

Table of contents

3.1.	Prelude	95
3.2.	Introduction	95
3.3.	RESEARCH PROBLEM AND MOTIVATION FOR THE STUDY	96
3.4.	PURPOSE AND OBJECTIVES OF THE STUDY	96
3.5.	RESEARCH QUESTIONS	97
3.6.	RESEARCH PARADIGM	99
3.7.	RESEARCH APPROACH	101
3.8.	RESEARCH STRATEGY	103
3.9.	RESEARCH DESIGN	107
3.10.	RESEARCH DESIGN – THE CASE STUDY IN QUESTION	109
3.11.	DATA COLLECTION METHODS AND DATA COLLECTION INSTRUMENTS	111
3.12.	WHEN ADMINISTERED AND WHO CONDUCTED?	131
3.13.	TRUSTWORTHINESS AND AUTHENTICITY	133
3.14.	CONCLUSION	134

3.1. Prelude

A research design is the logic that links the data to be collected to the initial questions of a study (Yin, 1989:27).

3.2. Introduction

The research problem emphasises the necessity to know what different roles the online facilitator needs to play in the online environment as well as to identify which competencies the online facilitator needs to function in the online environment. The intellectual puzzle (Mason, 2002:13) is presented in the form of the research question, the research objectives and subsidiary questions. A research strategy and research design are created to address the research questions. Observer participant observation, various written texts, a face-to-face interview and a group focus interview were selected as data collection methods. Each method, with its corresponding data collection instrument, is described in terms of objectives, preparatory work, advantages, disadvantages and corrective measures put in place to counteract the disadvantages. All data gathered was in preparation for the pivotal Work Profiling System session, which is described in detail in Chapter 4. To ensure trustworthiness and authenticity in the study, member checks, peer reviews, crystallization and investigator triangulation were employed. The chapter ends with information on the various assistants used by the researcher, their duties and preparation for their respective tasks.

3.3. Research problem and motivation for the study

The implementation of online learning has forced organisations to change their way of work. Dobbs (2000a) poses a warning about the implementation of online learning. The perceptions of the advantages of Internet technologies for training have motivated organisations to rush to adopt online learning regardless of whether they had a clear reason to do so (and no one wanted to find out what was happening, but no one dared to get left behind). The core problem of this study is that classroom facilitators, instructors and trainers are nervous to take the step toward online facilitation, as they do not know what is expected of them in this new online environment. It implies that traditional trainers need to step outside their comfort zone into a relatively new territory and the trainers need help in this area (Xebec McGraw-Hill, 2001:13). Trainers have always played a vital role in the learning arena and the introduction of Internet-driven learning methods should complement what trainers' offer, not eliminate the need for them.

It is for this reason that it is imperative to know what the online facilitator does in terms of fulfilling various roles to increase visibility as well as to identify which competencies the online facilitator needs to function in the online environment. The suitable person needs to be selected for this role.

3.4. Purpose and objectives of the study

The purpose of this research, as was stated in Chapter 1, is to identify what different roles the online facilitator plays in the online environment in order to be able to identify which competencies the online facilitator needs to function in the online environment.

Given the purpose, the objectives are inter alia:

- To describe what the online facilitator did in the online environment.
- To investigate the various roles that the online facilitator played to be 'visible' in the online environment.
- To scrutinise the challenges that an online facilitator needs to faced.
- To design a Work Profiling System (WPS) Person Specific Report for the online facilitator from the most job-relevant competencies, based upon an analysis of the tasks, activities and work context that comprise this job.

3.5. Research questions

From the objectives, the following questions emerge:

- How did the facilitator adjust to the online environment?
- How did the online facilitator 'talk' to the learners and encourage dialogue with the learners?
- What roles did the online facilitator play to be 'visible' in the online environment?
- What challenges did the online facilitator face?
- What people competencies were identified for the online environment?
- What thinking competencies were identified for the online environment?
- What energy competencies were identified for the online environment?

The main research question and the essence of the enquiry (Mason, 2002:13) can be summarised as follows:

What are the roles and competencies of an online facilitator?

The intellectual puzzle (Mason, 2002:13) is represented in Table 3.1. At a glance the main research question is indicated with the research objectives and clearly formulated research subsidiary questions.

 Table 3.1:
 The intellectual puzzle for this study

Research question	Research objectives	Subsidiary questions
What are the roles and	To describe what the online facilitator did in the online environment.	How did the facilitator adjust to the online environment?
competencies of the online facilitator?		How did the online facilitator 'talk' to the learners and encourage dialogue with the learners?
	To investigate roles that will increase the 'visibility' of the online facilitator.	What roles did the online facilitator play to be 'visible' in the online environment?
	To scrutinise the challenges that the online facilitator faced.	What challenges did the online facilitator face?
	To design a Work Profiling System (WPS) Person Specific Report for the online facilitator based upon an analysis of the tasks, activities and work context	What people competencies were identified for the online environment?
	that comprise this job.	What thinking competencies were identified for the online environment?
		What energy competencies were identified for the online environment?

3.6. Research paradigm

Linking research and philosophical traditions helps to illustrate different research orientations (Merriam, 1998:3). The research philosophy depends on the way you think about the development of knowledge (Saunders, Lewis & Thornhill, 2000:84) or about the production of knowledge (Merriam, 1998:3). Carr and Kemmis (1986) distinguish between three basic forms of educational research, namely positivist research, interpretive research and critical research. Knowledge gained in positivist research is objective and quantifiable. Knowledge gained in critical research is an ideological critique of power, privilege and oppression (Carr & Kemmis, 1986). In the interpretive approach the researcher does not stand above or outside, but is a participant observer (Carr & Kemmis, 1986:88), seeking to discern the meanings of actions as they are expressed within specific social contexts. The purpose of interpretive social science is not to provide causal explanations of human life, but rather to deepen and extend the knowledge of why social life is perceived and experienced in the way that it is (Carr & Kemmis, 1986:90). Figure 3.1 graphically represents the study as adapted from the Burrel and Morgan (1979:22) sociological paradigms.

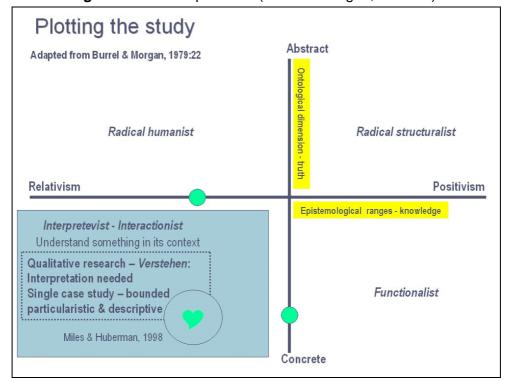


Figure 3.1: Interpretivism (Burrel & Morgan, 1979:22)

According to Burrel and Morgan (1979:22-23), the functionalist paradigm views the social world as consisting of concrete artefacts and relationships that can be identified, studied and measured through natural sciences from an objectivist point of view. The

University of Pretoria etd – Adendorff, D E (2004)

Chapter 3:

Research design and methodology

interpretive paradigm is concerned with understanding the world as it is. Interpretivism views the social world from subjective experiences of individuals. The radical humanist paradigm also views the social world from an ideographic perspective, as does the interpretive paradigm, but the frame of reference focuses on overthrowing the limitations of existing social structures. The radical structuralist paradigm focuses on structural relationships within a social world, providing explanations for the basic interrelationships within the context of social formations. The radical structuralist paradigm is concerned with radical change and emancipation. This study is situated in the interpretivist paradigm.

