes of higher education institutions (Education, 2003). At the centre of every reasonable effort to integrate ICT in higher education is the endeavour to pursue the enhancement of student learning (Haverila, 2011). The worldwide notion of ICTs is that they can effectively contribute to enhancing higher education by assisting teachers and learners to transcend traditional approaches to teaching and learning. The goal of integrating ICT into teacher education, according to Education (2003) is that:

Every South African manager, teacher and learner at all levels of education and training will be ICT capable (that is, use ICTs confidently and creatively to help develop the skills and knowledge they need as lifelong learners to achieve personal goals and to be full participants in the global community) by 2013 (Education, 2003, p. 17)

2.3. Effective support of and epistemological access to learning.

While learner characteristic remains a factor in determining whether a student has a potential to learn in a computer-supported collaborative learning (CSCL) environment (Abedin, Daneshgar, & D'Ambra, 2010), there are other factors to be considered. One of these is the extent to which academic programmes for effective support of learning and programmes for the democratisation of access to knowledge (epistemological access) are prioritised and implemented by universities (Badat, 2008).

2.3.1 Online-supported learning and the desire for effective support

Online-supported learning as a concerted effort to reinforce effective support has much to do with the need to respond to the challenges academics face in working with classes of large sizes (Field, 2005). Large class sizes in higher education institutions (HEIs), particularly at entry-year level, occur as a result of the desire to extend formal access and gain an equitable intake of students from all walks of life (CHE, 2010). Such challenges that come with the teaching of large class sizes can best be addressed by way of effective support, negotiated through online support of face-to-face instruction using computer-mediated communication.

Consultation with students in higher education environments featuring large class sizes is often crippled by time limitations, making it necessary for academic teachers to explore ways of consulting as alternatives to traditional face-to-face consultations (Field, 2005). Consults as one of the forms of support mentioned in the definition of Moodle are facilitated via the medium of the News Forum that links direct to students' e-mail accounts. Online-supported learning has become an alternative solution for colleges and universities all over the world in providing effective support for students in large classes (Hitch & MacBrayne, 2003). In this way, online support enables academics to address problems affecting students without compromising on instructional standards of quality (Field, 2005).

Giving individual attention that involves person-to-person consultation with students is difficult to achieve in overcrowded lecture-halls. Different students coming with the same query at different times extend the load assigned to academics who have to attend to each student and this makes things even worse (Thatcher, 2007). Online-supported learning as a form of blended (combination of face-to-face and online) learning typically extends classroom practice to online, making for new approaches and methods of addressing the challenges facing academics in dealing with overcrowded learning contexts (Hitch & MacBrayne, 2003). Effective online support in higher education (Field, 2005) is defined as

> An activity that seeks to pursue an educational objective, directed at making student learning possible through promoting high quality learning and engagement by students, by transcending traditional face-to-face instructional techniques, such as lecturing, to incorporate online methods (Field, 2005, p. 207).

The desire for effective support for business management students is one of the reasons that incited my engagement with this study and this support can best be achieved by considering students' needs. Effective support extends to students a collection of academic and support accessories that include ICT facilities located in campuses of HEIs (Field, 2005). According to Hitch and MacBrayne (2003) a well-structured effective support of educational programmes and study modules for both on and off-campus students consists of technological support made possible by an adaptable and strong technological infrastructure, and faculty support through a faculty and academic development back-up that promotes learning.

Online-supported learning offers an approach to learning that facilitates engagement between academics and their students beyond consulting on a person-to-person level, while also making provision for academics to disseminate additional study material and other knowledge sources required for their modules (Thatcher, 2007). Online support of learning provides and enhances effective support for students with special educational needs, especially those affected by impaired-hearing problems (Graham & Dziuban, 2009). Effective online support therefore, under these circumstances, offer lecturers and students a foundation on which teaching and learning can be enhanced, and which can hardly be achieved in contexts where classes are overcrowded and learning is limited to face-to-face sessions only (Higher Education and Training, 2014).

2.3.2 Online-supported learning and the desire for epistemological access.

In addition to access to higher education, already identified as a reason for large class sizes in first-year level modules offered by universities and other tertiary institutions, epistemological access is a relevant concern (CHE, 2010). This can loosely be referred to as access to various forms of knowledge that universities are able to offer to students. The decision to conduct this study has been heavily motivated by, amongst others, the desire to extend epistemological access to students (Morrow, 2009) and this can be defined as follows;

> Epistemological access is a political as well as an educational issue in that it turns the spotlight both on to unconscious and unquestioned processes of concept formation and knowledge acquisition and on to the assumptions that inform the manner in which teaching at university level takes place – as characterized by greater technological resourcing (Morrow, 2009, p. 77).

The purpose of teacher education is to provide access to various kinds of knowledge in contemporary society. Given this, Lotz-Sisitka (2009) argues for the most effective ways of reviewing learning in South Africa so that learning approaches that can promote the extension of appropriate epistemological access to students can be developed and adopted. Access to knowledge and information held by teacher education institutions can be located via the LMS. This access is capable of extending many opportunities and improved ways of learning if students know how to do gain entry into the LMS (Gamede, 2005). The use of extended programmes that combine face-to-face and online learning components and the use of integrated teaching practices that engage the use of online support go beyond the teaching of content. They also enable epistemological access and enhance learning and academic performance in higher education (Lotz-Sisitka, 2009).

The extent to which students gain access to knowledge (epistemological access) is to a large extent determined by various factors such as past experiences, culture and politics within the institutions that distribute that knowledge (Gamede, 2005). Different educational institutions engage in different ways of attaining epistemological access (Badat, 2008). Epistemological access made possible through an online LMS is a necessary condition for bridging the gap

between what students' understood about learning and what they actually find learning to be like at university (Boughey, 2005).

One way of enabling epistemological access in teacher education is to familiarize student-teachers with a variety of ways of searching for information using ICT. This is because enhancing students' abilities to search for information on their own advances opportunities for the achievement of quality learning outcomes (Gamede, 2005). The student must therefore be able to engage in the search for information on his/her own. Morrow (2009, p. 78) uses the concept of "entitlement to epistemological access" to denote access that someone must provide to beneficiaries, in emphasising that higher education often fails to extend this entitlement to students. This is because while access to knowledge and information is enabled by universities, students must be assisted by faculties through training to try to find knowledge in relevant academic contexts on their own. I therefore acknowledge that for learners to achieve this entitlement, both lecturers and students not only need access to physical devices and equipment, but also require the competence to use these devices with success (Higher Education and Training, 2014).

Higher education is continually being reshaped by modern tools and technologies adopted and used to explore new ways to teach and learn. These tools and technological resources have become the context where teaching and learning occur (Blewett, 2012). Even if youngsters gain access to these tools and technological resources, their learning will be retarded if they have insufficient knowledge of how to use such resources (Carrington & Robinson, 2009).

Familiarising students with online-supported learning enables them to gain access to electronic learning resources and the information required to assist their learning, and this is tantamount to epistemological access. It is therefore through an ICT-networked equipment which extends opportunities for social interaction in engaging with learning activities, that online-supported learning is able to offer epistemological access (Abedin et al., 2010).

2.4. Students' experiences of learning

Surveying literature on student learning from an evidence-based perspective is of paramount importance for an empirical study that seeks to explore students' experiences of learning. This study explored Business Management Education students' experiences of online-supported

learning. Various studies have explored the experiences of learners using online and blended-learning environments (contexts where face-to-face instruction is complemented by an online component) within higher education. Blended learning can be understood to be:

a) a mix of modes of web-based learning
b) a mix of various pedagogical approaches
c) a combination of any form of instructional technology with face-to-face instruction
d) a combination of instructional technology with actual job tasks (Bliuc, Goodyear, & Ellis, 2007).

Students' experiences of learning will be addressed by exploring, firstly, those experiences students found to have been beneficial, pleasing and meaningful to their learning using online support. Experiences that were less pleasing to students will be presented thereafter.

2.4.1 Positive experiences of online learning

In an online course that used scheduled blogging for learners to comment on new work as they progressed with curriculum content, Carrington and Robinson (2009) found that most learners appreciated new postings and were happy to share curriculum content and views with each other. A study conducted at the University of the West of England (Moule, Ward & Lockyer, 2010) found that students expressed their satisfaction with regards to the use of online tools in support of building their skills for clinical practice. This occurred when they used tools for social software when they were outside campus to communicate with others on campus. This enabled them to keep constant contact with fellow nursing and occupational health students and to get their individual views out there for scrutiny by the group (Moule, Ward, & Lockyer, 2010).

Another study conducted at the University of Rijeka (Zuvic-Butorac, Roncevic, Nemcanin, & Nebic, 2011) reports that most students experienced satisfaction with regards to the ease with which available materials could be accessed. Research reports that students felt that learning materials were very often fully prepared, organized and well-structured to suit their needs (Moule et al., 2010). The suitability of the learning materials that were accessible and the manner in which learning was organized convinced them that the online course offering made a

meaningful contribution to their learning (Moule et al., 2010; Zuvic-Butorac et al., 2011). Students also commended teachers' involvement in online activities as well as the manner in which teachers managed online courses.

Both English second language-speaking and less assertive students felt uncomfortable with communicating in face-to-face contexts. They found it more convenient for them to communicate, especially with English first language speakers through computer-mediated communication (Pasfield-Neofitou, 2011; Zhang & Kenny, 2010). Lack of participation in face to face contexts is often aggravated by limitations with regards to communicating in a second language (Pasfield-Neofitou, 2011). Students who spoke English as a second language struggled to follow the chat discussion as they needed a fair amount of time to reflect on the content of the readings before they generated their own postings (Zhang & Kenny, 2010). They eventually perceived the asynchronous discussion to be of great benefit to them as it offered them more time to deliberate on the readings, and write and post via the medium of the discussion forums. Online discussion forums offered English second language-speaking students opportunities to participate in cooperative learning environments that stimulated critical thinking, as they did not have to instantly respond to instructional postings.

Existing literature suggests that online, text-based conversations in virtual learning environments (VLEs) improved students' thinking processes and self-reflection through cooperative learning and peer-mentoring (Kruger, 2006). These VLEs allowed participants to assume diverse ways of thinking that enabled students to view learning from a broader perspective rather than looking at one aspect of learning. VLEs inculcated in students a habit of simultaneously exploring and personally directing their own learning while engaging with thinking in the process. Students experienced a VLE with appreciation as it improved the provision of learning materials, facilitated the availability of learning resources, and improved the rate at which participants in a learning context interacted (Sharpe & Benfield, 2005).

Students with distinct personalities and learning styles

While numerous studies have been conducted on student use of online learning, very few studies report on how students with distinct personal characteristics work with online content, and how they construct sense in the virtual learning space (Russel, 2002). Extroversion and introversion

are the two distinct personal qualities determining how learners communicate with the environment (Mupinga, Nora, & Yaw, 2006). Introverts are people who find it difficult to engage in social interaction with others in the sense that they tend to keep their views, opinions and feelings to themselves such that they find their "real me" through the Internet (Amichai-Hamburger, Wainapel, & Fox, 2002). Extroverts seem to enjoy having their views and opinions made public as they seek to engage with other people and objects in pursuance of company and excitement (Amichai-Hamburger, Kaplan, & Dorpatcheon, 2008; Offir, Bezalel, & Barth, 2007).

A study conducted at the University of Houston-Victoria (Texas), found that introverts formed a major bulk of students who preferred online courses and also excelled in these courses, while most of those who participated in face-to-face classes were extroverts (Harrington & Loffredo, 2010). This indicates that the Internet offers introverts, who are normally reluctant to speak in face-to-face contexts, a convenient space to hide their real personalities as their behavioural patterns change from what is normal for them in real-time conversations (Amichai-Hamburger et al., 2008). Online-mediated learning therefore inspires introverts and students who prefer to think deeper before they respond to on-going conversations to participate in interacting with others. This is because online conversations allow them space to digest other people's opinions before answering (Fung, 2004). For purposes of accommodating both personalities, a programme that combines face-to-face learning in the classroom and an online component (online-supported learning) could be the best option (Russel, 2002).

A study conducted at the Edgehill University, United Kingdom (UK), found that learning contexts that combine face-to-face learning with an online component allow those students who are too shy to participate in face-to-face discussions an opportunity to express their views online (Kruger, 2006) via text-based discussions. With these students who were naturally too shy to engage in face-to-face discussion, online support helped by offering an alternative method of expression using textual conversation. The Edgehill University study (Kruger, 2006) also reports that students who feared to express their opinions in face-to-face contexts, especially if they thought that these might be out-of-line, viewed online social interactions as their source of motivation. This happened when they became members of an online-learning team that communicated acknowledgements of good attempts, commendation and compensation from peers which served as incentives to improve performance.

Contrary to the positive experiences presented in the above paragraphs, students also expressed feelings of uncertainty and dissatisfaction with online-mediated learning as observed in the following paragraphs.

2.4.2 Negative experiences of online learning

The Oxford Brookes University study (Sharpe & Benfield, 2005) indicated that, as most higher education institutions already used an LMS, the students' perspective of the educational value and the pedagogic effects of online-mediated learning on their learning remained uncertain. This uncertainty emanated from students' lack of understanding as to how the integration of technology into education could be applied as a means to improve their learning. This was because students still experienced difficulty in getting tasks done online, hence they were unable to construct meaning and achieve expected learning outcomes (Zhao & Chan, 2009). Inefficient online instructional techniques, which included inferior online conversation styles of tutors, were also reported by students to have been the cause of this difficulty, according to the Oxford Brookes University study (Sharpe & Benfield, 2005). This problem was also compounded by insufficient commitment by the group to learn collaboratively online.

Students felt that irrelevant methods were applied by teachers, which led to communication inefficiencies and technical complexities that caused students' dissatisfaction with, and being doubtful about, learning mediated online. Unclear instructions, lack of student interest in taking part in group tasks and limited face-to-face contact made students feel isolated from the rest of the group, according to a study conducted in Ghana (Asunka, 2008). Nursing and healthcare students felt that while a VLE served as a useful resource, it was under-utilized as a teaching and learning aid in their education institutions due to uncertainty among their teachers with regards to how it was used. They felt that teachers were not sure as to whether it should be used as an information storing facility or a discussion forum that replaces face-to-face instructional sessions (Moule et al., 2010).

Students felt frustrated when they experienced inadequate availability of the resources (computers and the Internet) required to learn online on campus. The scarcity of these resources occurred ironically at the time when technological innovation in education was being declared. Inadequate knowledge of how to operate the technology and problems of minimal access to a

number of relevant networks in computer laboratories raised concerns among students (Moule et al., 2010). This led to lower rates of student participation in online-mediated learning and increasing preference for tutor-centred instructional techniques. Students also felt that the website facilities such as web-logs and wikis located in campus facilities were underutilized. Students expressed dissatisfaction with the manner in which the multimedia facility was utilised, the use of tests for self-evaluation purposes, the quantity of digital text made available to them, and the manner in which collaborative tasks were organized (Zuvic-Butorac et al., 2011).

Findings from the Oxford Brookes University study (Sharpe & Benfield, 2005) were that students experienced problems with their writing skills which were considered by tutors to be weak. This dissuaded them and they started withdrawing little by little from courses that required the use of online interactions as a condition for communicating with teachers and fellow peers. Also while they felt that web-logs could readily be applied to assist them as a technique used to engage in interactive learning to improve reflective writing, these were not used (Moule et al., 2010).

Students also experienced limitations with the use of online tools due to insufficient prior-learning skills and development training, and support required for learning in online courses and technologies (Moule et al., 2010). Reports from the Croatian study (Zuvic-Butorac et al., 2011) indicate that the majority of students considered web-based discussions and computer-mediated communication with instructors and co-instructors as not significant, owing to their not being conversant with how to engage in online collaboration using these. This pointed to the necessity to improve teachers' capacities to implement online instruction and enabling orientation support for students. In support of this, a UK study (Sharpe & Benfield, 2005) found that skills required for successful participation in online learning extend beyond information technology (IT) skills, as students who were skilled in IT reported having experienced challenges with interacting using the online tool. This indicates that IT literacy does not translate to the ability to learn successfully online, hence a need for orientation.

Students were also concerned about the effects that plagiarism, an ethical issue that denotes using other people's words, ideas, graphs, or any creative expression without sufficient acknowledgements (Alebaikan & Troudi, 2010), would have on the outcomes of their assignments when these were examined. Plagiarism is best detected through the submission of

assignments via the online space known as Turnitin Assignment. Students considered plagiarism to be a major threat to them when participating in online learning as Turnitin had the capacity to declare their work as plagiarized, which influenced the final results of their assignments. Students often write assignments without conforming to the academic conversions of print that require them to acknowledge the source from which the work was extracted, and also to rephrase cited text (Alebaikan & Troudi, 2010).

Due to lack of understanding of how to go about seeking technical support, students erroneously thought that the LMS would automatically lead them on how to seek assistance, hence some students did not participate in online networking communities (Kruger, 2006; Zuvic-Butorac et al., 2011). A study on students' experiences of e-learning (Sharpe & Benfield, 2005) reveals that the lack of desire among students to participate in online-supported learning activities emanates from lack of understanding of the primary purposes of merging online and face-to-face instructional techniques. They then find it difficult to effectively play an active-learning role in an appropriate manner when these approaches are combined. This is a serious limitation especially when one considers that the success of online support depends on students' self-directed learning (Marsh, 2012), which is difficult to achieve if students lack the will to participate.

With this in mind, support for students who participated in the current study had to be structured by drawing on Knowles' (1980) assumptions of andragogy which were applied to the adult online learning environment. This helped to align the nature of online support offered to students in the second-year BME module with these assumptions.

a) **Online support complements face-to-face learning**

Various studies (Arbaugh et al., 2009; Bliuc, Ellis, Goodyear, & Piggot, 2011) have investigated the impact of web-based learning on student engagement and self-reported learning outcomes in face-to-face, online, and blended learning environments. A number of researchers who have conducted studies in blended learning (Kose, 2010; Marsh, 2012) informed the current study. Students in BME engaged with online learning tasks after face-to-face lectures had been conducted and this suggests that online learning provided complementary support to face-to-face learning. Bradford & Wyatt (2010) note that online support, through courses delivered as hybrid

models of learning that combine face-to-face learning with an online component, are becoming popular. This popularity is inspired by the availability of online learning facilities at universities and the convenience with which access to knowledge and information is offered to students. An Australian university study (McAllister & Moyle, 2005) involving a community of clinical educators indicates that the hybrid nature of their course offered priority to the online component, with face-to-face contact conducted through workshops. This blended learning mode offered greater opportunities for improved, affective communication and group cohesion than when learning was conducted entirely in face-to-face contexts. Open consultation between the lecturer and students could be facilitated online as well as via face-to-face channels (Akyol, Garrison, & Ozden, 2009).

The University of Melbourne engaged Accounting students in a blended course that was organized in such a manner that the time students actually spent in face-to-face sessions with an instructor was relatively small in the context of an entire week. The arrangement was such that the significant proportion of student-learning essentially took place outside of teacher contact hours, in private study or in discussion with their peers (Potter & Johnston, 2006). The average time students devoted working to accomplish case studies and other tasks online cannot be ascertained for the current study. However, prospects are that time devoted to online learning may have surpassed the time devoted to face-to-face learning considering that students also had to accomplish their assignments online via Turnitin Assignment. While online education may emerge as similar to traditional face-to-face teaching, Barnard et.al. (2008) acknowledge that the online-supported course format provides for instruction to be conducted in both online and traditional face-to-face environments. Online teaching and learning environments have their curricula structured in a way that enables students to respond precisely to the content they learn in face-to-face lectures, through case studies grounded on real-life situations relating to their experiences (Blondy, 2007).

b) **Online support stimulates interactive learning**

Freedom of expression is rooted in our constitution as a right. This entails our making one's feelings and thoughts known to others and can be inferred that this right can be exercised by all irrespective of whether one is assertive or less assertive. Knowing that less assertive students are

reluctant to communicate their feelings or thoughts in face-to-face contexts, ways have to be found to accommodate students with such personalities. One of these ways is considered to be online support and is reported to promote social inclusion in the classroom. Blondy (2007) asserts that learners who would normally be reluctant to speak in face-to-face contexts may engage in a greater amount of interactivity in the online setting because they feel comfortable sharing their views with others. Online course instructors are often equipped with tools that help them develop courses that interactively engage learners with their peers and offer instructional modules designed to appeal to a variety of learning styles and preferences (Akdemir & Koszalka, 2007). Kim, Liu & Bonk (2005) asserts that in an online master-in-business administration (MBA) course, students' perceptions of online support revealed a higher level of interaction with course instructors. The flexibility of online learning through interaction, active discussions, and extended opportunities to communicate with teachers and peers influenced the success of, and students' perceptions of and satisfaction with the online component of the course.

Online support allows students to be in constant engagement with the learning tool in their quest for the joint constructing of knowledge, as this tool is always there for students to engage with. Learning is constructed through one's interaction with the environment which includes material resources, other students and interactive tools. (Saade, He, & Kira, 2005). The constructivist approach to learning is considered to be the foundation of online environments and emphasizes active meaning-making on the basis of prior knowledge, interaction with others, and elucidation of information, leading to learning (Blondy, 2007). Communication and participation by students in online-supported settings is vital for influencing interpersonal engagements and facilitating the exchange of meaning and the joint construction of learning experiences.

c) Online support stimulates cooperative and/or collaborative learning

It has been noted that some students feel uncomfortable with speaking-out their views and feelings about their learning in face-to-face contexts. This suggests that they are reluctant to learn cooperatively through participating in groups, hence; they prefer to keep their thoughts to themselves. This changes as soon as deliberations are conducted online. Blondy (2007) notes that online learning promotes collaboration between learners by offering a convenient environment

for learners to participate in sharing ideas, knowledge and learning through conversation and the exchange of information without fear. Collaborative learning, social inclusion and improved relationships between teachers and students are qualities of online-supported learning that promote self-directed learning as an alternative to teacher-centred processes (Robley, Farnsworth, Flynn, & Horne, 2004). When technology is applied to open and distant learning, the significant features of online learning are its prospects for collaboration and relaxed communication (Valtonen, Kukkonen, Dillon, & Vaisanen, 2009). A study that engaged an online learning community for clinical educators (McAllister & Moyle, 2005) indicated that online-supported learning communities emphasize collaborative learning, enhanced collegiality, improved dialogue and strengthened solidarity.

Research indicates that today's young people have developed the capacity and desire to work and study collaboratively and to use communication technologies, especially tools of social software and web (Valtonen et al., 2009; Weinberger, Stegmann, & Fischer, 2009). These tools promote collaboration and social interaction. Furthermore, students taking online-supported courses are expected to work collaboratively as this promotes student engagement, given that collaborative activities have been integrated into most web-based course designs (Chen, Lambert, & Guidry, 2009). Online collaborative settings where learners cooperatively work in groups to accomplish tasks without teacher interventions have the potential for each student involved to engage in argumentative tasks that require learners to explain their views (Weinberger et al., 2009). Blondy (2007) considers these settings to be collaborative and capable of sustaining mutual trust and respect which encourage input by individual learners, creating an environment that is conducive for learners to learn from each other.

d) Online-support extends social practice

Learning takes place in social contexts, therefore mutual interaction in an online-supported course design must be inspired, considering that students' communal feelings are influenced by social contacts with peers and teachers (Roehm & Bonnel, 2009). Social interaction among learners, both as individuals and as groups, can best be promoted when learning is mediated online. Online teaching and learning nurture students who value social networking and working

in groups using social media, and today's students are familiar with interacting using communication technology (Valtonen et al 2009).

Social engagements enabled via computer-mediated communications are social acts that illustrates the manner in which students engage with the teacher and fellow students in pursuance of their learning (Tapanes, Smith, & White, 2009). Blondy (2007) added that students should be motivated to exchange ideas among themselves on a regular basis through carefully considered, and mutual conversation. Learning as a social engagement requires that all learners think, explore, and express their thinking during the online learning process such that a social goal believed to be necessary for a meaningful exchange of information or communication is achieved (Ho & Swan, 2007). Blondy (2007) suggests that social activity through online chats that stimulates communication among students as they debate issues relating to a case being studied promotes social cohesion. The Moodle LMS tools that foster engagement and collaboration among students as they debate the events presented in content-related cases being studied, with the teacher moderating the debate, are the Chat Room and the Discussion Forum. These tools are significant in the sense that while the Chat Room offers immediate feedback on issues, comments and responses that ensues, the Discussion Forum allows students ample time to think and/or consider various options on the case before posting their comments and responses to questions asked by the teacher.

2.5. A learning management system (LMS) as an agent for online-supported learning

Online-supported learning as a form of blended learning is transacted through the medium of an LMS that allows free entry into learning courses and modules (Moule et al., 2010). LMSs are specifically designed for the purpose of creating a unique platform that makes a meaningful utilization of the web a context for learning (Asunka, 2008). This happens through a combination of elements and characteristics of content delivery, interaction and assessment. LMSs are mostly web-hosted applications that offer access to course topics and provide tools for the administration of courses (Arcos, Ortega, & Amilburu, 2009; Coates et al., 2005). Sclater (2008) asserts that administrative information on courses is drawn from the learning provider such as the course outline and work schedules, lecture times and venues, and examination time tables as well. While LMSs are used to facilitate online support of face-to-face learning, this study does

not intend to foreground an LMS, but seeks to establish students' experiences of online support using the LMS.

Among the web applications that are in use and are administered by a number of universities as LMSs and major platforms for online support include Blackboard, Web 1.0 and 2.0, and Moodle (Asunka, 2008). Moodle as an LMS provides software that facilitates the execution, tracing and the administration of learning and training (Arcos et al., 2009). Higher education institutions that adopt technology in learning often prefer Web CT, Blackboard, Desire 2 Learn, Angel or Moodle as LMSs of their choice in pursuing their intention to maintain a balance between learning and management. These software applications have the potential to assist or enable administrators and instructors to be in control of the whole process (Siemens, 2006).

LMSs have the capacity to extend weblogs at the disposal of users (bloggers) who use these as personal knowledge repositories (Carrington & Robinson, 2009). These researchers report that blogs could be used by students as repositories of hyperlinked information that blend with regular posting to support the co-construction of meaning in a collaborative working context. I have established that LMSs are generally being utilized by students in most institutions to access learning materials such as lecture notes and PowerPoint presentations put by lecturers into the system (Sclater, 2008).

Preparing for the delivery of course content at initial stages of the blended course requires more LMS support of face-to-face interaction to secure a successful execution of online-supported instruction (Arcos et al., 2009). A study conducted at the George Washington University (Vovides, Sanchez-Alonso, Mitropoulou, & Nickmans, 2007), found that online-supported learning contexts provide students with the mechanism to take part in both scheduled and unscheduled engagements with one another, and with the teacher through an LMS. Scheduled online learning occurs in the form of synchronous chats while unscheduled learning and communication take the form of asynchronous announcements, e-mail, instant messaging and discussion forums (Coates et al., 2005). Any mode of learning that engages the use of computer-mediated technology in its implementation will need an LMS as its starting point (Siemens, 2006).

Teachers offering courses using the traditional lecture approach may opt for the use of an LMS to distribute extra course readings and lecture notes to learners as a form of online support (Vovides et al., 2007). Participants in this study received course readings, case studies, work-schedules and lecture notes that were circulated by the lecturer through the LMS during the semester. The LMS does not in any way replace the teacher in a teaching and learning context but becomes a mechanism for facilitating online support. This support is necessary to complement traditional face-to-face instruction in a way that enables students to participate in a cognitively challenging form of learning (Vovides et al., 2007).

Considering that the use of an LMS is central to the process of implementing online-supported learning, describing this concept could bring about an understanding of what it entails. This study will adopt the following definition of an LMS (Gautreau, 2011)

> An LMS is a web-based software consisting of courses that contain electronic tools including a discussion board, files, grade book, electronic mail, announcements, assessments, and multimedia elements. An LMS provides access to student-centered teaching approaches, increased accessibility, assessment and evaluation features, and improved management of course content and administrative tasks (Gautreau, 2011, p. 4).

Recent studies (Landon, Henderson, & Poulin, 2006) indicate that higher education institutions are currently adopting a habit of using a dual LMS; the one LMS obviously becoming more influential and popular with its use, parallel with a less popular other LMS. However, this is not the case with the current study since my institution subscribes only to a single LMS in all of its campuses. Modern LMSs encompass a variety of options that offer teachers the prospects of providing learner-oriented instructional support that suits each student according to diverse personal needs and desires (Gautreau, 2011; Vovides et al., 2007). Coates et al. (2005) claim that universities try to offer students in a higher education environment a reasonable cost advantage, and the best of both the real and virtual worlds according to their needs. They do this by cutting course management overheads through the use of the LMS without compromising the efficacy of instruction. .

An LMS as an agent for online learning enables teachers and students to log onto the module material, tasks, assessment materials, engage with online conversation, interaction and

teamwork. This enables extended support from the more capable peers, and assistance that promotes student learning with minimal limitations (Vovides et al., 2007). Existing research (Coates et al., 2005) indicates that LMSs as agents for online-supported face-to-face teaching and learning are used to achieve enhanced student learning.

An LMS enables academics to reap the advantages of teaching online using learner-centred instructional strategies. These strategies enhance the potential to access and use instructional content through different modes of presentation that appeal to learners with different learning characteristics (Gautreau, 2011). An LMS enables academics to reap the advantages of teaching online using learner-centred instructional strategies. These strategies enhance the potential to access and use instructional content through different modes of presentation that appeal to learners with different learning characteristics (Gautreau, 2011). The LMS enables a student-centered teaching approach that uses online learning resources such as e-mail, electronic mailing lists, online discussion boards and blogs to enable students to share meaning. The purpose is to allow users to organize discussions, and to post and reply to messages which could best be facilitated via the LMS. These asynchronous forms of communication are often supplemented with a synchronous component in the form of online text-chats where discussions are facilitated among groups of students.

2.6. Gap in literature

Online-supported learning as a form of blended approach is a recent innovation in the field of student learning and is therefore still under-researched, especially in the domain of BME (Sharpe & Benfield, 2005). A study conducted at the University of Hong Kong's Faculty of Education (Zhao & Chan, 2009) reports that most research into online-supported collaborative learning has been conducted in the field of science. It further indicates that very little has been done about researching online-supported, research-based learning in the field of business studies education. This happens despite this mode of learning gaining much popularity on the grounds of its reported capacity to enhance knowledge construction, interactive and post-school learning. This study therefore, aims to extend research into online-supported learning to an under-researched domain of BME in a way that explores how knowledge is constructed and how teacher-student and student-student interactions happen.

The University of St. Francis study (Wyrostek, 2011) reports that, due to limited research conducted in online-supported learning within the BME discipline, a thorough explanation of how students engage with, and relate to the online learning context is yet to be established. The Holfstra University study (Evans & Haase, 2001) found that despite the remarkable increase in the number of online-mediated courses in business studies being registered and pursued, evidence-based research conducted in this area of demand is not yet documented. A University of Navarra (Spain) study (Caliz, 2004) found that there already has been an emerging demand for distance education owing to the recent developments in ICT, yet very little evidence-based research has been conducted on the effects of modern communication technologies in tertiary business education.

The University of Wisconsin study (Arburgh, Hwang, & Pollack, 2011) recently reported that literature provides inadequate reports on studies conducted in online business education, because business educationists are reluctant to use pilot study designs to conduct experimental research. Online-supported learning emerges as one of the popular modern developments among institutions that cater for the provision of knowledge (Garrison & Kanuka, 2004; Graham & Dziuban, 2009). However, Graham & Dziuban (2009) label online learning an overlooked, under-estimated area of university education as very little is found in circulation regarding its nature. This is due to its being under-researched especially in the field of Business Management Education.

Few researchers (Wyrostek, 2011) have attempted to explore the idea that ways of learning influence the outcomes in the educational environment, despite a number of studies conducted on students' ways of learning having been published. However, most of these studies present results that are difficult to justify especially in the business discipline. The University of Melbourne study (Potter & Johnston, 2006) reports that numerous studies have been conducted on students' conceptions of learning in online-mediated learning environments. However, research that measures the influence online support has on the pedagogical techniques, as well as its impact on outcomes of learning is yet to be pursued.

The University of Sheffield (UK) study (Webb, 2006) acknowledges a number of policies and initiatives implemented to support the introduction of technology-based education at primary, secondary and tertiary levels of learning. However, very little evidence-based research has been

conducted on how technology influences the process of learning. The University of Melbourne (Australia) study (Coates et al., 2005) reports that online LMSs, contrary to other management systems that manage finances and manpower resources, have the capacity to influence the central concern of education. However, studies that seek to explore the educational potential of LMSs are negligible.

Developed countries have accumulated a significant amount of inquiry into the variables that influence the integration of technology into teaching and learning, while very little has been done in developing countries on researching the integration of technology in teaching and learning (Peeraer & Van Petegen, 2011). A University of the Free State (SA) study (Nel & Wilkinson, 2008) reports that online supported learning has found its place in SA's tertiary learning institutions but research into the contextual factors that promote or retard this approach to teaching and learning is remarkable scarce.

With technology constantly becoming more widespread in SA's higher education context as a means to complement traditional instructional practice, efforts to come to terms with students' needs are currently being made. Large-scale research has been conducted in online modules in Psychology all over the world, but only a handful of studies have been conducted in the context of SA's Psychology domain (Thatcher, 2007).

2.7. Business management education as the context of the study

This paragraph seeks to address the problem of how business economics (herein referred to as business management) as a unique discipline within the cognitive sciences might be considered a field of learning that is distinct from other related disciplines (Powell & Wakely, 2003). The University of Jyvaskyla (Finland) study (Nasi & Nasi, 1997) found that Finnish academics use Business Economics as a collective concept for a variety of business studies that historically constitute Accounting and Finance, Marketing and Management, and Organizational Behaviour. The BME curriculum covers aspects of management of business functions such as Purchasing and Supply, Production and Operations, Marketing and Public Relations, Personnel, and Finance which can be enhanced through Moodle. With limited orientation outside business schools, Business Economics commands a great proportion of the majority of Economics in Austrian, German and Swiss higher education institutions (Fabel, Hein, & Hofmeister, 2008). BME as the

context within which students who participated in this study experienced online-supported learning is defined (Bence & Oppenheim, 2004) as follows:

> Business and Management Studies Education focuses on teaching students in an area that extends from management sciences to social sciences, organisational and behavioural studies, management psychology and specific areas such as sports and heritage studies (Bence & Oppenheim, 2004, p. 403).

A qualification in Business and Management Studies has been designed to meet the desires of diverse students, such as those aspiring to pursue a career in industry, or a career in teaching, or in academia (McFarlane, 1997). These careers or occupations can be accomplished by students both attending as full or part timers. Students who experienced online-supported learning in BME as the context of this study were pursuing a career in teaching as full-time students. The curriculum for courses in the Business and Management Studies discipline is built on the foundation of modules that runs throughout the semester, where each module is taught over a semester that covers a period of twelve to fifteen weeks (McFarlane, 1997). The basis of Business Economics/Management is the assumption that business theory should be part of a model of the system adopted by the corporate environment. This model should provide for applicable understanding that can be shared among management, considering that it guides and outline the management and development process (Powell & Wakely, 2003).

The Canterbury Christ Church College (UK) study (McFarlane, 1997) reports that teacher academics in the field of Business and Management Studies had as their aim of teaching in this curriculum, the inculcation of critical thinking, ability to argue and examine assertions made by others as opposed to merely assimilating information, understanding and skills. The field of study of business economics branches off into two independent areas of study (Nasi & Nasi, 1997). These areas are the pure business economics based on coherent beliefs and foregrounds inquiry about 'how circumstances are' as opposed to 'how circumstances should be'. The other one is the applied business economics that considers the requirements for lived business existentiality. Describing their approach to teaching Business Management Studies, lecturers emphasised the application of the pragmatic philosophy that places the promotion of knowledge and skills at the centre of their teaching objectives (McFarlane, 1997).

McFarlane (1997) reports that student enrolment in Business and Management Studies recently experienced a significant growth within three of the four universities that were sampled in the study. This happened because students doing a language as a second major were allowed to register for Business Management, and/or those who desired to take it as an elective were allowed to do so. A study conducted at the University of Iowa, USA indicates that there has been a sudden increase in numbers with regards to student registration in the discipline of business education (Trank & Rynes, 2003). This suggests that the current trend of having large class sizes in Business and Management Education is not unique to my institution as these researchers report on their findings.

Business Economics as a discipline found its roots from one of the fields of study of economics known as the economic theory of the firm which, like Business Economics, has the firm as the object of its study (Nasi & Nasi, 1997). Business Economics seeks to provide an explanation of the effects of the economic theory of the firm on the economic processes of the business (Powell & Wakely, 2003). It seeks to do this in a way that influences the ability of business managers and other stakeholders to formulate management strategy at micro level. The development of Business Economics as a discipline is informed by the evolutionary theory of business economics. This theory seeks to identify an orderly taken point of origin of the business's competitive position and its quest for development (Powell & Wakely, 2003). This theory views Business Economics as "an all-embracing discipline which focuses on analysing the economic processes of a firm" (Nasi & Nasi, 1997). Business Economics is concerned with how the firm as typically one of the several organisations in the industry, can best be managed in a highly contested environment where several contestants compete for the patronage of the same consumer (Powell & Wakely, 2003).

Given that the functional areas of the firm's process include purchasing, production and marketing, the following definition (Nasi & Nasi, 1997) has been adopted for the firm;

> The firm is a producer of goods and services, and exists as an economic entity which buys the production factors from the factor market, transforms them in the production process into goods and services and sells them in the product market for the purpose of profit (Nasi & Nasi, 1997, p. 213).

In adopting the way of thinking that suggests that the firm is central to the study of Business Economics (Powell & Wakely, 2003), the following claim is appropriate;

> We are not primarily concerned with businessmen, business decisions, business routines and business reactions; we are concerned with firms only because of the effects of their actions and reactions upon production, resource use, incomes, and prices (Powell and Wakeley, 2003, p. 153).

2.8. A framework for conceptualizing online-supported learning

Research into online-supported teaching and learning in higher education is profoundly guided by the blended community of inquiry (CoI) framework (Shea et al., 2010). This conceptual framework classifies the elements that support successful learning in higher education (Garrison et al., 2000). They developed this framework so as to make sense of issues that encountered their new online graduate programme in which computer-based discussion forums played a central role (Swan & Ice, 2010). This study will attempt to explore how its findings fit in with the elements and their interrelationships as outlined in detail. The aim is to create an understanding of how these vital elements of the higher education practice can be maintained when higher education is shifted into a computer-mediated communication (CMC) environment (Garrison et al., 2000).

This new theoretical framework was necessary to explain and explore the online educational experience, since the pedagogy involving online discussion forums assumes that students will work together, not independently as in traditional distance education (Swan & Ice, 2010). This suggests that online learning resources facilitate information sharing among a network of people without being constrained by time and place. This is part of what students experienced in the module that provides a context for this study. This is known as asynchronous learning and is based on a constructivist theory, a student-centred approach that emphasizes the importance of peer-to-peer interactions (Duffy & Jonassen, 1992). This approach combines self-study with asynchronous interactions to promote learning, and it can be used to facilitate learning in traditional on-campus education, distance education, and continuing education. The combined network of learners and the electronic network in which they communicate are referred to as an asynchronous learning network (Dalgarno, 1996).

The blended community of inquiry framework is philosophically founded on the basis of the collaborative constructivist approach to teaching and learning (Akyol et al., 2009) and is theoretically grounded in the research on deep and meaningful approaches to learning. These approaches manifest in the dynamic nature of higher order learning and have appeared to be useful in guiding research and practice in online higher education ((Garrison et al., 2010). The blended community of inquiry framework is social constructivist in nature and is also grounded on the notion of practical inquiry (Swan & Ice, 2010). This framework serves as a dynamic process model designed to define, describe and measure elements supporting the development of online learning communities.

The blended community of inquiry framework assumes that learning occurs within the community through the interaction of the three core elements (Akyol et al., 2009; Garrison et al., 2000; Swan & Ice, 2010). Research on the CoI framework documents the correlation between core elements of the model and learner satisfaction and perceived learning, and online learner sense of community (Shea et al., 2010). These core elements are identified as social presence, cognitive presence and teaching presence, and their overlap provide the structure to understand the dynamics of deep and meaningful online learning experiences (Akyol et al., 2009; Garrison et al., 2010; Swan & Ice, 2010). These elements will now be described within the frontiers of the notion of 'presence'.

2.8.1. Presence
Presence has been described as a feeling of being in a context and belonging to a group and is further elaborated as social, teaching and cognitive presence. It is an element of the model and refers to the experience of being in a learning context while simultaneously being stationed in another context (Joo et al., 2011).

2.8.1.1. Social presence

As defined below, this denotes interpersonal connections emerging from being part of an online community where one operates in the presence of others. The primary importance of this element

is the provision of support for cognitive presence by indirectly facilitating the process of critical thinking carried on by the community of learners (Garrison et al., 2000). Akyol, Garrison & Ozden (2009) state that social presence paves the way for collaboration and critical discourse by supporting cognitive objectives through its ability to instigate, sustain and support critical thinking in a community of learners. This is further supported by Shea et al (2009) who assert that social presence plays an important role in the promotion of cognitive presence, while Swan & Ice (2010) note the role of social presence as a mediating variable in the development of cognitive presence. Garrison et al. (2010) posit that social presence has a special historical place in online learning as this was, understandably, the initial focus of learning online that enabled cognitive presence.

Akyol et al., (2009, p. 1835) note that the three categories of social presence are affective expression (mechanisms for injecting emotion into the environment in lieu of visual or oral cues, such as emoticons or parenthetical or metalinguistic cues such as "hymm" or "yuk"), open communication and group cohesion. Social present as an element of the CoI model (Akyol et al., 2009; Garrison et al., 2000) can be defined as;

> "the ability of participants in the community of inquiry to develop inter-personal relationships by projecting their personal characteristics into the community and identify with it, communicate purposefully in a trusting environment, thereby presenting themselves to the other participants as 'real people' (Garrison, Anderson & Archer, 2000, p. 89; Akyol, Garrison & Ozden, 2009, p. 1835).

Garrison, Anderson & Archer (2000) acknowledge that social presence promotes the success of the educational experience in online learning environments when there are affective goals for the educational process, including amongst others, cognitive ones. To achieve this, group interaction among participants has to be inspiring and personally fulfilling for them to want to remain in the online cohort of learners for the full length of the programme. The development of a community of learners does not happen only in contexts where people communicate verbally. Evidence from existing research strongly supports the idea that social presence can and should be established in online learning communities (Garrison et al., 2010).

Garrison et al. (2000) assert that social presence is essential in establishing a critical community of learners. This necessitates a collaborative process that will place meaningful outcomes at the centre of critical reflection and discourse. The purpose is to draw learners into a shared experience for the purposes of constructing and corroborating meaning. Shea et al (2010) suggested that instructor contributions and the raising of questions about the relation of social presence to learning are important. This suggests that the development of social presence is dependent on instructors and students working consistently rather than intermittently with each other.

2.8.1.2. Cognitive presence

Akyol et al., (2009), Arbaugh, Bangert & Cleveland-Innes (2010) and Garrison et al., (2010) define cognitive presence as;

> the extent to which the participants in any particular configuration of a community of inquiry are able to construct meaning through sustained reflection and discourse (Akyol et. al., 2009, p. 1835; Arbaugh, Bangert, & Cleveland-Innes, 2010, p. 38; Garrison et. al., 2010, p. 89).

Garrison et al. (2000) view cognitive presence as the element in the CoI model that has in the past, achieved most success in higher education. Cognitive presence demonstrates the real learning and inquiry process in settings of reflection and discourse; analysis and synthesis (Garrison et al., 2010). The value of cognitive presence as an element of the CoI model is revealed in higher order learning that takes place in virtual learning environments (Arbaugh, Bangert, & Cleveland-Innes, 2010). Garrison et al., (2000) acknowledge cognitive presence to be a vital element in critical thinking (a process and outcome that is often portrayed as the perceived goal of higher education, particularly when the medium of communication changes as in the adoption of computer-mediated communication for educational purposes). Garrison et al., (2010) posit that cognitive presence should be seen as shaped and predicted by both teaching presence and social presence.

Akyol et al. (2009), Arbaugh et al. (2010) and Garrison et al. (2010) assert that cognitive presence is operationally defined through the Practical Inquiry model that identifies four phases in the inquiry process. The phases are: defining the problem, issue or task for further inquiry / triggering event; exploration of the issue both individually and mutually through critical reflection and discourse for relevant information or knowledge / exploration; making sense of and integrating ideas / integration, where learners construct meaning from ideas developed during exploration; and, finally, testing plausible solutions / resolution, where learners apply the newly gained knowledge to educational contexts or workplace settings.

2.8.1.3. Teaching presence:

Akyol et al. (2009), Garrison et al. (2010) and Shea, et al. (2000) define teaching presence as;

> instructional design, facilitation, organisation and direction of cognitive and social processes, productive discourse, and direct instruction developed in on-line courses ideally by both instructors and students, for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes (Akyol et. al., 2009, p. 1835; Garrison et. al., 2010, p. 32; Shea et. al., 2000, p. 10).

Garrison et al. (2000) claim that teaching presence has become the binding element in creating a community of inquiry for educational purposes. The source of this claim is that cognitive and social presence, and ultimately, the establishment of a critical community of inquiry, are dependent upon the presence of teaching and the teacher. Swan & Ice (2010) supported the philosophical, fundamental role of teaching presence in the development of both social and cognitive presence. Garrison et al. (2010) report that the Structural Equation model or framework revealed that teaching presence is essential to establishing and maintaining social and cognitive presence. The Structural Equation model is a statistical technique for testing and estimating causal relations using a combination of statistical data and qualitative causal assumptions (Ullman, 2006). In reflecting the notion of teacher immediacy, Shea et al (2010) acknowledge the blended CoI model's hypotheses that modes of social presence including the textual

demonstration of affect, group cohesion, and open communication have to be facilitated by the teacher in a community dedicated to joint knowledge construction.

Shea et al (2010) acknowledges that notions of teaching presence and social presence combine with each other to bring about the third construct, cognitive presence, in developing a critical community of inquiry. Garrison et al. (2000) observed that when teaching presence is combined with social presence, the outcome of the simultaneous application of the two presences can be a high level of cognitive presence leading to effective learning. According to Garrison et al. (2010), a well-thought, determined and dedicated teaching and teacher presence is required for the establishment and maintenance of a community of inquiry.

Arbaugh et al. (2010) conceptualises teaching presence as having three components, namely, instructional design and organization; facilitating discourse or building understanding; and direct instruction. Garrison et al. (2010) acknowledge the first of the teaching presence's responsibilities as establishing curriculum content, learning activities, and timelines. The second responsibility involves monitoring and managing purposeful collaboration and reflection, and the third entails ensuring that the community reaches the intended learning outcomes by identifying needs and providing timely information and direction. Garrison et al. (2000) argue that, when computer-mediated education fails, it is usually because of absence of responsible teaching presence and appropriate leadership and direction exercised.

2.9. Implications of the literature review for this study

While online-supported learning is in line with universities' aspirations to implement technological innovation in support of lifelong learning, challenges that come with engaging with new ways of learning had to be acknowledged. These may include challenges such as the regular availability of equipment and the ability of students to use and work with the equipment. Mutual interaction through the Moodle LMS has the capacity to improve the accessibility of the teacher to students in an overcrowded classroom but students have to be inducted into the LMS (Joo et al., 2011).

For students participating in the current study to be considered to have learned online, the proportion of time they devote to learning using online support had to be greater than that allocated to face-to-face contact sessions (Potter & Johnston, 2006). Student participation in online learning needs to be incited by the teacher, by adopting ways of communicating that encourages them to be in contact with both their peers and the teacher (Blondy, 2007) and the same had to be done with students in this study.

Given the capacity of the LMS, participants in this study had to access course readings, case studies, work-schedules and lecture notes as online support that had to be circulated by the lecturer through the LMS during the semester (Vovides et al., 2007). They also had to engage with synchronous discussion via the medium of the Chat Room, use resource files for storing learning resources, and receive urgent notices and announcements via the medium of the News Forum that links direct to their e-mail accounts. Assignments as a form of assessment had to be accomplished online using Turnitin Assignment as a learning space located in the Moodle LMS. Asynchronous discussion of case studies in support of the co-construction of meaning had to be conducted via the medium of the Discussion Forum. These case studies to be discussed and analyzed in BME will be carefully considered on the basis of relevant course content essential to the debates around the case.

Students in this study had to engage with online learning after face-to-face lectures had been conducted so that one mode of learning complemented the other. This was an attempt to extend opportunities to students who are less assertive in face-to-face sessions (Kruger, 2006), to express their feelings and thoughts as much as those who are assertive in face-to-face contexts.

To eradicate the possibility of students being upset and hence; discouraged to participate due to insufficient availability of resources required to learn online on campus (Moule et al., 2010), facilities had to be booked in advance for exclusive use by all students participating in the module during a particular intended period.

In an attempt to narrow down the existing gap in literature, this study seeks to report on students' experiences of learning using an online LMS (Siemens, 2006) especially in the field of Business

Studies Education (Evans & Haase, 2001). Exploring students' experiences of online-supported learning in this study was therefore aimed at contributing towards the generation of evidence-based epistemology required to report on the phenomenon in this domain.

This study attempts to explore how its findings fit in with the elements of the blended CoI conceptual framework, and also survey the interrelationships between these elements as outlined in detail in the above paragraphs. The purpose is an attempt to understand how learning is perceived when education is transacted via the computer-mediated communication environment, bearing in mind that the learner's perception of technology is a vital factor for successful online learning (Joo et al., 2011).

2.10. Conclusion

This chapter has extended a window through which existing research and the theoretical assumptions related to this study could be depicted. It was stated in Chapter One that face-to-face learning complemented by an online component is meant to alleviate challenges that come with teaching and facilitating engagement with learning in classes of a relatively large size. This chapter illuminates this has happened in contexts where this approach has been documented as reported in existing research. It acknowledges the role of information and communication technologies (ICTs) in enabling the integration of technology into traditional learning, and the value of effective support and epistemological access in enhancing one's ability to learn using online support. It also provides insight into students' experiences of learning in higher education as captured in existing research which informs the manner in which experiences of learning could manifest in the current study.

It also offers an account of how learning mediated online is conducted using an LMS, and a detailed description of the curriculum that provides the context for the current study. It is evident that there is a gap in existing literature as none of the studies that were perused in setting-up this chapter was found to have researched online and/or blended learning in BME. The chapter goes on to illuminate the ideal framework that provides a useful explanation for conceptualizing online-supported learning by foregrounding and analyzing the elements of its model.

Chapter Three will then proceed to present the type of design the study seeks to pursue and the theoretical framework that informs the methodology.. Marton's (1986) phenomenography as a theoretical approach to qualitative research offera a useful framework for researching experiences of learning and will provide a methodological process according to which the phenomenon will be explored. Creswell's (2003) mixed-methods design which may or may not be implemented within a prescribed theoretical perspective, merges both the qualitative and the quantitative approaches to research in a single study and will allow quantitative data to complement qualitative data. These approaches that aim at gaining a better understanding of an aspect of the world will be described.

CHAPTER 3

WAYS AND PROCESSES OF RESEARCHING THE PHENOMENON

3.1 Introduction

The previous chapter presented literature on the phenomenon as seen through the eyes of researchers who have studied it in different contexts and domains. This chapter presents the design of the research, methodological approach and the paradigmatic perspective according to which the phenomenon was investigated. Personal reflective-journals, focus group-discussion, two sets of phenomenographic interviews – those conducted by the researcher and those conducted by an independent researcher, and the questionnaire were used to collect data. Qualitative data was analysed using Phenomenographic analysis while the SPSS was used to analyse quantitative data.

Social and educational research entails the identification of appropriate methods and the design of a well-thought process according to which methods of how to go about searching for whatever the researcher believes can be found, would be applied. A unique feature of social and educational research is the process by which the research is conducted, which is of prime importance with regards to indicating whether the outcomes have ontological backing and epistemological credibility (Ashworth & Lucas, 2000). Empirical studies in the qualitative research tradition are conducted differently to those in the quantitative research tradition. Therefore, selecting methods and rotating these to suit the study and kind of phenomenon being researched is essential in social and educational research (Barnard, McCosker, & Gerber, 1999).

Phenomenography as a theoretical approach to qualitative research was chosen as the means to direct the process according to which data was to be generated and analyzed. This was done in line with the theoretical beliefs about the nature of reality (ontology) and the beliefs about the nature of knowledge (epistemology) that Phenomenography embraces. Phenomenography as an approach to qualitative research is located in the interpretive paradigm, and is a useful framework for researching peoples' experiences of learning. It was therefore relevant for a study that sought to explore the variations in students' experiences of online-supported learning. The synthesis to this chapter will be the examination of the ways by which this inquiry provides for the reinforcement of credibility of the study.

3.2 Methodological and paradigmatic orientation of the study

This chapter starts by describing how qualitative research is used to research student learning from a methodological perspective, while also attempting to address my paradigmatic position in the process. When I started this inquiry as a qualitative research project I was primarily concerned with how I would be able to draw legitimate and adequate significance from the use of qualitative data. I was also concerned about finding methods of analysis that would best enable me to adopt what would be usable, reportable and non-misleading. Assuming that experiences can best be described in qualitative terms, I considered that the qualitative methodology could address my first concern. This allowed me as the researcher to obtain data in the form of words rather than in numbers. The reason for this is that such data can provide a foundation of well grounded, loaded descriptions and explanations of processes (Miles & Huberman, 1984).

In an attempt to address my second concern, I reasoned that phenomenographic analysis is inductive and iterative in nature; therefore it would allow me to stay true to the data. Phenomenography will be presented in section 3.3 of this chapter. The design and collection of data in qualitative research is usually based on some philosophical justification of the methods and this strongly confirms a meaningful relationship that exists between philosophy and empirical investigation (Barnard et al., 1999). This is because qualitative research methodologies often emphasize either the philosophical, scientific or linguistic dimensions of research (Svensson, 1984). These dimensions are central to the foundations of support in the search for reality or knowledge, especially in providing answers to questions that seek clarity on a particular method of research (Barnard et al., 1999).

Through qualitative research, I sought to uncover social meanings of the phenomenon as would be conceptualized by people using empirical methods of research (Sin, 2010). My intention in this study was to identify and apply an approach to qualitative research that would identify and hold onto the views of research subjects. This was to happen concurrently with keeping under constant scrutiny the ways they understood their experiences of the aspect of the world that is under study (Barnard et al., 1999). From a qualitative research perspective, this study entails the generating, instigating and interpreting of the scripted data elicited from participants' writings, and conversations with individual and group of participants. The purpose was to acquire an understanding of their experiences related to the phenomenon (Sin, 2010).

Key to understanding and improving student learning and constructing a student-driven pedagogy, is constructing the diverse ways in which learning is conceptualized and experienced by teachers, students, higher education institutions and the community at large (Barnard et al., 1999). With diverse theoretical positions that feature different assumptions about the nature of reality, nature of knowledge and the research process, qualitative research seeks to provide solutions to problems that are diverse in nature (Sin, 2010). These solutions are informed by findings of studies that draw on diverse research methodologies.

Research into online-supported teaching and learning in other disciplines mentioned in the literature reviewed in this study, including literature on Business and Management Studies, has mostly been qualitative. This research is embedded in the theoretical paradigm that supports the notion that reality is co-constructed through interaction between inquirer and the subject of the inquiry. However, none of the studies mentioned in the literature review has explored pre-service teachers' experiences of learning using online-support in BME using Phenomenography as a theoretical lens.

My choice of qualitative research as a methodology was inspired by the perception that human experience, including experiences of learning, can best be described in qualitative rather than in quantitative terms as such experience differs qualitatively from one person to another. The interpretive paradigm describes rich and thick descriptions of phenomena being studied in their natural settings. It consequently was seen as an appropriate paradigm in pursuance of experiential knowledge (Visconti, 2009) in this study. The following notion about the interpretive paradigm (Terre Blanche, Durrheim, & Painter, 2006) has been advocated;

> The interpretive paradigm involves taking people's subjective experiences seriously as the essence of what is real for them (ontology), making sense of people's experiences by interacting with them and listening carefully to what they tell us (epistemology), and making use of qualitative research techniques to collect and analyze information (methodology) (Terre Blanche, Durrheim and Painter, 2006, p. 120).

Social issues relating to how people interact with one another in the social milieu, how people learn using resources such as technological devices, how they organize themselves around social

establishments in pursuance of some common interest can, as examples, be explored through qualitative research as a window (Reddy, 2010).

This qualitative study is in response to a call for more studies to be conducted from an orientation that will bring about diverse views, experiences, and interpretations of online-supported learning (Buchanan, 2003), though alternative approaches to research would use different methods for such studies. I decided to use the Phenomenographic approach due to its relevance to studies where a variety of ways of experiencing in authentic contexts have to be established. The following paragraphs describe Phenomenography as a theoretical approach to qualitative research.

3.3 Phenomenography as a theoretical approach to qualitative research

The focus of this study was to explore students' experiences of online-supported learning as an aspect of the world. The decision on the theoretical dimensions of the study had to be guided by this focus. For this reason, I considered Phenomenography to be the appropriate choice of theoretical approach to this study.

3.3.1 A description of Phenomenography

For learning to take place, learners must be able to experience the act of learning in a particular context and for this reason experience becomes the essence of learning. Allavi & Gallupe (2003) assert that teachers attempt new pedagogic practices by using innovative teaching techniques so as to improve the quality of teaching and learning. The purpose is to create a long-lasting experience from which learners will be able to learn in the process. Phenomenography as an approach to qualitative research (Marton, 1986) is described as follows:

> …a research method adapted for mapping the qualitatively different ways in which people experience, conceptualize, perceive, and understand various aspects of, and phenomena in, the world around them (Marton, 1986, p. 31).

The origins of Phenomenography can be traced back to an empirically-based research tradition of studies that explored the phenomena of learning (Ireland, Tambyah, Neofa, & Harding, 2009). This approach to qualitative research is not concerned with the nature of the experience as such, but with identifying the manner in which people experience the same phenomenon in different

ways. The purpose of establishing the differences in the ways by which the different aspects of reality are experienced is informed by the assumption that forms the foundation of Phenomenography. This assumption points to the notion that there is a number of qualitatively different ways of experiencing a specific phenomenon (Marton, 1986).The purpose of this study is to explore students' experiences of learning using online support as Svenson (1997) claims that Phenomenography emerged from inquiry into students' experiences of learning.

The focus of the research was students' conceptions of their experiences of the phenomenon of online-supported learning. The manner in which they engaged with the phenomenon in their learning explained the nature of the relationship between them and the phenomenon. The 'ways of experiencing' online-supported learning and the resultant relationship between the participants and this phenomenon were central to the focus of this study. For this reason, research questions were set such that they corresponded with the generally accepted phenomenographic practices. Within the phenomenographic framework, not only the phenomenon being inquired into or the people involved in the process of experiencing the phenomenon are important. The relations between the people and the phenomenon, and their ways of experiencing phenomena are also equally important (Reddy, 2010).

These questions clearly emphasized the phenomenographic nature of the framework that underpins the theoretical and epistemological orientations of the approach to this inquiry in terms of what was learned and how it was learned. This helped establish what students had learned in relation to how they engaged with learning tasks. Phenomenography seeks to establish how student-learning had occurred as a function of experience, and also as a relation between the inquirer and the subjects of the inquiry. Informed by this philosophy, my epistemological position in this study is as a discoverer of my participants' experiential knowledge as a relationship.

Phenomenography as an approach to qualitative research (Boon, Johnston, & Webber, 2007) differs from other qualitative research approaches such as phenomenology, ethnography and grounded theory in that

a) Phenomenography assumes a second order perspective in the sense that it foregrounds the conceptions and understandings of the participants to the exclusion of the researcher's own conceptions

b) Its purpose in research is to focus on the variations in the ways the phenomenon is perceived and understood by the participants, as opposed to explaining the reasons for their perceptions and understandings

Phenomenography assumes an ontological point of view that does not make any assumption about the nature of what is believed to be true; instead it makes assumptions about how the object or phenomenon is perceived (Svensson, 1997). The ontological assumptions of Phenomenography are subjectivist in the sense that different people experience the world in different ways from a non-dualist perspective (Marton & Booth, 1997). This perspective views reality only as a function of the relationship between the participant and the phenomenon. According to this ontology, there is only one world, the one world we inhabit and is experienced and understood in different ways by human beings, and is simultaneously both subjective and objective (Richardson, 1999). These different ways can be described, labelled, and expressed in a way that can be comprehended by others (Reddy, 2010) such that the descriptions of people's experiences of an aspect of the world is the source of the descriptions ascribed by the researcher. With this in mind, I considered that phenomenography adopts a 'second order' perspective (experiences of the participants). In contrast, phenomenology takes a 'first order' perspective (experiences of the researcher). This perspective entails seeking to see the world through the eyes of people other than those of the researcher.

Based on this assumption, I refused to perceive the subjects of this inquiry as variables that were independent of the object or phenomenon being researched, in the process of searching for what I perceived to be true. This is further justified by the philosophical belief that the meaning of the object is derived from the participants' own conceptions of the object, which may vary from one participant to another. This suggests that the assumptions of Phenomenography regarding the nature of reality are subjectivist – while there is only one world, different people experience this world in different ways (Uljens, 1996).

I acknowledged the philosophical assumption that a close relationship exists between knowledge and the conceptions of the object, and that knowledge is relational (not only empirical). This is

based on the understanding that the ontological assumptions of the Phenomenographic theory are tantamount to its epistemological assumptions (Svensson, 1997). Learning entails being able to really experience, understand, perceive or discern something in a distinct manner (Paakari, Tynjala, & Kannas, 2009). This confirms the existence of similarities between phenomenography and the theoretical assumptions of online-supported learning that suggest that the online learning approach allows students to experience learning in a new way. Conducting this study within this theoretical approach offered me opportunities to explore students' experiences of learning using online support in BME.

I had to reconcile my awareness of phenomenography as a theoretical approach that holds onto the notion that people experience the same phenomenon in qualitatively different ways, with the purpose of this study (to explore students' experiences of learning). This allowed me to assume that students would experience online-supported learning in BME in qualitatively different ways. The focus of this study, therefore, was on the ways students would experience the phenomenon of online-supported learning in BME.

Phenomenographic research views the conceptions of a phenomenon as important indicator of people's experiences (Harris, 2011), and the assumption is that these conceptions constitute the different ways of understanding the same phenomenon (Marton, 1986). Furthermore, such conceptions are often used as a smallest unit of analysis (Harris, 2011). Conceptions are located in the categories of description which constitute the outcome space as the ultimate findings of a phenomenographic research study.

Phenomenography has as its object of research, the essence of variation (Marton & Booth, 1997). The question of what are the variations in participants' conceptions of the phenomenon, and how do these variations of conceptions manifest in participants' conception of the phenomenon is more important than why these variations occur (Kaapu, Saarenpaa, Tiainen, & Paaki, 2007). The analysis process in this study strongly drew from both dimensions, that is, the dimension that seeks to address the essence and nature of variation (what) in ways of experiencing, and the dimension that addresses the manner in which the experience vary (how) as experienced by the participants (Reddy, 2010). Referring to this, Marton (1986, p. 38) uses the concept of 'pure' phenomenographic interest as this relates to describing the whole range of various ways in which people understand and perceive the phenomenon.

3.3.2 Aspects of an experience of learning

Described as a research approach (Marton, 1986), phenomenography gives more attention to the process of inquiry than on generating a theory. This study will also have, as its primary concern, the process of research rather than the outcome of the investigation. The theories and assumptions of phenomenological researchers are the foundations of the phenomenographic approach. While these theories and assumptions do not provide a well-defined theoretical position (Uljens, 1996, p. 103), they extend a useful foundation on which to establish some carefully prepared conceptual and analytical tools. These tools, considered as frameworks in phenomenography, are the main aspects of the experience of learning and distinguish between the 'what' and 'how' of learning (Harris, 2011).

The 'what' aspect became useful in informing the referential framework, while the 'how' aspect was used to inform the structural framework of designing learning. The referential framework was used to make sense of data elicited from the subjects in response to the question about 'what is it that is learned', that is, the direct object of learning: the phenomenon. The structural framework was used to engage with data elicited from the research subjects in response to the question on how had student learning occurred, that is, the act of learning and the indirect object of learning. This translated to how the learner coped with understanding and learning that which was learned (Stamouli & Huggard, 2007). This framework enabled the construction of the relationship between participants' experiences of using online support and their learning in BME.

3.3.3 A dimension of variation

Since phenomenographic research is concerned with ways in which people experience a particular phenomenon, its focus is on variation, the varied conceptions of the experience. Phenomenographic research, therefore, needs a unique method of analyzing or making sense of data from transcripts, a method capable of giving less attention to similar components of the data (Drew, Bailey, & Shreeve, 2001). This unique method should foreground the internal relations within the data set in the process. The object of phenomenographic research is the focus on the variation in the ways in which people experience a particular thing or aspect of the environment (Marton & Booth, 1997). This is the first dimension of variation. This dimension of variation has

been described by phenomenographic researchers as that which varies among the different categories of description (Akerlind, 2005). It allows people to clearly see or understand certain aspects of their environment, and to a certain extent, value these aspects (Marton, 1986).

Dahlin (2007, p. 328) refers to the variation of conceptions among the categories of description as the "mother of all learning". This notion of variation is a realistic feature of phenomenographic findings and is consistent with the view that learning is a transition from one conception to another. Through this transition, learners are able to see a phenomenon in a different way, according to the theory of variation (Marton & Booth, 1997). Booth (2008) acknowledges that students may understand different ways in which a particular problem can be solved, as determined by the uniqueness of the context in which they come face-to-face with the problem.

The proponents of the variation theory often argue that students are likely to see or understand clearly a particular aspect of learning when they experience variation in that aspect (Stamouli & Huggard, 2007). As a researcher in this study, I had to try to identify the ways in which awareness, which serves as the basis of participants' varying experiences of online-supported learning, is constituted. I had to foreground the dynamic and analytical aspects that often diverge into what is learned and how it is learned – the referential aspect as well as the structural aspect of learning (Booth, 2008). This is the second dimension of variation. In line with these aspects of the experience of learning, two research questions were addressed in this study as a way to explore how each question led to a particular dimension of variation. The first research question which had its intentions and focus on the 'what' aspect or dimension of variation was:

a) What are students' experiences of online support in BME?

My aim to pursue this critical question was motivated by the desire to generate rich descriptions of what was it that students felt was worth mentioning about their ways of experiencing online-supported learning as a phenomenon. Informed by the theoretical perspectives of phenomenography, my assumption was that students would experience the phenomenon in qualitatively different ways. The second research question was concerned with and focused on the 'how' aspect or dimension and was:

b) How do these experiences relate to students' learning in BME?

The second critical question was inspired by the desire to understand the relation and the effect of the different ways of experiencing, on student learning. This suggested that my intentions in this study were to determine and understand exactly 'what is it that can be seen as a way of experiencing a phenomenon and how did different ways of understanding a phenomenon affected student learning' (Reddy, 2010). The essence of this question was the exploration of the relationship between the participants and the phenomenon in terms of the effects the phenomenon had on the learning of participants.

Since learning is a function of the learner's ability to see and understand clearly a measurable change in experiencing (dimension of variation) the phenomenon, students had to understand how this change in their experiences could vary, while also becoming aware of a particular dimension of variation in the process (Dahlin, 2007).

3.4 Selecting participants from the population being studied

Sampling in phenomenographic research stipulates that participants should be identified at the earliest stages of the process of inquiry, and this should be based on the presence of a collateral relationship between participants and the phenomenon (Mann, Dall' Alba, et al., 2007). A condition for selecting the sample from the population being studied was the drawing of participants from one second-year cohort of undergraduate BME students and varying this sample according to geographical location, as participants came from different parts of KwaZulu-Natal and Mpumalanga provinces. This was because such students had participated in learning through a combination of face-to-face lectures in class and an online component during the course of the academic semester. The selection of the sample in phenomenographic research is influenced by the desire to achieve maximum variation in the ways of experiencing the aspect of the world – the phenomenon (Akerlind, 2005).

3.4.1. The sampling process

According to Stamouli and Huggard (2007, p. 184) sampling in phenomenography should "capture as broad a range of relevant population characteristics as possible, taking into account factors such as background, prior experience, gender and age". This is known as sampling for purposeful variation and has become a feature of phenomenographic research. Sampling for purposeful variation as used in this study took into consideration the factors mentioned above to

ascertain that the sample was representative of the population being studied as suggested by Stamouli and Huggard (2007). To achieve this objective, a purposive sample of fifteen undergraduate BME students from the second year cohort was selected, which was also varied according to geographical location. This decision was motivated by the assumption that in phenomenographic research, a participant group size of between fifteen and twenty is considered to be sufficiently large to reveal aspects of the phenomenon without becoming cumbersome (Bowden & Walsh, 2000; Sandberg, 1994; Trigwell, 2000).

Bowden & Walsh (2000) argue in favour of this sample size by citing the need to constitute from the data sets, usually the interviews, variation in categories of description of the experience of the group of participants. While a sample of ten to fifteen participants constitutes a minimum number from which a reasonable chance of finding a variation in the range, a sample of more than twenty participants is likely to generate a volume of data that will be difficult to manage. This sample was then purposively selected with the following dynamics in the student population that constituted the second-year cohort in mind.

Students from a diverse economic and socio-cultural background were selected to form part of the study sample. Culture is, in some studies where student learning has been researched, identified as one of the factors influencing the manner in which students learn (Dahlin, 2007). Based on this, sampling in this study had to give serious consideration to the diverse cultural orientation of different students that constituted the study population. While the phenomenographic sample is meant to capture a broad range of demographic factors, these should be representative of the group being studied (Stamouli & Huggard, 2007). Since the sample constituted students from diverse social and cultural backgrounds, their experiences of learning in general, as well as their experiences of learning using the computer in particular, were expected to vary among the student group (Stamouli & Huggard, 2007).

The student population in the second-year BME cohort constituted both male and female students, with female students in the majority. To achieve maximum variation, and also to ensure that the sample was well representative of the population (Terre Blanche et al., 2006), both male and female students were selected to participate in this study. Nine female (3/5) and six male (2/5) students were selected on the basis of females being in the majority in the class register. The selection of these 15 participants also took into account how frequently each student had

engaged with (logged onto) the Moodle LMS, also taking into account the strength (duration) of each log. The log-files of the students in the LMS were therefore perused to ascertain the regularity with which they logged onto the system from the commencement of the module in February to the end of the module in May.

Students that recorded the most, average as well as a few number of logs as determined by their participation records in the "all logs" register in their profiles were considered for selection and duly included in the sample. This means that five students in each group were selected from each gender to represent the three variations in the level of frequency with which students engaged with the LMS for purposes of maximizing the variation in participants' experiences. While it would be desirable to select the sample from students who had recorded a higher rate of participation in the LMS, this would not be comprehensive enough in terms of achieving a variety in participants' experiences. This finally led to fifteen participants being selected across the three data sets.

The 156 registered students in this module fell within two broad racial categories, namely, Africans and South Africans of Indian origin. The sample therefore, was selected in a way that took into consideration the racial dynamics that constituted the population being studied to achieve the objective of population representativeness in the sample. Since Africans constitute a little more than two-thirds of the whole class, eleven out of fifteen students included in the sample were Africans and the other four were South Africans of Indian origin.

3.4.2. Sampling for purposive variation

The majority of students in this second-year BME module were students who, immediately after completing their secondary education and got their Grade 12 or matric certificates, applied for and earned their first university registration for a teaching degree. These are mostly teenagers below the age of twenty. In the minority there were students who, after completing secondary education, had participated in other spheres of social life, some of whom were already married with children. Participants therefore had to be purposively selected such that the sample reflected on the heterogeneous nature of the various age-groups and post schooling activity that depicted the population being studied.

Any presumption I was going to make with regards to students' experiences of learning in this programme had to be informed by data elicited from this sample, and this was the rationale for this maximum population representative sample. Sampling in this study was not only a function of the availability and keenness of the student to take part in the study but was purposively driven by the desire to derive a sample that would be representative of the students who experienced with online-supported learning in BME (Terre Blanche et al., 2006).

The focus of this study was the intention to uncover the experiences of the second-year students in the BME curriculum that was offered through a combination of face-to-face lectures and an online component. It was therefore reasonable to select a sample from the class of 2012 because students in this class had a chance to experience with online-supported learning in this curriculum during the first semester. Some of the 156 students who constituted the cohort according to the class register were familiar with this approach to learning as they were engaged with the use of online support in another curriculum. I had to select a sample in a way that excluded students who were exposed to online-supported learning in another curriculum as this would have led to a conflict of experiences across curricula. For this reason, all students had to complete a piece of students' writing at the beginning of the semester. This had a section that captured their ongoing experiences of learning in a way that would reveal their involvement with online-supported learning in other curricula.

Considering that I defended my proposal on the 21st of October 2011, the results of which were communicated to me just over a week later, I could only apply for ethical clearance at the beginning of November and this was granted early in January 2012. The first phase of data collection started with the updating of online personal reflective-journals by students while they were experiencing with online-supported learning during the course of the first academic semester of 2012. The following table depicts the extent to which the sample was varied according to the demographic diversity and background of the study population. Students who attended schools that had no computers did not have access (nil) to computers. Some schools that had insufficient computers allowed access to students who were taking either Compu-typing or Computer Applications Technology as a subject only during the periods for this subject (minimal). Few schools that had sufficient computers allowed students, irrespective of the subjects they were taking, to use computers whenever they needed to do this (open)

Table 1: Biographical profile of participants and their home and previous schooling background

No.	Name (Pseudonym)	Race	Gender	Name and location of Secondary School	Access to use of computers	Home Location
1.	Baphiwe	Black	Female	Koonvol, Glakcstad rural	Nil	Gluckstad
2.	M'khaya	Black	Male	Ginyani, Ixopo rural	Nil	Ixopo
3.	M'ndeni	Black	Male	uMtapho, Highflats rural	Nil	Highflats
4.	Snowy	Black	Female	Masibumbane, Ulundi rural	Open	Ingwavuma
5.	Shakila	Indian	Female	Kharwastan, Chatsworth semi-urban	Open	Chatsworth
6.	S'the	Black	Male	KwaPhindavele, Waschbank rural	Nil	Washbank
7.	Suria	Indian	Female	Crossmore, Chatsworth semi-urban	Minimal	Chatsworth
8.	Nkosi	Black	Male	Dr. Nembula, Adams Mission	Open	Adams Mission
9.	Thando	Black	Female	Esiqhuqhweni Secondary - rural	Nil	Maphumulo
10.	Sihle	Black	Female	Little Flower, Ixopo rural	Minimal	Ixopo
11.	Thembi	Black	Female	Ukusa Senior Secondary - rural	Nil	Mpumalanga Township
12.	Lindiwe	Black	Female	Emhlahlweni High - rural	Nil	Ladysmith
13.	Ursula	Indian	Female	Stanmore, semi-urban	Minimal	Phoenix
14.	Shakes	Black	Male	Methula High – rural	Open	Mgodlomezi rural
15.	Rajesh	Indian	Male	Centenary, semi-urban	Open	Durban

Design adapted from Reddy (2010)

3.4.3 Engagement with participants

Access to participants was possible with very little or no complication as they were students in the institution where I am located and, as the lecturer in the curriculum that happens to be the context of this study, I met them three times per week. I had in the first place to brief them about the study as well as my intentions to recruit them as participants in the study before issuing letters that formally requested their participation. I made it explicit to them that it was necessary to read the letter of request thoroughly and engage the advice of the student representative council (SRC) in reviewing the request where necessary for them to make an informed decision. To ensure that they were made aware of the intentions and events that were due to take place in the study, I informed them about the extent of their involvement starting from the online-reflective journals that were updated monthly, the focus group discussions and the individual interviews.

Considering that the reflective journals were going to be completed in May and final entries into these journals were to be effected a week before their duly perfumed (DP) marks were released hence; I could only continue with the focus group discussion during the second semester of year 2012. I could not do otherwise as I had to wait until August when all participants were back from teaching practice (a compulsory session set for second, third and fourth-year students for them to engage with the practical aspects of teaching). While it was convenient and simple to divide participants into two groups of focus-group discussion, as it is suggested that each group should not have more than twelve people (Krueger, 1988), participants sometimes arrived late and one member of group A did not come at all. Group A was initially set up to have seven participants and Group B to have eight participants. The member gave the reason that she had forgotten about the arrangement and I was then forced to accommodate her in Group B. The only problem with interviews was to find time when participants were free during the day as most of them relied on the campus bus-service that ferried them between the school and off-campus residences.

3.5 Engaging with the generation of data

The deployment of a phenomenographic approach to this study was informed by the assumption that such an approach could allow me to use multiple methods of data collection (Richardson,

1999). Based on this assumption, multiple methods of data production to elicit rich and strong data were used. In phenomenographic research, accounts of the qualitatively different ways of experiencing the phenomenon are produced largely through interviews, but there will be exceptions to this norm (Hasselgren & Beach, 1997). While the interview is mostly used as the only method of collecting data in phenomenographic research, Booth (2008) acknowledges having used this in combination with short essays that reflected on participants' experiences of studying, later complemented with discussions held between two groups. Similarly, this study depicts one of those exceptional research cases where the phenomenographic interview is used in combination with other methods of generating data.

The following paragraph seeks to map out the qualitatively different ways in which data was generated through the utilization of online reflective-journals, focus group-discussions and phenomenographic interviews.

3.5.1 Online, personal reflective-journals

The use of self-reflective journals by students as a research tool for generating data in this study allowed students to set down only events, thoughts and feelings that had importance to them (Babbie & Mouton, 2001). This extended the researcher an opportunity to see things through the eyes of the students (Day, Kaidonis, & Perrin, 2003) in terms of how they perceived online-supported learning. Babbie and Mouton (2001) assert that reflective journals and diaries represent the immediate recording of experiences that are not misguided by the reconstructions and distortions of memory as authors write exactly what they are experiencing at that time, no matter what it is. The following is the description of the process of reflection (Howieson, 2004);

> …the process of internally examining and exploring an issue of concern, triggered by an experience, which creates and clarifies meaning in terms of self and which results in a changed conceptual perspective (Howieson, 2004, p. 5).

Reflective journals provided a legitimate method for students to express their belief about the socially constructed world which I, the teacher, wanted to explore and define (Day et al, 2003). The use of online, personal reflective-journals in this study was motivated by the desire to elicit data necessary to answer the first research question "what are students' experiences of online-

support in BME?" Data gathered through online reflective-journals was used as a base from which subsequent focus group-discussions and interview schedules were constructed. These subsequent schedules were essential in gathering data required to further elucidate this research question and also to answer other research questions. The decision to ask participants to update online reflective journals prior to interviews, besides its relevance for this study, was inspired by a phenomenographic study conducted at the University of Jyvaskyla, Finland (Paakari et al., 2009). Researchers in this study requested the informants to each write an essay on a particular defined topic before interviews were conducted with them. Considering that students tend to write only when there is something to stimulate their efforts such as marks attached to a particular piece of writing, staff had allocated 10% of their DP status in the module to online reflective journals. This denotes that these journals served a dual purpose as a data collection and also an assessment tool. Online, personal reflective-journals also had an educational benefit to students as these offered an opportunity for them to engage with the use of technology as they learned in the process.

3.5.2. The focus group discussion

A focus group discussion (FGD) is a rapid assessment, semi structured data gathering method in which a purposively selected set of participants gather to discuss issues and concerns based on a list of key themes drawn up by the researcher/facilitator (Kumar, 1987). The purpose of this qualitative method of data collection is to gain knowledge about a specific issue, by obtaining in-depth information on the perceptions and ideas of a group of people directly affected by that issue (Debus, 1988). The difference between a focus group discussion and one-on-one interviews is its capacity to extend opportunities to all the participants in the group to interact and share their views (Krueger, 1988). It is also cost-efficient and time-saving (as one discussion is conducted instead of fifteen interviews), flexible and relatively simple to conduct. It also differs from a survey in the sense that it allows participants to question each other and to provide detailed ideas on the topic (Morgan, 1997).

The FGD often constitutes between six and twelve participants with common characteristics in respect of sex and age, and normally last between one to two hours, conducted under the control

of a facilitator (Debus, 1990). For this reason, I had to divide the sample of fifteen participants into two groups of eight and seven participants each to comply with this theoretical assumption. Since focus group discussions require two researchers to conduct, one interrogating the participants while the other is recording (Morgan, 1997), I had to seek assistance from one of my colleagues in the school.

Data collected from the FGD can be used to provide information for a variety of purposes, including for an example, conducting a needs assessment or programme evaluation (Krueger, 1988). For the purpose of this study, data collected had to provide insight into students' experiences of online supported learning. While these discussion groups are good for exploring concepts and developing creative ideas, they are mostly used as a method of triangulation with other data gathering techniques in qualitative research (Kumar, 1987). However, I used focus group discussion in this study not only for purposes of triangulation but also as a tool to further clarify or probe data that emerged from reflective journals. These discussions were conducted at a neutral venue as the case was with interviews.

The FGD that was conducted with two groups of participants lasted for about 75 to 90 minutes each with the help of person filming the event using the video, and another person taking notes though not actively participating in the proceedings (Kumar, 1987). The use of a focus group discussion in this study brought about the environment necessary to encourage participants to respond without fear (Krueger, 1988). This happens because the focus group setting eradicates situational anxiety a peer group may feel as a result of being threatened by the power differential between the participant and the researcher. However, multiple voices of the participants coupled with flexibility may make it difficult for the researcher to exercise control over the focus group proceedings with the serious consequence that only the voice of the most dominant members of the group is dominates in the data (Campbell, 2008). Through effective guidance, the moderator was successful in creating an environment necessary for all members to participate without fear.

3.5.3 The phenomenographic interview

Phenomenographic interviews that were used in this study were semi-structured with an open-ended orientation (Ornek, 2008). These interviews were conducted individually on a one-to-one format in the Students' Union hall. This venue hosts a number of activities in which students

participate outside normal contact hours, and was more convenient to the participants than my office. It provided a context where these bilateral conversations could occur with very minimal or no disruption and offered a quiet and secluded space, especially during the day when learning continues in various lecture halls. The need to secure a tranquil and private space emanated from the notion that participants were likely to be more comfortable with sharing their experiences privately rather than in a public space. This also provided an environment that made it convenient for the audio-recording of the interviews. The interview schedule was used as a guide to ensure that all participants are asked more or less similar questions to answer the critical question "how do these experiences relate to students' learning in BME?" Participants' responses to the questions in this schedule determined further questions to probe additional issues of significance.

I used the phenomenographic interview for the purpose of getting through to the participants' world of experiences with the phenomenon under review (Mann, Dall' Alba, et al., 2007). The extent to which the interviewees were prepared to furnish regarding their ways of experiencing with the phenomenon depended on my capacity as the interviewer to encourage interviewees to articulate views on such experiences. Follow-up questions that illuminated issues of significance and/or controversy helped me draw deep meaning from the responses of the interviewees. To stimulate the participants to disclose their ways of experiencing the phenomenon and to lead them into talking about how they related with the phenomenon, the following process is recommended by Drew, Bailey and Shreeve (2001, p. 5) as a guide:

a) Ask the initial question
b) Probing on process / approach
c) Probing for conscious decisions about approach
d) Probing for intentions and conceptions

An important attribute of a phenomenographic interview as a qualitative research technique for generating data is the use of a contextualizing statement as a starting point. Each interview developed from the following statement:

> *Online-supported learning is a development where student learning in lectures is complemented by activities conducted via the Web space. I am conducting a study that seeks to establish students' experiences of this way of learning in Business Management*

Education. There are no wrong answers here as I am predominantly interested in your views and experiences. I need you as a person who has engaged with online-supported learning in Business Management Education and is therefore an expert in this, to tell me about what goes on when learning is supported online. Yours is to tell and mine is to listen to your views and experiences of what and why of online-supported learning! Ok? For purposes of allowing the conversation to flow without being interrupted by my writing during the ongoing interview, I ask your permission to have deliberations audio-recorded using this voice recorder if that is ok with you! Adapted from: Ireland et al. (2008)

This statement seeks to portray the participant as an expert in the field of online-supported learning and is useful in situating the event as well as reaffirming ethical issues such as seeking the participant's consent to the audio-recording of the interview (Ireland et al., 2008). This interview often has as its point of departure a particular scene upon which basic questions will be asked. While questions on the 'what of learning' and on the 'how of learning' are usually asked, interviews in this study were used mainly to address the question "how do the variations in experience relate to students' learning in Business Management Education?" Open-ended questions became the feature and formed the major bulk of the interview schedule. These offered me the opportunity to gather informative data on the different ways in which the participants comprehended the phenomenon. The interview schedule had the following broad open-ended questions, amongst others:

a) Can you briefly describe your experiences of logging into the online space at the time when you were introduced to online support in Business Management Education at the beginning of the semester?

b) What was it like to have your views and responses to questions put in the open for others to comment on, in the Chat Room?

c) What was it like to complete assignments online and have these submitted via the "Turn-it-in assignment" activity space in BME?

d) Can you please describe the different tasks that you completed using online support in BME?

e) Can you please describe the different resources that were made available to you as online support to assist your learning in BME?

For this interview to search for a profound and inherent reasoning and feeling among participants, it had to remain within its desired objective – which is to bring into view the variation in people's experiences of the phenomenon under review. In line with the views espoused by Bowden and Walsh (2000) regarding particular design features of the interview schedule, I had to ascertain which questions directed the participants towards the phenomenon. These had to be broad enough to provoke answers that expressed the above mentioned objective without channeling participants to a particular type of response. Each interview comprised a series of questions meant to stimulate students' experiences of online-supported learning in Business Management Education. Questions were designed such that each question assisted with facilitating the development of a series of follow-up questions that aimed at achieving a shared understanding of the topic in question. Questions also allowed for the ensuing dialogue to continue on the basis of responses from participants.

Conducting these interviews was quite a challenging task, especially as I was acquainted with the students and the nature of learning under investigation. The temptation to assume the role of the teacher was inevitable. Sometimes the conversational approach to the dialogue led me to pursue my own interest rather than the essence of the interview. This manifested in the manner in which I unwittingly tried to explain or clarify what the participant was describing by introducing a concept that best explained what the student said.