Interpretivism, as used in this study, is summarised in Table 3.2 in respect of the purpose of the research, the nature of reality (ontology), nature of knowledge and the relationship between the inquirer and the inquired-into (epistemology) and the methodology used (Cantrell, 2001).

Table 3.2: Interpretivism

Feature	Description	
Purpose of research	Understand and interpret daily occurrences and social structures and meaning people give to the phenomena of online facilitation.	
Nature of reality (ontology)	 Reality is concrete and can be explored. There are multiple and different constructs / realities. Explore meaningful actions, interactions and behaviours. Reality is constructed through human interaction. Discover how people make sense of their social worlds in the natural setting by means of daily routines, conversations and writings while interacting with others around them. These writings could be text and visual pictures. Many social realities exist due to varying human experience, including people's knowledge, views, interpretations and experiences. Inquiry is not a matter of offering interpretations of reality, but one of offering interpretations that become reality, to the extent they are agreed upon (Smith, 1989:171 – my emphasis). 	

Table 3.2: Interpretivism

Feature	Description	
Nature of knowledge / relationship between inquirer and inquired-into (epistemology)	 Events are understood through the mental process of interpretation that is influenced by and interacts with social context. Those active in the research process socially construct knowledge by experiencing the real life or natural setting. Inquirer and the inquired-into are interlocked in an interactive process of talking and listening, reading and writing. More personal, interactive mode of data collection. 	
Methodology	Processes of data collected by text messages, interviews, reflective sessions – research is a product of the values of the researcher.	

3.7. Research approach

A qualitative research approach was conducted because the aim of this research was to study events in their natural setting in an attempt to interpret phenomena in terms of the meaning people bring to them (Greenhalgh & Taylor, 1997). This approach was derived from the humanities with an emphasis on holistic information and **interpretive approaches** to be able to **Verstehen** (Husén, 1999:32 – my emphasis) – understanding something in its context. This was applicable to the study as the researcher is investigating the online facilitator in a natural setting in order to arrive at understandings and interpretations of how the facilitator and learners create and maintain their social worlds.

The word 'qualitative' implies an emphasis on the qualities of entities and on processes and meaning that are **not** experimentally examined or measured in terms of quantity, amount, intensity or frequency (Denzin & Lincoln, 1995:8 – my emphasis). Qualitative researchers stress the socially constructed nature of reality, the intimate relationship between the researcher and what is being studied and the situational constraints that shape the research (Denzin & Lincoln, 1995:8).

Savenye and Robinson (1996:1172) define qualitative research as follows:

... research devoted to developing an understanding of human systems ... qualitative research systems typically include ethnographies, case studies and generally descriptive studies.

This is applicable to the study that is in the form of a case study.

Bogdan and Biklen (1992), Creswell (1998) and Merriam (1988) provide characteristics for qualitative research. These characteristics are summarised in Table 3.3.

Table 3.3: Characteristics of qualitative research

Characteristics	Bogdan & Biklen (1992)	Creswell (1998)	Merriam (1998)	This study
Natural setting as source of data	✓	√	✓	The online environment
Researcher as key instrument of data collection	√	√	-	ObserveSelect, analyse and synthesis textsInterview
Data collected as words or pictures	✓	✓	✓	Words, emoticons and sound files
Outcome as process rather than product	*	√	√	Online facilitator follows certain processes and CyberSurfiver was about process rather than product
Inductive analysis, paying attention to particulars	√	√	✓	•
Focus on participants' perspectives and meaning	√	√	✓	Focus group interview and face-to-face interview

[•] The inductive approach followed (Saunders *et al.* 2000:91), emphasised the following:

- Gaining an understanding of the meaning participants attached to the events.
- There was a close understanding of the research context and there was a rich collection of qualitative data.
- A realisation that the researcher was part of the research process.
- Less concern with the need to generalise.

Creswell (1998) also explains that qualitative research is selected because of certain reasons, *inter alia*:

The research question often starts with a how or a what, as is the case for the study.

- The topic needs to be explored. In this study there are a variety of variables and the online facilitator's behaviour cannot be explained by means of a theory. More knowledge needs to be gained about the topic.
- Qualitative research emphasises the researcher's role as an active learner, which
 is so true as the researcher is no expert who can pass judgment but needs to live
 very closely to the online facilitator under research.

Bearing the above in mind and reflecting on the research question, it was appropriate that the qualitative approach was used for this study because it focused on the subjective experiences of the individual and it was sensitive to the contexts in which people interact with each other (Mouton, 2001).

3.8. Research strategy

The research strategy is a general plan of how you will go about answering the research questions you have set (Saunders *et al.* 2000:92). The selected strategy is a case study. Miles and Huberman, quoted by Merriam (1998:27) think of the case as:

a phenomenon of some sort occurring in a bounded context.

According to Merriam (1998:27), Miles and Huberman graphically present 'the case' as a circle with a heart in the centre – the heart is the focus of the study and the circle defines the edge of the case: *what will not be studied*. Figure 3.2 is my graphical interpretation of the written bounded context, according to Miles and Huberman.

Figure 3.2: A bounded context according to Miles & Huberman



Similarly, Stake (1995) and Creswell (1998) indicate that a case study must have boundaries. To ascertain whether the study is ring-fenced, Merriam (1998:27) suggests that the researcher asks how finite the data collection would be:

Is there a limit to the number of people involved who could be interviewed?

Or

Is there a finite amount of time for observations?

Both these questions can be answered in the affirmative. The case study in question involved 24 learners and one online facilitator and observations could only be made for a six-week period, suggesting that there is a clear starting and ending point.

The case study, per definition, contains special features (Merriam, 1998; Shaw, 1978; Creswell, 1998). Table 3.4 provides a summary of these special features, which are particularistic, descriptive and heuristic.

Table 3.4: Special features of a case study

Particularistic

Description (Merriam, 1998; Shaw, 1978; Creswell, 1998)

Focus on a particular situation or event. This specificity makes it an especially good design for practical problems – for questions and situations arising form everyday practice:

- It can suggest what to do or what not to do in a similar situation.
- It can examine a specific instance, but highlight a general problem.

This study

Focus on the online facilitator and her interactions and challenges with the learners in the virtual environment in terms of coping with tight deadlines, numerous e-mail messages and dysfunctional teams.

- On reflection, the online facilitator suggested what would remain the same in the course and suggested changes for future usage.
- This case study examined CyberSurfiver particulars, but highlighted general online facilitation challenges.