Since a neutral venue had to be identified in advance, it became my responsibility to inform the participant well in advance about this venue, as well as the time at which the interview was to commence. The interview lasted for about an hour and participants were reminded before commencement of each interview of how the content of the interview would be handled with the strictest confidentiality and their identity was to be kept anonymous (Marton, 1986). Through each participant's permission, interviews were audio recorded as we shared personal experiences in the process. Since the purpose of the interview in this study was to understand in the best possible way the participants' views about the phenomenon, I tried to get the participants to reflect on what they had said, to give meaning to what they comprehend to be their experiences. Since phenomenographic research considers 'variation in the ways of experiencing a particular phenomenon' (Dahlin, 2007, p. 327) as its essence, care was taken to ensure that variation was noted at every level of the interview.

3.5.4 Data analysis in phenomenographic research

The purpose of phenomenographic analysis is the construction of categories of descriptions that denotes the different ways in which the phenomenon is comprehended, while a collective mind is mapped-out in the process (Marton, 1995). In phenomenographic analysis a descriptive framework based on the two elements of meaning and structure is often developed (Bruce et al., 2004). The phenomenographic method of data analysis is a process of 'discovery' as well as one of 'construction' (Mann et al., 2007). The outcomes are not known and must therefore be discovered, or emerge from the transcript rather than imposed on data by the researcher

Data analysis in phenomenographic research differs from traditional content analysis in the sense that, when using the latter, the researcher imposes from some theoretical or conceptual frameworks, a number of predetermined categories of description onto the data. However, phenomenography does not allow this to happen since its process is iteratively dependent on the reading and re-reading of transcripts until a frequently recurring trend is noted in the data.

3.6 A methodological shift

It transpired during the process of analysing the interviews that I conducted on my own that the data was being influenced, and thus findings could not be justified, because I was also the lecturer in the module that provides the context for this study. This meant that there was a need to use data generation techniques that excluded me. Interviews conducted by an independent person, as well as the questionnaire, had to be used to achieve greater validation of the themes that emerged from data sources than when the researcher was involved. Difficulty with getting all the participants who were selected in the original sample led to participants in the independent interviews being sought again from the original sample according to their availability. Eventually, nine of the fifteen students who participated in the first round of interviews (which were conducted and administered by me) declared their availability and participated in interviews conducted by the independent person. This independent person was the member of the campus-based student representative council (SRC) who represented the campus in the inter-campus or central SRC.

The decision to engage the data collection techniques that excluded my involvement meant that there needed to be a shift in the methodology due to the inclusion of the quantitative instrument

of data generation in the form of the questionnaire. The design of the study then changed from a qualitative to a mixed-methods study. However, qualitative methods of generating data were dominant as they included personal reflective journals completed online, focus group-discussion, interviews conducted by the researcher, and interviews conducted by the SRC member. This made the model of the mixed methods design to be a QUAL-quant design. This means that more weight is allocated to the qualitative component of the research since 80% of data was collected through qualitative techniques and only 20% of data was generated through quantitative means.

The mixed methods research is a methodological design that advocates the use of both qualitative and quantitative methods of research in a single study either simultaneously or sequentially. The historical foundations of this design can be traced as far back as the late 1950s (Campbell, 1957) and the late 1970s (Jick, 1979; Sieber, 1973). This was when some scholars during the formative period of the development of mixed-methods research started developing interest in generating multiple forms of quantitative data. The purpose was to find better ways in which research into psychological attributes can best be corroborated. This was followed by the paradigm debate period of the development of mixed-method research when researchers (Rossman & Wilson, 1985; Smith, 1986) argued as to whether or not qualitative and quantitative designs could be merged. The purpose was to find ways in which multiple paradigms can be used to address research problems. The period of procedural developments (Brewer & Hunter, 1989; Greene, Caracelli, & Graham, 1989; Morse, 1991; Tashakkori & Teddlie, 1998) saw the emergence of techniques for developing a mixed methods design during the continuing period of ongoing debates. The purpose was to develop procedures and strategies for the designing a mixed method study. Researchers (Creswell & Plano Clark, 2007) define the mixed methods research as follows:

> Mixed methods research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of the qualitative and the quantitative approaches in many phases in the research process. As a method it focuses on collecting, analysing, and mixing both qualitative and quantitative data in a single study or series of studies. Its central premise is that the use of qualitative and

quantitative approaches in combination provides a better understanding of research problems than either approach alone (Creswell and Plano Clark, 2007, p. 9).

While the definition identifies the fundamental reasons for the use of mixed methods research as a way of achieving better understanding of the research problem than could not be accomplished when use is made of either one of qualitative or quantitative approach (ibid), Creswell (2003) and Creswell and Zhang (2009) argue that the potential use of the mixed method strategy selected for this study is as follows:

a) The qualitatively driven first phase of the design will be complemented by the second quantitative phase
b) It may or may not be implemented within a prescribed theoretical perspective, thereby allowing flexibility in its use
c) It allows the researcher to explore how individuals describe a phenomenon by starting with interviews and then uses an analysis of the information to develop a survey instrument
d) It uses quantitative data and results to assist in the interpretation of qualitative findings
e) Its two-phase approach makes it easy to implement and straightforward to describe and report

The sampling, data generation and analysis of the qualitative component have been covered in the above paragraphs. A description of how these were accomplished for the quantitative component of this study, and a description of the mixed methods strategy chosen for this study will now follow.

3.6.1 Sampling for the quantitative component

The purpose of sampling individuals in quantitative research is to choose those who are representative of a population so that the results can be generalised to a particular population (Creswell & Plano Clark, 2007). However, the purpose of this study is not to generalise to a wider population but to gain a better understanding of an aspect of the world, hence sampling was non-random for the execution of the quantitative component of the study.

Onwuegbuzie and Collins (2007, p. 288) advocate a minimum sample size of 82 participants for a study with a two-tailed hypothesis. However, this study did not emerge from a hypothesis and the decision to circulate 150 questionnaires was informed by the awareness that the class had 156

students in year 2012. The variance of 6 accommodated the likelihood that other students may have not opted to take the module at a higher or third-year level in year 2013, especially when they failed the module. The sample had to be large enough to ensure the return rate would not, even if some questionnaires could be spoilt, have the capacity to compromise the appropriateness of the sample size. It was also important to consider that statistical procedures are best accomplished with large samples. Large samples allow researchers to use descriptive statistics with greater confidence, so that the sample replicates the features of the whole population (Creswell & Plano Clark, 2007).

Most research conducted in the tradition of mixed methods design engages the use of purposeful sampling (Onwuegbuzie & Collins, 2007) and this informed my choice of this sampling technique. For the questionnaires, purposeful sampling as a technique allowed me to consider the whole group from the second-year BME class of 2012 (which was at third-year level in 2013), as this group was well-informed about the phenomenon (Patton, 1990). This suggests that the relationship between the qualitative and quantitative samples was somehow 'nested'; in other words, participants selected for the qualitative component represented a subset of the participants who completed questionnaires for the quantitative component of the study.

3.6.2 Generation of quantitative data

The services of a specialist statistician were solicited for the purpose of designing and constructing the questionnaire. In designing the questionnaire, a questionnaire alignment matrix had to be designed to ascertain that the questions in the questionnaire were compatible with the critical research questions. Questionnaires were then circulated to the 150 students by the independent researcher, who also administered the collection of completed questionnaires from students. Of the 150 questionnaires circulated to students, 22 were not returned despite many attempts made to remind students to have these returned to the independent researcher. This left the study with 128 completed questionnaires that were then placed in a separate envelope and dispatched to the specialist statistician for purposes of statistical analysis.

3.6.3 Analysis of quantitative data

Quantitative data collected through the medium of the questionnaire was analysed using the SPSS. The statistician, who had developed the questionnaire in line with themes that had

emerged from qualitative data and were compatible with the conceptual framework, developed the descriptive statistics. However, the statistician discovered during the analysis process that 35 questionnaires could not be used as a reliable measure of what the instrument intended to measure. These included questionnaires that were incomplete while others were erroneously completed by the respondents. This finally left the study with 93 questionnaires with which the statistician could work.

In this qualitative-dominant mixed methods study, the analysis of data engaged the presentation of participants' conceptions as embedded in the utterances from which the qualitative themes emerged. The quantitative and descriptive statistics comprised numerical representations that either confirmed or conflicted with these qualitative themes (Creswell, 2003). My own analysis and resultant interpretations of the conceptions indicated whether the quantitative findings supported or opposed qualitative themes.

3.6.4 Enhancing the trustworthiness and credibility of the data and findings.

Once designed and completed the questionnaire was circulated for purposes of convenience, among 15 students who participated in both the focus group discussion and interviews for evaluation in order to ascertain that the questions were not ambiguous. The content of the questionnaire was also examined by my two supervisors, and also by the statistician for purposes of validation and for inter-item reliability and test-retest reliability (Creswell & Plano Clark, 2007). When the necessary editing and adjustments had been accomplished, the resultant questionnaire was then piloted with the 2013 group of students. This was the second-year class that had in 2012 learned BME using online support and was therefore familiar with this mode of learning. Only then was the questionnaire administered on the intended population. The trustworthiness and credibility of the findings from this study was enhanced through member checking. This happened when the study was presented in the Social Sciences Education cluster-research seminar to colleagues who served as critical respondents on the 29th of May 2014.

3.6.5 The sequential mixed methods strategy

The sequential mixed methods strategy is one of the two variations in strategy for a mixed methods research study. According to this strategy, researchers generate both qualitative and quantitative data in intervals. Data generated in the first interval is used in the design of the

instrument for generating data in the second interval (Creswell, 2003). It differs from the concurrent mixed methods strategy in the sense that researchers using the latter generate both qualitative and quantitative data simultaneously. The following matrix or visual model of the mixed methods research presented in table 2 below illustrates the variations in the strategies from which the sequential-qualitative prioritized strategy was selected.

Table 2: Decision choices for determining a Mixed Methods Strategy of Inquiry

Implementation	Priority	Integration	Theoretical Perspective
No sequence Concurrent	Equal	At Data Collection	Explicit
Sequential – Qualitative first	Qualitative	At Data Analysis	
Sequential – Quantitative first	Quantitative	At Data Interpretation	Implicit
		With Some Combination	

Source: Creswell et. al. (2003)

According to Creswell (2003) the sequential mixed methods strategy has variations of its own which manifest in the form of the sequential explanatory strategy where quantitative data is collected and analysed prior to the collection and analysis of qualitative data. Priority is therefore placed on the quantitative data. The sequential exploratory strategy emphasizes the collection and analysis of qualitative data prior to the collection and analysis of quantitative data. The essence of this arrangement is the placing of priority on the qualitative component of the study. Quantitative data is then used with the purpose to assist with the analysis and interpretation of qualitative findings, and this informed the choice of this strategy for this study. The sequential transformative strategy, which differs from the other two in the sense that either method may be used primarily and then place priority on any of the two phases, needs to be guided by a

theoretical perspective. The first two variations may or may not be guided by a theoretical frame of reference.

The mixed methods design type of strategy used in this study is considered to be a sequential exploratory design because I initially collected and analysed qualitative data and then followed-up with the generation and analysis of quantitative data using a questionnaire (Creswell & Zhang, 2009). The visual model presented in table 2 above labels this strategy as sequential-qualitative first and it prioritise the qualitative component of the study. The use of this strategy in this study manifests in the manner in which the integration of both qualitative and quantitative components of the design occur at the level of data analysis. The purpose was to establish through quantitative data whether the themes or findings that emerged from qualitative data could be justified or not, in exploring a phenomenon. It therefore allowed me to also expand beyond the level of qualitative description and interpretation of findings.

The choice of the sequential exploratory strategy was motivated by the desire to elicit quantitative data that would strengthen qualitative data since both forms of data were to be related in a collaborative effort to answer the same research questions (Creswell & Plano Clark, 2007). This relationship was based on the fact that I had already collected and analysed qualitative data, and themes that emerged from the analysis were used in the development of a questionnaire that was administered to a target population of students. As Creswell and Plano Clark (2007, p. 9) suggest, the use of the sequential exploratory strategy in this study helped shed light on the question 'do participants' views from interviews and from standardised instruments converge or diverge' in exploring the same aspect of the world?

While this design is relevant for studies that seek to experiment aspects of a developing theory emerging from a qualitative component, it is used in this study to ascertain whether qualitative themes or findings could be trusted or not, given the nature in which initial interviews were administered.

3.6.6 Increasing growth of interest in mixed methods research

Growth in the implementation of mixed methods designs, and preference among researchers for this approach at the beginning of the new millennium signifies increasing interest in this methodology (Creswell & Plano Clark, 2007). Recently, researchers (Creswell, 2003; Johnson &

Onwuegbuzie, 2004; Tashakkori & Teddlie, 1998) have shown profound interest by advocating a third design alongside qualitative and quantitative designs. According to Creswell and Plano Clark (2007, p.16), the latest developments in the growth of interest in this approach include, amongst others;

a) The published guidelines for qualitative and mixed methods research that included models for combined qualitative and quantitative approaches by the national institutes of health's (NIH) Office of Behavioural and Social Science Research in 1999.

b) A workshop held by the National Science Foundation on the scientific foundations of qualitative research with five papers devoted to combining qualitative and quantitative methods.

c) A NIH workshop titled Design and Conduct of Qualitative and Mixed-Method Research in Social Work and Other Professions held in 2004. Among the topics discussed was the use of mixed methods research in intervention research.

d) Private foundations such as the Robert Wood Johnson Foundation and the W.T. Grant Foundation have recently held workshops for their scholars on mixed methods research.

e) Mixed methods research has aroused the interest of international observers too. The Homerton School of Health Studies sponsored the first international conference devoted particularly to mixed methods research in 2005. This conference attracted 100 mixed methods researchers and methodologists. This was later followed by the invitational mixed methods conference held in Basel, Switzerland in August 2005.

3.6.7 Addressing limitations of the mixed methods design

Researchers (Creswell, 2003; Creswell & Plano Clark, 2007) who have advocated the use of the mixed methods design also observe that certain limitations have the potential to inhibit the use of this approach to research. Among these limitations is that the sequential exploratory approach used in this study requires a considerable amount of time to accomplish both data collection phases and this can be a hindrance for some research endeavours. After formulating the questions and designing the questionnaire on the basis of qualitative data I had collected earlier-on, I forwarded it to the specialist statistician who then organized it in a way that would generate quantitative data. This happened when the independent researcher was conducting the independent interviews. On completion of these interviews, the independent researcher then

administered the circulation and collection of the final version of the questionnaire that had come from the specialist statistician. Completed questionnaires were then forwarded to the statistician for purposes of analysis. This indicates that the analysis of the independent interviews happened at about the same time as the analysis of the questionnaires, indicating that time that was lost in the process was negligible.

Another limitation is that researchers may find it challenging to build from the analysis of qualitative data to the related quantitative collection. However, themes had already been developed from the qualitative data collected by me and these were used by the specialist statistician in designing the questionnaire. Lastly, it has been observed that investigators are often trained in only one form of research approach (qualitative or quantitative) while the mixed methods requires that they develop expertise in both forms of data. Securing the services of a specialist statistician in this study offered me an opportunity of gaining specialist advice on how I was expected to combine quantitative data and qualitative data during the writing of my analysis chapters.

4. Conclusion

The previous chapter presented literature on theory generated by research in the field of online learning. This chapter reveals how phenomenography was used as a methodological approach to qualitative research in laying down the foundation for the design of the study. It also demonstrates how qualitative data was collected through personal reflective journals online, focus group-discussion and interviews conducted by the researcher. It also reveals the rationale for the further use of interviews that were conducted by an independent person as well as the questionnaire. This entailed a shift in methodology from qualitative to a mixed-methods design. It reports how the quantitative instrument was designed by the specialist statistician and administered by the independent researcher, and further elucidates issues relating to how this instrument was validated and that the trustworthiness and credibility of the data was enhanced. The following chapter seeks to address the analysis of qualitative data from which the categories of description emerged, and the analysis of quantitative data that is aligned or not aligned with the qualitative data.

CHAPTER 4

REPOSITORY OF RESOURCES AND SUPPORT FOR LEARNING

4.1. Introduction

The previous chapter outlined the process according to which data was collected and analyzed in this study. This section demonstrates how the inductive analysis, typical of phenomenographic research, was used to analyse from the various data sets, the qualitatively different ways of experiencing online-supported learning in BME. This emphasizes that this chapter does not seek to discuss findings emerging from the analysis in the context of the literature reviewed in Chapter 2 as this will be the focus in Chapter 7. Initially, data was collected from the reflective journals as a data source from which tentative themes basically emerged. Focus group discussions (FGDs) were used for further data collection and thus provided a means of triangulation (Campbell, 2002). Interviews were subsequently conducted by the researcher to obtain data that sought to depict participants' inner feelings and explore greater depths of thinking and experiencing. The purpose was to elicit the variation in their experiences or understanding of the phenomenon being studied (Reddy, 2010).

As noted in the previous chapter, when it transpired that data generated from these three sources appeared not to be strong enough to substantiate findings, the need to question the manner in which these collection methods were administered arose. This was also motivated by the consideration that I was also the lecturer who taught the participants as students in the module that is the context of the study. It was thus necessary to augment the data generation strategy by engaging with additional collection strategies since the need to maximize validity and trustworthiness was important for the study.

All data sources were then collectively analyzed, firstly considering those sources where the researcher was involved in the process and then the sources where the researcher was not part of the collection process. This was an attempt to strengthen the case in answering the question "What are students' experiences of online-support in Business Management Education?" To establish the variations in participants' experiences, a constant comparative method was applied. Recurring articulations were carefully identified and then organized thematically. The analysis

led to the emergence, from the iterative process of reading and re-reading transcripts, of the first two categories of description, namely;

a) Repository of resources
b) Support for learning

The construction of these categories is substantiated by extracts from the data sources located in the transcripts. Categories of description become the basis for the construction of the outcome space. This outcome space is a chart in which the findings of phenomenographic research are mapped out. The outcome space in which the various ways of experiencing the phenomenon are depicted constitutes the most relevant outcomes of phenomenographic inquiry (Marton, 1986). This outcome space will be the final result of the analysis in this and the upcoming analysis chapters. Sorting categories of description in a logically related manner is an attempt by phenomenographic researchers to further analyze these to capture their relationship in creating an outcome space (Marton & Wing, 2005). The following is a detailed presentation of the participants' conceptions of these two categories of description as captured from the data sources.

4.2 Repository of resources and learning activities

This category relates to participants' view of online-supported learning as a *location where resources necessary to support* student learning, as well as learning activities conducted online, are stored. Resources that supported student learning took the form of *work schedules* the lecturer prepared and disseminated to students online. These were to keep students aware of content topics that were going to be covered, and when and how these were going to be assessed during the semester. Learning activities refer to the discussion of case studies that were either conducted in the Chat Room as online chats or in the Discussion Forum. This depicts the LMS as a *repository of support resources* and *learning activities*.

4.2.1 Conceptions of a repository of work schedules as support resource for learning

Prominent in the qualitative data was the role of work-schedules in delivering what the student required to know about the content of the course. Details of the content to be covered during the academic semester are clearly outlined to indicate the week in which a particular topic will be

addressed. Students noted that this resource was always available in the LMS as they could access it anytime when necessary. Online-reflective journals indicate that students acknowledged the LMS as a custodian of work schedules, as the following case reveals:

> *Work schedules are available online in our student personal files and help me to prepare in advance so that I know what is required from me.* (J29)

Another participant shared similar experiences with regards to work schedules posted online and their capacity to guide learning throughout the semester:

> *Work schedule as online support guides us about the work we are going to come about during the whole semester.* (J6)

The following participant also expressed his/her experiences with regards to the work schedule posted online and its capacity to remain here permanently, unlike a hard copy that can be lost:

> *Work schedule posted online is very helpful bearing in mind that it cannot be lost like a hard copy.* (J46)

The variation is in the manner in which each participant experienced the use of work schedules as online support. The first statement depicts the participants' experience of certainty with which work schedules are available online to enable preparation in advance. The second statement depicts the participants' experience of the work schedules as an online guide with a bearing on future learning, while the third statement depicts the participants' experience of the work schedules as something that cannot be lost if put online. Evidence from the focus group discussion (FGD) conducted with the participants confirmed this conception when participants were asked to explain "in what ways would you say work schedules or work programmes which were uploaded online helped or did not help you learn?" and the following response emerged:

> *E…h you see when I have hard copies and you find that I am studying here, and I go out and forget my hard copy of the work schedule, I may lose it and never find it again. But when it is in the system, I will log-on and view the schedule for as many times as I necessarily have to. Ja, even now I can still find the work schedule for the last semester's Business Management Education module.* (FGD)

Interviews conducted with the participants also reported this as one participant responded to the question "how does online support influence the way in which you learn?" as follows:

> *… When I go to the resources I see the work schedules there, if I want to refer to them I do so …* (M'khaya)

The above statements emphasise the conception that one could print the hard copy of the work-schedules from the LMS and carry it around campus, but chances are that this hard copy could eventually get lost and never be found again. The participants acknowledged the capacity of the online space to enable students to have the electronic copy available for one to reprint hard copies of the work schedules from it. The variation is that, while the participant in the FGD experienced the capacity of online support to store schedules even after the semester is over, the participant in the interviews above experienced the prevalence of locating and using online work schedules for reference purposes whenever necessary. These statements therefore support the notion that the LMS is the permanent custodian of the work schedules that could be browsed as many times as was necessary as long as the course was still open to students.

The highlight of these statements is the participants' awareness of the constant *availability* of work schedules in the online space where students' online personal files are located. The participants are conscious about how work schedules could be frequently perused in order to prepare for lectures that were to follow during the semester. Reference readings stipulated in these schedules helped direct students to relevant resources that had to be studied before lectures. The capacity of the learning space to keep permanent files helped make work schedules readily available for use by the participants whenever the need arose, as they could not to be lost like hard copies. The descriptive statistics emerging from the analysis of the questionnaire indicate that students indeed, knew they were able to take advantage of the repository nature of the online space, as indicated in the following table:

Table 3: Students who knew that they could reprint from the electronic resource

If I lose a hard copy of the work schedules I can go back again and re-print it from my profile

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	2	2.2	2.2	2.2
	Disagree	5	5.4	5.4	7.5
	Neutral	16	17.2	17.2	24.7
	Agree	37	39.8	39.8	64.5
	Strongly agree	33	35.5	35.5	100.0
	Total	93	100.0	100.0	

Table 3 above indicates that 70 out of 93 respondents (75.2%) who completed the questionnaire claim to have been able to go back and reprint from their profiles in the event that hard copies went missing, though the table does not explicitly indicate that students actually reprinted these schedules. Students could not have been able to do this if it wasn't for the capacity of the online space to serve as a permanent repository of resources uploaded and disseminated by the lecturer online.

4.2.2 Conceptions of a repository of chats as learning activities

The participants' view of the online space as a repository was not limited only to work schedules as support resources uploaded online and disseminated to their online profiles by the lecturer. Learning activities also featured as the online space could keep these permanently available for students to peruse in case of need. This is evident in what emerged from online reflective-journals when participant indicated that they were able to revisit previous chat activities. This happened when students were not certain about something that was disputed during the course of the conversation in the Chat Room. The following case serves as an example

> *I have learnt a few things from reviewing the discussion with my fellow colleagues in the chat room.* (J37)

Another participant expressed this view with regards to the learning space being a repository of learning activities:

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I have been unable to attend the Business Management Education lectures due to a clash in my specialization modules, online-supported learning has enabled me to catch-up with the lectures that I have missed as well as engage in online discussions that were conducted during the semester. (J38)

The variation in the ways of experiencing in the above statements lies in that, while the first participant experienced reviewing the discussion in the Chat Room as enabling him/her to learn few things, the second participant experienced discussions online as enabling him/her to catch up with what was done during his/her absence. Evidence from the focus group discussion conducted with participants subsequent to the reflective journals also confirms this perception, considering the response from the following case when participants were asked "in what ways would you say resources posted into your profiles helped you/did not help you learn?"

E…h … I didn't know until I perused… in the Moodle LMS that we are able as students to, even after the chat we can go back there and view the whole activity so, if you had a difficulty …, then later on you can go there and try to, like read, understand and analyze the chat and learn something…. (FGD)

Interviews conducted by the researcher with participants also revealed a similar response, as in the following case when probed as to "how do you seek and find the clarity you have mentioned during the run of the chat?"

Like e…h after the chat, I would on my own seek help and then go back to the chat and make sense of what was going on, why did they answer this that way and why did you say this answer was right, ya. (Nosy)

Independent interviews also indicated that students benefitted from the capacity of the online space to keep permanent copies of activities that were conducted in the online space. This is evident with the following participant in response to the question "why would you say you have benefitted or not benefitted from discussing tasks online in Business Management Education?

... I can copy the whole discussion and re-read it again when I am alone ... most of the time everyone was posting their responses at the same time so, sometimes you miss what some others are saying ... (Sthe)

Participants claim to have learned and understood from what was previously discussed with colleagues in the Chat Room when they revisited the space to review the whole activity at their own time. This is probably because during the run of the chat, participants could not easily have gone backwards and forwards to catch up with what they had missed, fearing that they would more likely fall behind others on the proceedings. Participants also acknowledged the value of online learning activities in enabling them to catch up with work covered during their absence, and to review online discussions conducted and automatically saved in the Chat Room. This depicts the variation in the ways in which participants experienced online chats. The participant in the FGD above experienced going back to the whole activity with other students after the chat while the participant in the interviews experienced being prompted by what was done in the chat to seek help from others. Independent interviews depict the participant who, as a result of having experienced, declares that he could print the content of the chat for rereading when he had missed what others had said during the chat session.

When one participant noted with surprise that chats recently conducted were still available in the online space, he/she took the privilege of re-visiting the Chat Room at his/her own time to clarify what had not been understood during the flow of the chat. Meaning-making could be stimulated through rereading the responses given by others to questions that were asked during the chat. Participants were then able to establish reasons why certain responses were accepted as correct while others were not accepted. Considering that responses to the questions posted by the lecturer during the chat often came at the same time, they had very little time to objectively evaluate each response but after the chat, they had time to do this.

These statements point to the repository nature of the Chat Room, which offered participants opportunities to review activities that were conducted and stored permanently in the space for as long as the module was still registered and available to students. The Chat Room served as a permanent repository of learning activities. This view is evident also in the descriptive statistics that emerged from the analysis of the questionnaire.

Table 4: Number of students who indicated that they could re-visit the chat

If I missed the chat session, I could go back to previous chats and I could learn from questions and answers that were discussed in the Chat

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	7	7.5	7.5	7.5
	Disagree	8	8.6	8.6	16.1
	Neutral	8	8.6	8.6	24.7
	Agree	37	39.8	39.8	64.5
	Strongly agree	33	35.5	35.5	100.0
	Total	93	100.0	100.0	

Table 4 above indicates that 70 out of 93 respondents (75.2%) who completed the questionnaire agreed that they could return to the Chat Room for purposes of reviewing preceding chats in order to learn from these activities. This ultimately takes me to the second category of description as presented in the following paragraph

4.3 Support for learning

This category relates to participants' view of online support as a *mechanism for mobilizing support* necessary for students to pursue their learning. Support for learning in the form of PowerPoint slides used to conduct lectures, work schedules designed to give direction to learning and assessment for the whole semester, assignment guidelines and scoring rubrics posted into students' personal files constitute *support material for learning*. News and announcements communicated to students by the lecturer to remind them or to raise their awareness of certain issues, and notices meant to update them on the latest developments such as changes in existing arrangements constitute *administrative support for learning*.

4.3.1 Conceptions of lecture notes as advanced support-material for learning

The desire to make learning in Business Management Education a lot easier and more convenient led to the decision to disseminate material to students from time to time through the LMS. As mentioned above, this material constitutes work schedules, lecture notes, assignment guidelines

and scoring rubrics. For the purpose of this chapter, I will focus only on describing lecture notes as support material for learning.

Lecture notes as support material were considered by participants, based on the data, to have been worthwhile in promoting student learning. Lecture notes uploaded and circulated by the lecturer online enabled students to do what would otherwise have been difficult for them to do if these notes were not put online. Online-reflective journals indicate that participants also made mention of online circulated lecture notes as support material that enabled them to do what they could not do with notes they write during the lecture as inferred from the following comment:

> *I preferred online learning tools to classroom note-taking because the content was accurate and could be edited with ease.* (J43)

Another participant made the following comment in the reflective journal:

> *They are useful because I can print them or read them from my personal file.* (J23)

Another participant gave a similar view with regards to choice as to when to print lecture notes

> *... lecture notes sent in a medium font help us save because if you print you end up paying lot of money printing.* (J96)

The above three statements reveal the variation on how participants experienced lecture notes as advanced support-material for learning. The first participant experienced the ease with which the content of these lecture notes could be edited while the second participant experienced the capacity of these notes to be either printed or read directly online. However, the third participant experienced the variety of font-sizes in which these notes were formatted and the capacity of the medium font-size to enable them to save on printing costs. The participant in the following case during the focus group discussion acknowledged the value of online lecture notes in bringing about increased legibility. When asked as to "what do you think could have been the contribution of online-disseminated lecture notes to learning", the participant's response was

> *I personally feel that these notes help us a lot because we are able to learn and they are bright and clear to see them.* (FGD)

During the interviews that were conducted by the researcher, this conception was also noted as the following participant offered the following response to the question "would you describe how these resources such as lecture notes, work-schedules, etc. supported your learning in Business Management Education?"

> *... such resources remain there in the site or computer and it will be my choice whether to print these or not.* (Baphiwe)

Evidence extracted from independent interviews suggests that lecture notes circulated to students online indeed offered them a variety of options on what to do with them. The following utterance amongst others emerged from these interviews in response to the question "if you happen to miss a lecture due to your absenteeism, how did you catch-up with what was done in the lecture?"

> *... every week Mr. Mtshali sends out notes for the week so that's where I got to print these notes without writing these* (Nkosi)

The above three statements point to the variation in the ways in which participants experienced lecture notes as advanced support material. The participant in the FGD experienced the legibility with which these notes could be read in a way that enabled them to learn while the participant in the interviews experienced the role of lecture notes as a bearer of options. However, independent interviews depict the participant who experienced the role of lecture notes as support material that invalidates the need to write notes during the lecture. Participants acknowledged the capacity of lecture notes circulated via the online space to place at their disposal texts that could be edited with ease as opposed to lecture notes that are not put online. Participants also observed that lecture notes conveyed to them via the online learning space were legible enough to enable them to read with ease. Participants consider lecture notes circulated via the online space to have assisted students as they benefited from the quality and clarity of these notes in support of their learning.

As a bearer of options, lecturer notes circulated online offered participants a choice whether to print copies of these notes or read them directly from their online files. Considering the costs involved in printing documents, this choice offered students an option to use cost-effective methods that were compatible with their economic circumstances than when these notes were made available to them in some other form. Participants also considered lecture notes uploaded

and circulated online in medium font to have enabled students to save on printing costs because enlarged font-sizes increase the number of pages to print. This ultimately increases total costs of printing per document. Online support therefore offered students an option to learn from electronic copies of lecture notes at no cost, something that could not be done if lecture notes are not circulated online. Online lecture notes also allowed students the opportunity to decide as to when it was ideal for them to print these notes. This is how online lecture notes offered to students what other forms of lecture notes could not. .

4.3.2 Conceptions of providing notifications in support of learning

Business Management Education second-year level module provides for two contact sessions per week according to schedule and these were on Tuesdays 9h40-11h10 and Wednesdays at 11h20-12h50. For the rest of the other days there were no scheduled contact session between lecturer and students. However, circumstances from time to time required that new and urgent matters relating to the course be brought to the attention of students when no contact was to happen. For this reason, announcements had to be circulated to students especially on the days when there were no scheduled contact sessions, and this constitutes administrative support for learning.

Students seem to have depended on instructional updates received through the News Forum as a means to keep them abreast of the latest developments in the course. The following extracts from online reflective-journals support this conception:

> *News Forum is used by our lecturer to inform us about upcoming tests and venues, topics we need to discuss.* (J26)

Another participant shares similar experiences with regards to the News Forum as a space that facilitated the dissemination of administrative information:

> *The News Forum serves as a notice board which supplies us with vital information from the lecturer.* (J11)

Another participant gives a similar view with regards to the News Forum as a space for disseminating administrative information:

News forum provides general news and announcements from the teacher to the students. It has enabled me to gain important content information from my teacher. This facilitates my understanding and enhances my learning. (J24)

The variation in the ways participants experienced the News Forum in the above three statements is embedded on the role of the News Forum in supporting learning. The first statement depicts the participant who experienced the News Forum as a mechanism for conveying information on the course while the second participant experienced the News Forum as a notice board on which vital information is displayed. However, the third statement portrays the participant who experienced the News Forum as a platform for disseminating general news and announcements (other than news and announcements concerning the course). The participant in the following case acknowledges the capacity of the online space to disseminate information regarding forthcoming incidents. When asked during the focus group discussion as to whether "there is any influence online learning has on them before they attend a face-to-face lecture" the participant stated that:

There are announcements that the lecturer makes to or gives to students online via the News Forum informing us about upcoming events during the following lectures. (FGD)

Interviews conducted by the researcher made a similar point. This is noted in what the following participant said when asked during these interviews as to "how do you access these case studies?"

...there are also case studies that the lecturer sends to us via the News Forum and we access these in our e-mail boxes... (M'Khaya)

Independent interviews indicated that participants were aware of the role of the online space providing notifications to students. This is inferred from what the following participant had to say in response to the question "if you happen to have missed the lecture due to a strike on campus, what did you do?"

... you can just ask from the forum, News Forum by posting a question to the lecturer as to what's gonna happen since there is a strike... (Sihle)

The participants' experiences of the News Forum in providing notifications vary in the sense that the participant in the FGD indicates that the lecturer used this forum to circulate announcements on upcoming events while interviews depict the participant who acknowledges this forum to have been a passage for case studies disseminated by the lecturer. However, independent interviews depict the participant who experienced the News Forum as a space where, not only the lecturer, but also students could approach the lecturer and raise questions on certain issues and request clarification. Participants considered online consultations and announcements to be a valuable source of information that students needed before attending formal lectures. This brought to their attention knowledge of what was expected to happen in forthcoming lectures. It also aroused their interest and readiness for upcoming lectures as they were kept in anticipation of what was yet to come. Students' attention in the lectures was driven partly by announcements circulated via the online space prior to the lecture.

The announcements from the lecturer often contained directives on what students were expected to do, and were used to inform students about upcoming events in such a way that the News Forum served as a notice board for students. Through these announcements and messages that were communicated to students, important information that supported student learning could be disseminated in time to allow students to take necessary action. Participants considered the News Forum to have circulated vital information, such as dates on which tests were to be written and when assignments were to be due for submission. With this coming from the lecturer, their learning was enhanced. One factor is that students are very focused on assessment as they are concerned about passing or failing modules. It is therefore under these circumstances that online support is considered to have provided administrative support for learning.

Participants acknowledged having visited the learning site before attending lectures and this kept them abreast of the latest developments on campus. Participants relied on the learning site in verifying or refuting speculation as to such events as disruption due to strikes on campus, and could get information on what the lecturer had planned in such cases... This allowed learning to continue even though the lecturer and the students could not meet in the lecture hall during the scheduled lecture period. Since disruptions on campus as a result of student protests happen to be a frequent occurrence, it is important that measures to alleviate the effects this has on student

learning are considered from time to time. Online support is currently the convenient option available to lecturers and students to do this.

Once more, the descriptive statistics in this study do not make it explicit as to how module updates and announcements through the News Forum benefitted student learning as this can best be described in qualitative terms. However, the following table provides evidence to the effect that students indeed received announcements and updates through the News Forum.

Table 5: Circulation of administrative information through the News Forum

I received announcements and module updates through the News Forum

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	1.1	1.1	1.1
	Disagree	2	2.2	2.2	3.2
	Neutral	12	12.9	12.9	16.1
	Agree	33	35.5	35.5	51.6
	Strongly agree	45	48.4	48.4	100.0
	Total	93	100.0	100.0	

Table 5 indicates that 78 (Agree + Strongly agree) out of 93 respondents (83.8%) agree that administrative information was brought to their attention by way of announcements and module updates which were circulated using the News Forum as a medium. This confirms that substantial support of learning during the course of the semester was extended to students via the News Forum.

4.3.3 Conceptions of respondents' understanding of online chats

At certain intervals, computer rooms had to be booked and arrangements made for all students to be in these rooms for them to engage in interactive case-based discussions facilitated by the lecturer. Such discussions were not conducted during official lecture time as time is often not enough to cater for both the presentation of the lecture and facilitating Chat Room activities. Extracts from qualitative data were used to explore how this happened in the context of BME as students had varied experiences of engaging with online chats. Online-reflective journals

confirmed this conception as students often made remarks with regards to the different things they did in various online spaces. The following case confirms this:

I used the Chat-Room to converse with my lecturer... (J43)

Another participant shares similar experiences with regards to the use of the online space for conducting online chats:

The using of online support has been useful in such a way that we had a synchronous chat where we discussed about assignments, tests and we share our views as students. (J41)

Another participant posted a similar view in his/her online reflective-journal with regards to the use of the online space to conduct online chats:

There is also an account called the Chat Room where I use to interact online with my colleagues and also with my lecturer. (J39)

The variation in the ways participants' experiences of online chats as quoted above from the reflective journals is embedded on what participants did in the Chat Room with whom. The first participant experienced online chats to have enabled him/her to converse with the lecturer while the second participant experienced online chats to have enabled him/her to share views with fellow students. However, the third participant experienced online chats to have facilitated communication with both fellow students and the lecturer. When asked during the focus group discussion as to "why did students, especially those who did not log into the system regularly, did not use all the forums the LMS placed at their disposal?" this is what one participant said:

As an irregular logger I only participated in the Chat activity because it is the only time I have to be in the LAN as per arrangement by the teacher. (FGD)

During the interviews conducted by the researcher, participants also made mention of how they used online chats for purposes of learning in the virtual space, with the teacher mediating the process. The following is a case where the participant was asked as to "what do the tasks that you have conducted online, entail?" and she responded as follows

E...m case studies are posted prior to the chat... and then the very same case study will then be discussed in the Chat-Room... and then that's where we get to interact with the teacher, the whole class online. (Snowy)

Independent interviews conducted subsequent to the interviews conducted personally by the researcher indicate that students indeed used the online space to engage with online chats as inferred from the following participant's response to the question "Why would you say online-supported learning offered or did not offer you a platform for clarifying learning problems with your teacher or fellow students as compared to face-to-face learning in class?"

...in the Chat Room you can ask a question. While in the Chat Room we get time to participate, we are able to say our answers besides looking at other students who were gonna judge you sometimes. (Sihle)

This points to the variation in the ways participants experienced online chats and/or the Chat Room. The participant in the FGD experienced online chats as online support that is occupied according to schedule or arrangement, and not just any time when one desires to while interviews portrays a participant who experienced online chats or the Chat Room as a context for discussing case-studies. However, individual interviews indicate that the participant experienced the Chat Room as a context where one could ask a question and participate without any fear of being judged by fellow students. Participants acknowledged that participation in the Chat Room was scheduled and took place according to arrangement. The essence of these statements is the participants' awareness that online chats offered them the opportunity to interact not only with the lecturer, but also to participate in a collective dialogue with fellow students. Thus online chatting was one use of the online space. Some participants even considered online chats to be a component of the online space that made the module suited for online-supported learning

Participants also acknowledged the use of online chats to facilitate the discussion of case studies. This environment enabled every participant to enjoy the freedom of articulating their feelings and thoughts about the case under review. The exchange of ideas was often triggered by questions that the teacher asked on the basis of a particular scenario or case being studied.

The following extract from one of the online chats conducted during the semester had indications of a mutually negotiated interaction.

14:51 Muntuwenkosi: In a business organization, who or which section is responsible for issuing such warnings as that in the case study

14:52 Senzelokuhle: public relations

14:52 Mthandeni: public relation section

14:52: Mpiyasekhaya Memela has just entered this chat

14:52 Nosphela: The Public relations office sir

14:52: Siphelele Vikwa has just entered this chat

14:53 Noluthando: public relations

14:54 Muntuwenkosi: Correct, it is the PR function, but why is it the PR function?

14:54 Mafika: bcos p.5r deals wth the public

14:54 Sithembele: because it affect the image of the business and the PR deals with that aspect.

14:55 Wiseman: Its simple because there are the ones who are responsible for notifying the public

The above chat depicts a conversation between the lecturer and students in a BME chat session where a case was studied and analysed. Lecturer-student interaction emanates from the initial question the lecturer asked to open up the discussion. This shows how the online learning system supported learning through interactions that extended opportunities for all students, irrespective of whether they were assertive or less assertive in face-to-face conversations, to participate in a learning task.

Evidence from the descriptive statistics emerging from the analysis of the questionnaire indicated that respondents shared the same view with regards to this conception. While it does not explain how this happened, evidence suggests that students used the online space to learn through online chats, as indicated in the following table:

Table 6: Students who used the online space to conduct online chats

As students we helped each other by way of interacting with one another in the chat

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	7	7.5	7.5	7.5
	Disagree	3	3.2	3.2	10.8
	Neutral	12	12.9	12.9	23.7
	Agree	44	47.3	47.3	71.0
	Strongly agree	27	29.0	29.0	100.0
	Total	93	100.0	100.0	

Table 6 indicates that 71 out of 93 respondents (76.3%) who completed the questionnaire concur with the notion that interacting with one another through online chats allowed them to help each other. These chats enabled them to assist one another through collaborative ways of interacting with one another.

From what emerged from qualitative data and quantitative data, the following outcome developed. The essence of this phenomenographic outcome space is the emergence of the categories of description from data generated from online, personal reflective-journals, the focus group discussion as well as interviews conducted with the participants. These categories of description are therefore a product of data generated from the sources mentioned above and have not been imposed onto the data by some theoretical framing. However, this outcome space will be augmented as the analysis develops from one chapter to the next and new categories of description emerge from the data.

Table 7: The phenomenographic outcome space – ways of experiencing

ASPECT OF AN EXPERIENCE	CATEGORY	WAYS OF EXPERIENCING
What aspect (Referential)	1. Repository of resources and learning activities	• Conceptions of a repository of work-schedules as support resource for learning • Conceptions of a repository of chats as learning activities
	2. Support for learning	• Conceptions of lecture notes as advanced support material for learning • Conceptions of providing notifications in support of learning • Conceptions of respondents' understanding of online chats

Design adapted from Reddy (2010)

An important consideration of phenomenographic analysis is that hierarchical categories of description that are logically related emerge from the participants' conceptions of an experience. These logically related categories are often captured in the outcome space (see table 7 above) that results from the process of phenomenographic analysis. This hierarchical and logical relationship manifest in the manner in which the online space offered a permanent repository of lecture notes and work schedules, and subsequently provided support for learning through these lecture notes and work schedules.

4.4. Discussion

In summing-up categories of description that emerged from the data analyzed in the above paragraphs, I will now illuminate the various conceptions of each category of description. The two categories of description emerging from the above analysis are the repository of resources and learning activities, and support for learning.

4.4.1. Repository of resources and learning activities

Literature in this area focuses on the aspect of online support as a repository of personal knowledge from which students draw hyperlinked information (Carrington & Robinson, 2009); participants in this study similarly viewed the online space as a repository of support material and learning activities. Support material in the form of work schedules, as well as learning activities in the form of online chats were stored for future reference in the learning tool. Participants acknowledged the value of the online space as a repository of work schedules to which students could refer whenever they needed to pace their learning. Students soon became conscious of the permanent availability of work schedules in the space as they continuously referred to these during the semester and noted that these could not be lost. The same could not be said in the case of printed, hard copies as participants were aware of the possibility of hard copies being forgotten or misplaced where they were not going to be found when searched for.