Table 3.4: Special features of a case study

Descriptive

Description (Merriam, 1998; Shaw, 1978; Creswell, 1998)

The end product of a case study is a thick description of the phenomenon being studied – it includes many variables and portrays interaction over a period of time:

- Illustrate the complexities of a situation there are many contributing factors.
- Show the influence of personalities on the issue.
- Show the influence of passage of time on the issue, especially deadlines.
- Include vivid material quotations and interviews.
- Obtain information from many sources.
- Spell out differences of opinion on the issue and suggest how differences have influenced the result.
- Present the information in many different ways.

This study

The end product of this study is reflected in Chapter 4 and provides a thick and rich description of the role and competencies of the online facilitator, after being studied for a six-week period:

- The online facilitator had to cope with various challenges and the study highlighted difficulties specific to the virtual environment.
- From the very beginning there were learners in the groups who could not co-operate and others who would not co-operate. There were also learners who wanted to work, but were constantly at loggerheads with others, thus working against each other all the time. There were also learners who never became involved and caused tremendous frustration for the others this clearly shows evidence of the influence of personalities in the virtual environment.
- Definite deadlines were set for numerous assignments and evidence is provided of the impact of these deadlines.
- In Chapter 4, various extracts, in the form of direct quotations, are provided from Yahoo Groups messages, WebCT messages, Yahoo Messenger messages, formal test responses, focus group interview and face-to-face interview.
- Various data sources were used for this study, as is listed above.
- Studying the online facilitator highlighted how people differ in opinion, especially regarding collaboration. Evidence will indicate how the online facilitator managed these differences and how she made adjustments to assist the learners to function optimally in the virtual environment.

Table 3.4: Special features of a case study

Heuristic

Description (Merriam, 1998; Shaw, 1978; Creswell, 1998)

The case study illuminates the reader's understanding of the phenomenon under study – new meaning can be discovered, the reader's experience can be extended or what is known can be confirmed:

- Explain the reasons for a problem, the background of a situation, what happened and why.
- Explain why an innovation worked or failed to work.
- Evaluate, summarise and conclude increasing potential applicability.

This study

The researcher endeavoured to provide a reader with a clear understanding of online facilitation and the role of the online facilitator:

- The online facilitator encountered various challenges. Each challenge was dissected and solutions were provided.
- The mayhem of Week 1 was described in detail.
- At the end of each research questions, a summary was provided to indicate new discoveries or confirm existing research.

The case study for this research project was a single case. Yin (1989) pointed out that generalisation of results, from either single or multiple designs, can be made to theory and not to populations. Yin (1989) and Hamel, Dufour and Fortin (1993) argue that the relative size of the sample whether 2, 10 or 100 cases are used, does not transform a multiple case into a macroscopic study. The goal of the study should establish the parameters and then should be applied to the research. Similarly, even a single case could be considered acceptable, provided it meets the established objective.

A typical case study strives towards a holistic understanding of cultural systems of action (Stake, 1995). Cultural systems of action refer to sets of interrelated activities engaged in by the actors in a social situation. It is typically a system of action rather than an individual (biography) or group of individuals (ethnography). The case study in question is the bounded system of the online learning environment and how the online facilitator interacts with the learners.

3.8.1. The case study versus other qualitative studies

This study is not a biographical life history, because the focus of a biography is on the life of a person who has had a distinguished career (Creswell, 1998) and substantial contextual material is available about the individual's family, daily life and work life (Creswell, 1998; Lomask, 1986).

This study is not a phenomenology, because the focus is not on understanding the meaning of experiences of individuals about a concept or phenomenon, with the inclusion of a philosophical discussion (Creswell, 1998; Moustakas, 1994).

It is not a grounded theory study, because no theory or model is being developed (Creswell, 1998; Strauss & Corbin, 1990).

This study is not ethnography, studying the behaviours of a culture-sharing group, using anthropological concepts such as myths, stories, rituals and social structure (Creswell, 1998; Wolcott, 1994).

This research is a case study, because it is an in-depth study of a bounded system in terms of time and place (Creswell, 1998; Merriam, 1998; Stake, 1995; Shaw, 1978). Table 3.5 provides a list of multiple sources of information in data collection to provide the detailed in-depth picture of the online learning environment and how the online facilitator interacts with the learners.

3.9. Research design

The research design is the action plan for getting from here to there. 'Here' is specified by an initial set of questions. 'There' is specified as answers to the questions. In the gap between 'here' and 'there' a number of major steps may be found, such as the collection and analysis of relevant data. The logical sequence of the research design assists the researcher to ensure that the evidence addresses the initial questions (Yin, 1989). A summary of the research design for this study is reflected in Table 3.5. The following groupings are presented in the table: Research design; Data collection methods; Data collection instruments; Data sources; When the method was administered; Who conducted the data collection; Types of check for trustworthiness and authenticity and ethical considerations. Each one of these groupings is dealt with separately after the summary in Table 3.5.

 Table 3.5:
 Research design for this study

Research design		Case study – 2002 ORO 880 CyberSurfiver online module on eLearning			
Data collection methods	Observation	Content analysis		nterview	WPS session
			Focus group	Face-to-face	
Data collection instruments	Researcher field notes in the form of an observation sheet per week and roles matrix per week	 Asynchronous Yahoo Group messages WebCT messages Synchronous Yahoo Messenger messages Sound files Formal electronic test responses Self-administered questionnaire 	Interview schedule		WPS protocol
Data source	Online facilitator and learners	Online facilitator and learners	 Optional for learners – 14 learners attended the session Scribe Independent verifier 	Online facilitatorIndependent verifier	 Transcripts Field notes Content analysis Test responses Accomplished performer Researcher Verifier Two independent observers
When administered	18 July – 28 August 2002	18 July – 28 August 2002 Questionnaire = End August 2003	8 May 2003	20 May 2003	19 October 2003
Who conducted	Researcher	Online facilitatorResearcher	Independent moderator	Independent interviewer	WPS facilitator
Verification: Trustworthiness and authenticity	Member checks and peer reviewsTriangulation	Member checks and peer reviewsTriangulationCrystallization	Member checks anCrystallization	d peer reviews	Member checksCrystallization
Ethical considerations	 Covert observation Informed about researcher 	Documents can take on private or confidential form – obtain permission to use	What you askHow you ask itGain trustObtain informed co	nsent	Restrict information to case study only

3.10. Research design – the case study in question

The basis for this **instrumental case study**¹ was the 2002 ORO 880 online module on eLearning for the Master's degree in Computer Assisted Education. The module simulated the popular reality television series, *Survivor*, implementing the same rules and events that took place in the television series – the location just shifted to cyberspace. The name was adapted to *CyberSurfiver*, emphasising 'surf', to indicate surfing the Internet to get to various locations. A weekend away was the winning prize for the final *CyberSurfiver*!

An online facilitator presented this six-week module entirely online, with a start-up face-to-face contact session at the beginning of the module and a face-to-face closure session at the end of the module. The 24 tribal members (learners) were divided into four groups (tribes), each consisting of six learners with differing levels of computer and web literacy. All the interactions between the tribal members and the online facilitator took place using a number of pre-selected web-based communication tools, such as *Yahoo Groups, Yahoo Messenger, WebCT* and *InterWise*. The online facilitator deliberately selected these tools to provide the learners with a wide range of experiences regarding synchronous and asynchronous communication. The module was presented in asynchronous mode. Some of the learners only had access to their networked computers from home, whilst others only connected from their workplace.

Tribal members had to access the instructions for the weekly assignments via the Internet. They also had to complete a number of collaborative/tribal and individual assignments each week and submit these assignments electronically. Keeping with the spirit of the original Survivor game, immunity and reward challenges were posted on a regular basis. The objective of the game is that members get voted off on a weekly basis, until only one final survivor remains. At the end of each week's activities, the tribes had to vote off one member of their team, based on a number of pre-set criteria. This member then joined other evicted tribal members (learners) in a separate Tribe 5. This particular tribe had to complete all the assignments as they were given to the tribal members still in the game, but no one from Tribe 5 was eligible to win the final prize.

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¹ Use the case instrumentally to illustrate the issues (Stake, 1995:46)

3.10.1. The six-week period

Table 3.6 provides a summary of what was expected of the learners for the six-week period.

Table 3.6: The six-week period of the case study

Week 1: 18 – 24 July 2002	 Tribal Assignment 1 Individual Assignment 1 (with tribal assistance) Individual Assignment 2
Week 2: 25 – 31 July 2002	 Tribal Assignment 2 Individual Assignment 3 Individual Assignment 4 Collaborative Behaviour
Week 3: 1 – 7 August 2002	 Tribal Assignment 2 (continued) Individual Assignment 5 Individual Assignment 6 (with tribal assistance and support) Individual Assignment 7
Week 4: 8 – 14 August 2002	 Tribal Assignment 3 Individual Assignment 8 Individual Assignment 9 Collaborative Behaviour
Week 5: 15 – 21 August 2002	 Tribal Assignment 4 Individual Assignment 10 Individual Assignment 11 Collaborative Behaviour
Week 6: 22 – 28 August 2002	 Tribal Assignment 5 Individual Assignment 12 Individual Assignment 13

3.10.2. The objectives of the case study

The objectives of the case study are *inter alia*:

- To describe what the online facilitator did in the online environment.
- To investigate the various roles that the online facilitator played to be 'visible' in the online environment.
- To scrutinise the challenges that the online facilitator faced.

3.10.3. *The sample*

The sample selection is a typical sample as it reflected the average person and situation of the phenomenon of interest (Burns & Grove, 1997). This sample selection is in no way atypical, extreme, deviant or intensely unusual (Merriam, 1998:62). The participants or learners selected themselves. If a learner enrolled for the Master's degree in Computer Assisted Education this particular module, on which the case study

was based, was compulsory. The participants were selected merely because they happened to be there and they were the learners that enrolled for the eLearning module.

The **participants/learners** were all adults with an education background ranging in age from 23 – 55 years. They enrolled for this compulsory ORO 880 eLearning module for the Master's degree in Computer Assisted Education on a part-time basis whilst working full time. Fifteen of the 24 learners completed the course. There was a gender mix, with eight men and 16 women enrolling for this module.

The **online facilitator** is a 33-year old, white South African woman with a MEd CBT *Cum Laude* degree who works in the field of telematic education at the Tshwane University of Technology.

This sample should provide meaningful contexts, illustrations and scenarios of the particular online context.

3.11. Data collection methods and data collection instruments

A case study involves a wide array of data collection instruments as the researcher attempts to build an in-depth picture of the case (Creswell, 1998:123).

Sections 3.11.1 to 3.11.4 provide a detailed description of the specific data collection method as it pertained to the study.

3.11.1. Observation

(Direct) observation is conducted during a field trip during the case study. This technique is useful for providing additional information about the topic being researched. In the context of the study, the researcher did make use of observation. Although a specific field trip was never made, the researcher observed the online facilitator *via* her personal computer in what she was doing in cyberspace.

This subsection considers the researcher's ontological and epistemological positions on the use of observation. It is followed by a detailed description of what type of observer role the researcher played. The objectives of using this data collection method are listed as well as preparatory measures to commence with the observation. The advantages and disadvantages of observation are discussed. An indication is also given of corrective measures put in place to counteract the disadvantages.

University of Pretoria etd – Adendorff, D E (2004)

Chapter 3:

Research design and methodology

The ontological position (Mason, 2002:85) sees interaction, action and behaviour as central to the natural setting. People make sense of their social worlds in the natural setting by means of daily routines and conversations.

The epistemological position (Mason, 2002:86) suggests that observing or participating in the natural setting can generate knowledge of the social world. I want to know what this social setting feels like (Mason, 2002:85).

Several of the research questions and objectives are concerned with what the online facilitator does. Using observation is an obvious way in which to discover this and watch what the online facilitator does.

I adopted the role of 'observer as participant' in the online course to observe without taking part in the activities in the same way as the 'real' learners. In other words, I was a 'spectator' (Saunders *et al.* 2000:222). My identity as a researcher was clear to all concerned. This had the advantage that I could focus on my research role and I could note insights as they occurred to me. The disadvantage of this role was that I lost the emotional involvement; not really knowing what it feels like to be on the receiving end of the experience.

Figure 3.3 provides a graphical representation of the typology of participant observation researcher roles (Saunders *et al.* 2000:223). The role I played is highlighted with the yellow circle.

Researcher takes part in activity Complete **Participant** as observer participant Researcher's Researcher's identity is identity is revealed concealed Observer Complete as participant observer Researcher observes activity

Figure 3.3: Typology of participant observation researcher roles (Saunders *et al.* 2000:223)

The **objectives** of the observation were *inter alia*:

To observe activities and interactions in the virtual setting

I was logged onto *Yahoo* most of the time, just to observe who was participating and in particular, to observe the online facilitator. Questions that I posed were *inter alia* does the online facilitator initiate participation or does she wait for a problem to arise before 'speaking'. How is the online facilitator adapting in this environment? I recorded behaviour as it happened on a daily basis, for six weeks. My notes were contextualised and used as reference points or *promising lines of enquiry* (Saunders *et al.* 2000:227) for my interview later on with the online facilitator. I carefully took cognisance of the online facilitator's actions and responses and visibility.

To observe unusual situations

I was particularly interested in tight, stressful situations and also 'what does not happen'.

To observe conversations and writing style

I looked at the length of messages; whether the online facilitator used participant's names; how learners were greeted; non-verbal communication and usage of emoticons.

To check my own behaviour

I immediately jotted down my feelings if I thought the online facilitator acted differently as I would have done.

The researcher made notes on the abovementioned actions on the Observation Sheet that was designed for this purpose (Creswell, 1998:125). These actions were observed on a daily basis.



Refer to Annexure B for an example of the Observation Sheet.