Participants acknowledged the value of the online space as a repository of chats as learning activities to which they could refer in the event that they either missed the chat or missed something during the deliberations in the Chat Room. They also hinted that during the chat, things happened too quickly for the eye to follow. This happened because many postings were executed by many students at the same time, making it difficult for them to read and understand views that each posted. This was a drawback of online chats but students could go back to the same chat at a time after it was conducted, to review the chat at their own pace and time to make sense of what they had missed.

Considering that 142 of the 156 students were second language speakers of English, it was not going to be easy for them to fully comprehend other peoples' views presented in English during the run of the chat. Following a discussion during the chat was a bit challenging for students who spoke English as a second language as they needed a significant amount of time to reflect on the content of the readings before they generated their own responses (Pasfield-Neofitou, 2011; Zhang & Kenny, 2010). They most probably needed time to figure these out at their own pace before they could make meaning. It is for this reason that students opted to review online chats, and they learned in the process.

The online tool as a repository of chats as learning activities saved students from possible disappointment that would occur as through demotivation caused by the prospects of missing important ideas that were posted during the chat. The capacity of the online tool to keep electronic copies of the deliberations that transpired during the chat provided support for student learning. This support extended further opportunities for English second-language speaking students to re-engage with the chat at their own pace. This is a significant issue emerging at this stage of the data analysis and will again be given attention in chapter seven.

4.4.2. Support for learning

Lecture notes uploaded by the lecturer and circulated to students online served as a support resource for student learning. Questions such as 'what is it that make these notes different from hard-copies of notes handed to students over the counter" or "how do these lecture notes enhance learning as opposed to hand-written notes students write as the lecturer presents during the lecture" may emanate from this notion.

The analysis in the above paragraphs indicates that online circulated lecture notes offered convenience that could not be offered by hard-copies of lecture notes that are physically handed to students. While students do not experience difficulty with writing notes during the lecture, they do however; find it more compelling to do this while simultaneously listening and paying attention to what the lecturer is saying than when lecture notes are put online. With the desire to keep up with the pace with which the lecturer moves from one presentation slide to the other, spelling and grammatical errors leading to other words having to be deleted compromise the tidiness with which these notes are produced. Online circulated lecture notes were considered by participants to have the capacity to be edited with ease as opposed to hard-copies circulated over the counter. This is because text could be easily and neatly deleted or added on screen while the same could not be conveniently done with other conventions of notes that cannot allow this to happen. Editing was motivated by the desire for students to update and augment the content presented in the lectures through information from research and further reading. Electronically disseminated lecture notes also allowed students to put in hyperlinks to other sources of information that related to a particular concept. This ultimately turned what started as simple lecture notes into a wealth of resource for the content topic within the discourse.

Participants also considered lecture notes to have provided students, especially those who spoke English as a second language, with relief to the problem of multi-tasking during the lecture. They would have had to cope with paying attention to the on-going lecture while also taking down their own notes in the process, which would have required them to also think about how they were to express the spoken word in English as the medium of instruction. The two facets to learning that online-supported learning provided meant that students could pay undivided attention to the proceedings during the face-to-face lectures. This could only happen because students did not have to worry about taking notes during the course of the lecture as they could concentrate on the lesson in anticipation of having lecture notes posted onto the LMS after the lectures.

It is not without reason that participants raised economic issues with regards to the various options that online circulated lecture notes were able to offer. More than two-thirds of the student population at this university, and this campus in particular, are dependent on state-funded bursaries and educational grants offered by the Department of Higher Education and Training. It has become a regular occurrence at the beginning of each university year for students to embark on strikes in the wake of reports that there were insufficient funds to assist students with their initial registration. This is often compounded by the fact that some of them are often in arrear with the previous year's fees. For this reason, students have begun to solicit ways that allow them to access learning material at relatively low or no extra costs. Knowing that lecture notes handed to them at the beginning of the semester as material for learning often come at a price as the costs of printing these are often charged against the respective student's fees account, they viewed lecture notes circulated online to offer a cost-effective option. They soon noted that they could choose to print these notes, re-write them from the LMS by hand or read them direct from the LMS.

The university use electronic mailing lists to communicate with its community that constitute its staff and students. Provision had to be made by individual lectures to ensure a constant communication with students in their modules since there was no other open context for students to meet with their lecturers beyond scheduled lectures and consultation times. Considering that certain matters that required urgent attention often arose when there were no scheduled lectures, the online space accommodated this by bringing such matters to the attention of students. The

News Forum in particular became the space through which administrative information that had to be urgently conveyed to students in this module was communicated. This enabled learning as students could be informed of the latest developments in the module especially with regards to what they had to bring with them, or prepare for the forthcoming lecture.

With online chats, students posted their responses to the question at the same time, making it difficult for the lecturer to respond to each of their postings. The times next to each Moodle emoticon indicate, for example, that three students posted their responses at 14:52 (see chat on p. 100). Feedback could only be given by the lecturer after a number of postings had been made by students. While students considered activities in the Chat Room to have been useful in support of their learning, there were also challenges, such as that of feedback from the lecturer being not forthcoming. A complication with regards to the delivery of feedback was a challenge for students as they expected immediate recognition of their efforts. This gave rise to the assumption that the Chat Room was not a convenient space to engage with a multitude of students at the same time. This suggests that individual attention to each student appeared to be a difficult task to execute in online chats.

Among some of the challenges for me as a lecturer was the difficulty with which I could monitor and manage the conversation with156 students participating in one chat session at the same time. While I could give direction to the activities, it was difficult to follow every discussion no matter how I tried to monitor the proceedings. I could not attend to each individual posting and I had to make a decision as to who I responded to and when. Sclater (2008) observed that support concerns could be difficult to manage for universities where students have to interact with tutors and other students in a particular space online. This tension in the online discussion of case studies could be addressed through further research to improve the use of the system in support of learning.

4.5. Conclusion

This chapter shows how the inductive approach to the analysis process was used to develop the first two categories of description from data, using utterances made by the participants and depicted in the data sources. The next chapter will continue with the process of analysing data

using the same inductive approach to data analysis as a technique for developing further categories of description with a view to modify the above outcome space.

CHAPTER 5

CONDUIT FOR COMMUNICATION AND COMPLEXITIES OF EPISTEMOLOGICAL ACCESS

5.1 Introduction

The previous chapter has shown how the first two categories of description emerged from the data sets collected by the researcher, and how this was supported by the independent interviews and descriptive statistics emerging from the analysis of the questionnaire. This chapter takes on from where the previous chapter left off, through the continued process of iterative engagement with all the data sets to establish further categories of description, once more, from the data. This chapter seeks to present how the next two categories of description were generated from the data sets using the inductive analysis from a phenomenographic point of view, in an effort to further explore the question "what are students' experiences of online support in Business Management Education?" This is to emphasise that this chapter does not intend to discuss findings that will emerge from the analysis in the context of the literature reviewed in Chapter 2 as this will be covered in Chapter 7.

The two categories that emerged from this process, which are now set to be presented in this chapter, are

a) Conduit for communication
b) Complexities of epistemological access

5.2 Conduit for communication

Further engagement with data through an iterative process of reading and from the data transcripts produced evidence that suggested that students identified purposes for which the online space could be used as a channel for communicating learning. The emergence of the category 'conduit for communication' occurred as a result of participants' recognition of the various purposes for which they used the space which included *consulting with the lecturer*, and also for submitting assignment with capacity to *monitor plagiarism*.

5.2.1 Conceptions of a conduit for consulting with the lecturer

Participants indicated in the various data sources that they used the space in pursuance of their learning in several ways, one of which was for *consulting with the lecturer*. Participants indicated in their reflective journals that they used the space to consult with the lecturer; the following participant expressed the following view in online reflective journals about online learning forums:

> *Forums offer more lecturer approachability as I no longer have to worry if I cannot make a lecturer's consultation time as I still have the ability to submit inquiries via forums at any time.* (J39)

Another participant shared a similar view with regards to being able to consult with the lecturer without having to go to the lecturer's office:

> *I would be able to communicate successfully with my lecturer without physically seeing him at his office. This helps with time management because when the lecturer is unavailable I can leave him an online message.* (J11)

Another participant shared similar experiences with regards to being able to consult with the lecturer even when no consultation session is scheduled for that day:

> *Online support can be good sometimes because if no consultation is scheduled for the day when I need the lecturer's help, I can post my concern on that day.* (J42)

The views of the three participants with regards to online support offering them a context for consulting with the lecturer vary in the sense that the first participant emphasizes the benefit of being able to approach the lecturer when consultation times are difficult to meet. The second participant emphasizes the need to save time, and eradicating the spatial problem emanating from the lecture's absence from campus as the benefits derived from consulting with the lecturer online. However, the third participant notes the capacity of online support to enable consultation with the lecturer even on days when no face-to-face consultations are scheduled.

Another participant in the focus group discussion expressed the following view of his/her use of the online space:

In this site the lecturer does not have to know who you are and you can just speak to the lecturer and this make it easier for us as learners to be able to approach you as the lecturer (FGD)

Another participant indicated during the interviews as to why he used the space to consult with the lecture in the event that disruptions occurred during the lecture when she was asked the question "why did you have to consult online with your teacher?"

I felt that sometimes it's better to ask questions though online learning … if there are disruptions I don't have to stress because I know that this option of online consultation is available to me and I can ask questions to my lecturer and get feedback at the same time. (Suria)

Another participant also expressed the following view during the independent interviews, of how he used the online space to engage in consultations with the lecturer, through his response to the question "Looking at how online support offered the platform for clarifying learning problems, what would be your comment comparing it with face-to-face learning in class?

… it is difficult to have a face-to-face consultation with a lecturer because there are many students who need the very same opportunity. So this e…h online learning helps … instead of face-to-face because we have to come during consultation times which clash with other lectures so it is… (Shakes)

The participant in the FGD considers having experienced online support being capable of protecting the identity of the student interacting with the lecturer in a way that promotes freedom of expression. The participant in the interviews indicated her preference for asking questions online when she missed something because of disruptions during the lecture as she had experienced immediate feedback. The participant in the independent interviews reports having experienced difficulty with having access to face-to-face consultation with the lecturer owing to numerous students queuing for this purpose. These point to a variation among the reasons participants had for consulting with the lecturer online. Participants indicated that learning forums extended opportunities for them to approach the lecturer either in cases where they could not see the lecturer during the scheduled face-to-face consultation hours or when the lecturer was not on campus or consultation times were not scheduled for a given day, thereby saving on time.

The participants acknowledged the value of the online space in extending opportunities for them to gain increased access to the lecturer. This explains how and why participants used the online space to consult with their lecturer without having to take time visiting the lecturer in the office.

Participants also acknowledged having used the online space to consult with the lecturer in an effort to follow-up on some aspects of learning that may not have been adequately addressed in face-to-face lectures. The benefit that this offered to the participants is that it saved them time and energy as they did not have to walk all the way from the LAN to the lecturer's office for a consultation. All that participants had to do was post a query and the lecturer certainly responded to such queries and this suggests that the participant used the online space for purposes of consulting with the lecturer.

Participants also acknowledged the manner in which the Business Management Education class was overcrowded with many students expecting to engage in face-to-face consultations with the lecturer. In addition, participants were aware of the challenges the students and the lecturer faced in trying to meet this expectation. One of these challenges is the possibility that scheduled consultation times happen to coincide with other lectures students had to attend according to time table. The participants consider the online space to have brought about the solution to this problem as they noted that online learning alleviate the challenges that inhibit face-to-face consultations. Evidence from the descriptive statistics that emerged from the analysis of the questionnaire is compatible with what emerged from qualitative data sets, as the following table indicates:

Table 8: Students who could consult with the lecturer online

If I missed lectures due to absenteeism, I could consult with the lecturer online

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	5	5.4	5.4	5.4
	Disagree	1	1.1	1.1	6.5
	Neutral	12	12.9	12.9	19.4
	Agree	32	34.4	34.4	53.8
	Strongly agree	43	46.2	46.2	100.0
	Total	93	100.0	100.0	

Table 8 indicates that 75 out of 93 participants (80.6%) who completed the questionnaire indicated that they could use the online space for purposes of referring to lecture notes and to consult with the lecturer. Online consultation became a viable option for students who missed lectures and had to catch-up on what was done during their absence.

5.2.2 Conceptions of a conduit for submission of assignments with capability for monitoring plagiarism

It also transpired during the process of analysing qualitative data that participants used the online space for submitting assignments. As part of online-supported learning, students were expected to write their assignments in the 'Turn-it-in assignment' window that Moodle as a learning management system places at the disposal of users. Turn-it-in is a method of submitting assignments online that also detects levels of plagiarism. Students had varying feelings about using this. The following is a case in point:

> *The first assignment we had to submit it online using 'Turn-it-in'. I was unhappy and stressed because it was my first time submitting online…* (J49)

Another participant expresses his/her experiences with regards to submitting assignments via the online learning system:

> *The method of submitting the assignment using the learning management system is fast and it is the safe method.* (J47)

Another participant shares his/her experiences with regards to submitting assignment using the online space:

> *The online submission of assignments makes my studying difficult because when I submit, it always reports that I have plagiarized my work.* (J45)

The above three statements extracted from the reflective journals indicate that participants' experiences of submitting assignments online varied. The first statement depicts the participant who experienced anxiety and unhappiness about this method of submission when he had to submit for the first time. The second statement depicts the participant who experienced this

method as hassle-free as it ensured safety and speed with which submissions were handled while the third statement depicts the participant who experienced irritation emanating from reports that indicated that submitted work was plagiarised. Participants in the focus group discussion made frequent reference to this, as in the following case where students were asked as to "What would be your comments on the method of submitting tasks using the LMS?"

> *Sir I...I think it also helps us e...h to learn to write, to reference, cite and write something on our own ... now with this system in place I know now that I have to write my work, research it and reference sources and do everything required to avoid plagiarism.* (FGD)

References came up also in the interviews conducted by the researcher. In response to the question "what are your experiences of submitting assignments using Turn-it-in?" one comment was:

> *... despite that it was all my work it still, it reported similarity that was quite vast I think it was about 39% and I know that, that I referenced accordingly and I, whatever was required I did it but what shocked me was that this similarity was so high ...* (Suria)

Interviews conducted by the independent person also had produced comments on the method of submitting assignments online in response to the question "Ok, what are your feelings towards "turn-it-in" and how has this helped you develop academically?"

> *E...h I would say my, my, my feelings towards "turn-it-in" is hatred he, he, he (laughing). I have never liked "turn-it-in" though it helped me to be original you know, by not taking other peoples' work. Ya it has quite improved my, my research skills, ya. However, I do not like the idea of "Turn-it-in".*

Participant's experiences of submitting assignments using online support varied in terms of how they felt about this method of submission. The participant in the FGD experienced this method of submission as helpful in inculcating writing habits that observe academic conversions in a way that enable them to circumvent plagiarism. The participant in the interviews was surprised to learn that her work was reported to have been plagiarized despite having done all that was required to comply with academic writing. The third participant experienced mixed feelings of dislike for this method while acknowledging that the method helped her to produce unique work.

Participants reported on the use of personal reflective journals online. Work on such journals is recommended for use as research data in the literature (Krueger, 1988) where students were marked, and the mark constituted a small percentage of their total. Students had to update these journals during the course of the semester and submit them online at the end of the semester. The participants were also aware that assignments that had to be completed during the semester also had to be submitted electronically via the space known as the 'Turn-it-in assignment'.

Participants consider the experience of submission of assignments to have been accompanied by mixed-feelings of anxiety and displeasure, though the process seems to have been fast and the method safe. This was because the method monitored the way they wrote their assignments and students generally don't like being monitored. While submitting assignments electronically via 'turnitin assignment' helped students improve their writing skills, they did not favour this method and they indeed despised it. This also signifies a break from traditional ways of handling the submission of work by students where they had to sign a register on submission of scripts.

Table 9 below presents students' feelings about this alternative method of submitting assignments:

Table 9: Students who did not like to submit work electronically via Turn-it-in

I do not like to submit online because Turn-it-in reports that I have plagiarized even when I have cited and referenced

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	12	12.9	12.9	12.9
	Disagree	5	5.4	5.4	18.3
	Neutral	25	26.9	26.9	45.2
	Agree	22	23.7	23.7	68.8
	Strongly agree	29	31.2	31.2	100.0
	Total	93	100.0	100.0	

Table 9 above indicates that 51 out of 93 respondents (54.9%) who completed the questionnaire declare that they did not like to submit their work online as this led to their work being declared to have been plagiarized. However, 17 out of 93 respondents (18.3%) seem to have had no

dislike for this method of submission while 25 out of 93 respondents (26.9%) felt indifferent about the effects of Turn-it-in in monitoring. This indicates a variation in the way participants experienced the consequences of having plagiarism monitored.

5.3 Complexities of epistemological access

The challenges relating to difficulties with regards to working with the technology constitute complexities of epistemological access for students. This implies that while students had access to computers and the Internet, they did not have the skills necessary to access the various sources of knowledge located in the learning management system (LMS) and placed at their disposal by the university. These complexities comprise difficulties in comprehending induction procedures, difficulties in maneuvering within the graphical user interface as well as difficulties with coming to terms with the LMS's jargon.

5.3.1 Conceptions of challenges with comprehending induction procedures

When participants were asked during the focus group discussion as to what they felt were the reasons for the low participation rates by students in the LMS as reflected in the log file, they cited the problem of struggling to get into the system to have impeded their efforts to learn using online support. Online reflective journals indicate how challenging it was for participants to gain entry into the LMS for purposes of retrieving resources that were announced to have been disseminated by the lecturer. The following are cases in point

> *This method of turning in assignments electronically is very complicated, until this day I don't know how to log into it, I always ask someone to do it for me.* (J11)

Another participant acknowledges having seen other students experiencing challenges with logging into the online spaces:

> *When we first started the online spaces only the minimum number was involved in it because others were still having difficulties in logging into the system.* (J6)

Another participant shares similar experiences with regards to having found it difficult get into spaces where resources and activities were located during the first few weeks of engaging with the system:

> *It was not easy maybe for the first three weeks I had some difficulties, like finding activities and lecture notes. I was confused.* (J49)

The above three statements indicate the variation in the ways participants experienced problems with logging into the system. The first statement depicts the participants who experienced difficulty with logging into one specific online space, which is 'Turn-it-in assignment', suggesting that he/she could log into other spaces without difficulty. The second statement depicts the participant who had experienced seeing other students facing challenges with regards to logging into the LMS, indicating that they could not enter the system, at initial stages. The third statement however, depicts the participant who experienced challenges with logging into spaces where activities and lecture notes were located. This means that the magnitude of the problem varied among the participants. This had negative consequences in the sense that without the necessary understanding of the log-in processes, one would not be able to participate in online-supported learning. The following is a case from the focus group discussion where the participant's response to the question "what would you say were the reasons for the low participation rates by students in online-supported learning" cited 'not being conversant with how online learning technologies work' to have been the cause of log-in problems.

> *Ok, I think the cause of this problem is that most of the students are not familiar with these technologies. Maybe they find it difficult to enter the system to check the updates, assignments and other stuff.* (FGD)

Another participant, in agreement with these views, stated that their 'different school orientation' rendered some of them unable to find their way through the LMS while others could. The participant acknowledges having found it difficult to log onto the system as a result of inadequate understanding of how this could be done:

> *I agree with my colleague on this point as most of us come from different backgrounds... Not everybody knows the system in terms of how to log on, and go to various sites and do this and that.* (FGD)

When one participant was asked during the interviews as to whether "the school you last attended, did it have computers or not?", he responded as follows;

No, the school did not have computers. (M'khaya)

The follow-up question then inquired as to "how did you manage to engage with tasks using online support in Business Management Education, given the fact that you had no experience of learning using computers?" The following was the response:

E…h first of all I have to log onto the system in order to engage with any task which is there. And now it is not like in the beginning where I experienced a lot of problems … but now that the whole procedure of logging onto the system has been explained to us I can now get into the system… (M'khaya)

Participants' reasons for the low participation rate in using online support vary according to how they experienced this. One participant in the FGD considers the challenges faced by students in attempting to log into the LMS and check for updates and tasks to have been the reason for this low participation rate while the other participant believes that diverse school background led to other students not being able to participate in the use of online support. Interviews depicts the participant who experienced challenges with logging into the LMS at initial stages, suggesting that lack of training on how the system work was the cause of the low participation rate. Interviews conducted by the independent person indicates that this challenge was prevalent among students who participated in this study as the following participant acknowledges having experienced challenges with regards to using the system when asked as to "if there were no computers in your school e…h how did you manage when you firstly arrived here at the University of KwaZulu-Natal?"

O…h! At first it was difficult since I had no previous access to computers, so I was asking my friends e…h for the advice on using this technology of computers to access things. (Nkosi)

The participant claims to have gone through difficulties in his initial attempts at working with computers since he did not have previous experience of working with computers. This prompted

the interviewer to follow-up on this response by further asking "Ok then how did you manage your way throughout the module?"

> *O...h! I had a friend who was assisting me in order to use this online-supported learning and I was able to log-in as often as I wanted with his assistance* (Nkosi)

Independent interviews brought about another variation in the causes of the low participation rate at initial stages of engaging with online support. The above two statements depict the participant who experienced the role of friends in accessing online learning to be the factor, as he indicates that he struggled to participate in using online support before consulting a friend. Participants considered lack of familiarity with how technological tools for online learning work to have inhibited students efforts to participate in online-supported learning. The gateway into the system is the understanding of the log-in processes which, according to the participants, students did not comprehend. Owing to this challenge, students therefore could not access whatever was posted into their online files and therefore could not acquire information on tasks that had to be accomplished. One participant indicated that the role of prior learning, embedded in their secondary school background, had a negative impact on the capacity to engage with the online tool and as a result some students struggled to gain access into the system due to log in problems. Challenges with regards to getting into various sites as a result of not being able to log into the system inhibited their opportunities to participate in the system.

Not being able to successfully log into the system or particular spaces indicates that students struggled with comprehending the induction procedures necessary to enable them to use the online space.

Varied schooling background affected some participants' capacity to learn using online support at the commencement of the module as they struggled to negotiate entry into the space. However, through basic training offered by the lecturer during the process of implementing online support, some participants could eventually navigate their way into any space to do and get what they wanted. Descriptive statistics emerging from the questionnaires indicate that students experienced a problem with regards to negotiating their way into the LMS. Table 10 below suggests the number of students who were able to negotiate entry into the system because of the lecturer's intervention.

Table 10: Number of students who were able to log on because of the lecturer's intervention

After the process was demonstrated by the lecturer, I was able to log on

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	7	7.5	7.5	7.5
	Disagree	3	3.2	3.2	10.8
	Neutral	7	7.5	7.5	18.3
	Agree	27	29.0	29.0	47.3
	Strongly agree	49	52.7	52.7	100.0
	Total	93	100.0	100.0	

Table 10 above indicates that 76 out of 93 respondents (81.7%) who completed the questionnaire were able to find their way into the system because the lecturer had intervened by demonstrating to them as to how access into the system can be negotiated.

Being unaware of the content covered in the basic computer literacy course extended to entry-level students when they come to university, the lecturer had assumed that second-year students were ready to engage with the online component of the Business Management Education module. Only when students started asking questions about how were they to go about retrieving resources from the system, was the lecturer made aware that the computer literacy course did not cover aspects of online learning. This suggests that the computer literacy course that the university offers to all first-year students needs to be adjusted to cover aspects of online learning to justify the assumption that students can, on its completion, explore learning using the LMS. Through these challenges, it transpired that students had to be taken through the log in processes step by step for them to be able to develop skills needed to successfully negotiate their entry into the online learning system.

5.3.2 Conceptions of challenges with manoeuvering within the graphical user interface (GUI)

While some participants managed to gain entry into the LMS, they encountered further challenges with regards to finding their way into relevant sites and learning spaces, and also with

regards to retrieving resources from the system. This implies that they could not work with and use the graphical interface the system made available to them as users. The analysis of the questionnaire shows how participants struggled to find their way within the LMS at initial stages. The participants in the following cases extracted from the online-reflective journals acknowledged having experienced problems with the process of negotiating access to the learning activity.

> *At first I found it very difficult to navigate through the site to find my notes and to find announcements which the lecturer had posted.* (J11)

> *Moodle has a facility for submission of assignments but I have never experienced using it because each time I tried to explore it, it reported an internal error.* (J29)

> *It took me a little while to find my way into the chat discussion before I was able to successfully contribute.* (J6)

The focus group discussion presents the case where the participant acknowledges having struggled to gain *access to his/her own profile* located in the LMS until he sought help from a fellow student. While participants experienced a common challenge, the variation is in the different online spaces where each participant experienced this challenge. The first participant experienced difficulty with finding a way into the resource file where lecture notes were located while the second statement depicts the participant who could not find a way through the 'Turn-it-in assignment" space. However, the third statement depicts the participant who experienced difficulty in finding a way into the Chat Room. When participants in the focus group discussion were asked "would you comment on the process you had to follow when accessing material resources from the system?" The response was:

> *Yes sir… I had a very big problem with getting into the personal file. Until I asked a fellow colleague …, who then helped me on how to get into my personal file.* (FGD)

Further engagement with participants during the interviews indicated that some students did not have access to computers at secondary school. This suggests that they did not have elementary understanding of how to work with computers before coming to this university. This is evident

from the following statement given by the participant when asked whether the schools she attended before coming to university 'had computers or not?'

> *No it did not have computers for both primary and high school ... I left the school having not seen the computer. ... I did not have access to computers until I came to university.* (Baphiwe)

When the participant was asked to relate how, without basic knowledge of working with computers, she managed to find her way to the resources disseminated by the lecturer into their profiles as online support, she responded as follows

> *... it was hard for me like, to gain access without being taught how to access these and in our first day we were made aware of what we had to do in order to successfully get into the system.* (Baphiwe)

Similarly, in an interviews conducted by the independent person a participant was asked "could you explain why were you not ready for online-supported learning as a person who had worked with computers in both Grade 8 and 9 where you learned the basics, as well as in your first year at university where you did Computer Literacy?" and responded:

> *E...h first you need to differentiate between e...h the online and the basics of computers ... I think online was more difficult since we had to know sites and how to go through to get your notes or your assignments. So it was very difficult for me since I did not find any notes... so it was a bit challenging for me.* (Sihle)

The above statements suggest that participants had already logged in and secured access into the system, but found it difficult to navigate their way into their profiles where resources were located. Participant's ways of experiencing this difficulty varied as the participant in the FGD acknowledges having found it difficult to get into his/her personal file while the participant in the interviews acknowledges having found it hard to locate resources without initial training. However, the participant in the independent interviews acknowledges having found it challenging to locate lecture notes in the system. These cases constitute challenges with manoeuvering within the GUI as a platform that one can use to interact with, for purposes of

gathering and producing information. It was not until some participants solicited help from other student that they learned how to find their way into the various spaces located in the LMS.

So students found it challenging to locate desirable sites where they could engage with learning activities, access learning resources or retrieve material posted to them by their lecturer although they had already entered the system. Finding it complicated to access lecture notes and announcements, being inept at turning assignments in, or not being able to find the way into the chat discussion presume that one is already logged-into the LMS, but cannot manoeuver or navigate one's way into desired spaces within the system. The participants acknowledged the difficulty with which access to the space could be negotiated if no elementary training was offered to them, especially those who had never had the opportunity to work with computers before. While participants stated they had received basic training on how to manoeuver within the graphical user interface on the first day of the semester in this module, they still could not easily find their way into relevant spaces, resources and activities.

One student in the above independent interviews who used computers in her secondary school also experienced this challenge. She claims that online learning is more complicated than understanding basic computer literacy. While participants were familiar with these basics, they found it challenging to get to various sites and locate learning material they knew was already posted by the lecturer. This indicates how challenging it was for participants to manoeuver within the graphical user interface in search of relevant sites and the support material necessary to enable their learning. Evidence from the analysis of the questionnaire indicates that the majority of students who participated in the module experienced problems with finding their way into the user interface at the earlier stages of engaging with online support, as captured from the statistical analysis.

Table 11: students who eventually find their way after experiencing problems earlier-on

Though it was a bit problematic at an early stage, I eventually did find my way

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly disagree	5	5.4	5.4	5.4
	Disagree	11	11.8	11.8	17.2
	Neutral	25	26.9	26.9	44.1
Valid	Agree	37	39.8	39.8	83.9
	Strongly agree	15	16.1	16.1	100.0
	Total	93	100.0	100.0	

Table 11 above indicates that 52 (Agree + Strongly agree) out of 93 respondents (55,9%) who completed the questionnaire initially found the process of navigating their way within the LMS challenging, but eventually find their way into the various sites.

Further engagement with data led to the emergence of the following conception that had relevance to epistemological access complexities.

5.3.3 Conceptions of challenges with coming to terms with the jargon/terminology

Some students misconstrued one online space (Chat Room) as the other (Discussion Forum). This is inferred from the manner in which they expected to see something happening in the space that was not designed for it. This may have been triggered by the fact that they did not devote enough time exploring with the LMS; as a result they could not comprehend the operational differences among the various online spaces located in the LMS as well as the LMS concepts.

The findings from the qualitative data are that, in their search for resources or attempts to engage with activities that are meant to enhance their learning, participants find themselves landing into spaces which were not appropriate for what they intended to do at that particular time. Online reflective-journals present cases of miscomprehended use of the online space where participants expect something to happen in a space that is not designed for the purpose they expect. The following is a case in point:

I do experience problems getting into the chats ... and when I do enter them, there is no one to chat to. (J37)

Another participant in his/her online-reflective journal also demonstrated lack of awareness about how online chats operate as a context where a multitude of people participate or deliberate on a particular topic of interest that require input from a number of people rather than a bilateral dialogue between student and lecturer.

Sometimes the lecturer does not respond at all I remember the time I posted a question in the chat-room he did not reply I had to go to him in person. (J39)

Another participant posted the following statement in his/her online reflective-journal;

As for synchronous Chat Room, I never logged into it ... for the reason that, to me it was the same as the asynchronous discussion forum. (J6)

While participants share similar experiences with regards to miscomprehending the use of the Chat Room, this happens in different ways. The first statement portrays the participant who expected to find people in the Chat Room whenever he/she logged into this space. This is not how the Chat Room works as occupation of this space is scheduled prior to deliberations. The second statement depicts the participant who held onto the perception that only the lecturer had to respond to his/her posting in the Chat Room, which is not the case as interaction is open to everyone present. However, the third statement depicts the participant who seems to have experienced the Chat Room as similar to the Discussion Forum, which again is not true since participation in the Chat Room is arranged for everyone to be logged in (synchronous) at a particular time.

Participants acknowledged having had problems *accessing lecture notes*, as the following example indicates. The respondent could not find these in the News Forum no matter how they tried, and could not actually tell why. The following extract from the focus group discussion is a case in point, where participants were asked to "comment on how it was like to retrieve or access resources such as lecture notes from the LMS":

It was very difficult for me to find the notes because I went to the News Forum but I couldn't find these. I did not know whether it was me being unable to understand how to get to these notes... (FGD)

This concern also surfaced during the interviews conducted by the researcher when the participants were asked as to "what is it that you think can be done to improve the quality of online supported learning in Business Management Education?"; one participant responded as follows:

E...h with the chat... students including myself often complains e...h that they post questions and then the answers are not given .... So thinking that they are neglected, the students want to be appreciated even if they give wrong answers. I don't know how this could be done since there are a lot of answers that come in and the lecturer may not realize all these answers. (M'khaya)

Another participant experienced some challenges trying to refer to a space she used to engage in a particular activity when asked "what do you think constitutes the online space?"

... There is also the discussion Chat or the discussion room, I don't know whether I am pronouncing it correctly but it's where we discussed some topics like... (Baphiwe)

For purposes of clarity, the participant was asked whether "the discussion you have mentioned, did it require everybody to be logged onto the system or not?" and the response was:

Ya I think everybody was logged onto the system..., although we are not all logged onto the system at the same time..., like to have to be in a lecture at a particular time but with online, in my own time I can gain access to...(Baphiwe)

Independent interviews also picked up this issue, as in this response by a participant when asked as to "which online spaces were you exposed to or were made available to you by the system in Business Management Education 310?"

Yes I think chats are one of these, receiving notes in our profiles and announcements (Sihle)

The variation in the ways in which participants experienced the challenge of confusing one online space with another is embedded in the above statements. The participant in the FGD is of the opinion that lecture notes are located in the News Forum, which is not the case as these are stored in the Resource File. The participant in the interviews expected the lecturer to respond to every post made by each student because students 'students want to be appreciated'. This is contrary to the purpose for which the Chat Room is intended to serve, as everyone is expected to participate in this space by responding to any question or comment irrespective of who circulated that question or comment. Interviews bear experiences by another participant who could not distinguish between the Chat Room and the Discussion Forum. Independent interviews capture the experiences of the participant who could not correctly refer to the online spaces by name, though she was aware of what was done in the various spaces.

Some participants were not aware of the fact that activities in the Chat Room are often conducted according to schedule, where everyone has to be logged into the space at a particular scheduled time so that people can interact as if they were in the same context by location. Participants in some of the above cases confuse the Chat Room with the News Forum as they expected only the lecturer to respond to their postings during the course of the on-going chat. This suggests that even though students are taught using innovative means of learning, some haven't gone beyond the boundaries of traditional ways of transacting learning where the teacher is the only source of learning or knowledge. This suggests that the way in which students interact with the medium of the online learning system is to construct traditional expectations of roles and responsibilities of the learner/student and the teacher/lecturer.

Some participants also demonstrated ignorance of the differences in both the composition and the uses of the Chat Room and the Discussion Forum. For the participant to consider the Chat Room as similar to the Discussion Forum signifies that the participant could not distinguish between the values-in-use of both online spaces. This suggests that these participants could not make sense of the terminology used to identify the significance of each online space, leading one into believing that the participant could not come to terms with the jargon or terminology that go with online learning literacy.

Expecting the lecturer to respond to each wrong answer posted by them in response to the question that was debated at a particular time suggests that some participants are not aware of the

purposes for which the chat is conducted in a space that extends equal opportunities for all participants to participate. These participants confused the Chat Room with the News Forum as a space where a student can post messages or queries directly to the lecturer without others being part of the ongoing conversation, because the News Forum links online communication between correspondents to the respective e-mail boxes of recipients.

Some statements revealed confusion and uncertainty about the actual learning space participants wanted to refer to as they initially mixed-up concepts in their attempts to identify the space. Attempts to lead one participant to the correct identity of the space were not successful either as she could not really tell whether the discussion was conducted with everyone logged onto the system or not. The two activity spaces the participant is confusing are the Chat Room and the Discussion Forum which technically differ in their uses as one is basically synchronous in the sense that it requires everyone to be logged-onto the system at the same time (the Chat) while the other is asynchronous (the Discussion Forum). This indicates the nature of the challenge the participant faced in trying to comprehend the identities of various online spaces in terms of the terminology that comes with the use of the LMS.

One participant could identify online spaces in terms of purposes for which they were used, that is, spaces where online chats are conducted. However, the space should have correctly been identified as the Chat Room. The participant also could not correctly identify the Resources File where resources disseminated by the lecturer in the form of support material such as lecture notes are located, instead she referred to this as the online profile. However, she struggled to provide the correct identity of the third space, which is the News Forum in this case even though she comprehends the purpose for which this space is used, that is, to circulate announcements to students. This signifies the magnitude of the challenge participants faced in their efforts to identify the online spaces using the correct terminology.

This may have been triggered by the fact that they did not devote enough time exploring with the LMS; as a result they could not comprehend the operational differences among the various activity spaces located in the LMS. Descriptive statistics from the analysis of the questionnaire provide evidence in support of this claim:

Table 12: Number of hours devoted to online learning per week

Categorical hours online study

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	[0-5]	37	39.8	39.8	39.8
	[6-10]	27	29.0	29.0	68.8
	[11-15]	13	14.0	14.0	82.8
	[16-20]	7	7.5	7.5	90.3
	[21-25]	2	2.2	2.2	92.5
	[26-30]	3	3.2	3.2	95.7
	[41-45]	1	1.1	1.1	96.8
	[46-50]	2	2.2	2.2	98.9
	[56-60]	1	1.1	1.1	100.0
	Total	93	100.0	100.0	

Table 12 above indicates that the majority 64 out of 93 students (68.8%) devoted ten or fewer hours per week on the LMS as a learning tool. This translates to two or less hours a day being devoted to exploring with the online space on the average, assuming a five-days learning week. This could further suggest that time to get hands-on with the various activity spaces to fully comprehend operational issues around these spaces was negligible.

Table 13: The phenomenographic outcome space – ways of experiencing

ASPECT OF AN EXPERIENCE	CATEGORY	WAYS OF EXPERIENCING
What aspect (Referential)	1. Repository of resources and learning activities	• Conceptions of a repository of work-schedules as support resource for learning • Conceptions of a repository of chats as learning activities
	2. Support for learning	• Conceptions of lecture notes as advanced support material for learning • Conceptions of providing notifications in support of learning • Conceptions of respondents' understanding of online chats
	3. Conduit for communication	• Conceptions of a conduit for consulting with the lecturer • Conceptions of a conduit for submission of assignments with capability for monitoring plagiarism
	4. Complexities of epistemological access	• Conceptions of challenges with comprehending induction procedures • Conceptions of challenges with maneouvering within the Graphical User Interface • Conceptions of challenges with coming to terms with the jargon

Design adapted from Reddy (2010)

The essence of the two categories of description presented in this chapter that become part of the logical and hierarchical relationship in the outcome space (see table 13 above) is that participants had begun to consider the online tool to be a conduit for communication. In their continued use

of the space as a conduit for communication, they experienced a variety of technical and operational challenges. These challenges were obstacles to gaining access to a variety of applications that had implications for learning online. These applications included the students' profiles from which lecture notes had to be retrieved and the 'Turn-it-in assignment' window through which assignments had to be submitted. These challenges denote complexities of epistemological access and had to be overcome for online-supported learning to proceed without any hindrances.

5.4 Discussion

The categories of description that emerged from the data analysis process in the above paragraphs will now be illuminated by considering various conceptions of each category. The two categories of description in this chapter are *conduit for communication* and *complexities of epistemological assess*.

5.4.1 Conduit for communication

Participants perceived online-supported learning as a *conduit for consulting with the lecturer* and also as a *conduit for submitting assignments*. This is in line with what participants said when they constantly acknowledged having *logged onto the system to retrieve lecture notes*. Lecture notes are, under these circumstances, a means through which the lecturer communicated learning that had been conducted in face-to-face lectures to students. Online-supported learning provided a convenient space to facilitate the transmission of these notes in support of student learning. It transpired that students primarily used the online space as a conduit for communication. This emanates from their constant assertion that they would often browse the online space in search of lecture notes, implying that retrieving lecture notes encouraged them to engage with the online tool.

Participants also acknowledged having used the space as a medium for *consulting with the lecturer*. They noted that face-to-face consultations with the lecturer are not always convenient as consultation times were sometimes in conflict with other lecture periods students had to attend. Online-supported learning offered students an alternative method that guaranteed consistent accessibility of the lecturer that could not be afforded by a face-to-face component, considering time clashes or constrains and the presence of the lecturer on campus.

Participants considered online support to have offered a channel for *monitoring plagiarism.* This meant that students work, especially assignments, was going to be evaluated electronically in terms of how these were written. This happened when they submitted these assignments via the 'Turn-it-in assignment' space. This offered students the luxury of not having to be on campus when assignments were due, and also that they did not have to go and sometimes wait in long queues outside the lecturer's office seeking to submit their assignment on the due date. Despite this convenience some students were not happy with this method of submission as it monitored the extent to which their assignments were plagiarized. This meant that students were not happy about their work being closely monitored by online technology which detects the degree to which assignments may have been plagiarized. This being said, however, online support served as a *conduit for monitoring plagiarism.*

5.4.2 Complexities of epistemological access

Due to the challenges that come with learning using online technologies, students were often caught unaware in their efforts to engage with their learning. Challenges with regards to comprehending induction procedures saw students struggling with the log-in processes. Challenges with regards to manoeuvering within the graphical user interface saw students struggling, once they had logged-into the system, with getting into their profiles, relevant sites and activities. Evidence indicates that even those who claimed during the interviews,\ to have used computers before coming to university struggled to manoeuver within the graphical user interface. Challenges with regards to coming to terms with the jargon saw students confusing one online space with another by expecting things that are not normally set-up to happen in a particular space, to happen. This suggested that students were not ready for the online component of learning at initial stages of the module, irrespective of whether they had used computers before coming to the university. This was despite the course in computer literacy at entry level. It further suggests that the computer literacy course offered by the university to its entry-level students needs to be augmented to accommodate literacy in online learning.

5.5 Conclusion

The previous chapter presented a process which led to the emergence of the first two categories of description from the data sets using the inductive approach. This chapter continued from

where the previous chapter left off by presenting the two subsequent categories of description developed through an iterative process of inductive analysis. The next chapter will attempt to present the process according to which the last two categories of description will emerge from the data sets, to finalize the analysis.

CHAPTER SIX

SOCIAL INTERACTION AND MENTAL STIMULATION

6.1 Introduction

The previous chapter presented the process according to which the third and fourth categories of description emerged from the data sets where the researcher personally. It also showed how this data was supported by the independent interviews and descriptive statistics that subsequently emerged from the analysis of the questionnaire. This chapter continues from where the previous chapter left off; by pursuing a process of iterative engagement with various data sets to establish further categories of description from the data.

This chapter seeks to present how the last two categories of description were generated from the data sets using the inductive approach to phenomenographic analysis in an attempt to answer the question "how do these experiences relate to students' learning in Business Management Education?" It is therefore not the purpose of this chapter to discuss the findings that will emerge from this analysis in the context of the literature reviewed in Chapter 2 as this will be done in Chapter 7. This question seeks to establish the nature of the relationship between the participants and the phenomenon as based on the participants' experiences of the phenomenon. It constitutes the 'how aspect' (structural aspect) of the outcome space and in this study it denotes how the participants, through their experience of the phenomenon, constructed a relationship with both the phenomenon and the context of the study.

Online-supported learning was implemented as an attempt to ease the burden that comes with having to facilitate consultation between the students and the lecturer and also to enable student-centred learning in extremely large class sizes. It was within this awareness that the study had to pursue an understanding of the participants' experiences of the phenomenon in structuring a relationship with learning in Business Management Education. This question seeks to explore the effects that online-supported learning had on students' learning of Business Management Education as based on their experiences. The two categories that eventually emerged from this iterative process, which will be presented in this chapter, are

a) Social interaction

b) Mental stimulation

The conceptions of the above-mentioned categories of description will be outlined and then substantiated by verbal quotes from the data sources, starting with the conceptions of social interaction.

6.2 Social interaction

During the iterative process of reading and re-reading the transcripts, I was surprised and intrigued to note that participants repetitively made statements which indicated that online-supported learning affected social factors related to learning. Some participants revealed that they did not participate in face-to-face lectures because they were *less assertive to express themselves* in the presence of many people. Others indicated that their *command of English as the medium of instruction was not good enough* hence; they found solace of expressing their views so that others may learn about and respond to these via the online space. Participants also indicated that they could *learn from each other* when they interacted in the space. From these implications and conceptions I then developed the perception that online-supported learning enabled social interaction among participants in the learning act.

6.2.1 Conceptions of being reluctant / shy to articulate views in face-to-face settings

The notion that some students felt too shy to express themselves in the presence of others suggests that they find it challenging to engage in social interaction with others in face-to-face contexts. Online reflective-journals substantiate this perception as the following participants acknowledged in their journals

> *Face to face learning…accommodates only the outspoken students while shy students feel dominated by those students. This support…as the system allows the majority of potential students to freely state their concerns at any time…* (J47)

Another student shares similar experiences with regards to not all students being comfortable with expressing their views in face-to-face settings

Face-to-face is good to some students because we are not the same other students are shy and do not participate in class but when it comes to online support it where they get freedom and they even ask questions. (J38)

A similar experience with regards to not being comfortable with asking questions in face-to-face lectures is shared by another participant

Like myself I'm shy to question during the lecture, so it is easier to pose question in the written form. (J23).

Experiencing the reluctance by participants to speak in face-to-face settings manifests in a variety of ways. The first statement above depicts the participant who experienced the partial nature of face-to-face learning in the sense that it favoured eloquent students who enjoyed speaking in public platforms at the exclusion of timid students. The second statement depicts the participant who experienced the awareness of the restricting character of face-to-face learning on shy students who derived their inspiration to communicate with others from online learning. The third statement depicts the participant who experienced that inquiring and querying in writing was a lot easier than through the spoken word. This experience denotes the preference of online communication over face-to-face communication. The focus group discussion captured one participant's awareness of the fact that not all students were comfortable with speaking openly during the course of face-to-face lectures. This participant had this to say in response to the question "What are your views on online chats extending opportunities for self-expression?"

It also helps shy students to get the opportunity to say something because ... some students are shy, they cannot say their answers in class. (FGD)

Interviews conducted by the researcher also indicated that students were aware of this as inferred from the following response to the question "Why would you say this online support offered or did not offer a platform for clarifying learning problems with your teacher or fellow students as compared to face-to-face learning in class?"

... Many of us have questions but we do not ask these during the Business Management Education lecture as I may be shy to ask, but e...h using the online space ... even those

who were ashamed or shy to ask in the classroom are now answered automatically ...
(M'khaya)

Independent interviews conducted subsequent to the interviews that were conducted by the researcher also portrayed prevalence of this view as indicated by the following response to the question "why would you say online support offered or did not offer you a platform for clarifying learning problems with your teacher or fellow students as compared to face-to-face learning in class?"

... I was, well I can say during our lecture I was quite shy to answer the questions even though I knew the answer, but I wouldn't I, I, I wouldn't come up with the answer...I was shy you know. But using online learning I was keen to participate. (Sihle)

The variation in the manner in which participants experienced the capacity of online support to extend freedom of expression is embedded on the idea that the participant in the FGD saw students who were often reluctant to speak in class taking advantage of the space by expressing their ideas through online support. The participant in the interviews experienced that through online support he was able to ask questions he could not ask in class hence; inquiry-based learning was best enabled. The participant in the independent interviews experienced online support as a context that allowed him to take initiative to answer questions and participate in activities; something he missed because of being shy in face-to-face lectures. The above utterances indicate that participants observed different personalities that depicted students with different learning characteristics. This results in some students not being able to put their views freely in the open when face-to-face conversations happen in class because they are less assertive. When learning is negotiated online via the learning site, these students see this as an opportunity for them to express their views which would otherwise have not been heard if deliberations were not conducted online. This suggests that online support affected social factors related to learning for those students who are less assertive than others.

The participants expressed their observations of how face-to-face learning in class made things convenient for students who are assertive and their domination over the less assertive students. The participants consider online support to have enabled the less assertive but capable students to express their views without difficulties whenever they felt it necessary to do so. This suggests

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that the learning site extended opportunities that would otherwise have not been realized for less assertive students to interact with others if learning was only limited to face-to-face lectures. Not only did the online space enabled students to speak their minds, but it also emancipate those who find it threatening to ask questions in face-to-face lectures. This way online supported learning had a positive effect on social factors related to learning.

Participants further acknowledged that the online space enabled students to find answers to their questions through the lecturer's responses to questions posted by other students. This is because postings can be read by everyone participating in the space irrespective of whether he/she posted a question or not. This indicates that questions that would otherwise have gone without being asked if interaction was only limited to face-to-face lectures now get the opportunity to be addressed via the learning site..

Descriptive statistics that emerged from the analysis of the questionnaire supports this judgement, as table 14 indicates.

Table 14: Students who felt shy to comment during the face-to-face lectures

I feel shy to make comments during the face-to-face lecture

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	9	9.7	9.7	9.7
	Disagree	15	16.1	16.1	25.8
	Neutral	15	16.1	16.1	41.9
	Agree	30	32.3	32.3	74.2
	Strongly agree	24	25.8	25.8	100.0
	Total	93	100.0	100.0	

The above table indicates that 54 out of 93 respondents (58.1%) who completed the questionnaire were shy to make comments and participate in the on-going conversations during the lecture because they were shy to do this. These students are considered to be less assertive as they could not easily interact with others in face-to-face settings owing to their individual personalities. This insinuates that if learning was limited to face-to-face lectures, the majority of

students would not have interacted socially with other students when learning. It further suggests that online support affected social factors related to learning for less assertive students.

6.2.2 Conceptions of not being able to converse well in English

The iterative process of reading and re-reading of transcripts led me into an interesting discovery. When participants began to raise concerns about their diverse capabilities of expressing themselves in the medium of English in the reflective journals and focus group discussion, I then developed an interest exploring this in the interviews. The result was that participants had more to say in the interviews to confirm this state of affairs. Online reflective journals that were updated by students during the semester confirm this view.

Learners are not the same and have different background of schooling. (J38)

Another similar view was with regards to students having different ways according to which they engage with their learning:

Everyone is different from one another. And because we are such unique individuals, we all have separate languages ... learning methods that best help us through our educational searches. (J39).

The variation in the ways in which participants experienced the issue of language as a factor in influencing their participation in different contexts is embedded on the above statements. The experiences of the first participant emphasise the background of the school where each student comes from, as this has an influence on the language policy of the school. The experiences of the second participant however, does not emphasise the school background but rather emphasise the uniqueness of the individual with regards to language, as a factor that influences participation in various contexts.. The focus group discussion also had elements of this issue with the following response from one participant to the question 'why don't you learn from each other in a face-to-face, classroom lecture?'

... other people are more comfortable with speaking while others enjoy writing, so interacting online is whereby people like me who cannot express themselves during the lecture, may be because I am worried about my English and there are those who are

speaking English very well ... When it comes to writing online I feel free to express myself. (FGD)

Interviews conducted by the researcher also indicated that some students felt strongly about this issue, as in this response to the question "some of you indicated in the online reflective-journals that they did not participate in lectures, tell me, what causes this?"

*E...h you find that as students we are not the same. Some students are afraid because they doubt may be that e...h my English is poor e...h some other students e...h may not participate because ... (*Sthe)

Independent interviews also had traces of this conception, indicating that some students were worried about their command of English as the following response emerged from the question "some of you indicated that they did not participate in the lecture e…h what did you do to … what would be the cause of this?"

Ya as I have mentioned that e...h ..., as our ... my English is not very, very good so I, I, I used to just sit and listen. Therefore if ever I have a question I will ask in the learning channel. (Shakes)

The participant in the FGD expresses preference for online over face-to-face interaction because of concerns over his/her command of English while the participant in the interviews consider experiences of poor English on the part of his peers to have prohibited them from participating. The experiences of the participant in the independent interviews indicate that he remains passive in the lectures because of not being able to speak well in English as his freedom of expression is located in the online space. The essence of the above utterances is the participants' awareness of student's different learning preferences. Some participants consider online communication to have given a breakthrough to students who find it threatening to articulate their views during the lecture due to linguistic limitations in communicating in English. Noting that students who had a good command of English were able to raise arguments in a lecture, the participants assert that online texted conversations extended to them the liberty to articulate their views as opposed to the face-to-face spoken word. The reason could be that the participants communicate better through written rather than spoken English. This suggests that learning mediated online had a

positive effect on students who find it threatening to express themselves through the medium of the spoken word.

While some participants do not explicitly mention English as an item of comparison among different backgrounds of students' schooling history and also as a medium of negotiating learning, they however, acknowledge that their schooling background was influenced by language. The participants may be alluding to the idea that students who have had their basic education in multi-racial schools where English was not only the medium of instruction but was also a medium of communication, were in a better position to develop good conversational skills in English. They were then also in a better position to participate in face-to-face debates in the lectures. However, the same could not be said about students who received their education in rural and township schools where English was not the medium of communication though it was used as the medium of instruction. This therefore indicates that some students preferred to express their views through the medium of online-mediated learning as writing is less threatening than speaking in English.

The essence of this discussion is the limitation on the part of participants to speak fluently in English which is cited as the reason for non-participation in the lectures. Some participants claim to have assumed the status of observers while listening to what the lecturer was saying during the course of the on-going lecture. Some participants acknowledged having had to wait until getting into the learning site before inquiring on any aspects of their learning, indicating that participants were not comfortable doing this in a face-to-face setting. This was picked up also in the descriptive statistics:

Table 15: Students whose level of English competency discouraged them from participating in lectures

My level of English competence discourages me from participating in the lectures

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly disagree	17	18.3	18.3	18.3
	Disagree	15	16.1	16.1	34.4
	Neutral	18	19.4	19.4	53.8
Valid	Agree	21	22.6	22.6	76.3
	Strongly agree	22	23.7	23.7	100.0
	Total	93	100.0	100.0	

Table 15 indicates that 43 out of 93 respondents (46.3%) who completed the questionnaire considered their level of competency in speaking English to have hindered their participation in face-to-face lectures. The balancing factor is the number of students who remained indifferent to this conception (18) as they constitute 19.4% of the survey, indicating that only 32 respondents (34.4%) felt that English competency was not a factor in their participation rate in face-to-face lectures.

6.2.3 Conceptions of students learning from each other online

Persistent engagement with qualitative data did not only lead to the emergence of the two themes of being *shy* and *linguistic limitations* with regards to communicating in *English*, but also gave rise to the conception that students could learn from each other in an online-mediated environment. This is borne out by their consistent reference to how they were able to learn from each other in the Chat Room as responses of other students (outputs) to the questions asked by the lecturer served as clues (inputs) to others in determining the expected answers. Online reflective journals indicate that students had made some remarks with regards to this issue as the following statement suggests:

I have learnt a few things from my fellow colleagues through the Chat Room. (J37)

Another student sharing a similar view with regards to students learning from each other's ideas

We share our own ideas on a given topic or question in the chat room. (J29)

A similar view with regards to students learning from each other's experiences and ideas was shared by another participant:

Discussion forum gives an opportunity to share learning experiences and ideas as well as listening to others' views and thoughts. (J6)

The first statement depicts the participant who experienced learning a few things from fellow students in the Chat Room, making this a context for learning from each other while the second statement depicts the participant who experienced sharing opinions with others, making this space a context for sharing thoughts other than learning. The following extract from the focus group discussion serves to confirm this, where participants had to respond to the question "Learning online in support of face-to-face lectures in the lecture room may have impacted on your learning. What would be your comments on this?"

I would like to concentrate on the space we call the Chat Room ... during the chat session, we get help from our peer learners and eh, the way in which the chat is conducted,... the lecturer gives us time, he just poses a question and then wait until we all respond, eh ... and there is a time when I realize that my answer was not correct because of the right answer that was given by my other colleagues. (FGD)

The following extract from the focus group discussion again, was in response to the question "Right some of you in their reflective journals cited that the Chat-Room was a space that enabled them or you to learn from each other. Tell me, how does this space allow you to learn from one another?

It does because if you look at the chats there will be some concepts that I may not understand while other students are able to understand these concepts, and through some interactions with other students, I get to understand meanings of these concepts so it makes more sense to me to get help coming from someone at my own level, speaking in the manner that allows us to engage as equals make me understand better. (FGD)

The variation in the ways of experiencing the idea that students learn from each other through online support manifests in the above statements from the FGD. The first statement depicts the

participant who experienced getting help from other students by observing answers posted by them in the Chat Room while the second statement depicts the participant who experienced getting help from other students by requesting the meaning of concepts from others. In interviews conducted by the researcher one participant had this to say in response to the question "…the tasks that you have conducted using online support, how do these help you learn?"

> *I am encouraged to go to the chat session where I can express myself and see what other people say so it helps me learn in that way ...* (Suria)

Interviews that were administered by an independent person also indicate that students learned from each other through the learning site as the following response emerged from the question "why would you say e…h you have benefitted or not benefitted from discussing tasks online in BME?"

> *E...m! I can say I ... I did benefit from discussing those tasks since you know if you discuss, if you get wrong or your answer is not sufficient, other students or even the lecturer will correct you so you will know that this is wrong or this is right ...* (S'the)

The above statements indicate a variation in the sense that the participant in the interviews experienced having to articulate ideas to others and also get others to communicate ideas to him while the participant the independent interviews experienced the benefit of being corrected by others when he posted the wrong answer. The above statements indicate that participants learned from postings made by other students in response to the questions asked by the lecturer in the Chat Room. The essence of such statements is the capacity of online chats to allow everyone to respond to a question posted in the space at the same time. This extended opportunities for students to consider their responses to the question against the responses already posted by others. The participants claim to have been able to identify the appropriate answer from the responses posted by fellow students and in this way participants could learn from other students.

Participants also claim to have taken the initiative to seek understanding from other students in the Chat Room by posting questions that required other students to offer explanations to a variety of concepts that participants had not readily comprehended. This suggests that online support offered participants a convenient space in which they could pro-actively take control of their learning instead of sitting back, waiting for the lecturer to lead the deliberations. The highlights

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of this is the idea that participants had to engage in a *social discourse* with their peers in order to gain *meaning* of concepts because they find this to be exciting and convenient as compared to enquiring from their lecturer. This is likely to be inspired by the differences in the measure of formality involved when students interact with the lecturer than when they interact with each other. This suggests that online-supported learning had a social effect on student learning.

Participants acknowledged the value of the Chat Room and the Discussion Forum in enabling them to learn *a few things* from fellow students and also *share experiences* and *ideas* with fellow students. Sharing experiences and ideas denotes that everyone contributed whatever was in one's mind regarding a question or topic under review and this generated a pool of ideas and experiences from which everyone involved could learn. This is what students claim to have done and it indicates that online support had a social effect on the learning of students.

The descriptive statistics from the analysis of the questionnaire also indicate that students felt that online support extended opportunities for them to learn from each other, as table 16 suggests:

Table 16: Students who learned from each other through chat interactions

As students we helped each other by way of interacting with one another in the chat

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	7	7.5	7.5	7.5
	Disagree	3	3.2	3.2	10.8
	Neutral	12	12.9	12.9	23.7
	Agree	44	47.3	47.3	71.0
	Strongly agree	27	29.0	29.0	100.0
	Total	93	100.0	100.0	

Table 16 above indicates that 71 out of 93 respondents who completed the questionnaire allude to the notion that they *helped each other* through social interaction in the Chat Room. Knowing that the Chat Room is a learning space, obviously the purpose that students would seek to achieve by helping each other through social interaction in this space is learning. Thus this

interaction is another way in which online support interacted with social factors to promote learning.

6.3 Mental stimulation

Before the iterative process of reading and re-reading transcripts of qualitative data sets drew to an end, my attention was drawn to the frequently recurring utterances made by the participants which suggested that online support stimulated students mentally. This is inferred from statements that considered the online space as a context where *theory was linked to practice* to statements that suggested that online support *inspired thinking* through reading and writing.

6.3.1 Conceptions of linking theory to practice

Statements to the effect that online support provided a context where theory could be linked to practice were inferred from students' expression of their thoughts about learning using online support in their reflective journals and also during the focus group discussion. Online reflective journals updated by students during the semester indicate the following:

> *We learn beyond the classroom setting. In class we were never given the activities to do, but all the activities were posted online ...* (J39)

Another student shares a similar experience with regards to online activities enabling students to do what they could not do in class:

> *During class no activities were given to us. Online support has space for us to express our views as activities were being posted online.* (J26)

A similar view was expressed with regards to an online activity that enabled students to learn beyond what face-to-face lectures normally offer:

> *The discussion forum taught me that the purpose of this module was not only to learn prescribed books, writing assignments and examinations but also to look at business issues around the world. For instance our first discussion was about why sales of Michael Jackson's music increased after his death.* (J46)

While participants experienced online support as a context where they learned by doing things related to content learned in the lectures in an effort to link content to practice, there are variations in the ways this happened. The first statement captures the participant who experienced online support as a context for learning that transcends classroom learning while the second statement depicts the participant who experienced online support to have provided a contextfor communicating their views on enacted learning tasks. However, the third statement depicts the participant who experienced online support as a context for observing and/or examining affairs pertaining to businesses around the world. The focus group discussion captures another case where participants had to respond to the question "the Online Discussion Forum was also cited in the ORJs as a learning space for students to explore certain business-related topics, could you please throw light into this?"

> *… I cannot remember very well … or something that you posted had to do with being aware of how people can be victims of bank fraud. So this creates an understanding of what is happening in the world around us, so it served to integrate the content in Business Management Education and the outside world.* (FGD)

An interview conducted by the researcher included this response to the question "Could you tell me as to what these tasks you have mentioned as case studies, practice questions and assignments entail, could you tell me e…h what do you actually do when executing these tasks?"

> **"***Like case studies … with case studies we just try to move away from focusing only on the content, like focusing on the prescribed book, like … to see that this thing we are going to learn, we are not just learning it to pass but we just learn it in order to apply it in the real world …* (Baphiwe)

The variation in the ways in which participants experienced learning based on case studies through online support in an effort to link content to practice is evident in the above two statements. The participant in the FGD experienced case-based learning online to have brought together content learned in the course and actual events in the business world. However, interviews depicts the participant who experienced case-based learning online to have moved focus away from the course content and the prescribed book so that application of knowledge became the focus of learning. Participants in the interviews conducted by the independent person

also articulated this view as the following statement emerged in response to the question "Ok has this system influenced your thinking skills?"

> *Ya I can say yes because there are questions which needs us to critically discuss or apply the content that we had already learned in the classroom and, and the real-life system, real situation.* (S'the)

Another participant in the independent interviews offered the following response to the question "Do you think that Business Management Education as a module is suited for online support? Why do you think so?"

> *Ok I would say it is suited since it has… deals with research so through online-supported learning we are able… we used to…our lecturer will come up with scenarios and in a class the whole group will then participate … we as students will have to reply to questions on the scenarios and/or case studies.* (Sihle)

The variation in the ways in which participants experienced learning through case studies in an effort to link theory to practice is represented in the above two statements from the independent interviews. The first statement portrays the participant who experienced case-based questions to have required him to explore the case by challenging the views presented in the case and also to apply the content learned in the lectures on the same case. However, the second statement depicts the participant who experienced case-based questions to have required her to conduct research in an effort to find answers to such questions. One participant acknowledged one case study that cautioned people about the modern methods used by thugs in defrauding ignorant bank clients of their cash at automated teller machines. The participants acknowledged the value of online, case-based discussions in stimulating awareness of how the content students learn in face-to-face lectures manifests in cases from outside the business world. The participants considered such discussions to have helped them integrate the course content with what happens in the real world. This suggests that online support created a space where theory could be considered within the context of what happens in practice.

The participants acknowledged the value of online supported in extending a context where their learning is not limited by the classroom frontiers. This indicates that the content that students learned in class was taken a step further in the online space by exploring the manner in which it

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happened in practice. The participants noted that activities that allowed them to explore the practical nature of the content presented in the course were not done in class as these were directed to the online learning site. This suggests that online support indeed offered a context where theory embedded in content learned in face-to-face lectures could be linked to practice.

Case studies and scenarios are online tasks that the lecturer used to enable students to extend their learning beyond the details contained in the course content. Moving away from the course content meant that learning was no longer limited by what the prescribed book contained as participants noted that case studies analyzed online were based on real-world events. Participants also considered online support to have enhanced their thinking capacity in the sense that some questions asked by the lecturer on the basis of a given case studied online required students to challenge the views articulated in the case being studied. The participants asserted that case-based questions sometimes required them to relate the course content they had learned in face-to-face classes to situations in the real-world.

The participants considered the course offering to be suited for online support on the basis of its being research-based. This is due to the capacity of the online learning system to make hyperlinks available through which students were able to search for more information necessary to explore events described in scenarios/case studies. Students would not be able to relate their knowledge of the content learned in face-to-face lectures to real-world scenarios posted online without engaging with thinking around this. Online-supported learning therefore, enhanced students' capacity to think deeply.

6.3.2 Conceptions of inspiring thinking through online activities

Participants' conceptions of their experiences of learning using online support also extended to include the notion of *enhanced* capacity to *think* while working with the online tool. This is captured in the qualitative data sources. These utterances suggest that online support stimulated students' individual capacities to think as they engaged with various activities and/or tasks in the online space. Online reflective journals provide the following cases where these utterances are prevalent,

> *Discussion forum does not only help us learn but also helps us be responsible individuals and critical thinkers.* (J39)

Another extract from the reflective journal depicts the participant considering not only the discussion forum, but also questions that were asked in this forum

Questions asked in the discussion forum require our critical thinking. (J37)

Such comments were made also in the focus group discussion as the following extract indicates a response to the question "Online Discussion Forums were also cited in the ORJs as a learning space and occur without all of us having to be logged onto the system at the same time. Could you please throw light into this?"

I can say firstly about the discussion forum … the question is posted there but I do not know the correct answer so I have to go out and research about the question. Even with the practice questions I also often go around and research before I come back with a comment… (FGD)

Another comment from the focus group discussion emerged in response to the question "Would you please explain, in what ways would you say work schedules or learning activities uploaded online helped you learn?

… during the chat time … like I read, understand and analyze the chat and learn something. For the case studies that were discussed recently … we could go there and follow-up like, take note of everything … that were discussed, the responses, questions and everything. Some of us, its like, it brought us some light and we were able to understand exactly what was going on in the discussion and what exactly the case study was about. (FGD)

The variation in the ways participants experienced online support as a context for stimulating thinking lies in the fact that the above statements extracted from the reflective journals show participants' awareness that the Discussion Forum required them to use skills to think critically. However, statements extracted from the FGD above indicate that participants' engagement with online case-based learning required them to conduct research in search of appropriate answers to bring about meaning and understanding. Such comments were made also in the interviews conducted by the researcher as indicated in the following response to the question "how do these tasks that you accomplished online helped you learn?"

... Like ... I now understand that ... those case studies that we used for online-supported learning made me think and realize that no, what is in the book is what happened in the real world. (Baphiwe)

Similarly in the interviews conducted by the independent person, in response to the question "how has learning using online-support influenced your thinking skills?"

Ya as I was talking about chatting, so as we are answering questions based on the case study, then we had to think creatively, we had to think of solutions that are differ from other peoples' so it have an influence,... a positive influence. (Shakes)

Looking at the two statements above, extracted from interviews conducted by the researcher and those conducted by the independent person, variation in the ways of experiencing can be noted. The first statement depicts the participant who experienced case-based learning online to have created a link between textbook content and real-world practice. However, the second statement depicts the participant who experienced online case-based learning to have stimulated innovative thinking that inspired the development of unique answers to questions asked on these cases. Participants acknowledged the need to engage with research practice in search of solutions, as they did not know answers to questions posted by the lecturer via the online space. When researching, one also has to consider the relevance of the different results emerging from this process so that the most appropriate result could be selected as an appropriate answer. Participants acknowledged having had to do this with practice questions that were disseminated by the lecture to students as an online task and this suggests that tasks conducted online incited the participant's thinking abilities.

Through consistent reading, understanding and analyzing chats in the online system, participants learned in the process. When one analyzes, one also considers the diverse interpretations and meanings that could be attributed to the elements of the case according to its merits. Participants claim to have taken note of the important elements that constituted the case as these were discussed, and also noted the responses that were given by other students to questions that were asked on the case. Participants acknowledged the value of analyzing case studies using online chats in bringing about clarity and insight into what the case study was about. This implies that

participants' ability to think about or consider various options was stimulated by examining the relevance of each option in relation to the case being analyzed.

Participants indicated that the Discussion Forum and the Chat Room were the two spaces that enabled students to learn through online discussions. One participant declared that the Discussion Forum helped nurture them into responsible citizens. Participants also acknowledged the value of the Discussion Forum in inculcating thinking that challenged the philosophy of the textbook or content of the discussion. Participants considered questions asked in the discussion forum as an online space to be of outstanding quality as these questions developed students' ability to think critically.

Participants also recounted how they had to think innovatively as they responded to questions that were based on the case study as a subject of an online chat. The participants asserted that students had to consider a variety of possible answers to the questions and think more about how they structure their answers in a way that was unique and not similar to those of other students. This suggests that online support indeed enhanced the capacity of students to think exclusively, rendering learning mediated online to have a cognitive effect on student learning.

 Given the developments that emerged from the analysis executed in this chapter, the outcome space will now expand and assume a new shape as follows

Table 17: The phenomenographic outcome space – ways of experiencing

ASPECT OF AN EXPERIENCE	CATEGORY	WAYS OF EXPERIENCING
What aspect (Referential)	1. Repository of resources and learning activities	• Conceptions of a repository of lecture notes as support resource for learning • Conceptions of a repository of work-schedules as support resource for learning • Conceptions of a repository of chats as learning activities
	2. Support for learning	• Conceptions of lecture notes as advanced support material for learning • Conceptions of providing notifications in support of learning • Conceptions of respondents' understanding of online chats
	3. Conduit for communication	• Conceptions of a conduit for consulting with the lecturer • Conceptions of a conduit for monitoring plagiarism
	4. Complexities of epistemological access	• Conceptions of challenges with comprehending induction procedures • Conceptions of challenges with maneouvering within the Graphical User Interface • Conceptions of challenges with coming to terms with the jargon
How aspect (Structural)	5. Social interaction	• Conceptions of being shy to articulate views

		• Conceptions of not being able to converse well in English • Conceptions of students learning from each other online
	6. Mental stimulation	• Conceptions of linking theory to practice • Conceptions of inspiring thinking through online activities

Adapted from Reddy (2010)

The essence of the analysis presented in this chapter are the ways in which online support creates the possibilities of social interaction that enable learning that is primarily cognitive. This implies that through social interaction among students and the lecturer, opportunities to engage in cognitive processes were created in a way that promoted learning.

6.4 Discussion

Participants acknowledged the value of the online chats as these chat sessions *promoted* their learning. The chat session extended opportunities for participants to articulate their ideas and thoughts about the subject of learning so that others could get to know and respond to these. Through online chats, others could also respond by posting their comments either in support of or contrary to ideas and thoughts posted by participants, and through this process participants could learn from other students.

Participants considered the benefit derived from discussing tasks online to be the opportunity to divulge their ideas for scrutiny by other students, so that peers were able to challenge these ideas so that participants could get feedback from other students. Participants considered this to have enabled them to distinguish between the desirable and undesirable answers. This suggests that online support indeed enabled the participant to learn from other students hence, developing a social context for learning.

Business Management Education (BME) as a module is concerned with familiarizing would-be-teachers with the firm as its object of study. It seeks to explore various functions and aspects of the business that are embedded in the activities that people employed by the firm engage with on a routine basis. Learning in this module, therefore, has to be captured in the context of what these people do, and within the environment in which the enterprise operate. Linking learning content to the practices of the real world through the use of case studies and scenarios discussed and analyzed online is essential, especially when considering that what students learn in class is intended to relate to what happens in the real business world. These case studies and scenarios cannot easily be discussed during face-to-face lectures owing to the large class size.

Participants viewed the Discussion Forum as a context that extended opportunities for students to apply the content that was learned in face-to-face lectures to real-world cases. The asynchronous nature of this learning forum made it convenient for students to read the case study/scenario and respond to questions at their own pace and time, while also keeping the discussion among them. This enabled students to gain control of their learning as they could regulate the pace and direction of their learning without requiring the presence of the lecturer, typical of learner-centred learning. The purpose of learning, according to participants, was then extended beyond merely passing tests and examinations to include meaningful learning with understanding. This is because learning in BME becomes more realistic and/or pragmatic when it is situated within the environment in which the business operates.

While some participants did not describe scenarios in the data like the case used as a reference to Michael Jackson and the marketing of his music after his death, these often portray situations that happen in the real-world of business. Other scenarios that portrayed these situations include the ABSA Bank information campaign on bank fraud mentioned in the data above. Case studies are often followed by questions that were often asked on the basis of these scenarios and/or case studies which usually required students to apply their knowledge of the course content on these scenarios and/or case studies. As a window through which participants could look at the events taking place in the outside world, online support offered insight through case studies mentioned in the extracts, which enabled students to think more about how textbook content related to the real world. Capturing the manifestation of content in practice denotes establishing connections between content and actual practice through online-supported learning in a way that stimulate the

capacity of students to think logically. Thinking in the Chat Room was motivated by the desire to deepen the context of a particular case within BME since responses to a particular question were often probed through a series of follow-up questions with the intention to refine the conceptual understanding of the phenomenon under review.

6.5 Conclusion

This chapter has taken the analysis process a step further. New conceptions of students' experiences of learning were identified and grouped into new sets of categories of description. These new sets of categories of description gave rise to the new findings that are central to this chapter. These key findings are social interaction and mental stimulation and they eventually augmented the outcome space that depicts the outcomes or findings of phenomenographic research. The following chapter seeks to discuss these findings in the context of the literature reviewed in chapter two of this study.

CHAPTER 7

DISCUSSION

7.1. Introduction

This chapter deliberates on the participants' experiences of online support as depicted in the phenomenographic outcome space presented in the previous chapter. Chapter 4, 5 and 6 presented and analyzed the data collected from a group of students who participated in a semester BME module offered as a hybrid of both face-to-face and online components. The analysis of these participants' experiences constitutes the key findings that emerged as categories of description in the previous three chapters. The previous chapter signaled that the participants' reflections on their experiences and the subsequent categories of description would be brought into dialogue with the literature reviewed in this study, in this chapter. The essence of this chapter therefore, is the discussion of categories that emerged from the data analysis process, in answering the following critical question:

What are students' experiences of online support in Business Management Education?

A number of categories of description emerged from the data analyzed in the previous chapter, and offered broad insights into what participants perceived to constitute their experiences of online support in the domain of Business Management Education. These categories are *the repository of resources, support for learning, conduit for communication, and complexities of epistemological access.* The interrogation of these categories of description also seeks to provide a reflection on, and understanding through my interpretation as researcher in line with existing literature on online-mediated learning.

7.2 Repository of resources and learning activities

The analysis reveals that online support provided participants with a space that served as a repository of resources. Participants soon realized that the Chat Room and the Resource File both in the LMS had the capacity to keep a permanent record of work completed and learning material circulated to students. This surprised them as they had been used to the idea of keeping hard copies of documents circulated to them as learning material during face-to-face lectures. Similarly, Coates et al. (2005) observe that LMSs provide a space for the development of

repositories of learning materials and offer access to internet resources. This online space served as a repository of work-schedules as learning resources they used in support of their learning. The online space as a repository of chats as learning activities suggests that conducting learning and circulating case studies online places a useful source of revision and a compact mechanism for storing learning material at the disposal of students. This was unlikely to have happened if learning was only limited to face-to-face lectures. Sclater (2008) and Carrington and Robinson (2009) observe that LMSs can be used as personal knowledge repositories, repositories of hyperlinked information as well as storage facilities for learning materials such as lecture notes and PowerPoint presentations. This study reveals that online support enabled via an LMS offered a space that served as a repository of work schedules. Claims made by participants as captured in chapter 4 substantiate the notion that the online space could be used by students in this module as a repository of work-schedules. These schedules offered convenience with which students could access their use, hence they served as a support resource in facilitating planning for learning.

Students often take decisions to maximize their own satisfaction from learning by using cost-effective means of gaining access to learning resources hence; their choices were often guided by an economic motive given the fact that most of them come from historically deprived communities. Participants demonstrated their preference to have work-schedules posted online as chances to have these lost were remote. However, the same could not be said about hard-copies of learning material made available to students at a fee. Participants mentioned having lost hard copies learning material on several occasions when they erroneously left these in buses, examination rooms and in lecture-theatres as well. Through the use of LMS-mediated online support, students learned new ways of gaining access to learning material at minimal or no cost at all, something they could not have experienced with face-to-face learning.

Sclater (2008) asserts that LMSs allow institutions to develop consistent back-up service, and amenities for storing electronic files and records of permanent learning activities. Students in this module used online chats as permanent learning activities because of the capacity of the Chat Room to store chat activities permanently in the LMS. Claims by participants suggested that LMS-mediated chats as online support could be revisited for a review any time or day after these chats were conducted. This suggests that online support for learning offered a foundation on which a permanent source of revision could be located by both lecturers and students in the form

of chats. Face-to-face mediated chats could not be revisited for a review as records of participants voices are not captured during the course of an on-going discussion or conversation in class.

This is consistent with what Carrington and Robinson (2009) observed with regard to the capacity of LMSs to extend weblogs at the disposal of users who use these as permanent repositories of knowledge. Blogs (weblogs) are tantamount to chats and discussion forums that are open to everyone who desire to post entries such as comments and inquiries that incite responses from others while enabling the joint construction of understanding among students through the sharing of ideas in the process. However, the Chat Room is located in a particular module window and is open for participation only to people participating in that module for them to deliberate on aspects of learning concerning that module.

The capacity of the Chat Room to serve as a repository of online chats extended the prospects for student learning in a variety of unanticipated ways. Firstly, it allowed students to engage with learning in a self-directed manner as students would re-engage with the chat on their own without anybody directing them to do so. This is consistent with what Marsh (2012) asserts with regards to blended learning being dependent on students' self-directed learning. Secondly, the fact that not all aspects of the case studied in the Chat Room can be remembered by students is noted as this necessitates the revision of online chats. Thirdly, the curiosity with which students keep on inquiring as to 'why' with regards to answers given during the course of the chat, points to the capacity of the online space as a repository of chats to develop inquiry-based learning.

My experiences from the period during which I had to visit students in various schools to observe and supervise their teaching practice in the last five years paved way to some remarkable observations. I noted how most of the schools in historically disadvantaged communities in South Africa were poorly maintained, malfunctioning and under-resourced. Learners in these schools did not have subject files (repository of notes) hence; they did not have any hand-out copies of notes and learning activities except for the disorganized hand-written notes and homework activities of different subjects scripted in one exercise book. These schools lacked knowledge-based resources. Overcrowded classrooms in these schools had three or four learners sitting in one desk, sharing a single textbook while in some cases only the teacher had a copy from which he/she produced notes on the board.

Learners who successfully passed matric at these schools and met the requirements for acceptance at HEI found their way into this university and were registered as first-year students. This was when they found a solid system that keeps well-detailed notes and other kinds of learning support in online files, creating a situation that represented a dramatic shift in the way they had engaged with learning and stored knowledge. These online files contained permanent, fixed and reliable sources of knowledge that became available to students. The irony of this emerging reality is, firstly, that students may be overwhelmed if there was too much information and resources being put into this repository. The point is, if students found the repository of resources and activities to be overwhelming in the sense that too much information was put there, they would find it difficult to adapt considering that they came from contexts where very little resources were placed at their disposal. This suggests that higher education pedagogues should be thoughtful about the quantity of resources presented and placed into the repository in terms of the developing capacity of students at various levels of learning in higher education.

My observation is that students' learning styles may have been influenced by their different schooling backgrounds and environmental factors in the school context. Some consideration should therefore be given to cater for students who may have not been exposed to much technology in their schooling years. The sudden introduction of new technology, leading students to being faced with an excessive access to electronic resources, may discourage students initially. Therefore, moderate exposure to an appropriate amount of electronic resources is necessary. This is an area that requires further research so as to establish what may constitute an appropriate quantity of electronic resources to be made available in online knowledge repositories. This may best be done in a way that matches students' abilities at different levels of their learning in higher education.

Secondly, now that there is a repository that provides the permanent availability of resources in a file that will not be taken away, students are now not reliant on the teacher with a single textbook as the only source of knowledge. The online learning site has come with a repository of resources that provides a powerful resource to students. This implies that higher education practitioners should create opportunities for students to learn in ways that engage the use of such a resource that makes learning more convenient for students to cope with.

7.3 Support for learning

Students felt they benefitted from consistent support the LMS provided in the form of lecture notes that were used in presenting lectures during the course of the semester, when these were posted through the online space and constituted *support material for learning* that inspired them to learn. News and announcements that were often communicated to students by the lecturer to remind them or to raise their awareness of certain issues also aided their learning as these constituted *administrative support for learning*. This suggests that students are likely to derive satisfaction from the online component of a course if it provides thoroughly prepared learning materials that are organized and structured in a way that is coherent with their needs (Zuvic-Butorac et al., 2011)

Students benefitted from lecture notes uploaded by the lecturer and circulated to students via the online tool as these served as a permanent learning resource that could easily be edited by students in case new knowledge and innovation emerged, something the textbook could not provide. Vovides et.al (2007) note that teachers offering courses using the traditional lecture approach may opt for the use of an LMS to distribute extra course readings and lecture notes to learners as a form of online support. This module was offered in a traditional lecture format alongside an online component and this enabled the delivery of lecture notes to students online.

Literature reveals that students developed uncertainty as they lacked understanding as to how the integration of technology into education could be applied as a means to improve their learning . Participants in this study acknowledged the role of online support in assisting their learning by providing resources such as lecture-notes and additional course readings necessary to enable their learning. Participants recognise the value of these notes as a resource that brought about increased legibility through improved visibility which assisted students with impaired vision. They noted with surprise as to how these notes could be read with ease as compared to the size of the text with which the book is printed, which created challenges for people with optical limitations. The analysis revealed that participants would adjust the font-size of a document that was circulated online, while the same could not be done with printed hard-copies of a document. This finding is confirmed by Graham and Dziuban (2009) who found that LMS-mediated learning provided a solution to problems that affected students with special educational needs, especially those affected by impaired hearing difficulties.

The majority of South African students hail from economically disadvantaged, poor and lowly-paid working class families who can barely afford medical intervention required to address problems relating to optical limitations. Reading spectacles to the majority of these students with single parents or guardians, whose only source of income is an old age pension or a care-dependency grant offered to them by the South African Social Security Agency (SASSA), are a necessity they cannot afford.

Children of poor, working class and unemployed parents have advanced through the schooling system to university without being aware that they have problems with their vision as most of them may have not ever had an eye test in the past. When they are at this university and are exposed to the idea of resources being circulated via the LMS in clear and adjustable font size, they then brought this up during the focus group discussion and the interviews. This online facility, the technology and the computer allows for the resource to be magnified. When magnified, the reading resource such as notes gives a fair opportunity to students who may not have had a chance to have their vision supported by spectacles, to learn as equals with their counterparts who do not have problems with their vision.

Online support came along with several options for students to consider before a decision was taken on what to do with course material that was circulated online. Students now have the option of saving documents electronically and/or printing these as well, when they feel it is necessary to do so. This option cannot be offered to students if learning is conducted only in a face-to-face context. Coates et.al., (2005) observed that the use of LMSs by universities is motivated by the desire to cut course management costs so that competitive costs can be extended to students as their clients without compromising on the quality of service.

Participants acknowledged the value of online forum announcements that were circulated to them from time to time especially on the days when scheduled contact sessions were not going to happen and essential information had to be brought to the notice of students. This constitutes administrative support for learning and it influenced the manner in which learning occurred in the course offering. Students' view of the News Forum as a *"notice board"* suggests that students depended on instructional updates received through the News Forum as a means to keep them abreast of the latest developments in the module. Arcos, Ortega, & Amilburu (2009) state that the use of electronic mailing, online chats and forums located in the LMS to enable the

administration of engagement and social conversation with students is of utmost importance because it expedites the continued flow of information, extends learning beyond face-to-face contexts and improves the facilitation of discourse among the participants.

Literature reports that unclear instructions, lack of student interest in taking part in group tasks and limited face-to-face contact made students feel isolated from the rest of the group (see p. 31). Participants in this study valued the News Forum in the sense that general news and announcements from the teacher to the students were *channelled through this virtual space* that had enabled them to gain important content information from the lecturer. This acknowledgement suggests that the online space is the bearer of content knowledge and clear instructions and/or administrative information relating to the latest developments necessary to support student learning in the course offering. This is in line with what Jafari (2002) acknowledges as the value of the LMS in facilitating the administration of information by distributing reminders and notices to students who may have been identified as either compliant or non-compliant with instructional responsibilities and processes.

Participants in this study came from contexts and backgrounds where announcements were made in face-to-face contexts such as the common venue where morning prayers were conducted, in class during the lesson period or via the intercommunication system which some township and mostly suburban schools could afford. Online forum-announcements feature extensively in the hybrid mode of learning and participants found this to be more convenient than face-to-face announcements, which can be missed if one is absent from lectures. Announcements made via the News Forum settle into students' e-mail accounts and can be accessed at any time and convenience, even if one was absent from campus when the announcement was circulated. All that students need to do is regularly browse their respective e-mail account's In-boxes in anticipation of latest news and announcements as soon as they log into the online system.

An obstacle though was that, due to having not been used to this new order owing to the background from which students came from, they could not easily acclimatize to the habit of browsing their e-mail accounts regularly. This meant that some of them would go without knowing that changes had been effected on their normal academic programmes, owing to the fact that they had not perused and read their emails. As a lecturer in this module, I had to keep on reminding students through the LMS to peruse their e-mail boxes regularly to ensure that they

were updated with the latest information coming not only from campus, but also from the broader university community.

7.4 Conduit for communication

The origin of this category was the constantly recurring utterances by the participants which depicted the nature of the online space as a communication tool. This is inferred from what participants said in describing things that they did in the online space. Students indicated that they used the online space for *consulting with the lecturer* and also for *submitting assignments* as well. Consultation between students and the lecturer presented challenges with regards to the clashes that often occurred when scheduled consultation times coincided with other lectures students had to attend. Literature indicates this in the third paragraph of page 23 and linking the module to the Moodle LMS alleviated these challenges by using the News Forum that linked directly to all registered students' e-mail accounts as a medium to facilitate this.

Lecture notes were a medium through which the lecturer communicated learning content presented in face-to-face lectures, to the students. Coates (2005) acknowledges the capacity of the LMS to prepare neat online material for learning in the form of lecture notes that gets circulated among students participating in an online course. Lecture notes-inspired participation by students in online support could not be underestimated as this created desire in students to browse the learning site in search of these lecture notes. This denotes that the LMS served as a medium through which learning was communicated between students and the lecturer. Thatcher (2007) acknowledged the value of the LMS in making provision for academics to disseminate additional study material and other knowledge sources required for their modules.

The analysis revealed that participants also acknowledged how useful the online tool was as a means to consult with the lecturer in a course with a large class size. Due to uncertainty as a result of clashes in the time tables of students, where times for consulting with the lecturer often coincided with other lectures students had to attend, alternative ways of consulting had to be sought. Online support became the only other alternative way of doing this. Field (2005) acknowledges that consultation with students in higher education environments with large class sizes is often impeded by time limitations, making it necessary for lecturers to explore alternative ways of complementing traditional face-to-face consultations with students. This augmented

students' access to the lecturer beyond the level offered by face-to-face consultations. Online support has therefore become an alternative solution for colleges and universities all over the universe to provide effective support for students participating in large class sizes (Hitch & MacBrayne, 2003).