To check roles against the roles matrix

I had already documented the identified 23 roles for the online facilitator. I designed a roles matrix and ticked off the applicable role as I observed the online facilitator fulfilling this role.



Refer to Annexure C for an example of the Roles Matrix.

My **preparation** for the observation:

The Observation Sheet and Roles Matrix were designed before the case study commenced on 18 July 2002. It was imperative to have these documents handy when observing the online facilitator so that I could make my field notes there and then as I observed the participants.

The advantages of using observation as a data collection method for this study are summarised below (Mason, 2002; Saunders et al. 2000; Merriam, 1989; Creswell, 1998).

- It is good at explaining what is going on in particular social situations and I got a good impression of what this role encapsulates.
- It alerts the researcher to significant social processes, such as interacting in the virtual environment.
- Experience 'real life' emotions of those being researched it afforded me the opportunity to experience the real emotions and frustrations of working in the virtual world.
- Virtually all data collected are useful.

The **disadvantages** of using observation as a data collection method for this study are summarised in Table 3.7 (Mason, 2002; Saunders *et al.* 2000; Merriam, 1989; Creswell, 1998) and corrective measures are provided to counteract the disadvantages for this study.

Table 3.7: Disadvantages of using observation with the corrective measures for this study

Disadvantages	Corrective measures for this study
It is extremely time consuming.	The researcher knew that the study would be over a period of six week. In the greater scheme of things, six weeks is not a long time span. However, being able to observe from the luxury of my own home and office was just a natural continuation of my work and studies after hours. No time was wasted travelling to an actual site.
It can pose difficult ethical problems for the researcher in terms of role conflict.	At times I would have liked to participate just to see the effect of using two online facilitators. However, up front it was made clear that I will fulfil the role of observer as participant. There was no role conflict as my role was defined as a researcher.
The closeness of the researcher to the specific situation can lead to observer bias.	Being in a virtual environment makes the closeness less in your face. I also declared my bias and it is for this reason that I had a section entitled 'My own behaviour and feelings' on the Observation Sheet. If the online facilitator did something that I totally disagreed with, it was noted. This was also used as discussion points during the face-to-face interview.
The participant observer role is demanding and not all researchers are suited for this particular role.	My role was observer as participant, meaning that I observed without taking part in the activities.
Data recording is often difficult and it is complex to categorise observations.	Before the case study started I had already thought about what I wanted to observe. These various themes were included in the Observation sheet. This made the recording of field notes much easier.
Can be expensive.	Working in the virtual world helped in that I did not have to travel and visit sites. I did not have to incur any additional costs to my set-up at home.
Factualness and reliability of the data.	There is an audit trial for what was produced during the online module. Retrieving the actual electronic messages can corroborate this.



3.11.2. Written texts and questionnaire

Documents, in the format of written texts, are means of communication between the parties in the study. In the interest of triangulation, the written texts serve to corroborate the evidence from other sources. As is indicated in Table 3.5, a substantial number of written texts were used in the study. It is interesting to note that Creswell (1989:121) is the only author consulted who indicates the use of audio-visual materials. Audio-visual

materials were added to this section because e-mail or electronic messages fall within the realm of audio-visual materials. The researcher analysed various sets of e-mail messages in the study. Sound files were also used in the study and these are also categorised as audio-visual materials.

This subsection considers the researcher's ontological and epistemological positions on the use of written texts and a questionnaire. It is followed by a detailed list of documents used for this study. The advantages, disadvantages and corrective measures for documentation are revealed. The online questionnaire, as another data collection method, is discussed. The objectives of the questionnaire are listed. The preparation of the questionnaire regarding compilation and submitting is described. This subsection ends with the advantages, disadvantages and corrective measures taken in respect of questionnaires.

The ontological position (Mason, 2002:106) suggests that the written word, text, documents and visual pictures are meaningful in the social world because they act as a form of expression and communication.

The epistemological position (Mason, 2002:107) suggests that these written texts and visual pictures count as evidence of the ontological position. It is important to interpret and 'read' these documents in the context of how and why they were produced and used and what meaning they have and what they are seen to be or represent of the natural setting.

The production of these documents did not involve the researcher in social interaction as did observation and interviewing.

The following sets of documents form the basis of this study:

- Asynchronous Yahoo Group electronic messages.
- WebCT electronic messages.
- Synchronous Yahoo Messenger messages.
- Sound files.
- Formal electronic test responses.

These documents were constructed in particular contexts by the sample group, with particular purposes and with consequences, intended or unintended. All the electronic

messages were used for a content analysis by comparing the online facilitator's artefacts to the Blignaut and Trollip (2003) taxonomy of faculty participation in asynchronous learning environments to establish the online facilitator's roles. The *ATLAS/ti* software package was used for the coding purposes. I made use of interviews to corroborate the data found here.

The **advantages** of using documentation as a data collection method for this study are summarised below (Saunders *et al.* Creswell, 1998; McNamara, 1999).

- Obtain comprehensive information.
- Few biases about the information.

The **disadvantages** of using documentation as a data collection method for this study are summarised in Table 3.8 (Saunders *et al.* Creswell, 1998; McNamara, 1999) and corrective measures are provided to counteract the disadvantages for this study.

Table 3.8: Disadvantages of using documentation with the corrective measures for this study

Disadvantages	Corrective measures for this study
Takes long to gather.	A time limit of six weeks pertained to this documentation. Once the case study was completed, no more documentation was considered eligible for this study.
Information may be incomplete.	The documentation is not incomplete in terms of assignments submitted or electronic tests completed. It is possible that the researcher has not retrieved all the electronic messages. The facilitator posted 122 asynchronous messages and the learners posted 588 messages.
Data is restricted to what already exists.	That is the objective of the case study – to research the interactions between the online facilitator and learners for the six-week period.



- Annexure H for an analysis of the message units in Yahoo Groups according to the Blignaut and Trollip (2003) taxonomy and five online facilitator roles. (On CD ROM).
- Annexure I for an analysis of the message units in Yahoo Messenger according to the Blignaut and Trollip (2003) taxonomy and five online facilitator roles. (On CD ROM).
- Annexure J for an analysis of the message units in WebCT according to the Blignaut and Trollip (2003) taxonomy and five online facilitator roles. (On CD ROM).

The researcher also made use of a questionnaire. Figure 3.4 provides a graphical representation of the typology of questionnaires (Saunders, *et al.* 2000:280) and the yellow block indicates the type of questionnaire that was used for this study. An online questionnaire was selected because the entire case study was conducted in an online environment, where the learners responded to various assignments electronically. Thus selecting the online questionnaire was familiar to the learners. The completion of the questionnaire was compulsory for the online facilitator, but an optional choice for the learners.

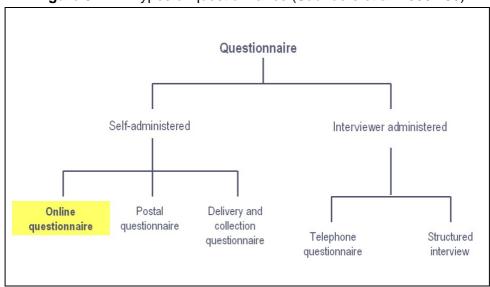


Figure 3.4: Types of questionnaires (Saunders et al. 2000:280)

This data collection method specifically dealt with the research subsidiary questions and it was important to establish what the online facilitator and learners felt would be the crucial competencies needed for the online environment. It is for this purpose that the researcher also asked for evidence to be submitted, depending on the answers that were selected.

Refer to Annexure D for the self-administered questionnaire on competencies for the online facilitator.

The **objectives** of the questionnaire were *inter alia*:

- To reflect on the role of the online facilitator.
- To individually select the competencies that each person thought should apply to the online facilitator.

My **preparation** to compile and send the questionnaire:

Clear instructions were provided what to do in the online questionnaire. The option columns were clearly defined. No information was bias or embarrassing and the minimum amount of writing was required. The layout was attractive and restricted to one A4 page of information. The purpose of the questionnaire was explained to the recipients (Saunders *et al.* 2000; Munn & Drever, 1995). Figure 3.5 provides an example of the covering letter that was sent to the user group, with a clear time line instruction.

Figure 3.5: e-mail as covering letter with online questionnaire



The **advantages** of using a questionnaire as a data collection method for this study are summarised below (Saunders *et al.* 2000; Munn & Drever, 1995; Selwyn & Robson, 1998; McNamara, 1999, Kerka, 1995; Mehta & Sivadas, 1995).

- Questionnaires are inexpensive.
- Low administration costs in terms of money and time.
- Possible to send the same e-mail to multiple addresses in one action, thus making a large 'mail shot' of subjects relatively straightforward.
- Most e-mail software allows sender of the message the option of notification when the recipient has received the message and when s/he has read it.
- Eschews conventional constraints of spatial and temporal proximity between interviewer and participant.
- Provides practical advantage of providing 'ready transcribed' data.
- Quantitative studies indicate that 'electronic' questionnaires have a very favourable response rate compared to the typical 20-50% response rates achieved by conventional mail surveys (Frankfort-Nachmias & Nachmias, 1996).

The **disadvantages** of using a questionnaire as a data collection method for this study are summarised in Table 3.9 (Saunders *et al.* 2000; Munn & Drever, 1995; Selwyn & Robson, 1998; McNamara, 1999, Kerka, 1995; Mehta & Sivadas, 1995) and corrective measures are provided to counteract the disadvantages for this study.

Table 3.9: Disadvantages of using a questionnaire with the corrective measures for this study

Disadvantages	Corrective measures for this study
Response rate is low.	I wanted the online facilitator to complete this questionnaire. It was an optional favour that I asked of the learners.
Data collected is limited in both quantity and quality.	It might be so, but I wanted the opinion of the online facilitator and quantity is not necessary in terms of this case study.
Follow-up letters are needed to chase non-responders.	The online facilitator asked for an extension, but promised to get the questionnaire to me.
Limited to biased population of users in terms of age, income, gender and race.	I was particularly interested in the online facilitator's thoughts and ideas.
Respondent's anonymity is virtually impossible and this poses an ethical problem.	The online facilitator has provided me with written consent to use her first name in the study.
The average individual is inundated with e-mails; so much so that attending to every mail message is impossible and a questionnaire may be construed as junk mail.	This might be the case for the rest of the participants or they could just decide that they have worked hard enough for this module. However, the online facilitator did answer the questionnaire.



3.11.3. Interview

Interviews are one of the most important sources of case study information. Several forms of interviews exist, namely:

- Open-ended / semi-structured interview key participants are asked to comment about certain events and provide insight into events. The researcher must avoid becoming dependent on a single informant and seek the same data from other sources to verify authenticity. In this study a face-to-face interview and focus group interview were scheduled with the participants and the online facilitator.
- Focused interviews are used where a participant is interviewed for a short period of time. This method is often used to confirm data collected from another source. Although this form of interview was not part of the scope of the study, this type of interview happened during the peer review sessions.

This subsection considers the researcher's ontological and epistemological positions on the use of interviews. Detailed information is provided on the face-to-face interview that was conducted with the online facilitator in terms of objectives of the session, preparatory work, advantages, disadvantages and corrective measures. The researcher also made use of a focus group interview with the participants of the case study. In similar vein, the objectives, preparatory work, advantages, disadvantages and corrective measures are discussed in this section.

This 'conversation with a purpose' (Merriam, 1989:71) is most probably the most commonly used data collection method in qualitative research (Mason, 2002:62).

The ontological position (Mason, 2002:64) suggests that people's knowledge, views, interpretations and experiences are meaningful in the reality that I am exploring.

The epistemological position (Mason, 2002:65) allows for meaningful ways to generate data by interacting with people by asking questions and listening to answers. Interaction can be stimulated through focus groups where certain sets of topics are discussed. Cues would be taken from the group about what to ask them next. Semi-structured interviewing is appropriate because there can be no bias during the interview sessions because an independent moderator and interviewer were used. Interviewing just adds an additional dimension to the data because participants have time to reflect. The transcripts of the interviews were also used to corroborate evidence.

Semi-structured and in-depth interviews are used in qualitative research to conduct exploratory discussions to be able to understand the 'what' and the 'how' (Saunders *et al.* 2000) of things. All the subsidiary questions are 'what' or 'how' questions, making the selection of this data collection method essential for the research.

The types of interviews fall into two dimensions, namely options of interviews and interviews on the continuum (Merriam, 1989; Saunders *et al.* 2000; Mason, 2002; Healey & Rawlinson, 1993; Fontana & Frey, 1994).

Figure 3.6 provides a graphical representation of the options of qualitative interviews. The yellow blocks indicate the two options that were used for this study.

Figure 3.6: Options of qualitative interviews (Saunders *et al.* 2000:240)

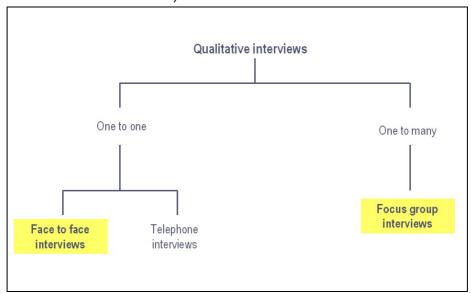


Figure 3.7 is my representation of the interviews on the continuum. The yellow block indicates my selection.

Unstructured Partially Semistructured Structured Structured Structured structured

Figure 3.7: Interviews on the continuum

Options of interviews are related to the form of interaction that is established between the researcher and those who participate in the process (Saunders *et al.* 2000:244). This differentiation involves conducting an interview between a single participant and a group.

Although focus groups are a form of group interviewing, it is important to differentiate between them. A group interview involves interviewing a number of people at the same time, the prominence being on questions and responses between the interviewer and the participants. Focus groups, on the other hand, rely on interaction within the group based on questions supplied by the moderator. The major difference that distinguishes

a focus group is the insight and data produced by the interaction within the group (Gibbs, 1997). The focus group revolves around organised discussions with a selected group of participants to gain information about their views and experiences of a topic.