Literature reports that students were also concerned about the effects that plagiarism had on their learning (see page 32) and developed the habit of avoiding online courses where assignments were submitted electronically via Turnitin. The participants' tendency to use the online space as a conduit for monitoring plagiarism in this study was motivated by the desire to improve their writing skills while practicing the use of better methods of submitting tasks other than using traditional ways of handing these over the counter. When students became the victims of circumstances when they could not submit assignments on relevant dates when these were due because of strikes on campus, this alternative method saved the situation. This offered students a more convenient method of submitting assignments without having to be on campus on the due dates.

While this made it convenient for students to submit without having to be on campus, some students were not happy to realise that submitting online had consequences when the system reported that their assignments had been plagiarized. This raised concerns among some participants as they eventually expressed feelings of dissatisfaction and disapproval of this method of submission. This happened when participants indicated that they preferred printing and submitting hard-copies of their assignments instead of submitting electronically via the 'Turnitin assignment' space. This suggests that they had initially miscomprehended the consequences of submitting assignments online.

Alebaikan & Troudi (2010) state that students seem to have also been, to a great extent, very concerned about the effects that plagiarism would have on their assignment results. Plagiarism is detected when students submit their assignments electronically via the online space known as 'Turnitin assignment'. Students regarded online support as stressful in as far as it had the capacity to declare their work as plagiarized, and this had a negative outcome on the final results of their assignments.

Students in this module came from different schooling contexts, most of which used manual methods of developing lesson notes through copying from teacher-scripted notes as the lesson developed on the chalkboard. These chalkboards were not always clear as some learners, especially those who sat midway to the back of the class, ended up copying wrongly worded sentences as they could not see clearly due to the chalkboard having worn out as a result of prolonged usage. Economically struggling communities find it hard to maintain the dilapidating school infrastructure, as well as to revamp chalkboards in different classrooms. When learners from these schools came to university they found, unlike what they had to do in their former secondary schools, a convenient facility that saved them the trouble of having to copy notes from the lecturer's presentation slides. This facility also ensured that they did not run the risk of having to write wrongly worded sentences as the case would have been when notes had to be copied manually from a particular source.

Students came from schooling backgrounds where the only way to address learning issues at a personal level with their teachers was through face-to-face consultations. To be able to consult with the teacher, learners had to go to the staff-room where all the teachers were located to address personal concerns, no matter how sensitive and private these were, in the presence of other teachers. This meant that learners' privacy was not protected and as a result some learners ended-up not bringing serious concerns to the attention of their teachers due to lack of privacy with which these could be handled in the staff-room. When they came to university and were registered for BME, they find this mechanism which was facilitated through an LMS that allowed them to consult with their lecturer via computer-mediated communication. The technology did not only offer students the privacy required to deal with personal concerns but also the convenience with which consultations could be effected without visiting the lecturer in his office. It did not only save students' limited time that would have been used on a visit to the lecturer's office but also assured that urgent matters were communicated to him even when he was not in the office or not on campus when students needed to see him, hence; they felt that this new phenomenon extended the accessibility of the lecturer to them. Face-to-face consultations began to dwindle with the increase of concerns and queries from students mediated via the medium of the LMS.

Students in this BME course had previously been familiar with only one method they have used in submitting their written tasks, which is that of handing these tasks over the counter. This means that they missed deadlines for the submission of tasks when they could not attend school for valid reasons on days when these tasks were due for submission. They were then identified as learners who had defaulted in terms of meeting the deadlines. On registering for this course when they came to this university, these learners were informed that learning in this course was mediated via the LMS which extended opportunities for students to submit assignments electronically. They found this method to be convenient as they did not have to follow long queues to the lecturer's office any longer, especially on days when these tasks were due for submission. Students also enjoyed the benefit of submitting assignments using the online space that offered them proof of submission in the form of electronically generated receipts as acknowledgement that the tasks were indeed submitted on a particular day and time.

7.5 Complexities of epistemological access

Access to equipment and accessories that enable participation in learning using online support is seen as formal access to physical resources. Formal access to physical resources is a fundamental requirement for participation in online support, but is not a guarantee for epistemological access. Carrington & Robinson (2009) observed that learning using these resources could be retarded by the limited knowledge of how to use these resources no matter how students gain access to these tools and technology. Epistemological access is enabled through training offered on how one can find one's way into an LMS using the necessary equipment and accessories to gain access into various learning sites that host sources of knowledge and information. This category had as its origin statements made by the participants on how challenging it was for them to get hands-on with the system especially at the beginning of the programme and hence, suggested that complexities existed with regards to gaining access to the various forms of knowledge the LMS could offer.

Participants consistently reported how challenging it was for them during the initial stages of engaging with the online learning system, to log into the system and search for activities and resources. Not only students who did not have the experience of learning using computers found logging into the LMS to be challenging. Students who had indicated earlier on to have used computers at the secondary school level of their education also experienced challenges with

regards to logging-into the system at initial stages of engaging with the LMS. This suggests that students experienced challenges with regards to comprehending induction procedures. Boughey (2005) states that epistemological access mediated via an online LMS is capable of bridging the gap between students' understanding of the use of the computer and the faculty's ideal use of the computer as a device for meaningful learning.

Participants also reported having been unable to, once they had successfully logged into the system, find relevant sites, resources and activities as well as web-links that could link them to various sources of knowledge they would have liked to access. Participants indicated to have found it challenging to locate resources, especially lecture notes, which had previously been reported via their e-mails to have been disseminated by the lecturer into their resource files. Some of them claimed to have been unable to participate in the first online chat because they could not find the relevant space (Chat Room) that hosted the chat activity. This suggests that students found it challenging to manoeuver within the graphical user interface of the LMS. As Gamede (2005) points out with regard to epistemological access, it is difficult for individual students to achieve quality learning outcomes without access to knowledge and information.

Errors of misconceptions also appear to have been disturbing to students during the course of their efforts to learn using the LMS. This derives from participants' claims of having browsed the system in search of spaces they had no business to do with. The highlights of these errors is revelation by one participant who successfully logged into the Chat Room to *find no one to chat with*, and the other who got into the News Forum *in search of lecture notes*. These are cases of being in the right spaces but for wrong reasons as the two spaces are misconstrued for other spaces and this indicate that students experienced challenges with regards to coming to terms with the jargon. Moule et.al. (2010) noted that the origin of these challenges is the limited knowledge of how to operate the technology which gives rise to lack of awareness as to how to access relevant networks, a question of epistemological access. It apparently emerged that the ability to use the computer cannot be considered to resolve problems of epistemological access as some students who had previously worked with computers became victims of these challenges.

However, it is also clear that participants who experienced the challenges of epistemological access predominantly came from historically disadvantaged rural and township settlements that

had a poor economic background. These participants declared this during the interviews when they indicated that they had never used a computer before, making their coming to university a transition from the traditional to the technology era. A handful of other participants who also experienced these challenges had used computers before coming to university and were mainly from secondary schools located in suburban areas. While it could be reasonable to suggest that the root of these challenges was that students had not experienced with computers before coming to university, this however, is not sufficient as students who had used computers earlier-on also had this problem. The tangible cause could be traced to the limitations of the programmes the university has put in place to orientate newly registered students in the use of web-based learning technologies.

Some students have acknowledged during the independent interviews that familiarity with the use of computers has no implication for online support, so an induction programme specifically designed to take students through learning using online support is necessary. This could give rise to the question as to 'how do universities prepare newly registered students to be ready for the rigorous challenges of learning using their official LMSs?' Alternatively one may seek to explore the question 'are universities doing enough to orientate entry-level students on the use of online learning systems the universities place at the disposal of students?' Further research could therefore be recommended to pursue such questions.

Further conceptions of participants' experiences of online support emerged from the data analysis chapters. These conceptions of participants' experiences constituted the last couple of categories of description which contributed to answering the following critical question

> How do these experiences relate to students' learning in Business Management Education?

The categories of descriptions that emerged from the data had to be carefully described to offer insight into what is perceived to have been the influences of online support in Business Management Education on students' learning. These categories are *social interaction* and *mental stimulation*

7.6 Social interaction

Participants' experiences of learning using online support in Business Management Education influenced the manner in which they learned in a variety of qualitatively different ways. The origin of this category of description is the constant reference by participants to how the online tool enabled them to learn from other students. Participants claimed to have been able to post their ideas and thoughts through the medium of the Chat Room so that others could get to learn about, and respond to these with the lecturer mediating the on-going deliberations. Participants considered the effect online interactions had on their learning with appreciation as students were able to have their ideas moderated on the space through corrective responses posted among them as the discussion developed in the Chat Room. Carrington & Robinson (2009) view learning mediated online as a socially constructed model of learning that explains how individuals use online activities to promote collaboration, and portrays students as active co-constructors of knowledge.

The dialogue between students alone and the dialogue among students as well as including the lecturer was enacted in the Chat Room as a space that allows all participants in a particular course to engage with the deliberations. This suggests that online discussions in the Chat Room constitute shared interactions at a collective rather than at an individual or personal level. While the conversation foregrounded a particular content topic, opportunities for open participation were extended to all students and lecturers registered in the module. The essence of this arrangement is the benefit online support offered to less assertive students who felt shy to participate in face-to-face lectures as they find it more convenient for them to participate in this virtual space. Amichai-Hamburger et.al., (2002) refer to people who find it uncomfortable for them to engage in social interaction with others and prefer to keep their views, opinions and feelings to themselves, and who often find their solace in the Internet, as introverts. Online support provides such students with the space that draws them into social interaction and thus extends their learning.

For social interaction to flourish, a number of people should engage with the exchange of ideas pertaining to a particular topic of interest. With online chats, case studies were central to the discussion that took place in the Chat Room and questions were subsequently asked by the lecturer on the events that were described in a particular case being studied. This prompted

students to come forward with their thoughts and ideas about why a series of events occurred the way they did in that particular case under review. The conversation was so open in such a way that students questioned, challenged and accepted each other's responses on the basis of the merits of the case. This is in agreement with what Akyol et.al., (2009) and Arbaugh et.al., (2010) claim to be the three categories of social presence, in the form of affective expression, open communication and group cohesion. As this continued, students were able to make meaning of what the case entailed as they could link the events described in the case with what they had learned in class. This way, online support had a social effect on student learning. Akyol et.al., (2009) recognize social presence as an important initiator of collaboration and critical discourse through its ability to instigate, sustain and support critical thinking in online mediated learning.

The majority of the participants in this study were not only African by racial classification, but were traditionally rooted in the African Zulu culture by context, as one would expect in the South African province of KwaZulu-Natal. According to this culture, being outspoken in a public place, especially in the presence of an adult person is usually not accepted. Data analyzed in chapter six of this study indicates that students used the word 'shy' to refer to their reluctance to articulate their thoughts openly in face-to-face lectures because this was not compatible with their culture. Now they find this online space where, for an example, they could express themselves freely without any fear of the lecturer whose presence as an adult figure in face-to-face lectures prohibited them from speaking their minds out, conducive for them to do this. This was further motivated by the idea that students were not visible to anyone when posting comments, questions or responses in this online space. Articulating their ideas under the conditions of not being seen in the online space extended not only an incentive for them to participate in online-mediated discussion, but also brought them into a supportive social environment in a more relaxed way..

7.7 Mental stimulation

Students who participated in this study made consistent reference to the capacity of online support to stimulate their thinking potential. This happened, according to the participants, when students participated in the Discussion Forum that extended opportunities for students to apply the content that was learned in face-to-face lectures to real-world cases. They claimed that the asynchronous nature of this learning forum made it convenient for them to read the case

study/scenario and respond to questions at their own pace and time, while also keeping the discussion among themselves. Zhang & Kenny (2010) state that asynchronous discussion forums are capable of improving cooperative learning as they allow students extended time to think about what has been communicated, more time to read, write and post, and may promote critical thinking. The potential of this online space to promote critical thinking suggests that it had a enabled intellectual stimulation that enhanced the learning of students.

The Discussion Forum offered students much needed insight into the course content through the case studies mentioned in the extracts in chapter six, which enabled students to think more about how the content described in the textbook manifest in the real world. This extended the capacity for students to think logically by establishing connections between content and actual practice as was depicted in the events described in the case or scenario. It transpired that thinking in both the Chat Room and the Discussion Forum was inspired by the desire to strengthen the context of a particular case within BME by probing responses that were offered. Garrison, Anderson & Archer (2000) acknowledged cognitive presence to be an essential element in critical thinking, a process and outcome that is frequently presented as the perceived goal of higher education, especially when learning is conducted via computer-mediated communication for educational purposes. This is compatible with the suggestion that online support enables exploration and thus facilitates student learning.

The participants' secondary school background has already been outlined as that characterized by contextual limitations with regards to the availability of resources and amenities for learning, hence students had become used to the idea of learning to think through classroom activities. Cooperative learning in groups facilitated through case-based discussions in class had become the most common way by means of which teachers inculcated thinking skills among learners in a way that allowed students to learn from each other. The only resource they had in each group to be able to engage in such discussions would be the hard-copy of a document containing the case being studied. When they came to the university and registered for this module, they discovered that online case-based discussions were not verbally conducted in small groups of four or five students but were extended to the whole group including the teacher, through text-based communication. To students, this meant that their knowledge-based resource was not only limited to the small group of four to five learners as it used to be at secondary school, but the

whole group including their access to the use of hyperlinks to web resources. This way, case-based discussions in both the Chat Room and the Discussion Forum enabled students to engage in critical thinking while the context of a particular case was being strengthened and deepened in the process.

7.8 Conceptual framework considerations

The following schematic representation depicts the community of inquiry framework with its fundamental elements that constitute this conceptual framework when higher education is moved into a computer-mediated communication (CMC) environment (Garrison, Anderson & Archer 2000). The categories of description presented in the context of literature reviewed in this study will now be examined and considered in relation to this conceptual framework. This conceptual framework was initially identified in chapter two of this study as a relevant framework for researching online support hence, deploying it as a means to illuminate the analysis presented in the previous chapters is appropriate at this level of the study.
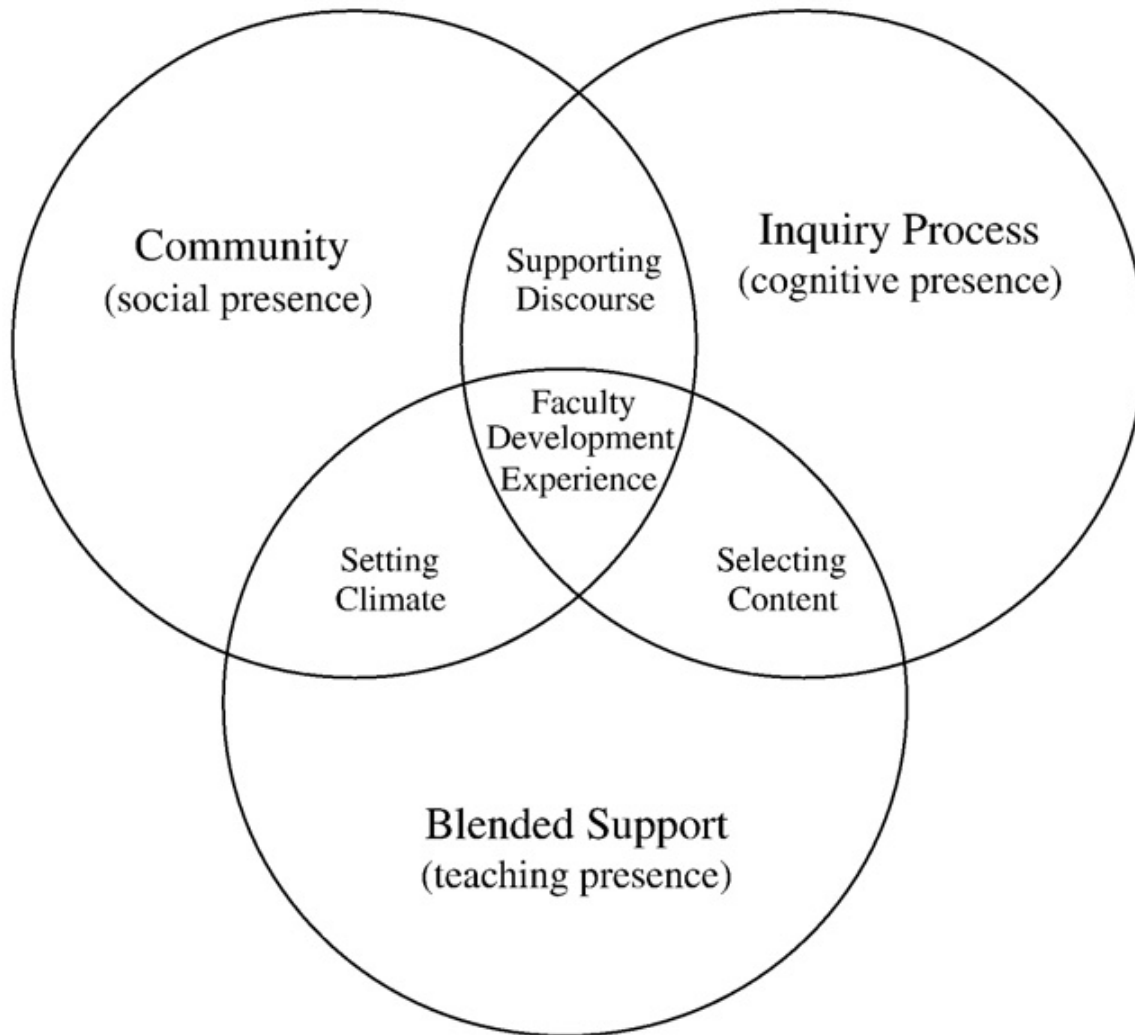
Fig. 1. Blended faculty community of inquiry — presences (adapted from Garrison et al., 2000)

7.8.1 Teaching presence and the first four categories of description

The significance of this framework is that it portrays the institutional faculty that combines a hybrid of face-to-face instruction and an online component in presenting its course offerings. Drawing on the first critical question which sought to establish what students' experiences of learning using online support in BME were, the relationship between the resultant categories of description that emerged from the data analysed in chapters four and five, and the model can be explored. The *repository of resources, support for learning, conduit for communication, and complexities of epistemological access* are the four categories of description that emerged from the analysis process in response to the first critical question. These categories have a bearing on

the model element of teaching presence in the sense that teaching presence is defined as "the design, facilitation and direction of cognitive and social processes for the purpose of achieving personally meaningful and educationally valuable learning outcomes" (Anderson, Rourke, Garrison, & Archer, 2001).

7.8.1.1 The repository of resources

Resources in the online space are designed, uploaded and circulated to students by the lecturer who happens to teach BME as a module. The system is structured in a way that once uploaded and circulated; these resources are permanently captured and can be located in the resource file whenever needed. They can only be removed by the lecturer who has the sole rights to edit and to deregister the module. These resources are a means to coordinate the teaching and learning in the virtual space. The same is true for activities initiated and uploaded by the lecturer online for students to participate in these. This points to the presence of the teaching component of the pedagogic situation, especially the *instructional management* and/or *design aspect of teaching presence*, which is necessary to facilitate instruction in the online space.

7.8.1.2 Support for learning

Online support in the form of lecture notes designed for instruction during face-to-face lectures, uploaded and circulated by the lecturer online after lectures became a method of communicating learning in BME. By circulating these lecture notes online, the lecturer offered students options that allowed them to use cost-effective measures of gaining possession of these notes. Students, especially those who spoke English as a second language, were relieved from the problem of having to multi-task as the circulation of lecture-notes online enabled them to pay undivided attention to the lecture without having to take down notes during face-to-face lectures in class. The *selection* of text and *outlining* of lecture notes were designed such that they could be edited with ease as opposed to pre-printed notes, and the capacity to add hyperlinks also offered students an added advantage. Since these lecture notes were designed by the lecturer, the *instructional management* and/or *design aspect of teaching presence* is also prevalent in this regard.

The online space enabled the delivery of notices initiated by the lecturer that could not be announced in lectures due to the fact that lecture periods were scheduled to take place only twice a week. This points to the presence of the teaching element of the CoI model in the BME course offering when mediated online.

7.8.1.3 Conduit for communication

The participants' view of the online space as a conduit for consulting with the lecturer has implications for the presence of the teaching component of the CoI model depicted above. As a conduit for communicating learning that had previously been executed in face-to-face lectures, the online space facilitates the transmission of lecture notes from the lecturer to students. The teacher as the mediator or facilitator of this communication is at the centre of this kind of occurrence. There is thus a teaching presence in the form of facilitation, confirming the *facilitating discourse* and/or *building understanding aspect/s* of teaching presence *through direct instruction,* indicating that this element of the CoI model was prevalent in this instance. The online space has also been considered to be a conduit for monitoring plagiarism. This happens because the lecturer uploads the 'Turnitin assignment' and lines it up in the activity files of students for them to write their assignments in the 'Turnitin assignment' window and submit these on completion. This once more indicates the role of the teaching presence, especially the *facilitating discourse* and/or *building understanding aspect/s,* as a model element was prevalent in this study. This was achieved through sharing experiences and personal meaning between the lecturer and students.

7.8.1.4 Complexities of epistemological access

Some students found the process of logging into the system a major task due to challenges associated with using online technology. These challenges indicate that students could not comprehend the necessary induction procedures, compelling the lecturer to re-train students online to enable them to log-in and participate in the programme. Some students also struggled, once they had logged-into the system, with getting into their profiles, relevant sites and activities uploaded by the lecturer on the leaning site. This compelled the lecturer to take them through the

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process of manoeuvering within the graphical user interface. Some students confused one online space with other spaces when they started searching for resources in the wrong places and expected to engage with activities in spaces that were not appropriate for such activities. This called for the lecturer's intervention, suggesting the presence of teaching, particularly the *direction instruction aspect* of teaching presence which students seem to have missed, is essential in online learning.

7.8.2 Social presence and cognitive presence

This section seeks to explore the relationship between the second and third elements of the model and the categories of description that emerged from data analyzed in chapter six in response to the question 'how do these variations in experience relate to students' learning in Business Management Education?' An attempt to establish this relationship can be made by considering the fifth and sixth categories of description in relation to the model.

7.8.2.1 Social presence and influence of online support on social interaction

Participants considered online chats to have extended opportunities for students to articulate their ideas, feelings and thoughts about the subject of learning so that they could share their learning experiences with others. This confirms social presence as one of the elements of the online education experience. Social presence manifests in three categories, one of which is the *emotions*. This category has as its indicator, *emoticons* or feelings which indicate the prevalence of emotions that constitute social presence in the act of learning (see table 4 below). Acknowledging that human feelings cannot always be equated with the crude images, emoticons could have served in some limited ways as indicators of emotions and thus serve as evidence of social presence. A presence of the *emotional aspect* emerged from this study, which saw students' emotions incited and manifested through the use of *emoticons* that depicted their feelings. The chat activity depicted in chapter four of this study reveals that most of the students used *smiley* as their *emoticon* of choice, which symbolize *emotions of joy* with which they participated in the discussions conducted in the Chat Room. They conceded that through this process students could learn from each other. Peer mentoring was enabled in the process when students corrected each other since lines of communications were open to everyone participating in the module to have his or her voice heard, under conditions that were less threatening. This

indicates that online support created a context that provided opportunities for social interaction among students and promoted student learning. This also suggests that social presence, particularly the *open communication aspect* of social presence highly featured in a *risk-free environment* that took the form of the Chat Room and the Discussion Forum.

The notion that online activities in the Chat Room incited participation by the majority of students including those who were often reluctant to express their thoughts, ideas and feelings in face-to-face lectures because they were shy, suggests that online supported learning had social implications that affected learning. It is also evidence for the role of social presence, especially with reference to the *affective expression aspect* of social presence, in this study. Participants reported that the Discussion Forum that allowed them to post entries whenever it was convenient for them to do so, allowed them to learn at their own pace while also enabling them to keep the discussion among themselves. This enabled students to gain control of their learning as they could regulate the pace and direction of their learning without involving the lecturer. Students enjoyed the informality with which they engaged with each other in the Discussion Forum, keeping the social discourse within the group. It also suggests that social presence, with particular emphases on the *group cohesion aspect* of social presence that *encouraged collaboration*, was indeed a major part of this study.

7.8.2.2 Cognitive presence and the mental stimulation of learning

Cognitive presence according to Garrison, Anderson & Archer (2001, p. 11) is the "extent to which the participants in any particular configuration of a community of inquiry are able to construct meaning through sustained communication".

When participants cited views that considered the online space, especially the Chat Room, to have been a space where thinking was motivated by the desire to deepen the context of a particular case within BME, little did I know that connections were being made with one element of the model. The analysis of each case being studied in the Chat Room or Discussion Forum had implications for cognitive presence, especially the *triggering event aspect* of cognitive presence since thinking was enhanced in the process. Due to uncertainty about the events that were

described in each case, students initially felt *puzzled*, but the more they thought about the case as they continued reading and communicating about it, they began to comprehend the events in the context of what they learned in class. Reading through the case and studying, and researching the aspects of the case was followed by attempts at answering questions that were based on the case, which also had a bearing on the content learned in the lectures. This means that the case was explored in relation to the course content. Data analyzed in chapter six of this study indicates that students interacted with each other to *exchange information* about the case during the process of exploration. This suggests that the *exploration aspect* of cognitive presence was also prevalent in this regard.

Participants indicated that the Discussion Forum offered them a platform for applying their knowledge of the course content to specific case studies and scenarios, thereby establishing connections between content and actual practice. This symbolizes that content was indeed merged with the events described in the case on the basis of *ideas* that *connected* both the course content and the case. This signifies the extent to which cognitive presence, especially the *integration aspect* of cognitive presence, was prevalent in this study. Data analyzed in chapter six shows that participants posted ideas so that these were corrected through postings by others during the chat. This enabled them to distinguish between desirable and undesirable answers. This indicates that desirable answers or *resolutions* to questions posted by the lecturer on the case resulted from collaborative efforts by students and lecturer through a consistent application of *new ideas* from existing theory onto the case, to accomplish cognitive presence. The following template depicts the relevant indicators in each category of the model elements that were matched with the various features of each category of description in paragraphs 7.8.1 and 7.8.2 above.

Table 18: Community of Inquiry Coding Template

Elements	Categories	Indicators
Cognitive Presence	Triggering Event	Sense of Puzzlement
	Exploration	Information Exchange
	Integration	Connecting Ideas
	Resolution	Apply new ideas
Social Presence	Emotional	Emoticons
	Open Communication	Risk-free expression
	Group Cohesion	Encouraging collaboration
Teaching Presence	Instructional Management/	Defining & initiating discussion topics
	Building Understanding	Sharing personal meaning
	Direct Instruction	Focusing discussion

(Garrison, Anderson & Archer, 2000, p. 4)

7.9 Striking outcomes emerging from this study

The findings from this study indicate that the study has mainly responded to the areas that had been identified and recommended by previous studies as important subjects of further research. Since these recommendations were made in a study conducted some years ago (Coates et al., 2005), efforts to meet these recommendations have already been made, but not in a developing country like South Africa. This study addresses these concerns in the context of a developing country. Shea & Bidjerano (2012) assert that there is a need to conduct studies that are more quantitative in design in order to explore opportunities for identifying factors that moderate or extend the relationship between the elements of the CoI framework and the course outcomes. While this current study assumes a mixed method approach that does not specifically foreground this, it however, considers the signature pedagogy of the module cited as the context of this study, in relation to the model components. This signature pedagogy plays a key role towards the achievement of the course outcomes in this module.

Coates et.al., (2005) advocate that the future of LMS in higher education should be the subject of ongoing research focusing on online learning systems involving a wide range of people. Central

to this advocated on-going research should be the adoption, implementation, utilisation and review of LMS with the purpose to

a) Identify how online LMS can be used to augment and complement rather than substitute for an institution's fundamental teaching procedures and objectives.

b) Investigate the influence of online learning systems on students' learning and general engagement.

The current study has attempted to meet the first purpose mentioned above as it was executed in a course that used a hybrid of face-to-face learning combined with an online component, rather than in a course where online learning completely substituted face-to-face learning. Augmenting and complementing the institution's fundamental teaching procedures was implemented by adding an online component onto the existing face-to-face teaching procedure. Attempts to meet the second purpose mentioned in the second bullet above had been made by way of pursuing the second critical question of this study. Chapter six of this study has engaged with the analysis of data from which the categories of description 'social effect on learning' and 'cognitive effect on learning' emerged. These two categories of description explain the influence online support had on students' learning in Business Management Education.

Having been partially involved in the collection, and fully involved in the analysis of data from which the findings were established, I felt like taking some time where I could stand back for a moment and look at this analysis and its outcomes from an observer's position. This is when I began to see things in a new light. Amongst a few things that attracted my attention and raised my awareness at this point were the following two key issues:

a) The role of epistemic access to online learning

b) Strengthening the signature pedagogy of Business Studies/Management.

These two key areas will now be given extended attention in order to explore various dimensions that would allow a better understanding of the new model of online-supported delivery methods.

7.9.1 The role of epistemic access in the transition to online learning

The findings of this study have made it obvious that students need support necessary to see them acclimatising to online learning technologies with minimal or no difficulties. Epistemological access has been surveyed in chapter two of this study, and has been understood to be the access to various forms of knowledge the university is able to offer (ibid). The category of description 'complexities of epistemological access' in chapter five of this study offered a useful explanation as to why some students find it challenging to learn using online support. Students entering university often come from different historical, economic and schooling backgrounds, with some who are acquainted with the technological environment while others are not. Those students who are not acquainted with the technological environment need to be familiarised with this environment. Epistemic access in this transition was fundamentally hindered by limitations with regards to language and personality.

7.9.1.1 Language

Students who participated in the module that provided the context of this study were predominantly speakers of different African home languages. A handful of these students were South Africans of Indian origin or Coloured South Africans who all spoke English as their first language. The African language majority constituted approximately 95% of the student population in this module. Difficulties that students faced with regards to epistemological access mostly affected students who spoke English as a second language. The challenge that caused a major obstacle for students who spoke English as a second language is that of struggling to come to terms with the jargon used in online learning. They find it difficult to correctly refer to spaces that they used using the correct terminology as one referred to the *Chat Room* as a *Discussion Chat*, confusing the Chat Room with the Discussion Forum as the two spaces that basically hosted case-based discussions. Pasfield-Neofitou (2011) considers such difficulties to have been compounded by lack of engagement with the online tool and limited venturing into the various online spaces on the part of the students, due to the fear of, and lack of confidence in, communicating in English.

Another participant who spoke English as a second language expected to do in the Chat Room, what is often done in the Discussion Forum. This suggests that some English second language speaking students could not correctly connect the Chat Room with synchronous discussions, and the Discussion Forum with asynchronous discussions. Language and discourse influence communication and participation patterns (Hofstede & Hofstede, 2005).The result was that these students ended up logging into the wrong spaces in anticipation of accomplishing activities that were not located in those spaces as the lecturer had not uploaded relevant cases in such spaces. These students had to be taken through the process of enlightening them with regards to the fundamental uses of each of these spaces for them to develop awareness or sense of what is it that is done or can be done in each of these spaces. While lack of familiarity with the online environment and its related language could be the key issue, this state of affairs occurs as a result of what recent studies have noted in terms of the dominance of English in the Internet. These studies maintain that domains in which languages other than English are used seems to be neglected as operational instructions on how to log-in are also not provided in these languages (Pasfield-Neofitou, 2011).

English second language speaking participants in this study have claimed that the online space offered them the opportunity to review the previous chats so as to make sense of what transpired because they could not follow the pace with which postings were made during the course of these chats. The reason, as Zhang & Kenny (2010) noted, is that English second language speakers were not certain about their competence in English and as a result, they spent significantly more time than their English first language speaking counterparts reading and compiling messages to be posted via the online space. As these students took more time reading and compiling responses, they ended-up missing other important postings in the process, making it necessary for them to review deliberations in the chat at their own time. I therefore think it could be advisable that online instructors consider allowing English second language speaking students to post comments and responses in a language other than English an individual student is familiar with.

7.9.1.2 Dimensions of being shy

The use of the word 'shy' by participants who claimed in their personal capacities to have not had the courage necessary to participate in face-to-face lectures whenever an argument was raised concerning the course content had different connotations and dimensions. This suggests that without epistemic access to a channel of communication conducive to people who lack courage to speak openly in the lectures at the disposal of these participants, they wouldn't have had an opportunity to have their voices heard. Such a channel was provided by the online support. The fundamental dimensions of being shy are the cultural, personal, social and political dimensions.

The cultural dimension of being 'shy' has already surfaced in the discussion of social interaction in learning earlier-on in this chapter. This dimension can best be described in the context of the African Zulu culture as it is rooted in the cultural beliefs held in high esteem by the Zulu speaking nation. This culture forbids young people to speak openly to the adult members of the community and requires that whenever a young person speaks to the adult in an effort to report something, he/she cannot look straight into the eyes of the adult but would rather speak facing his/her toes on the ground. This, however, may be a negligible practice in multicultural communities where Zulu people are suddenly drifting away from what their culture espouses. The effect that this has on learners who subscribes to this cultural belief is an attempt to withdraw from participation in face-to-face discussions in an effort to avoid possible confrontation with the lecturer who happens to be an adult.

According to Hofstede & Hofstede (2005, p. 4) culture is "the collective programming of the mind that distinguishes the members of one group or category of people from others". Under these circumstances, the cultural dimension of being 'shy' indicates that students as young people are reluctant to speak in face-to-face sessions where the lecturer is physically present and is part of the ongoing discussion. Once the discussion is conducted online, students are able to keep the discussion among them while striving to negotiate a direction towards the desirable solution or answer to the problem or question. Whilst the lecturer is also present, it cannot be felt as much as it could be in face-to-face sessions. This suggests that the minds of the students have

been unconsciously moulded in a way that the amalgamated patterns of their knowledge, beliefs and behaviours acquired by their parents and passed on to them (Hofstede & Hofstede, 2005) convince them that engaging with the lecturer online is not confrontational.

The personal dimension of being 'shy' has not been a subject of much mention hence; it is now given the necessary consideration. This dimension emerges from the notion that shyness is tantamount to introversion and is therefore an issue of personality. People with this kind of personality will often prefer to, once they become aware of a problem or issue, internalise it by silently keeping it to themselves without communicating it to others. Zhang & Kenny (2010) cites these as less verbal students who have an inclination to remain silent in face-to-face lectures. Under these circumstances, students' reluctance to speak is a stigma a person was born with, rather than something one has been acculturated into. This minimizes the students' potential for successful participation in public debates while also subjecting one into being a silent observer. With students gaining epistemic access to this less than familiar, technological environment, they become emancipated in the sense that the space offers them a context where they can express their opinions while hiding behind the computer.

The social dimension of being 'shy' emanates from the perception that man, unlike some species in the natural habitat, is generally a social being and is perceived to be empowered to engage in social interaction. However, knowing the background from which the majority of the participants in this study came from, it was not without reason that they find themselves reluctant to speak out their thoughts and feelings in face-to-face contexts. A handful of students who attended their secondary education in suburban, former model C schools with enriched social backgrounds participated without any fear in discussions conducted during face-to-face lectures. However, the majority of respondents, who had attended rural and township schools were withdrawn in these discussions due to the perception that they were inferior to others who were thought to be more knowledgeable on the basis of their schooling background. Another reason for this could also be the issue of language. Conducting these discussions via online mediated communication enabled these students to participate as they find the space to be less risky and less threatening.

The political dimension of being 'shy' also has connections with the historical background from which the students come in the South African context. African South Africans, who formed a major bulk of students who participated in this study, had been raised by grandparents and parents who learned it the hard way that they had no right to be outspoken about matters pertaining to their political emancipation. This happened during the times of the apartheid government that ruled South Africa during the period before 1994. Limitations to the freedom of expression had become normative to these parents the way it had been biblically normative to the Israelites in Egypt under the rule of the Pharaohs. These grandparents, who had accepted this norm as standard procedure, then passed it on from generation to generation. This was further compounded by the 'historically anticipated behaviour' by teachers from the past who expected learners to be silent spectators in the pedagogic situation, typical of what Bantu Education during the apartheid era was designed to offer.

7.9.2 Strengthening the signature pedagogy of Business Management/Studies Education

The concept of signature pedagogies was used by Shulman (2005) to denote the forms of instruction that come to one's mind when one first think about the preparation of members of a particular profession. These forms embrace the manner in which whatever is considered to be knowledge in a particular field is made known to those who aspire to know. This implies that Business and Management Studies Education as a discipline has its own methods of imparting knowledge to students studying in this discipline. While there is a limited number of studies that confirmed the existence of signature pedagogies in various fields such as Leadership Education (Jenkins, 2012), very few addresses this item in Business and Management Studies Education. A study on Strategic Management claimed that one of the most prevalent forms of instruction in strategic management as an important component of Business Management is case-based teaching (Cox, Daspit, McLaughlin, & Jones III, 2012). Business Economics or Management has been explored in chapter two of this study, where it emerged that its object of study is the firm and how this firm can best be managed. To know how the firm can best be managed, one has to know how it operates, leading to the need to explore how best can one get to know how the firm works to be able to manage it.

According to Dexter & Tucker (2010) case methods of teaching have long been used as the signature pedagogy in business, medical and law schools. Nowadays these instructional methods have been extended to also include the field of education. Data generated and analysed in this study indicated that participants acknowledged the value of case studies that were discussed and analysed in the Chat Room and the Discussion Forum. This denotes that online support extended opportunities to the researcher and participants of strengthening the signature pedagogy of Business and Management Studies Education. While Dexter & Tucker (2010) acknowledge the use of traditional text-based cases extracted from newspapers as a source in the preparation of teachers, students in this module enjoyed the opportunity of studying online cases and scenarios uploaded and disseminated into their online activities files. This was based on the understanding that faculties that offer business and/or marketing education modules are undoubtedly most likely to combine research, group work and discussion based, knowledge acquisition and online activities in their courses (Fletcher, 2013).

Supporters of the case method of teaching claim that tricky contexts that are often described in a case need reasoning skills, which develop inherent comprehension of particular concepts by linking theory and practice of the business world (Dexter & Tucker, 2010). This is confirmed in the data analysed in this study where participants found that the Chat Room and the Discussion Forum extended opportunities for them to consider the events described in a particular case in the context of what they had earlier on learned in the lectures. The effective utilization of case methods of instruction derives from numerous views that appreciate interaction and group discussion as these provide for reflection and feedback which are central features of case methods (Merseth, 1990). This way, case methods of instructions that promote group discussion and interaction among students in a liberating or risk-free environment can best be implemented via online support. Learning using online support is therefore capable of strengthening the signature pedagogy of Business and Management Studies Education

7.10 Conclusion

This chapter has given depth to the outcomes of the previous three chapters by locating the findings in the context of literature reviewed in chapter two of this study. It has also attempted to

look at the findings through the lens of the CoI as the relevant conceptual framework for researching learning mediated online. It has also raised a number of questions that could be relevant for further research as these could not be answered within the scope of the current study. Furthermore, it revealed how the study attempted to give attention to areas identified by previous research as essential for further research. Finally, it has unearthed noteworthy debates that could contribute to the development of new knowledge and theory.

CHAPTER 8

IN SEARCH OF A THEORETICAL MODEL

8.1. Introduction

The previous chapter presented a comprehensive account of findings that emerged from this study, in the context of existing literature. This chapter attempts to present the summary of the main findings and also to deliberate on the implications of the study. It will start by outlining these findings and drawing on these, will suggest questions for future research. The study set out to explore students' experiences of online-supported learning in BME. With this in mind, the critical questions the study sought to address were:

a) What are students' experiences of online-support in BME?
b) How do these experiences relate to students' learning in BME?
c) Why do these experiences relate to students' learning the way they do?

8.2. Outlining the findings

This section recapitulates the main findings emerging from the study in relation to the critical research questions.

8.2.1. Students' experiences of online-support and their relation to students' learning

While students experienced challenges at initial stages of their learning using online support, these did not pose a permanent threat to their learning as students eventually managed to find their way into the system. This is evident in the nature and kind of support students declare that they gained from learning using the LMS. Participants pointed to the benefits of the LMS as a repository of resources and learning activities, as well as to how the online space provided a conduit for communicating learning in the course offering. Analysis revealed that the influence online-supported learning had on student learning included the opportunity that enabled students to interact as a group in an attempt to find solutions to their problems while their ability to think critically and innovatively was also enhanced in the process.

8.2.1.1. Students' experiences of online support

The findings are that both students who had access and students who had no access to computers at their basic level of education found it challenging to learn using online support at the initial stages of their learning in the course offering.

Students believed that the capacity of online support to keep permanent records of learning activities after these had been accomplished as well as electronic records of learning resources, enabled them to learn, revise and prepare for assessment activities. This happened because students could revisit these activities and resources whenever they needed to use these as references. This was a novel experience, especially for students who had limited exposure to computers in their schooling years. Students claimed to have benefitted from these in terms of costs as they did not have to print these resources, and the risk of loss of these electronic records due to misplacement as opposed to hard copies was negligible. Students viewed learning through an online component in BME to have been complementary to face-to-face engagement as they declared that the content topics presented in face-to-face classes were further refined in the online space. This happened when case-based online chats and case-based discussions in the learning forum were conducted. Through online-supported learning, a new conduit was created for communicating and for enabling learning between the lecturer and students and also amongst students themselves.

Students felt that the ideal combination of face-to-face and online-mediated learning offered them more support than what other traditional ways of transacting learning could offer. This emanates from students' acknowledgement of online support as an intervention that offered students an opportunity to submit their assignments and other assessment tasks without having to be on campus on the day these tasks were due. This could be done electronically via the LMS. Consequently, students' use of online support brought about solutions to specific problems in their context.

Students held the belief that online support extended the accessibility of the lecturer in the event that attempts to locate him in his office were unsuccessful due to consultation hours coinciding with other lectures students had to attend. These unsuccessful attempts were often resolved through the certainty that students would successfully locate the lecturer online. Students also

felt that communicating with the lecturer online was less threatening than when they had to articulate their concerns in a face-to-face context, especially those who described themselves as shy or less assertive.

8.2.1.2. Relation of students' social experiences to their learning

Findings also revealed that students acknowledged the social character of online-supported learning. Their feeling of a shared repertoire of ideas, and the exchange of information during the analysis of case studies in the Chat Room, brought a social element to their learning. Students freely articulated their diverse thoughts on the case being analyzed among them without involving the lecturer and eventually arrived at a desirable answer on their own. This extended opportunities for social interaction that saw students working cooperatively as a group as opposed to working competitively against each other as individuals towards accomplishing a particular case being studied. A socially negotiated and consented solution to a case-based problem represented the shared understanding of the whole group, something that cannot easily be achieved in face-to-face settings as students are often reluctant to speak.

The *flexibility* with which students could respond to questions posted subsequent to a case study in the Discussion Forum served as an incentive for students to engage in online social interaction to collaboratively search for desirable answers to these questions at their *own pace* and *time*. Live debates in face-to-face settings are not compatible with this flexibility as students who are assertive often dominate the discourse at the expense of the less assertive students. Learning in this forum offered students enough time to refer to the content they had learned in the lectures in the context of information they had acquired through research. This enabled students to integrate course content by relating it with the events described in the real-world cases. This helped deepen students' understanding and knowledge of content in a particular case in the course offering, and also inculcated in students the habit of working together as a small community of learners united by common interest.