Figure 3.8 provides my interpretation of a successful focus group.

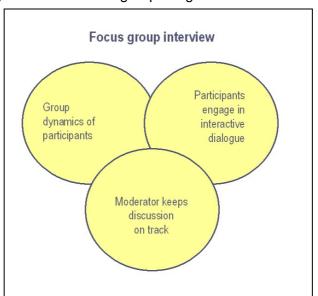


Figure 3.8: Focus group – ingredients for success

I chose to use of a face-to-face interview with the online facilitator and a focus group interview with participants who wanted to participate in the interview. I made use of an interview schedule (Creswell, 1998:124) for both interviews, which were my list of questions to be asked during the interview sessions.

The continuum of interviews consists of unstructured interviews on the one end, followed by partially structured interviews, then semi-structured interviews, then structured interviews and totally structured interviews on the other end. Unstructured interviews are based on instinct or experience when interviewing a participant and no set questions are formulated. Partially structured interviews have questions formulated without any order. Semi-structured interviews have questions formulated with order in mind. Structured interviews have formulated questions in a particular order that are coded. Totally structured interviews provide alternative answers for each question.

I selected a semi-structured interview because I wanted the online facilitator to reflect on the online learning situation. Therefore the questions were interpretative by design, but ideal position questions (Merriam, 1989) were also asked. Using interpretive questions have the advantage of checking your understanding of the situation, gaining more information about a situation and revealing opinions and feelings about certain incidents.

The **objectives** of the face-to-face interview were *inter alia*:

- To reflect on the online experience without the need to write anything down.
- To reflect on the various roles of the online facilitator.
- To further explore the tricky situations faced by the online facilitator.
- To explore opportunities for improvements of the online facilitator.

My **preparatory work** to conduct the face-to-face interview is listed below (Coopman, 1999).

Determine the purpose of the interview:

This has been addressed in the objectives section above.

Select the interviewee:

The researcher knew that it had to be the online facilitator.

Structure the interview:

Compile the interview schedule.

Refer to Annexure E for Interview Schedule for online facilitator.

Set up the interview:

- It was decided to use an independent interviewer so that there could be no bias from the researcher. The interviewer had also met the online facilitator on a previous occasion. This made the session easier because the two parties knew one another.
- It was decided to conduct the interview at the online facilitator's workplace, in case she wanted to refer to sets of documents. She could then easily retrieve the documentation from her personal computer.
- The researcher briefed the interviewer extensively on the case study. Three days prior to the interview, the interviewer received the Interview Schedule and a dictaphone to tape the conversation.
- The interview was to be conducted on 20 May 2003 at the online facilitator's place of work. Two hours were set aside for the interview.

Conduct the interview:

- The interviewer was also responsible for note taking. It was decided before hand, that if the online facilitator wanted to change to her mother tongue, that this was in order.
- The interviewer often conducted face-to-face interviews. She followed the set layout of the Interview Schedule and made field notes.

Hand over:

- On 21 May 2003 the interviewer met with the researcher and handed over the tape, field notes, interview schedule and dictaphone.
- The researcher then transcribed the conversation.

The **advantages** of using a face-to-face interview as a data collection method for this study are summarised below (Saunders *et al.* 2000; McNamara, 1999, Berry, 1999; Anderson & Killenberg, 1999; Barone & Switzer, 1995; Stewart & Cash, 1997).

- Obtain the full range and depth of information.
- Gather rich data through the words of the interviewee.
- Develop a relationship with participant.
- Provide the participant with an opportunity to think aloud about things she may not have thought about previously.
- Explore meanings, understandings and perceptions.
- Discover subjective meanings.
- Allow new understandings to be developed during the research process.
- Participant generally finds experience rewarding.
- Non-verbal communication is observational opportunities.

The **disadvantages** of using a face-to-face interview as a data collection method for this study are summarised in Table 3.10 (Saunders *et al.* 2000; McNamara, 1999, Berry, 1999; Anderson & Killenberg, 1999; Barone & Switzer, 1995; Stewart & Cash, 1997) and corrective measures are provided to counteract the disadvantages for this study.

Table 3.10: Disadvantages of using a face-to-face interview with the corrective measures for this study

Disadvantages	Corrective measures for this study
Interview schedule needs to be piloted.	I submitted the interview schedule to my supervisor and co-supervisor for comments.
The time-consuming requirements may result in a reduction of willingness to take part in the interview.	The online facilitator was willing to participate in the interview, but she wanted it at her place of work. The time restraint was never an issue.
Lack of standardisation leads to concerns about reliability.	This could be corroborated with evidence from the observation sheet, actual documentation of incidents and information forthcoming from the focus group interview. The researcher is looking for dependability. This will happen if there is a close fit between what the researcher recorded and what actually happened in the setting.
Can be costly.	The researcher had to pay the independent interviewer a set rate of R250,00 per hour – travelling costs were not calculated. The researcher did the transcription herself.
Researcher bias – where comments, tone or non-verbal behaviour of the researcher creates bias in the way that interviewee responds to the questions.	It is precisely for this reason that an independent interviewer was contracted to conduct the interview – there could be no bias.

Table 3.10: Disadvantages of using a face-to-face interview with the corrective measures for this study *(Continued)*

Disadvantages	Corrective measures for this study
Where interviewer is unable to develop trust with the interviewee, the value of the information given might be limited.	The interviewer and interviewee knew one another on a professional level. They were both comfortable with the arrangement that the independent interviewer would conduct the interview.
Interviewee may choose not to reveal certain parts of sensitive information.	The interviewee was very willing to speak about sensitive issues, because it was already revealed in the online messages. This provided the online facilitator to shed more light on these tricky situations.
There might be issues about the generalisability of the findings.	This study is not concerned with generalisability. The researcher wants to find out what happened in this specific case study.
The skills of the interviewer in terms of attentive listening skills.	The interviewer is skilled in face-to-face interviewing. She is also qualified to facilitate stress management, conflict management and cultural sensitivity. She conducts corporate research, team coaching, executive coaching and business skills facilitation.
Ask permission to tape the interview.	Both the interviewer and interviewee know about conducting research and gladly gave permission to use the dictaphone.
Cultural misinterpretation possible.	This did not apply as both women were of the same race.
Stressful for interviewee and interviewer.	The interviewer conducts interviews on a daily basis. She was well briefed about this case study and received the Interview Schedule on time for her preparation. The interviewee knew what this interview was all about – to reflect on the case study and on her role as online facilitator.

Refer to Annexure L for the transcript of the face-to-face interview with the online facilitator.

The researcher also made use of a focus group interview with the participants.

The **objectives** of the focus group interview were *inter alia*:

- To reflect on the online experience.
- To obtain the multiplicity of views on specific issues and emotional processes as indicated in the Interview Schedule.
- To provide closure to the CyberSurfiver module.