Students talked about how they learned from each other through social interaction in the Chat Room and the Discussion Forum, and how they sometimes consulted with the lecturer online to seek certainty about tasks they had to accomplish. They also indicated how online support addressed social obstacles to their learning, especially those who were often reluctant to express

their thoughts, ideas and feelings in face-to-face lectures because they were shy. Online-supported learning therefore offered an environment that allowed students more freedom to participate in a social discourse. This environment made it conducive for students to be vocal in their own learning in the sense that it allowed them to break the silence that featured in face-to-face lectures. Students saw the expressive nature of the learning environment created through the effective implementation of case-based learning through the medium of the LMS as typical of learner-centred contexts. In these contexts learning is inspired by allowing subjects of learning to actively negotiate learning on their own.

Students felt that learning using the LMS had an impact on the development of cognitive abilities required to comprehend course content. This was evident in what students said about the manner in which they were able to apply content learned in face-to-face lectures in case studies that were further analyzed in the Chat Room and the Discussion Forum. Students expressed how they were able to develop a better understanding of the course content when theory was related to a particular case in the LMS. Case studies discussed and analyzed through the medium of the LMS offered students opportunities to develop thinking skills that were not likely to be achieved in other traditional learning contexts where students tended to keep their feelings, thoughts and ideas to themselves. Connections between the professed content presented in lectures and what actually happens in practice were therefore established through case-based learning negotiated via the medium of the LMS.

Students acknowledged the need to extend learning beyond what was taught in the lectures as this strengthened their memories when they explored specific cases relating to the firm in the real world. Case-based learning in the Chat Room was considered by students to be ideal in promoting thinking that deepened the context of a particular case as this allowed them opportunities to relate course content more effectively to actual contexts. This offers an explanation as to what motivated students to participate consistently in LMS mediated case-based discussions. Students were motivated by the desire to enrich and empower their thinking through an unorthodox pedagogy that subscribed to the notion of student-centred learning.

Students talked about the capacity of the LMS to extend opportunities for them to learn from responses posted by other students to a case-based discussion during the course of the online chat, and how this encouraged them to think differently from their peers. It could therefore be

argued that learning and thinking in the Chat Room was motivated by the desire to develop a distinct view to what other students may have expressed, hence generating a unique response to avoid duplication. Learning in higher education is consistent with this idea as students are often encouraged to remain original to their thoughts and ideas in an effort to discourage academically unacceptable practices of plagiarism. Students stated that they developed a habit of researching the information required to answer case-based questions in the Chat Room. This suggests that learning mediated via the medium of the LMS assisted with the generation of young and prospective academics and potential researchers while also inculcating independent thinking in the process.

Based on the findings, the argument that students in BME have come to understand that learning in this course can no longer be limited to what face-to-face lectures can offer, is justifiable. Students have reached the stage where they find it meaningful to learn cooperatively with one another in pursuance of a consistent objective to maximize their thinking potential. This derives from their experiences that suggest that LMS case-based learning maximizes student learning because it enhances collaborative learning, which is more effective than purely individual learning efforts. The following question therefore emerge from these findings: What is it that explains experiences of complexities of epistemological access to knowledge sources in the LMS?

8.2.2 Factors influencing students' experiences of online-support and their relation to students' learning

Higher education is a context where students converge from different schooling contexts that vary in terms of social and economic background with the intention to access opportunities to engage with work-related educational qualifications. Students in this context are unlikely to have come with the same level of profound schooling experience as resources are unevenly distributed among different schools from which these students are drawn. While their level of development with regards to content coverage is presumed to have been the same, their level of competence regarding the use of technology in facilitating learning was not the same. A handful of these students come from schools that provided an adequate presence of computers and they have used computers before coming to university. However, most students are drawn from schools located in historically disadvantaged communities and have not used computers before.

Innovations in the medium through which curriculum content is presented do not happen without presenting challenges for both teachers and learners in that curriculum. Having considered this, and the desire to bring about innovative ways of stimulating learner understanding, I decided to take the opportunity to teach through this LMS innovation so that students could experience learning in a different way. Challenges that came with online-supported learning as a mode of executing teaching and learning were considered to be worth the gains students were to derive from this mode once these challenges were addressed. Students were able to enact this innovative approach to learning and succeeded in overcoming challenges pertaining to epistemological access.

Students' participation in a particular learning programme is mediated and is also likely to be favorably or unfavorably affected by several factors. The extent to which a learning programme relies on students' prior learning experiences and the manner in which resources were organized and placed at the disposal of students in prior learning contexts, have strong implications for students' background.

Innovative pedagogies are deemed necessary to keep pace with developments in the curriculum. Pedagogies and/or approaches to teaching and learning that were appropriate in the curriculum 20 years ago may not be applicable in the new curriculum that advocates learner centredness. Nevertheless, it can be concluded that innovative pedagogies cannot easily be adopted in a particular context without those involved encountering difficulties in the process of negotiating a transition in that context. It emerged from the study that the language and secondary school background of students, the lecturer's assumptions as to the effectiveness of the computer literacy course in supporting adaptation to online learning and epistemological access emerged as barriers to students' engagement with online-supported learning. The elements, if not taken care of, could deprive students of the advantages the system offered.

The following subsections highlight the factors which influence students' experiences of online-supported learning and their effect on students' learning

8.2.2.1 School background and context

The study revealed that students who participated in the BME module that engaged the delivery of content through face-to-face lectures combined with an online component had diverse

schooling backgrounds. Students who came from schools located in economically affluent communities that had better resources, such as the opportunities to experience with computers, had the basic knowledge of learning using computers. However, their counterparts who came from schools located in economically disadvantaged communities that were under-resourced could not acquire opportunities to experience with computers. These students needed, in the first place, a comprehensive programme according to which they were to be familiarized with the world of computers, for them to be able to participate as equals with their privileged counterparts. While a basic computer-literacy programme is made available to all first-year level students at this university, it does not include training on the elements of online support.

The study found that students who had a better understanding of learning using online support due to their previous engagement with the use of computers became a source of assistance to students who struggled with the understanding of the basic induction procedures. These procedures were necessary to engage with the online component of learning in BME. This assistance enabled the familiarization of students who lacked the necessary skills of gaining access into the LMS. It enhanced students' opportunities to experience with learning using online support.

Students preferred to share challenges emanating from using online support and to mobilize assistance from other students without having to involve the lecturer. This allowed access to the skills of those from more advantaged school background. This allowed students to benefit from learning cooperatively with others.

Furthermore, the need for a step-by-step process of induction to enable students to become familiar with the skills needed to use online support effectively raised the lecturer's awareness to questions that challenged the legitimacy of the basic computer literacy course in assisting students to gain epistemological access to learning.

8.2.2.2 Intensity of engagement with the online tool

It is evident from quantitative data that the level of engagement with the online component of learning varied among students as measured by the number of hours devoted to online learning. Although students seem to have been inspired by this development, the all-logs file that I perused in the module window revealed and confirmed a variation in the rate of participation. While data

indicated that some students regularly interacted with the online tool, others appeared to have rarely logged into the LMS. This could emanate from the likelihood that their unsuccessful attempts at getting into the system during the earlier stages of the program may have partly deterred some of them from consistently engaging with the system. This irregular engagement with the LMS by students may have impeded with their ability to find their way into the various sites. This may also have impeded their attempts at finding relevant resources and activities located in the LMS due to lack of expertise required to do this.

Students who regularly interacted with the online tool were able to find relevant spaces and sites with ease and demonstrated the ability to provide appropriate support to students who encountered problems with learning using the LMS. Students talked about the benefits derived from learning via the mechanism of the Discussion Forum where responses to case-based questions could be posted at their convenience. However, some of them did not accomplish case-based and practice questions that were put in the Discussion Forum due to their irregular engagement with the online tool.

Findings indicated that some students entered the Chat Room having not seen or read the content of the case that had to be studied prior to being analyzed during the chat session. This happened because these students missed the electronic copy of the case study that was circulated to everyone via the mechanism of the News Forum due to their irregular engagement with the online tool. These students ultimately had to appeal to other students during the course of the ongoing chat for assistance with regards to the content of a given case. Students who regularly interacted with the online tool would have seen and studied the content of the case. One of them would then recirculate the case study in the Chat Room to enable other students to study the case. This evidently affected these students' learning through the LMS-strengthened case based pedagogy as they had to study the case while deliberations on the analysis of the case were on-going.

The findings were that some students had a blurred understanding of the use of the various forums and the Chat Room as they could not easily distinguish between these. They conceptualized issues that were relevant for being addressed in the News Forum to be also relevant for deliberating in the Chat Room. The reason could be non-participation or irregular participation in the various forums or spaces located in the LMS such that they could not

understand the crucial difference between these spaces. This had serious implications for their effectiveness in using online support.

8.2.2.3 The social and consultative context

Combining face-to-face learning with an online component has come with greater opportunities to extend the level of consultation among learners themselves. This adds to the extended access to the lecturer made possible by the online component. These two factors have shaped student experience with learning using online support. In the event that students got stuck in the process of engaging with the LMS due to lack of technical expertise, other students and the lecturer were always there for consultation and as sources of online assistance.

The study found that in the process of learning using the LMS, students developed the habit of approaching one another in search of the assistance necessary to pursue their learning. This ultimately led to the creation of an environment that was conducive to cooperative learning among students. Cooperative learning online in this instance meant that learning problems were eventually shared among the group while their learning experiences were enhanced in the process. The social and consultation-enabling nature of the online component of learning is evident in students' preference to communicate their concerns online rather than having these openly articulated in face-to-face lectures. They felt freer to express themselves without fear in the online space.

Due to a high level of consultation taking place via the medium of the online tool as opposed to face-to-face sessions, the LMS became a medium through which students could inquire about things they would otherwise have not queried if communication was limited only to face-to-face settings. This is evident when students who had been absent from lectures when the outline or scope of a test or assignment was presented, preferred to make inquiries on this online rather than approaching the lecturer in his office. They cited having done this in fear of the possibility that they were going to be condemned for being absent from lectures.

8.3 A model for students' experiences of online-supported learning in BME: The LMS mediated case-based pedagogy model

Students were not completely deterred by the operational and technical challenges they had to cope with in working with the online learning technology. They undertook the responsibility of consulting with the more capable others in order to get them on track. This enabled them to participate in learning activities that were conducted in the Discussion Forum and the Chat Room. This is evident from students' claims to have benefitted from discussing case studies in the Chat Room and the Discussion Forum, as the study found. Despite the overwhelmingly large class size, use of the Chat Room demonstrably improved learning. Using the LMS to analyze and discuss case studies enabled students to develop new insights into the various aspects of the firm. This inculcated in students a sense of being part of the environment in which the firm operates through the lens of the case being studied and analyzed. This state of affairs also served to support the idea of cooperative learning where each student's response became a building block towards developing the desired answer.

As already hinted in the above paragraph, the cases and/or scenarios in BME foreground the firm and require students to conceptualize their responses to case-based questions in the context of the firm. These case studies are often sourced from online newspapers and magazines either as advertisements or newsworthy items about the product the firm either manufactures or distributes. Once the cases have been located in these sources, the lecturer downloads these onto the desktop of his computer, and then uploads them onto the module window in the LMS as resources. These were then circulated to students for them to read via the medium of the News Forum.

On receipt of these case studies in their resource files, students either read them on sight or printed them for reading as hard copies before the day on which they were invited to participate in the chat session. They read these cases with their lecture notes or study material including the text book on hand. Others often consulted the lecturer online for an explanation as to what they were expected to do after reading case studies circulated online.

On the day of the chat session, students and the lecturer met in the Chat Room – an online space where the lecturer welcomed students and socialized them into the chat session. This offered

learners the opportunity to think and share their opinions collaboratively with the purpose to revive each other with the content of the case. This is where students who had not studied the case because they had not seen it due to their irregular engagement with the online tool started asking their peers to furnish them with the content of the case. Cooperative learning and sharing of ideas and resources therefore began at this level.

It was obvious that the nature of learning in the Chat Room engaged innovative thinking as each student who responded to the same question based on the case sought to offer a different answer to that previously posted by peers. This may have been caused by the feedback the lecturer had given in refuting an ineffective answer previously offered to a given question. Due to the large class size, many responses came from students at the same time and feedback was not given by the lecturer to all of these, leading students into asking and answering questions among themselves. Whilst this may have not been acceptable to students, it is what the Chat Room is meant to do, i.e. offer a context to participants in which everyone can respond to a question irrespective of whoever posted that question.

As observed in the above paragraph, this notion of case-based teaching and learning mediated via the LMS effectively offers a context that promotes inclusivity and flexibility in learning as everyone, including less-assertive students, is able to respond whenever one is ready to do so. Collaboration among students provides the basis for a joint construction of meaning as learning emanates from the sharing of ideas among students, and also from observing each other's previous responses to the same question. A model for LMS mediated case-based pedagogy is depicted in figure 2.
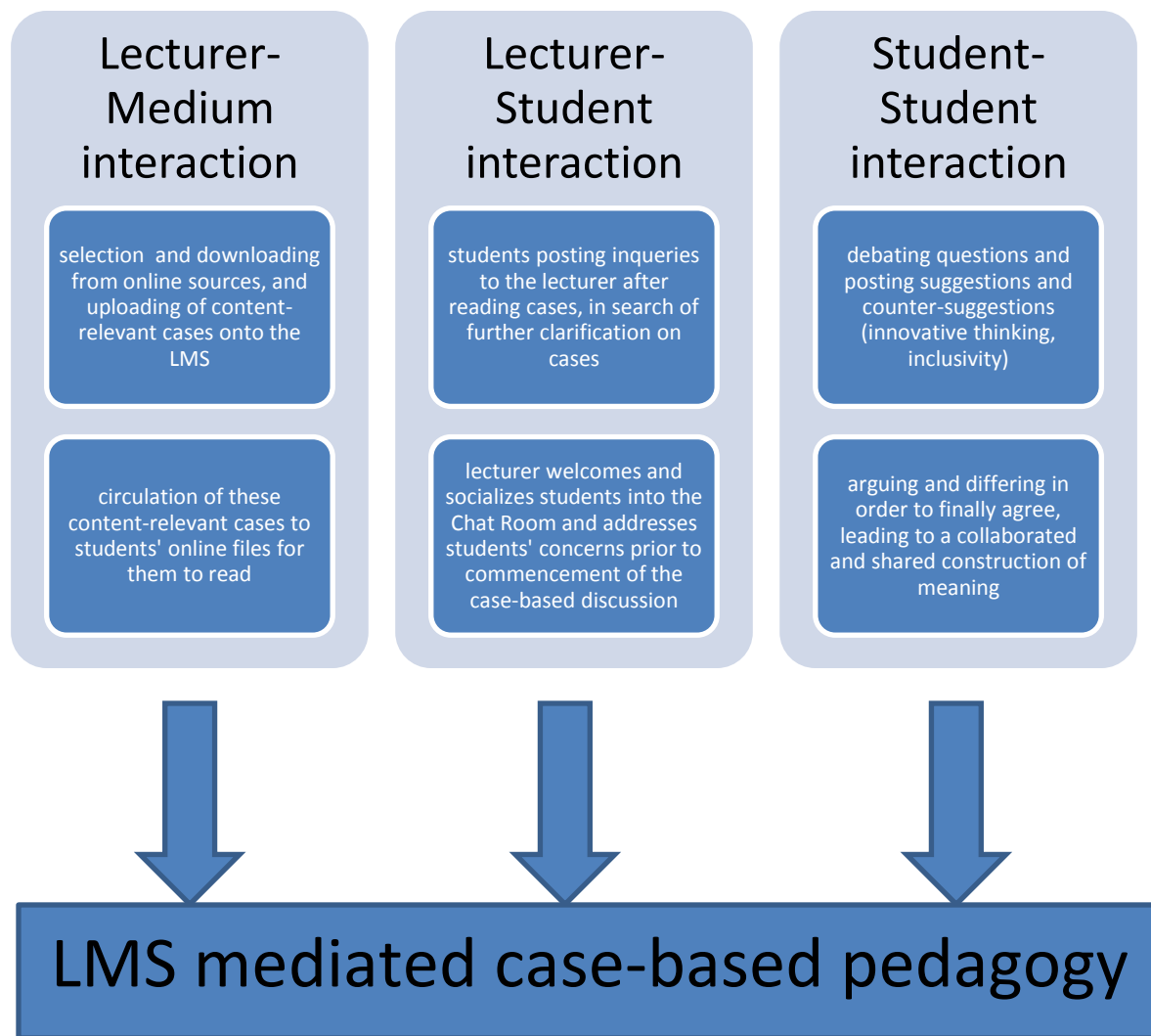
Figure 2: A model for LMS mediated case-based pedagogy

Like other course offerings in the discipline of business education, BME has long been associated with the use of case study as pedagogy for the preparation of members for the teaching profession. The rationale for this, given the fact that BME foregrounds the firm as its object of study, is that case studies offer students an opportunity to explore course content in the context of the firm in the real world. Case studies selected, uploaded and discussed online add to the content learned in face-to-face lectures and open up further opportunities for linking theory to practice. Therefore in relation to the second research question, it could be considered that case studies constitute part of the students' experiences of relating the BME theoretical course content to the ways in which this content manifests in the real world. This is evident in the findings

'social interaction' and 'mental stimulation' that explains how online chats and forum discussions stimulated students' learning in BME through case-based discussions. In the past, case studies were discussed only in face-to-face lectures and once lecture-time had expired, the discussion was terminated. The advent of the LMS has brought about a new context where case studies that could not be fully discussed in face-to-face contexts can be brought to a full conclusion. The LMS case-based pedagogy model that I propose is expected to promote learning by enhancing the discussion and analysis of case studies. This was supported by the participants' claims that considered online-supported learning to be a conduit for communicating learning in this study.

The above diagram considers, as a starting point, that content delivered in face-to-face lectures in BME becomes the foundation upon which decisions pertaining to the selection of relevant cases originate. For the lecturer to locate cases that are relevant to the content addressed in face-to-face lectures at a given time, he has to interact with the media (online course outline and the online tool). This dimension of interaction attempts to form the foundation upon which subsequent lecturer-student interaction is established. Through the lecturer-media interaction, the lecturer is able to locate, download, upload, and eventually circulate relevant cases to students via the medium of the LMS. This could be a model for case-based pedagogy in BME.

The process of teacher-student interaction sees students initiate online interaction with the lecturer after reading the case study circulated to their resources files in the LMS. This happened when students sought to know whether participation in the scheduled chat had any implication for their DP status or not, as this sometimes influence their decision whether to participate or not. In the model proposed, the lecturer makes it clear to students at the beginning of the chat session that successful participation in this activity is inspired by in-depth reading of the content of the case. Students then assure the lecturer that they have read the case before entering the Chat Room and consequently request the lecturer to start the deliberations.

Student-student interaction marks the beginning of a phase where students begin to claim their independence from the teacher by keeping the discussion among them. They respond by inquiring, answering and arguing among themselves with regard to specific suggestions made by their fellow peers based on the merits of the case being studied. This enables students to arrive at a collaborated and shared understanding. This kind of learning sustains collaborative learning

where all learners contribute their ideas to eventually derive the joint constructed solution to the issues raised in the case. This way, learning becomes a connected network of ideas generated from the process of innovative and independent thinking by students. The model also suggests that learning in face-to-face lectures extends to the learning that happens in the Chat Room when cases that are relevant to the content covered in lectures are discussed and analyzed.

Findings from this study suggest that students in BME found learning using online support to have been case-oriented. Despite some challenges in not being able to log onto the relevant chats at the beginning of the program, students came to find value in this kind of learning and started setting themselves up to deal with these challenges. In explaining as to what were students' experiences of online support, the finding 'complexities of epistemological access' depicts students' conceptions of their experience with challenges they had to go through before they could participate in case-based online chats as 'support for learning'. This describes what students did when blocked through lack of skill necessary to log into the LMS. They networked with the more capable others and gained participation in the new mode of learning. They considered this learning to have helped them gain a better understanding of the content presented in face-to-face lectures as cases offered them the opportunity to explore and comprehend this content in the context of the real-world.

From a lecturer's point of view I found students had advanced in their understanding between lectures. This happened because students engaged with learning on their own; evidence for their work is there as the LMS could keep a permanent record of all activities including cases previously studied in the online space. These case studies could be used by students as a resource additional to content presented in face-to-face lectures.

For these reasons I propose the application of this model for BME. The LMS enabled students to progress with learning on their own, once they had constructively engaged and dealt with challenges that could threaten their learning using online support in BME.

While in some instances, participants seem to have celebrated the technology and opportunities that come with learning using online support; this study does not seek to celebrate students' experiences and understanding of online-supported case-based teaching and learning. Instead, it seeks to understand why students' experiences of online-supported learning point to the direction

of this pedagogy. This will enable me and other academics in the field to understand these experiences in the context of a South African higher education institution rather than being critical of such experiences.

The study seeks to shift the research approach from one which constructs students as deficit towards understanding and acknowledging students' experiences. The purpose is to avoid the possibility of being judgmental of the students while also avoiding celebrating their experiences in the process as I will, if I do so, be compromising my paradigmatic position as an interpretivist researcher.

8.3.1 Limitations of the LMS mediated case-based pedagogy for BME

The findings of the study indicate that student' efforts to participate in online chats at the earlier stages of the course offering were thwarted by challenges with regards to logging into the relevant spaces such as the Chat Room. Consequently they had to solicit assistance from other capable students who were already logged-in and were participating at that time. As the study seeks to understand students' experiences in terms of how student learning had occurred in the process of experiencing, it also needs to address the process impediments.

With the LMS mediated case-based pedagogy emerging as an approach to online-supported learning in BME, its limitations deserve the necessary attention. What are both the potential and the limits of this model? While it is argued that this is a valuable pedagogy there is a need to recognise the deficiencies that came with discussing and analyzing case-studies in the Chat Room. This speaks to the need for careful initiation of students into online learning before engaging with a course offered through face-to-face contact sessions in combination with an online component.

While the responsibility to respond to questions posted during the run of the chat should be shared among students and the lecturer, this could have a probably harmful consequence if students are not aware of their responsibility. It is this shared responsibility with students to give feedback that brings about a collaborated construction of meaning. Students' contributions to the construction of meaning through responses posted during the chat may not necessarily be accurate, making it necessary that the lecturer intervenes at the level of moderation.

It is acknowledged that evaluating responses to individual case studies in online classes of enormous size can be a strenuous exercise (Pena-Shaff & Altman, 2009) and this is often the reason why responses and feedback to online case-based questions are not always offered (Lee, Lee, Liu, Bonk, & Magjuka, 2009). This usually leads to students being discouraged from participation in case-based online chats as they often expect the lecturer to commend them even if their responses are off the mark.

A potential danger is that dominant students monopolize the deliberations, leading others to withdrawing from participation (Pena-Shaff & Altman, 2009) and free-riders emerge from this non-participation in case-based discussion that takes place in the chat (Voigt & Swatman, 2006). The problem that emerges is that the free-riders, who prefer not to post their responses to a particular case-based problem during the chat discussion, draw on the responses posted by others to score a post like those who had participated.

It may be argued, however, that lack of participation in case-based chat discussions could be further aggravated by the burden on the part of students to simultaneously manage tasks and technical applications of computer equipment (Lee et al., 2009). It appears that when some students had successfully logged in to the Chat Room, they discovered that they were not in the relevant chat where the discussion for that particular day was located. This means that these students had to waste a significant amount of time browsing the wrong space, exiting it and entering another chat in search of the correct one while others were already working in the relevant chat, hence the system read this as non-participation. Students who were in the correct chat also complained that the system sometimes froze in the middle of the composition of the response due to a multitude of responses being composed at the same time, indicating that the tool was overloaded due to the size of the class being enormous.

Some students complained that their responses which they felt were correct were not equally acknowledged like those of their counterparts, hence they felt that their attempts were ignored by the lecturer. The reality of the situation could be that, due to the absence of nonverbal emotional signals like gestures and the likelihood for misinterpretation, especially by secondary speakers of the language of instruction, what students thought was correct may actually have been wrongly presented or written (Lee et al., 2009). Limitations in the ability to completely and meaningfully express oneself through the texted word, compared to how one can communicate through the

spoken word has the potential to inhibit meaningful communication, especially when secondary speakers of the language of instruction are involved.

Pena-Shaff (2009, p. 99) acknowledges the challenge posed by the different course schedules that students have to adhere to, on making it difficult to find a mutually convenient time for all to engage with online case-based discussions. A possible solution to this problem is that which was adopted in the BME module – a context for this study, where chat activities were scheduled to take place during the scheduled BME tutorial period when all students had an equal opportunity to attend. Students were aware that case-studies were not addressed in class due to time constraints and thus they took advantage of the opportunity to participate in LMS mediated case-studies that offered them access to extended learning opportunities. This empowered students to be more prepared to face real-world challenges the work environment is likely to present as soon as they leave the academic environment (Lee et al., 2009).

8.3.2 Other similar models

While efforts to locate models that may already have been developed from previous research in BME were not successful, a model for Chinese Management Education (Berrell, Wrathall, & Wright, 2001) appeared to have some similarity with the model proposed for BME in this chapter. This Chinese model bears resemblance to this study's proposed model in the sense that it used the case study method to transfer managerial knowledge in the pharmaceutical and health industries. Like the model proposed in this study, the Chinese model considers content-related cases relating to real world issues from the local management environment. This model has since been used in China as an approach to management education, and is reported to be sensitive to the influence of culture on managerial behavior and emphasizes the importance of real-world experience. While the model for Chinese Management Education is not designed for online-supported learning, the model proposed in this study is customized for contexts where learning in BME is mediated via the medium of the LMS.

8.4 Implications of the findings

The limitations of this pedagogy as described in the above paragraph suggest that a number of implications need to be acknowledged, not merely for academics and students who currently

pursue or seek to achieve consolidated collaboration and shared learning in their course offerings, but also in guiding future research.

8.4.1. Consolidated collaboration and shared learning

Existing literature reports that online-supported learning that integrates technology with the traditional face-to-face course in higher education, mediated via an LMS to assist lecturers and learners, enhances the quality of teaching and learning (Armatas et al., 2003). This happen because the LMS offer learning spaces that can be used by students as repositories of resources and activities that blend with regular posting to support the co-construction of meaning in a collaborative working environment (Carrington & Robinson, 2009). In this system interaction among participants freely occurs as students post responses, comments and inquiries in a way that allows anyone, including the lecturer, to respond to any posting in circulation. This gives shape to collaborative learning as the texted conversation ensues among the students.

A special method of preparation needs to be considered to enable the induction of students into this approach to learning. The assumption that, if students have gone through a computer literacy course during their first year of university education, they can easily engage with learning using online support is not realistic as completion of this course does not guarantee the acquisition of skills necessary to do this. A one-and-a-half-hour long induction into the process by means of which entry into the LMS is negotiated, including the processes by which how one manoeuvers one's way into the various spaces without repeating one's errors is insufficient to enable students to fully grasp this process. This short induction programme is therefore unlikely to enable students develop a practical understanding of the use of online support for learning. The Griffiths Institute of Higher Education suggests an intensive induction course that considers the expectations of students by assessing and articulating these with regards to learning using technology in an effort to improve first-year learning experiences (Krause & McEwen, 2008).

If the advantages of the model presented in this chapter are to be achieved, it still requires a special way by means of which students are acclimatized with the technology in a way that enables students to benefit from the use of the technology. This suggests a model for inducting students into the use of technology in learning, which will consider their previous schooling background as a framework for taking their needs into consideration. The purpose is to avoid the

habit of assuming that a ninety-minute induction program is adequate for introducing students into the LMS mediated approach to learning on the grounds that they had completed a computer literacy course in their first year of study.

With an intensive induction programme in place, chances are that epistemological access that address students' needs as based on their expectations can be extended to them. The model of student learning advocated in this study suggests that learning in BME using the LMS is case-oriented and therefore require the student to initially interact with both the case and the teacher before interacting with other students. This implies that student learning is grounded on the case being studied. Without access to these cases, student interaction and collaborative construction of understanding is likely to be impeded. The events described in the case in support of student learning have the potential to sustain and deepen students' understanding of course content learned in the lectures when this is applied on the case.

The study also advocates a form of understanding and approach to online-supported learning that will support student learning without students becoming overwhelmed by the technology. This implies that for successful student learning using online support, the main issue is how we socialize students in a way that recognizes their previous schooling background and how we support students to overcome challenges in working with the technology.

The study argues for a balance between an approach to the induction of students into online-supported learning that has, as its starting point, the consideration of previous schooling background of students and that which integrates elements of online learning into the computer literacy course. The implication is that it should be possible to use either of the approaches and achieve desirable outcomes. The case being made is that, in designing the induction programme, the designer must consider the challenges that students are likely to experience when participating in a course mediated via the medium of the LMS.

It is important for students to develop the ability to apply skills learned from the induction process to their learning during the course of the semester. The emphasis is on the effectiveness of the induction programme in equipping students with skills as well as the nature of the course for which the skills were acquired. The study calls for a careful consideration of the two aspects necessary for the linking of induction to actual practice.

8.4.2 Future research

This section identifies points emerging from this study which may be a subject of further research in an attempt to contribute to academic knowledge on students' experiences of learning using online support.

A finding from the study is that students were able to learn from each other when cases were analyzed and discussed collectively in the Chat Room. This means that students found it possible to engage in a collaborative and shared construction of understanding. Future research should therefore be directed towards understanding how social engagement with learning happens in the Chat Room, especially between the lecturer and students and amongst students alone. Future research should also seek to identify the benefits and limitations of social engagement in the Chat Room.

The issue of impeded epistemological access to online support and the diverse challenges that come with this deserve further exploration. The implication is that prospective researchers should consider efforts to explore ways by means of which the elementary computer literacy course offered to new students entering university can be changed to include elements of online learning. This could help provide ways to alleviate challenges pertaining to this issue.

The fact that different schooling backgrounds and environmental factors in the school context influenced students' capacities to engage with online-supported learning at the beginning of the semester needs further attention. When students were introduced to the technology without considering their individual schooling backgrounds, they were overwhelmed with the technology as they had to work with a variety of electronic resources. Further research should aim to provide a guide as to how much online support should be considered as adequate in introducing first-time users of the online tool for learning, as well as that to be offered to students at higher levels of their learning. This could help allow faculty to ascertain adequate capacities of online support that match students' abilities at different levels of their learning.

The questions one may necessarily have to pursue in further research could then include "what is the extent of the repository of learning resources?" and "how do students manage the quantity of learning resources such as lecture notes, case studies, work schedules, assignments and additional readings put into this repository?" Students may not have been ready for online-

supported learning in the course offering due to having had limited or no exposure to the way the course was taught. If we are to address that, it is important to ascertain the adequate capacity of online support at different levels of development of students.

This study found that students in BME were able to benefit from the capacity of the online tool to change the size of the text in a texted resource or activity by either increasing or decreasing the font-size. The implication is that students with poor vision may have been accepted for registration at the university without the university learning about this disability. This gives rise to a need for further research that may seek to establish whether universities have sufficient mechanisms to identify students who have such problems. Possible questions that could be pursued may be directed at exploring whether universities should simply accept students on the basis of their having met the minimum entry requirements without considering physical disabilities, and how universities can address previously hidden disabilities such as vision so that students are able to access university programs on equal footings.

The core of the study was confined to students' experiences of online-supported learning in BME. The context of the study had a class of 156 students which is considered to be relatively large in terms of size. The study therefore reports on students' experiences in a particular course offering as a specific context of a particular size. Other contextual factors such as influence of students' prior-learning experiences could not be sufficiently explored as they were not central to the study. Future research should therefore attempt to focus deeply on some elements of online-supported learning in BME such as the rate of student participation in the use of the LMS for learning, and the influence of the availability of operational resources on the achievement of learning outcomes.

8.5 Concluding remarks

The study focused on students' experiences of online-supported learning in BME. This study was conducted in the teacher education institute of a higher education institution located in the outskirts of a particular city. The study implemented relevant methodologies necessary to understand students' experiences of learning using online support.

Findings from this study revealed that students became aware of a special kind of pedagogy that applied when their learning in the course offering was mediated via the medium of the LMS.

While their learning in face-to-face lectures did not require skills and expertise to engage with the technology, it became technologically challenging as soon as it was mediated via the LMS. Participants acknowledged the value of case studies that were discussed in the online space in helping them understand how course content manifests in the outside world. The study therefore suggests the design of programmes to induct students into online-supported learning and also to augment the basic computer-literacy course offered to new students at entry level to incorporate elements of online learning.

The study seeks to propose a shift from traditional ways of teaching and learning in BME, which heavily rely on face-to-face lectures, to include online learning. This could allow lecturers and students to reap the benefits of flexibility in executing teaching and learning in the course. The study suggests that the complexities that come with this approach to learning should be explored to enable consideration of the relevant factors that need to be considered before technology is integrated into a face-to-face course offering. This study has attempted to develop an understanding of what it is like to learn in a course that extends from traditional face-to-face lectures to include an online component, within the context of teacher education. Students in this course offering saw their identities evolving from being onlookers, who may have heard stories about learning using an online facility, to being integrally involved in an online learning experience. These evolving identities were influenced by the immediate environment in which students were located, as well as by challenges brought about by this online-education experience.

Contrary to what is predicted about learning in BME being limited to the content presented in the classroom, and particularly with reference to the lack of awareness about how learning in BME happens when it is conducted via the LMS, students' experiences revealed the reality of the situation. Case-based teaching and learning, the most dominant mode of engaging with the economic theory of the firm, was central to the activities conducted in the LMS in this study. This suggests that the time constraints that inhibit the frequent execution of case based teaching in face-to-face lectures are not a factor when learning is moved to a LMS mediated learning environment. While trying to comprehend students' experiences of learning, students' lack of expertise in negotiating their way into the LMS were also diagnosed in this study. There were

thus both positive and negative elements in student experience when they analyzed and discussed content-relevant cases in the Chat Room.

If BME students were to be taught using only the traditional face-to-face lecture approach and lecturers denied them knowledge that learning can be transacted beyond face-to-face contexts, students as prospective teachers will develop the perception that teaching in BME is limited to face-to-face classroom teaching. As teachers they would be less likely to pursue innovative approaches to learning and will be more likely to resist attempts by the department of education to integrate innovative approaches into existing pedagogy. Such resistance would more likely be triggered by the manner in which they had been trained without being exposed to the use of online technology for teaching and learning. While students may have developed a theoretical understanding of the case-based approach as signature pedagogy in teaching Business Studies, they also need to be conceptually and theoretically aware of how this pedagogy is applied online. For student teachers to develop adequate pedagogical content knowledge, they need to be knowledgeable with both the content of a particular discipline as well as ways by means of which that content can be transmitted to learners in diverse (face-to-face and online) contexts.

References

Abedin, B., Daneshgar, F., & D'Ambra, J. (2010). Underlying Factors of Sense of Community in Asynchronous Computer Supported Collaborative Learning Environments. *MERLOT Journal of Online Learning and Teaching, 6*(3), 585-596.

Akdemir, O., & Koszalka, T. A. (2007). Investigating the relationships among instructional strategies and learning styles in online environments. *Computers & Education, 50*(4), 1451-1461.

Akerlind, G. (2005). Variation and commonality in phenomenographic methods. *Higher Education Research & Development, 24*(4), 321-334.

Akyol, Z., Garrison, D. R., & Ozden, M. Y. (2009). Development of a community of inquiry in online and blended learning contexts *Procedia Social and Behavioural Sciences, 1*, 1834-1838.

Alavi, M., & Gallupe, R. B. (2003). Using Information Technology in Learning: Case Studies in Business and Management Education Programs. *Academy of Management Learning & Education, 2*(2), 139-153.

Alebaikan, R., & Troudi, S. (2010). Online discussion in blended courses at Saudi Universities. *Procedia social and Behavioural Sciences, 2*, 507-514.

Amichai-Hamburger, Y., Kaplan, H., & Dorpatcheon, N. (2008). Click to the past: The impact of extroversion by users of nolstagic websites on the use of Internet social services. *Computers in Human Behaviour, 24*, 1907-1912.

Amichai-Hamburger, Y., Wainapel, G., & Fox, S. (2002). "On the Internet No One Knows I' m an Introvert": Extroversion, Neuroticism, and Internet Interaction. *CyberPsychology & Behavior, 5*(2), 125-128.

Anderson, T., Rourke, L., Garrison, D. R., & Archer, W. (2001). Assessing teaching presence in computer conferencing context. *Journal of Asynchronous Learning Networks, 5*(2), 1-17.

Arbaugh, J. B., Bangert, A., & Cleveland-Innes, M. (2010). Subject matter effects and the Community of Inquiry (CoI) framework: An exploratory study. *Internet and Higher Education, 13*, 37-44.

Arbaugh, J. B., Godfrey, M. R., Johnson, M., Pollack, B. L., Niendorf, B., & Wresch, W. (2009). Research in online and blended learning in the business disciplines: Key findings and possible future direction. *The Internet and Higher Education, 12*(2), 71-87.

Arburgh, J. B., Hwang, A., & Pollack, B. L. (2011). *A review of Research Methods in Online and Blended Business Education: 2000-2009*. University of Wisconsin. Oshkosh.

Arcos, F., Ortega, P., & Amilburu, A. (2009). *Learning English Through An LMS, Face-To-Face Lectures And The Resulting Blend*. Paper presented at the ICT conference for language learning, Spain.

Armatas, C., Holt, D., & Rice, M. (2003). Impacts of an online-supported, resource based learning environment: does one size fit all? *Distance Education, 24*(2), 141-158.

Ashworth, P., & Lucas, U. (2000). Achieving Empathy and Engagement: A practical approach to the design, conduct and reporting of phenomenographic research. *Studies in Higher Education, 25*(3), 295-308.

Asunka, S. (2008). Online Learning in Higher Education in Sub-Saharan Africa: Ghanaian University students' experiences and perceptions. *The International Review of Research in Open and Distance Learning, 9*(3). http://www.irrodl.org/index.php/irrodl/article/view/586/1130

Attard, A., Di Lorio, E., Geven, K., & Santa, R. (2010). Student-centered learning: Time for a Paradigm Change. In A. Attard (Ed.), *Time for a New Paradigm in Education: Student-Centred Learning* (pp. 1-68). Bucharest, Romania.: European Union.

Babbie, E., & Mouton, J. (2001). *The practice of social research: south african edition.* Cape Town: Oxford University Press.

Badat, S. (2008). *Producing, Transforming the Social Composition of, and Retaining a New Generation of Academics: The Rhodes University Programme of Accelerated Development*. Paper presented at the University Leaders Forum, Accra, Ghana.

Badenhorst, J. J. C. (2009). *The Changing Classroom: Managing the Learning Experience with a Learning Management System*. Central University of Technology. Bloemfontein.

Barnard, A., McCosker, H., & Gerber, R. (1999). A Qualitative Research Approach for Exploring Understanding in Health Care. *Qualitative Health Research, 9*(2), 212-226.

Barret, B. F. D., Higa, C., & Ellis, R. A. (2012). Emerging university students' experiences of learning technologies accross the Asia Pacific. *Computers & Education, 58*, 1021-1027.

Bence, V., & Oppenheim, C. (2004). A Comparison of Journal Submissions to the UK's Research Assessment Exercises 1996 and 2001 for UoA 43 (Business and Management Studies). *European Management Journal, 22*(4), 402-417.

Berrell, M., Wrathall, J., & Wright, P. (2001). A model for Chinese management education: adapting the case study method to transfer management knowledge. *Cross Cultural Management: An International Journal, 8*(1), 28-44.

Blewett, C. (2012). e-Learning Terminology Trends - A Lens into Institutional Paradigms? *Alternation, 19*(2), 211-235.

Bliuc, A. M., Ellis, R. A., Goodyear, P., & Piggot, L. (2011). A blended learning approach to teaching foreign policy: Students' experiences of learning through face-to-face and online discussion and their relationship to academic perfomance. *Computers & Education, 56*, 856-864.

Bliuc, A. M., Goodyear, P., & Ellis, R. A. (2007). Research focus and methodological choices in studies into students' experiences of blended learning in higher education. *The Internet and Higher Education, 10*, 231-244.

Blondy, L. C. (2007). Evaluation and Application of Andragogical Assumptions to the Adult Online Learning Environment. *Journal of Interactive Online Learning, 6*(2), 116-130.

Boon, S., Johnston, B., & Webber, S. (2007). A phenomenographic study of English faculty's conceptions of information literacy. *Journal of Documentation, 63*(2), 204-228.

Booth, S. (2008). Researching Learning in Networked Learning. *Proceedings of the 6th International Conference on Networked Learning*.

Boughey, C. (2005). Epistemological access to the university: an alternative perspective. *South African Journal of Higher Education, 19*(3), 638-650.

Bowden, J. A., & Walsh, E. (2000). *Phenomenography: Qualitative Research Methods*. Melbourne: RMIT Publishers.

Brewer, J., & Hunter, A. (1989). *Multimethod Research: A synthesis of style*. Newbury Park, CA: Sage.

Bruce, C., Buckingham, L., Hynd, J., McMahon, C., Roggenkamp, M., & Stoodley, I. (2004). Ways of Experiencing the Act of Learning to Program: A Phenomenographic Study of Introductory Programming Students at University. *Journal of Information Technology Education, 3*, 143-160.

Buchanan, D. A. (2003). Getting the story straight: Illusions and delusions in the organizational change process. *Tamara Journal of Critical Postmodern Organization Science, 2*(4), 7-21.

Caliz, C. (2004). *E-LEARNING: DESIGNING NEW BUSINESS EDUCATION.* (PhD), University of Navarra, Barcelona.

Campbell, D. (1957). Factors relevant to the validity of experiments in social settings. *Psychological Bulletin, 54*, 297-312.

Carrington, V., & Robinson, M. (2009). *Digital Literacies: Social Learning and Classroom Practices*. Thousand Oakes, California: SAGE.

CHE. (2010) Teaching and Learning beyond Formal Access: Assessment through the Looking Glass. Pretoria: The South African Council on Higher Education.

Chen, P. S. D., Lambert, A. D., & Guidry, K. R. (2009). Engaging online learners: The impact of Web-based learning technology on student engagement. *Computers & Education, 54*(4), 1222-1232.

Chick, N. L., Haynie, A., & Gurung, R. A. R. (Eds.). (2012). *Exploring more signature pedagogies: Approaches to Teaching Disciplinary Habits of Mind*. Sterling, Virginia: Stylus Publishing LLC.

Coates, H., James, R., & Baldwin, G. (2005). A critical examination of the effects of learning management systems on university teaching and learning. *Tertiary Education and Management, 11*, 19-36.

Cox, M. Z., Daspit, J., McLaughlin, E., & Jones III, R. J. (2012). Strategic management: Is it an academic discipline? *Journal of Business Strategies, 29*(1), 25-42.

Creswell, J. W. (Ed.). (2003). *Research Design: Qualitative, quantitative, and mixed-methods approaches* (2nd ed.). Thousand Oakes, C.A.: Sage.

Creswell, J. W., & Plano Clark, V. L. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, C.A.: Sage.

Creswell, J. W., & Zhang, W. (2009). The Application of Mixed Methods Designs to Trauma Research. *Journal of Traumatic Stress, 22*(6), 612-621.

Dahlin, B. (2007). Enriching the Theoretical Horizons of Phenomenography, Variation Theory and Learning Studies. *Scandinavian Journal of Educational Research, 51*(4), 327-346.

Dalgarno, B. (1996). *Constructivist computer-assisted learning: theory and technique*. Paper presented at the ASCILITE conference, Adelaide. http://www.ascilite.org.au/conferences/adelaide96/papers/21.html

Day, M. M., Kaidonis, M. A., & Perrin, R. W. (2003). Reflexivity in learning critical Accounting: Implications for teaching and its research nexus. *Critical Perspectives on Accounting, 14*, 597-614.

Debus, M. (1988). *A handbook for excellence in focus group research* (Vol. HEALTHCOM Project special Report Series). Washington, D.C.: Porter/Novelli.

Debus, M. (1990). *Handbook for excellence in focus group research*. Washington, D.C.: Academy for Educational Development.

Dexter, S., & Tucker, P. D. (2010). *Faculty Growth in Implementing Case Methods of Instruction: Implications for A Signature Pedagogy*. University of Virginia.

Donnely, R. (2010). Harmonizing technology with interaction in blended problem-based learning. *Computers & Education, 54*, 350-359.

Drew, L., Bailey, S., & Shreeve, A. (2001). *Phenomenographic research: methodological issues arising from a study investigating student approaches to learning in fashion design*. Paper presented at the Higher Education Close Up Conference 2, Lancaster University.

Duffy, T. M., & Jonassen, D. (Eds.). (1992). *Constructivism and the technology of instruction: A conversation.* Hillsdale NJ: Lawrence Erlbaum Associates.

Education, D. o. (2003). *Draft White Paper on e-Education: Transforming Learning and Teaching through Information and Communication Technologies (ICTs)*. Pretoria: Government Gazette.

Evans, J. R., & Haase, I. M. (2001). Online business education in the twenty-first century: an analysis of potential target markets. *Internet Research: Electronic Networking Applications and Policy, 11*(3), 246-260.

Fabel, O., Hein, M., & Hofmeister, R. (2008). Research Productivity in Business Economics: An Investigation of Austrian, German and Swiss Universities. *German Economic Review, 9*(4), 506-531.

Field, R. M. (2005). *Favourable conditions for effective and efficient learning in a blended face-to-face/online method.* Paper presented at the ascilite 2005 conference proceedings, Queensland.

Fletcher, E. C. (2013). *Signature pedagogies of business and marketing education faculty*. Paper presented at the National Association of Business Teacher Education Conference, Atlanta, GA.

Fung, Y. Y. H. (2004). Collaborative online learning: interaction patterns and limiting factors. *The Journal of Open, Distance and e-Learning, 19*(2), 135-149.

Gamede, T. (2005). *The Biography of "Access" as an Expression of Human Rights in South African Education Policies.* (Doctor of Philosophy), University of Pretoria, Pretoria.

Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical Inquiry in a Text-Based Environment: Computer Conferencing in Higher Education. *The Internet and Higher Education, 2*(2-3), 87-105.

Garrison, D. R., Cleveland-Innes, M., & Fung, T. S. (2010). Explaining causal relationships among teaching, cognitive and social presence:Student perceptions of the community of inquiry framework. *Internet and Higher Education, 13*, 31-36.

Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and Higher Education, 7*, 95-105.

Gautreau, C. (2011). Motivational factors Affecting the Intergration of a Learning Management System by Faculty. *The Journal of Educators Online, 8*(1), 1-21.

Graham, C. R., & Dziuban, C. (2009). *Blended Learning Environments*. University of Central Florida. Florida.

Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis, 11*(3), 255-274.

Hamalainen, R., & Hakkinen, P. (2009). Teachers' instructional planning for computer-supported collaborative learning: Macro-scripts as a pedagogical method to facilitate collaborative learning. *Teaching and Teacher Education, 26*, 871-877.

Harrington, R., & Loffredo, D. A. (2010). MBTI personality type and other factors that relate to preference for online versus face-to-face instruction. *Internet and Higher Education, 13*, 89-95.

Harris, L. R. (2011). Phenomenographic perspectives on the structure of conceptions: The origins, purposes, strengths, and limitations of the what / how and referential / structural frameworks. *Educational Research Review, 6*, 109-124.

Hasselgren, B., & Beach, D. (1997). Phenomenography - a "good-for-nothing brother" of phenomenology? Outline of an analysis. *Higher Education Research and Development, 16*(2), 191-202.

Haverila, M. (2011). Prior E-learning Experience and Perceived Learning Outcomes in an Undergraduate E-learning Course. *MERLOT Journal of Online Learning and Teaching, 7*(2), 206-218.

Higher Education and Training, D. (2014). *Building an Expanded, Effective and Integrated Post-School System*. Pretoria: Department of Higher Education and Training.

Hill, P. (2012) Online Educational Delivery Models: A Descriptive View. (pp. 85-96): EDUCAUSE review.

Hitch, L. P., & MacBrayne, P. (2003). A Model for Effectively Supporting e-Learning. http://ts.mivu.org/default.asp?show=article&id=1034

Ho, C. H., & Swan, K. (2007). Evaluating online conversation in an asynchronous learning environment: An application of Grice's cooperative principle. *The Internet and Higher Education, 10*, 3-14.

Hofstede, G., & Hofstede, G. J. (Eds.). (2005). *Cultures and organizations: Software of the mind.* (2nd ed.). New York: McGraw-Hill.

Howieson, B. (2004). *The use of self-reflective study journals in a post-graduate accounting theory course: a case study*. Paper presented at the IAAER/Southern African Accounting Association Conference, Durban.

Ireland, J., Tambyah, M., Neofa, Z., & Harding, T. (2008). *The tale of four researchers: Trials and triumphs from the phenomenographic research specialization*. Paper presented at the International Education Conference: Education for Sustainable Futures, Brisbane.

Ireland, J., Tambyah, M., Neofa, Z., & Harding, T. (2009, 30th November - 4th December). *The tale of four researchers: Trials and triumphs from the phenomenographic research specialization.* Paper presented at the International Education Conference, Queensland University of Technology: Brisbane.

Jenkins, D. M. (2012). Exploring sygnature pedagogies in Undergraduate Leadership Education. *Journal of Leadership Education, 11*(1), 1-27.

Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. *Administrative Science Quarterly, 24*, 602-611.

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher, 33*(7), 14-26.

Jonassen, D., Davidson, M., Collins, M., Campbell, J., & Bannan Haag, B. (1995). Constructivism and Computer-Mediated Communication in Distance Education. *American Journal of Distance Education, 9*(2), 7-26.

Jones, L. (2007). *The Student-Centered Classroom*. New York: Cambridge University Press.

Joo, Y. J., Lim, K. Y., & Kim, E. K. (2011). Online university students' satisfaction and persistence: Examining perceived level of presence, usefulness and ease of use as predictors in a structural model. *Computers and Education, 57*, 1654-1664.

Kaapu, T., Saarenpaa, T., Tiainen, T., & Paaki, M. (2007). *The Truth is Out There - Phenomenography in Information Systems Research*. University of Tampere.

Kelly, P. (2014). Disruptor, Distracter, or What? A Policymaker's Guide to Massive Open Online Courses (MOOCS): Bellwether Education Partners.

Kose, U. (2010). A blended learning model supported with Web 2.0 technologies. *Procedia - Social and Behavioural Sciences, 2*, 2794-2802.

Krause, K. L., & McEwen, C. (2008). Developing Best Practices for Prospective and New Student Introduction to E-Learning *Student Induction into E-Learning*. Southern Queensland: Griffith Institute for Higher Education.

Krueger, R. A. (1988). *Focus Groups: A practical guide for applied research*. Carlifonia: Sage Publications, Inc.

Kruger, S. (2006). *Students' experiences of e-learning: a Virtual Ethnography into Blended Online Learning.* Paper presented at the Networked Learning Conference, UK.

Kumar, K. (1987). *Conducting focus group interviews in developing countries. A.I.D. Programme Design and Evaluation Methodology Report No. 8.* Washington, D.C.: U.S. Agency for International Development.

Landon, B., Henderson, T., & Poulin, R. (2006). Course/Learning Management Systems, Course Materials Life Cycle, and Related Costs. Massachusetts: Massachusetts Institute of Technology.

Lazakidou, G., & Retalis, S. (2009). Using computer supported collaborative learning strategies for helping students acquire self-regulated problem-solving skills in mathematics. *Computers & Education, 54*, 3-13.

Lee, S. H., Lee, J., Liu, X., Bonk, C. J., & Magjuka, R. J. (2009). A review of case-based learning practices in an online MBA program: A program-level case study. *Educational Technology and Society, 2*(3), 178-190.

Lotz-Sisitka, H. (2009). Epistemological access as an open question in education. *Journal of Education, 1*(46), 57-79.

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Mann, L., Dall' Alba, G., & Radcliffe, D. (2007). Using Phenomenography to Investigate Different Ways of Experiencing Sustainable Design. *American Society for Engineering Education*.

Maphosa, C., Mudziewelwana, N. P., & Netshifhefhe, L. (2014). Curriculum Development in South African Higher Education Institutions: Key Considerations. *Mediterranean Journal of Social Sciences, 5*(7), 355-366.

Marsh, D. (2012). *Blended Learning: Creating Learning Opportunities for Language Learners*. Cambridge: Cambridge University Press.

Marton, F. (1986). Phenomenography: A research approach to investigating different understandings of reality. *Journal of Thought, 21*(3), 28-43.

Marton, F. (1995). Cognosco ergo sum. Reflections on reflections. *Nordisk Pedagogik, 15*(3), 165-180.

Marton, F., & Booth, S. (1997). *Learning and Awareness*. New Jersey: Lawrence Erlbaum.

Marton, F., & Wing, Y. P. (2005). On the unit of description in phenomenography. *Higher Education Research & Development, 24*(4), 335-348.

McAllister, M., & Moyle, W. (2005). An online learning community for clinical educators. *Nurse Education in Practice, 6*, 106-111.

McFarlane, B. (1997). The Business Studies First Degree: institutional trends and the pedagogic context. *Teaching in Higher Education, 2*(1), 45-57.

Merseth, K. K. (1990). *Beginning teachers and computer networks: A new form of induction support*. East Lansing, MI: National Center for Research on Teacher Education.

Miles, M. B., & Huberman, A. M. (1984). *Qualitative Data Analysis: A Sourcebook of New Methods*. Carlifonia: SAGE Publications Inc.

Moreno, L., Gonzalez, C., Castilla, I., Gonzales, E., & Sigut, J. (2007). Applying a constructivist and collaborative methodological approach in engineering education. *Computers & Education, 49*, 891-915.

Morgan, D. L. (1997). *Focus Groups as Qualitative Research*. Thousands Oakes, CA: Sage Publications.

Morse, J. M. (1991). Approaches to qualitative-quantitative methodological triangulation. *Nursing Research, 40*, 120-123.

Moule, P., Ward, R., & Lockyer, L. (2010). Nursing and healthcare students' experiences and use of e-learning in higher education. *Journal of Advanced Nursing, 66*(12), 2785-2795.

Mupinga, D. M., Nora, R. T., & Yaw, D. C. (2006). The Learning Styles, Expectations, and Needs of Online Students. *College Teaching, 54*(1), 185-189.

Nasi, S., & Nasi, J. (1997). Accounting and business economics traditions in Finland - from a practical discipline to a scientific subject and field of research. *Eurpean Accounting Review, 6*(2), 199-229.

Nel, E., & Wilkinson, A. C. (2008). Establishing a preliminary framework for effective blended learning practices in the undergraduate classroom: A South African perspective on selected aspects. *South African Journal of Higher Education, 22*(1), 144-174.

Offir, B., Bezalel, R., & Barth, I. (2007). Introverts, Extroverts, and Achievement in Distance Learning Environment. *American Journal of Distance Education, 21*(1), 3-19.

Onwuegbuzie, A. J., & Collins, K. M. T. (2007). A Typology of Mixed Methods Sampling Designs in Social Science Research. *The Qualitative Report, 12*(2), 281-316.

Ornek, F. (2008). An overview of a theoretical framework of phenomenography in qualitative education research: An example from physics education research. *Asia-Pacific Forum on Science Learning and Teaching, 9*(2), 19-25.

Paakari, L., Tynjala, P., & Kannas, L. (2009). Student teachers' ways of experiencing the objective of health education as a school subject: A phenomegraphic study. *Teaching and Teacher Education, 26*, 941-948.

Park, T., & van der Merwe, A. (2009). The transformative role of ICT in higher education: A case study of the alignment of educational technology utilization with the vision of Stellenbosch University. *South African Journal of Higher Education, 23*(2), 356-372.

Parkinson, E. (2002). *A brief description of an aspect of practice re on-line support for research methods.* Paper presented at the Effective on-line support conference, University of London.

Pasfield-Neofitou, S. (2011). Online domains of language use: Second language learners' experiences of virtual community and foreignness. *Language Learning and Technology, 15*(2), 92-108.

Patton, M. Q. (Ed.). (1990). *Qualitative research and evaluation methods* (2nd ed.). Newbury Park, CA: Sage.

Peeraer, J., & Van Petegem, P. (2010). ICT in teacher education in an emerging developing country: Vietnam's baseline situation at the start of 'The Year of ICT'. *Computers & Education, 56*, 974-982.

Pena-Shaff, J. B., & Altman, W. S. (2009). Case-Based Instruction Using Asynchronous Online Discussions: A synthesis. *Journal on Excellence in College Teaching, 20*(3), 97-121.

Petropoulou, O., Kasimatis, K., Dimopoulos, I., & Retalis, S. (2014). LAe-R: A new learning analytics tool in Moodle for assessing students' performance. *Bulletin of the IEEE Technical Committee on Learning Technology, 1*(1), 2-5.

Potter, B. N., & Johnston, C. G. (2006). The effect of interactive online learning systems on student learning outcomes in accounting. *Journal of Acounting Education, 24*, 16-34.

Powell, J. H., & Wakely, T. M. (2003). Evolutionary concepts and business economics: Towards a normative approach. *Journal of Business Research, 56*, 153-161.

Qiyun, W., & Huay, L. W. (2007). Comparing asynchronous online discussions and face-to-face discussions in a classroom setting. *British Journal of Educational Technology, 38*(2), 272-286.

Reddy, S. (2010). *Experiences of clinical practice in a problem-based learning medical curriculum and subsequent clinical environment* (Doctor of Philosophy), University of KwaZulu-Natal, Unpublished.

Richardson, J. T. E. (1999). The Concepts and Methods of Phenomenographic Research. *Review of Educational Research, 69*(1), 53-82.

Robley, L. R., Farnsworth, B. J., Flynn, J. B., & Horne, C. D. (2004). This New House: Building Knowledge Through Online Learning. *Journal of Professional Nursing, 20*(5), 333-343.

Roehm, S., & Bonnel, W. (2009). Engaging students for learning with online discussions. *Teaching and Learning in Nursing, 4*(1), 6-11.

Rossman, G. B., & Wilson, B. L. (1985). Numbers and words: Combining quantitative and qualitative methods in a single large-scale evaluation study. *Evaluation Review, 9*, 627-643.

Russel, A. L. (2002). MBTI Personality Preferences and Diverse Online Learning Experiences. *School Libraries Worldwide, 8*(1), 25-40.

Saade, R. G., He, X., & Kira, D. (2005). Exploring dimensions to online learning. *Computers in Human Behaviour, 23*, 1721-1739.

Sandberg, J. (1994). *Human Competence at Work*. Goteborg: Grafikerna I Kungalv AB.

Sclater, N. (2008). Web 2.0, Personal Learning Environments, and the Future of Learning Management Systems. *Research Bulletin*(13), 1-13.

Seng, L., & Mohamad, F. S. (2002). Online learning: Is it meant for science courses? *The Internet and Higher Education, 5*, 109-118.

Sharpe, R., & Benfield, G. (2005). The Student Experience of E-learning in Higher Education. *Brookes eJournal of Learning and Teaching, 3*(1), 1-9.

Shea, P., Hayes, S., Vickers, J., Gozza-Cohen, M., Uzuner, S., Mehta, R., . . . Rangan, P. (2010). A re-examination of the community of inquiry framework: Social Network and content analysis. *Internet and Higher Education, 13*, 10-21.

Sieber, S. D. (1973). The integration of fieldwork and survey methods. *American Journal of Sociology, 73*, 1335-1359.

Siemens, G. (2006). Learning or Management Systems? Connectivism. http://www.connectivism.ca/?p=243

Sin, S. (2010). Considerations of Quality in Phenomenographic Research. *International Journal of Qualitative Methods, 9*(4), 305-319.

Smith, M. L. (1986). *The whole is greater: Combining qualitative and quantitative approaches in evaluation studies. In D. D. Williams (Ed.), Naturalistic evaluation (pp. 37-54)*. San Francisco: Jossey-Bass.

Stamouli, I., & Huggard, M. (2007). *Phenomenography as a tool for understanding our students*. Dublin City University. Dublin.

Svensson, L. (1984). Three approaches to descriptive research (D. o. Education, Trans.). Sweden: University of Goteborg.

Svensson, L. (1997). Theoretical Foundations of Phenomenography. *Higher Education Research & Development, 16*(2), 159-171.

Swan, K., & Ice, P. (2010). The community of inquiry framework ten years later: Introduction to the special issue. *Internet and Higher Education, 13*, 1-4.

Tapanes, M. A., Smith, G. G., & White, J. A. (2009). Cultural diversity in online learning: A study of the perceived effects of dissonance in levels of individualism/collectivism and tolerance of ambiguity. *The Internet and Higher Education, 12*, 26-34.

Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.

Terre Blanche, M., Durrheim, K., & Painter, D. (Eds.). (2006). *Research in Practice: Applied Methods for the Social Sciences* (2nd ed.). Cape Town: Universty of Cape Town Press.

Thatcher, A. (2007). Using the World Wide Web to support classroom lectures in a psychology course. *South African Journal of Psychology, 37*(2), 348-353.

Thorpe, M. (2005). The Impact of ICT in Lifelong Learning: In McIntosh, C and Varoglu, Z. (eds.) Lifelong Learning & Distance Higher Education. Paris: UNESCO/COL.

Trank, C. Q., & Rynes, S. L. (2003). Who Moved Our Cheese? Reclaiming Professionalism in Business Education. *Academy of Management Learning & Education, 2*(2), 189-205.

Trigwell, K. (2000). *A phenomenographic interview on phenomenography. In J. Bowden & E. Walsh (Eds.), Phenomenography. (pp. 47-61)*. Melbourne: RMIT University Press.

Uljens, M. (Ed.). (1996). *On the philosophical foundation of phenomenography. In G. Dall'Alba & B. Hasselgren (Eds.), "Reflections on Phenomenography - Toward a methodology?"*. Goteborg: Acta Universitatis Gothoburgensis.

Ullman, J. B. (2006). Structural Equation Modelling: Reviewing the Basics and Moving Forward. *Journal of Personality Assessment, 87*(1), 35-50.

Valtonen, T., Kukkonen, J., Dillon, P., & Vaisanen, P. (2009). Finnish high school students' readiness to adopt online learning: Questioning the assumptions. *Computers & Education, 53*, 742-748.

Visconti, L. M. (2009). Ethnographic Case Study (ECS): Abductive modelling of ethnography and improving the relevance in business marketing research. *Industrial Marketing Management, 39*, 25-39.

Voigt, C., & Swatman, P. M. C. (2006). *Instigating interaction in electronic case-based learning (E-CBL)*. School of Communication and Information Systems University of South Australia, Adelaide.

Vovides, Y., Sanchez-Alonso, S., Mitropoulou, V., & Nickmans, G. (2007). The use of e-learning course management system to support learning strategies and to improve self-regulated learning. *Educational Research Review, 2*, 64-74.

Wakefield, A. B., Carlisle, C., Hall, A. G., & Attree, M. J. (2007). The expectations and experiences of blended learning approaches to patient safety education. *Nurse Education in Practice, 8*, 54-61.

Webb, S. (2006). Can ICT Reduce Social Exclusion? The Case of an Adult's English Language Learning Programme *British Educational Research Journal, 32*(3), 481-587.

Weinberger, A., Stegmann, K., & Fischer, F. (2009). Learning to argue online: Scripted groups surpass individuals (unscripted groups do not). *Computers in Human Behaviour, 26*, 506-515.

Wilson, S. M., Floden, R. E., & Ferrini-Mundy, J. (2002). Teacher Preparation Research: An insider's view from the outside. *Journal of Teacher Education, 53*(3), 190-204.

Wyrostek, F. (2011). *Meeting the Needs of Visual/Verbal Online Finance Students*. Finance. University of St. Francis. St. Francis.

Zhang, Z., & Kenny, R. F. (2010). Learning in an Online Distance Education Course: Experiences of Three International Students *The International Review of Research in Open Distance Learning, 11*(1), 1-9.

Zhao, K., & Chan, C. (2009). *Conceptual, Metacognitive and Collaborative Learning in Computer-Supported Inquiry for Chinese Tertiary Business Students.* Paper presented at the 17th International Conference on Computers in Education, Hong Kong.

Zuvic-Butorac, M., Roncevic, N., Nemcanin, D., & Nebic, Z. (2011). Blended E-Learning in Higher Education: Research on Students' Perspectives. *Issues in Informing science and Information Technology, 8*, 409-429.

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25 January 2012

Mr MA Mtshali (204400664)
School of Social Science Education

Dear Mr Mtshali

PROTOCOL REFERENCE NUMBER: HSS/0016/012D
PROJECT TITLE: Students' experiences of online-supported learning in Business Management Education
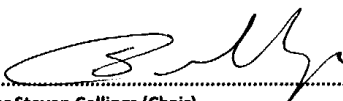
In response to your application dated 12 October 2011, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL.**

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.
PLEASE NOTE: Research data should be securely stored in the school/department for a period of 5 years.

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

Yours faithfully

Professor Steven Collings (Chair)
HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE

cc. Supervisor – Dr SM Maistry and Dr DW Govender
cc. Mrs S Naicker / Mr N Memela

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REQUEST TO AUGMENT EXISTING RESEARCH PROTOCOL

Dear Sir/Madam

I, Muntuwenkosi Mtshali, a registered PhD student at the University of KwaZulu Natal with identity student number 204400664, hereby apply for permission to augment the existing ethical clearance certificate/protocol **Reference number HSS/0016/012** to include the use of questionnaires. The title of the study for which this protocol was granted is "Students' experiences of online-supported learning in Business Management Education".

The rationale for this course of action emanates from the need to extend the triangulation of data sources since interviews had an element of researcher involvement who also happened to be the practitioner. This may have had an impact on the manner in which students responded to interview questions that generated responses that were extraordinary positive.

I hope my request will meet your favourable consideration.

Yours faithfully,

Mtshali, M.A.

Signed: *Mtshali*

Supervisor: Prof. S.M. Maistry

Signed:

Request and consent for participation in a research study:

I, Muntuwenkosi Mtshali, lecturer and student at the University of KwaZulu-Natal, cordially request you to participate in a PhD study in the faculty of education. The details of the proposed study are listed below:

Study Title: Students' experiences of online-supported learning in Business Management Education.

Study Aims:

The purpose of this study is to explore undergraduate students' experiences of learning using online support in Business Management Education. Findings from this study will possibly have implications for future learning practices in higher education.

My contact details:

Office telephone number: (031) 260 3415

Cellular phone number: 072 510 7152

Current qualifications: Master in Education

Degree for proposed study: PhD

School and university: School of Social Science Education of the University of
        KwaZulu-Natal

Contact person: Dr. S.M. Maistry (study supervisor and leader of cluster)

Online-supported learning is a form of blended learning that seek to implement methods that encourage students to use technologies for their own development rather than merely accessing technology (Webb, 2006). This study emerges from the idea that an online-supported learning model that uses Moodle in Business Management Education, constitutes face-to-face classroom practice complemented by an online component, and could allow students and academic practitioners to carry-out learning operations that can effectively be achieved than when regular pedagogies currently available are used (Kose, 2010). It is against this background that the study got my attention as a researcher.

As participant in this study, you will be expected to update an online-reflective journal to record your own experiences of learning in an online-supported learning environment during the course of the academic semester. You will also participate in a one-hour interview as well as once in an hour-long focus group-discussion with other co-students subsequent to completion of the reflective journal. This is likely to take approximately four hours of your time during the semester to cover two intervals at which the journals will be updated, once each month between March and May and an hour-long focus group-discussion, and a one-hour interview.

The benefits you are likely to gain include opportunities to experience how the research process, from a participant's perspective, unfolds. As you would have engaged in learning using online support technologies, your horizon regarding the approaches to learning will widen and as a future teacher, you will be in a position to engage your learners with these ways of learning.

I will bear all expenses associated with this study so that participants will not have to use their resources, may it be financial or physical, in participating in this study. I will cordially ask for participants' permission for the use of audio (voice) recorders to have interview proceedings recorded, and of course I will explain their rights to decide whether they want to allow this or not.

All written transcripts from journals, group discussion and interviews will be shredded once the study has been completed and the theses accepted while recorded cassettes will be submitted to the institution with the theses. I will ensure that your identity is protected and you remain anonymous by using a pseudonym. Whatever you say will be dealt with a great measure of confidentiality so that nothing that you say can be linked back to you.

You have a right to decide whether you want to participate in this project or not, as participation is voluntary and you also have a right to withdraw from participation at anytime as you see necessary without being disadvantaged in any way. In the event that you are willing to participate, please indicate by completing the following declaration.

I…………………………………………………………….. (full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

SIGNATURE OF PARTICIPANT   DATE

…………………………………………………………………………......

Focus Group-Discussion Schedule

Welcome ladies and gentlemen to this group-discussion that focuses on your learning in Business Management Education 310 during the previous semester. This discussion follows-up to the personal reflective-journals you updated during the course of the previous semester when you experienced with online-supported learning. Questions on which this discussion will be based will not have correct or incorrect answers as they seek to engage with your experiences of learning in Business Management education 310. Dr. …….. has joined us as a second researcher who will record deliberations and also help moderate the process. Does anyone wishes to comment or ask a question? ….. We will then proceed

Some of you ladies and gentlemen indicated in the online reflective-journals that the resources you received as online support in the form of work schedules and lecture notes assisted your learning. Would you please tell me?

1. In what ways would you say work schedules / programmes uploaded online helped or did not help you learn?
2. What would you say work schedules circulated online did not provide / failed to cater for as a learning resource?
3. What would be your comment on how you accessed or were unable to access these work schedules?
4. What do you think could have been the contribution of lecture notes to your learning?
5. What would be your comment on the time at which these notes were posted to you?
6. What would be your comment on how you accessed or were unable to access these lecture notes?

Learning online in support of face-to-face lectures in the lecture-room may have impacted on your learning. Tell me:

7. What impact/effect did online learning have on your learning before attending the face-to-face lecture?
8. What impact/effect did online learning have on your learning after the face-to-face lecture in the lecture-room?

9. What relationship would you say existed between activities you accomplished online and face-to-face lectures?

Some of you in the online reflective-journals cited online chats and/or the chat-room as a space that enabled them to learn from each other. Tell me:

10. What are your views on this?

11. What learning tasks did you engage with using online chats?

12. What are your views on online chats extending or not extending opportunities for self-expression?

13. What are your views on the capacity of online chats to promote individual attention?

14. When seeking clarity on something during the chat session, if you did, who often provided this clarity?

15. Could you tell me a little more about how this often happened?

16. When you feel that a paragraph has been exhausted and nothing has been left undone in the case studied through online chats, what do you often do as students?

17. Could you comment on how you as students, were also able or not able to get the opportunity to facilitate/drive the proceedings during the chat session?

Online discussion forums were also cited in the reflective journals as a learning space for students to explore important business-related topics and issues happening in the business world.

18. Could you please throw light or comment on this?

19. And with regards to practice questions that were circulated via this forum?

20. What would be your comments/views on the method of submitting tasks using the LMS?

21. Did this method impact on your development?

22. What will be your views on feedback from the lecture when you had previously posted?

Some of you ladies and gentlemen seem to have had a low participation rate in the LMS, based on the number of "hits" in the "all logs" file

23. What would you say may have been the cause of this?

24. Based on the content of your personal reflect-journals, regular loggers viewed the learning space as constituting three activity spaces, viz. the News Forum, Discussion Forum and the Chat-room, with moderate loggers viewing this as a two-activity space

and irregular loggers seeing it as a one-activity space. What is your comment/opinion on this?

Thank you ladies and gentlemen. You will soon be getting the transcripts of this discussion for you to check if this is a true reflection of what transpired during the session. **Once more thank you so much!**

<u>Researchers' Interview Schedule</u>

Participant No: ----------	**Age:**----------------	**Gender:**-------------------
Race:--------------------	**Subject Specializations:**---	
Key Research Question		

Good morning/day/afternoon/evening/ …….and thank you for attending this interview session. Knowing that you have learned Business Management Education 310 using online support through the Moodle learning management system (LMS), you are the most suitable and knowledge-able person from which one can learn/know about this kind of learning. All I want to know about is your experiences of online-supported learning in Business Management Education; nothing more and nothing less. The questions I am going to ask do not have wrong or right answers as they seek to establish your very own experiences. Starting with the first set of questions on your personal biography, tell me;

Biographical questions:

1. Where did you grow up? Which school did you attend?

   - Did your school have computers?

   - How often per week did you use computers?

   - Can you briefly describe the purpose for which you used computers?

2. If your school did not have computers

   - How did you manage when you first came to UKZN?

   - Did you feel that you were ready for the Business Management module – online work in particular?

   - Did you know how to maneuver/negotiate/manage your way on the module window? How did you learn this?

 Business Management Education-related questions:

3. Do you think that Business Management Education as a module is suited for online-supported learning? Why do you think so?

4. Which online spaces were you able to access in the Business Management Education 310 module window?

Cognitive development

- Briefly explain how have your writing skills been influenced by online-supported learning?

- Briefly explain how have your reading skills been influenced by online-supported learning?

- How have your thinking skills been influenced by online support

- Are you reading more or less often than previously?

- How has online support helped or not helped you develop positive reading habits?

- If you have conducted tasks online, how was it like to engage with tasks using online support in Business Management Education?

- If you have conducted tasks online, how often have you done this using online support in Business Management Education?
  - How have these tasks helped or not helped you learn?

- If you have received any learning material online, what kind of material have you received as online support to conduct learning tasks?
  - How was it like to access this materials or online support?

- What resources (technology) do you think are essential for you to engage with online-supported learning in Business Management Education?
  - Could you explain how accessible these resources are to support your learning?

- How well did you/did you not achieve the outcomes of learning (successful completion of tasks, passing tests, develop understanding of the module) using online support in Business Management Education?

- If you were stuck on something while learning online, who did you turn to for help?

- If you were the Business Management Education lecturer, what would you do to improve online-supported learning? technical

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- Could you explain whether you feel that online support has helped or not helped you achieve higher marks in Business Management Education?

- Do you think that the online submission of assignments is working for you or not? Why?

- What are your feelings towards Turn-it-in? How has this helped or not helped your academic development as a student?

- Why would you say online support offered/did not offer you extended learning opportunities in Business Management Education?

- Why would you say you have benefitted or not benefitted from discussing tasks online in Business Management Education?

- Why would you say online support offered or did not offer you a platform for clarifying learning problems with your teacher or fellow students as compared to face-to-face learning in class?

- Why did you/did you not learn using online conversations in Business Management Education? In other words, why did you have or did you not have to consult online with your teacher?

- If you happened to miss a lecture due to your absenteeism, how did you catch-up with what was done in the lecture?

- If you happened to miss a lecture due to strikes on campus, what did you do?

- If you were in class and some disturbances occur (cell-phone ringing) while the lecturer was presenting and you happened to miss something that was said by the lecturer, what did you do?

- Some of you indicated that they did not participate in lectures, what do you think caused this? What did you do to address, may be, a question you should have asked in class but didn't?

- Students expressed varied feelings with regards to the promptness or quickness of feedback from the lecturer, what would be your comment on this?

Independent Interviewer's Schedule

Participant No: ----------   **Age:**----------------   **Gender:**-------------------
Race:--------------------   **Subject Specializations:**--
Key Research Question

Good morning/day/afternoon/evening/ …….and thank you for attending this interview session. As you may know me, my name is ………., a member of the campus students' representative council (SRC) as well as the central SRC. I am conducting these interviews on behalf of a PhD student Mr. Mtshali in my capacity as an independent researcher. Knowing that you have learned Business Management Education 310 using online support through the Moodle learning management system (LMS), you are the most suitable and knowledge-able person from which one can learn/ draw knowledge about this kind of learning. All I want to know about is your experiences of online-supported learning in Business Management Education; nothing more and nothing less. The questions I am going to ask do not have wrong or right answers as they seek to establish your very own experiences. Starting with the first set of questions on your personal biography, tell me;

Biographical questions:

5. Where did you grow up? Which school did you attend?
    - Did your school have computers?
    - How often per week did you use computers?
    - Can you briefly describe the purpose for which you used computers?

6. If your school did not have computers
    - How did you manage when you first came to UKZN?
    - Did you feel that you were ready for the Business Management module – online work in particular?
    - Did you know how to maneuver/negotiate/manage your way on the module window? How did you learn this?

Business Management Education-related questions:

7. Do you think that Business Management Education as a module is suited for online-supported learning? Why do you think so?

8. Which online spaces were you able to access in the Business Management Education 310 module

window?

Cognitive development

- Briefly explain how have your writing skills been influenced by online-supported learning?
- Briefly explain how have your reading skills been influenced by online-supported learning?
- How have your thinking skills been influenced by online support
- Are you reading more or less often than previously?
- How has online support helped or not helped you develop positive reading habits?
- If you have conducted tasks online, how was it like to engage with tasks using online support in Business Management Education?
- If you have conducted tasks online, how often have you done this using online support in Business Management Education?
  - How have these tasks helped or not helped you learn?
- If you have received any learning material online, what kind of material have you received as online support to conduct learning tasks?
  - How was it like to access this materials or online support?
- What resources (technology) do you think are essential for you to engage with online-supported learning in Business Management Education?
  - Could you explain how accessible these resources are to support your learning?
- How well did you/did you not achieve the outcomes of learning (successful completion of tasks, passing tests, develop understanding of the module) using online support in Business Management Education?
- If you were stuck on something while learning online, who did you turn to for help?
- If you were the Business Management Education lecturer, what would you do to improve online-supported learning? technical

- Could you explain whether you feel that online support has helped or not helped you achieve higher marks in Business Management Education?
- Do you think that the online submission of assignments is working for you or not? Why?

- What are your feelings towards Turn-it-in? How has this helped or not helped your academic development as a student?

- Why would you say online support offered/did not offer you extended learning opportunities in Business Management Education?

- Why would you say you have benefitted or not benefitted from discussing tasks online in Business Management Education?

- Why would you say online support offered or did not offer you a platform for clarifying learning problems with your teacher or fellow students as compared to face-to-face learning in class?

- Why did you/did you not learn using online conversations in Business Management Education? In other words, why did you have or did you not have to consult online with your teacher?

- If you happened to miss a lecture due to your absenteeism, how did you catch-up with what was done in the lecture?

- If you happened to miss a lecture due to strikes on campus, what did you do?

- If you were in class and some disturbances occur (cell-phone ringing) while the lecturer was presenting and you happened to miss something that was said by the lecturer, what did you do?

- Some of you indicated that they did not participate in lectures, what do you think caused this? What did you do to address, may be, a question you should have asked in class but didn't?

- Students expressed varied feelings with regards to the promptness or quickness of feedback from the lecturer, what would be your comment on this?

APPENDIX G: CONSENT FORM AND QUESTIONNAIRE

<u>**CONSENT FORM: STUDENT'S EXPERIENCES OF ONLINE**</u>

<u>**University of KwaZulu-Natal**</u>

My name is Muntuwenkosi Mtshaliand I am a PhD student in education at the University of KwaZulu-Natal. I am conducting research on Students' experiences of online – supported learning in Business Management Education. My research includes an empirical component of which this questionnaire is one of the research instruments used for data gathering.

The purposes of this questionnaire are as follow.

- Firstly, it will enable to evaluate the online supported learning as an education tool.
- Secondly, it will provide data which will help us to improve teaching and learning.

Please note:

- The data you provide will be recorded anonymously and your participation in this study will be held in the strictest confidence. If a summary of the results is used for educational or publication purposes, individuals will not be identified.
- Your participation in this research is entirely voluntary and you can withdraw from the survey at any time.
- You have the right to ask questions before, during and after the administration of this questionnaire.

I shall appreciate it if you assist the project by filling the attached questionnaire.

Informed Consent

I hereby give my permission for the use of my views and opinions for research purposes.

....

Signature   **Date**

My Email is mtshalim1@ukzn.ac.za

Thank you so much

I- PROFILE OF THE RESPONDENT

Q.1. Gender:

Male	1	Female	2

Q.2. Race:

African	1	Indian	2	White	3	Coloured	4

Q.3. First language:

English 1	IsiZulu 2	Other...

Q.4. Age:

Q.5. Years of Post – Secondary Schooling

One year	Two years	Three years	Four years or more
1	2	3	4

Q.6. How many Modules have you taken with an online component?

Zero	One	Two	Three or more
1	2	3	4

Q.7. Please estimate the number of hours you spend per week using a computer for educational purposes

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Q.8.Please estimate the number of hours you spend per week online (for example, exploring the Internet, YouTube, Facebook, etc.)

Q.9.Do you have Internet access?

| Yes | 1 | No | 2 |

Q.10. If yes, where do you access the Internet?

On campus only	On campus and at home or res	Elsewhere, please specify…………………………………………………
1	2	

II- ONLINE – SUPPORTED LEARNING

Q.12. Please read carefully the following statements and thenindicate your position about each one

Initial Complexities

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I experienced a lot of problems with logging onto the system in the beginning	1	2	3	4	5
Though it was a bit problematic at an early stage, I did find my way which wasn't really difficult	1	2	3	4	5
I had problem logging into the system	1	2	3	4	5
I was able to log onto the system with the help from my friends who took the module the previous year	1	2	3	4	5
After the process was demonstrated by the lecturer, I was able to log on	1	2	3	4	5

Social Presence or Functionality	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
As students we helped each other by way of interacting with one another in the chat	1	2	3	4	5
Online, I answered questions on my own without being given the opportunity to share ideas with other students	1	2	3	4	5
I was able to integrate with and pose questions to other students online	1	2	3	4	5
When I asked the question, not only the lecturer but also other students would see that question and try to respond	1	2	3	4	5
The chat session is where I could express myself and see what other people say	1	2	3	4	5

The Safety – Net Effect

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
If I did not hear something in class, I could seek clarity online	1	2	3	4	5
I could submit my work online in case I could not be on campus due to strikes.	1	2	3	4	5
If I lose a hard copy of the work schedules I can go back again and re-print it from my profile	1	2	3	4	5
If I missed the chat session, I could go back to previous chats and I could learn from questions and answers that were discussed in the Chat	1	2	3	4	5
If I missed lectures due to absenteeism, I could refer to lecture notes in my profile and consult with the lecturer online	1	2	3	4	5

Detection of plagiarism
and plagiarism aversion

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I do not like to submit online because Turn-it-in reports that I have plagiarized even when I have cited and referenced	1	2	3	4	5
If I use a certain word repeatedly in my work, Turn-it-in will see this as plagiarism	1	2	3	4	5

Plagiarism is compounded by submitting the same work twice, meaning that Turn-it-in does not provide for second chances	1	2	3	4	5
Turn-it-in inculcates in students the habit of complying with academic standards of writing	1	2	3	4	5
I like Turn-it-in submission because it issues proof of submission	1	2	3	4	5

Administrative Support	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Learning resources uploaded and received online included lecture notes, assignment guidelines, case-studies and work-schedules.	1	2	3	4	5
I received announcements and module updates through the News Forum	1	2	3	4	5
Students are often not informed that lecture notes have been posted	1	2	3	4	5
When new and urgent matters arose, the lecturer communicated this to me through the online space	1	2	3	4	5
Without online support, I wouldn't be as informed about the course as I was	1	2	3	4	5

Emancipation of the Introverts

I find it more comfortable to ask questions online than in a face-to-face lecture	1	2	3	4	5
Responding to the lecturer's questions in a face-to-face lecture makes me scared	1	2	3	4	5
I feel shy to make comments during the face-to-face lecture	1	2	3	4	5
My level of English competence discourages me from participating in the lectures	1	2	3	4	5
I prefer asking questions in face-to-face lectures than online	1	2	3	4	5

Actual use of the online tool

I used online support to communicate with my lecturer	1	2	3	4	5

I used online support to do a learning task collaboratively	1	2	3	4	5
I used online support to do a learning task individually	1	2	3	4	5
I used online support to gather information	1	2	3	4	5
I used online support to communicate learning with other students	1	2	3	4	5

Thank you so much for your participation

APPENDICS H   **PERSONAL REFLECTIVE JOURNALS**

2012 EDBU310E1 Business Management 310

Jump to... ▼	QTzuoBDd4c

- **Learning@UKZN**
- / ► **2012|EDBU310|EA|1**
- / ► **Journals**
- / ► **Reflections on online-supported learning**

75288	true	QTzuoBDd4c	Update this Journal

This journal is for purposes of enabling students to reflect on their experiences of learning using online support. The following questions serve as a guide to students' reflections.

1. Which online space/s or forums did you use for online interaction/communication with your teacher and/or peers?

2. What did you do in this space? (announcements, consultations, discussion, etc.)

3. What type of learning material or resources did you receive for learning? (Lecture notes, newspaper articles, journals, work-schedules, assignment guidelines, assignment rubrics, etc.)

4. Do you think this online material was of any use to you? Why?

5. In what ways would you say online communication was useful/not useful to you

6. Why would you say it is necessary/not necessary to use online support for learning in a course where face-to-face lectures are conducted?

7. Would you recommend that something be done to improve online support in Business Management Education 310?

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Editing period has ended: Thursday, 3 May 2012, 12:00 AM

Moodle Docs for this page

You are logged in as Muntuwenkosi Mtshali (Logout)

2012|EDBU310|EA|1

- Validate HTML

- Section 508 Check

- WCAG 1 (2,3) Check

Request for permission to conduct research in the faculty of education:

To: the Dean of Education
   Prof. Michael Samuel

I, Muntuwenkosi Mtshali, student and lecturer at the University of KwaZulu-Natal, cordially request you to allow me to conduct a PhD study in the faculty of education. The details of the proposed study are listed below:

Study Title: Students experiences of online-supported learning in Business Management Education.

Study Aims:
The purpose of this study is to explore undergraduate students' experiences of online-support in Business Management Education. Findings from this study will possibly have implications for future learning practices in higher education.

My contact details:
Office telephone number: (031) 260 3415
Cellular phone number: 072 510 7152
Current qualifications: Master in Education
Degree for proposed study: PhD
School and university: School of Social Science Education of the University of
                         KwaZulu-Natal
Contact person: Dr. S.M. Maistry (study supervisor and head of school)

Online-supported learning is a form of blended learning that seek to implement methods that encourage students to use technologies for their own development rather than merely accessing technology (Webb, 2006). This study emerges from the idea that an online-supported learning model that uses Moodle in Business Management Education, constitutes face-to-face classroom practice complemented by an online component, and could allow students and academic practitioners to carry-out learning operations that can effectively be achieved than when regular pedagogies currently available are used (Kose, 2010). It is against this background that the study got my as a researcher.

Rationale:
I am a Business Management Education lecturer who assumed duties on the 1st of February 2010 and, realizing that teaching large classes posed a challenge with regards to meeting students during consultation times as these times often did not suit all students, I developed an idea to engage with students outside normal lecture times. Having tried a learning management system, in this case Moodle for this purpose, I am now exploring online-supported learning using Moodle as a means to enhance student learning in Business Management 2nd year level, while also extending students' access to diverse ways of learning. Findings from this study are, therefore, meant to inform future learning practices in higher education.

Thanking you in advance

Yours truly,
M.A. Mtshali.