My **preparatory work** to conduct the focus group interview is listed below (Saunders *et al.* 2000; Gibbs, 1997; Goss & Leinbach, 1996; Kitzinger, 1994).

Design focus group environment:

 Booked the Dean's Boardroom at the Groenkloof Campus, as this is a regular meeting place for this pre-existing group.

Select focus group participants:

- This was a voluntary session and I sent out e-mail to the list server. Figure 3.9 is a screen print of the actual invitation that went out to the learners.
- As the learners responded, I provided them with more information regarding the session, *inter alia* the duration, location.

Select moderator:

- One of the research partners had already started focus group interviews with the learners on her topic of interest and used an independent moderator. To provide continuance, I decided to also make use of the services of the same moderator. The learners knew this person by now and were very comfortable with her style of conducting the focus group interview.
- The researcher briefed the moderator extensively on the case study. Two days prior to the interview, the moderator received the Interview Schedule. On the evening of the session, I supplied the moderator with a dictaphone to tape the session.
- I also arranged for a scribe to attend this session. This person competently speaks and writes Xhosa, Zulu, Sotho, Pedi, the Namibian languages, Afrikaans and English. I felt that this was necessary, should one of the participants want to answer the questions in his/her mother tongue. On the day of the session, the researcher had a two-hour meeting with the scribe.

Prepare interview schedule:

Refer to Annexure F for Interview Schedule for focus group.

Conduct group interview:

- The interview was conducted on 8 May 2003. Two hours were set aside for the interview. Fourteen learners attended the focus group interview.
- The researcher opened the session and placed the session in context.
- Ground rules were set to allow each participant to speak alone and to avoid a chaotic situation.
- Informed Consent letters were handed out and signed by the learners present.

Refer to Annexure G for the Informed Consent letter.

- The researcher then handed over to the moderator. There was an arrangement between the researcher and the moderator that as soon as the session had finished, the moderator would contact the researcher to wrap up the session.
- Each question to be discussed was written on the white board in the Board Room.
- At the end of the session the researcher thanked the participants and handed out a small gift to all present.

Hand over:

- Directly after the focus group session, the moderator handed over the tape, field notes and interview schedule. The moderator kept the dictaphone to use it for the face-to-face interview.
- The researcher then transcribed the conversation.

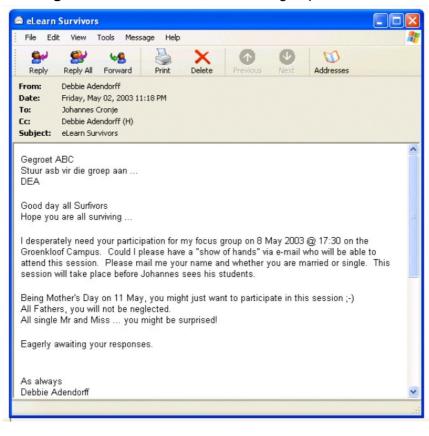


Figure 3.9: Invitation to the focus group session

The **advantages** of using a focus group interview as a data collection method for this study are summarised below (Saunders *et al.* 2000; McNamara, 1999, Gibbs, 1997; Goss & Leinbach, 1996; Homan, 1991; Kitzinger, 1994; Morgan & Krueger, 1993).

- Gather rich data through the words of the interviewees.
- Obtain common impressions.
- Obtain a range and depth of information in a short time.
- Interaction enables participants to ask questions of each other.
- Participants get the opportunity to re-evaluate and reconsider their own understandings of their specific experiences.
- It elicits information that allows the researcher to find out why an issue is salient as well as what is salient about it. As a result the gap between what people say and what they do can be better understood.
- The participants benefit because it is an opportunity to be valued as experts.
- The chance to work collaboratively with a researcher is empowering.
- Obtain several perspectives about the same topic.
- If the group works well, trust develops and the group explores solutions to problems as an entity, rather than as individuals.
- Time to collect the information is limited.
- Obtain large amount of information in a short time.
- Sensitive topics become shared experience.
- Interactions may create new ideas, thoughts and feelings.
- Explore the degree of consensus on a given topic.

The **disadvantages** of using a focus group interview as a data collection method for this study are summarised in Table 3.11 (Saunders *et al.* 2000; McNamara, 1999, Gibbs, 1997; Goss & Leinbach, 1996; Homan, 1991; Kitzinger, 1994; Morgan & Krueger, 1993) and corrective measures are provided to counteract the disadvantages for this study.

Table 3.11: Disadvantages of using a focus group interview with the corrective measures for this study

	•
Disadvantages	Corrective measures for this study
Encourage all participants to talk and monitor individuals who may dominate the discussions.	A competent moderator was appointed who would have looked after all the participants.
Need a good, strong facilitator for safety and closure. Difficult to do well – practice makes perfect!	It is for this reason that an independent moderator was appointed to facilitate the session.
Difficult to schedule 6-8 people together.	I informed the participants about the voluntary session. What was in my favour is that on this specific night, the learners had another lecture on the campus.
Can be intimidating, especially for inarticulate or shy members.	This was a voluntary session.
The researcher and moderator have less control over the data produced as in a one-to-one interview.	If the moderator stuck to the Interview Schedule, the researcher would receive the data she was looking for.
It may not be easy to get a representative sample; group too heterogeneous or too homogenous. Select participants with similar status ('horizontal slice') instead of 'vertical slice' status, which are different status and variations in work experience) (Saunders et al. 2000:269).	The group <i>per se</i> is a representative sample. They are also horizontal in status as postgraduate students.
The method of discussion may discourage some from trusting others with sensitive or personal information.	Sensitive issues had already been revealed in the online messages. Now was the time to clarify the situation.
Focus groups are not fully confidential or anonymous because the material is shared with the other in the group.	Nothing was confidential during the course of the study. The participants even gave the researcher written permission to use their first names in the study.

Table 3.11: Disadvantages of using a focus group interview with the corrective measures for this study *(Continued)*

Disadvantages	Corrective measures for this study
It should not be assumed that the individuals in a focus group are expressing their own definitive individual view. They are speaking in a specific context and it may be difficult for the researcher to clearly identify an individual message. Problems arise when attempting to identify the individual view from the group view.	This will be corroborated with the data analysis of the messages and triangulation between the research partners. However, if the views are related to a specific context, then the majority group feeling will suffice.
It can be hard to analyse responses.	Ground rules were explained at the start of the session. Only one person spoke at a time. The session was taped. The moderator started each section with a question, allowed the discussion and then gave a time count down and final comments before moving on to the next discussion point.
Difficult to substantiate levels of data reliability.	This will be corroborated with the field notes on the observation section and the interview with the online facilitator.
Difficult to manage the process and note key points at the same time. Check moderator's skills – danger of losing and confusing data.	A moderator was used to facilitate the process and a scribe was appointed to take field notes.



- Annexure K for the transcript of the focus group interview.
- Annexure M for the transcript of the sound files.

3.11.4. Work Profiling System (WPS) session

The objective of the WPS session was to design a Work Profiling System (WPS) Person Specific Report for the online facilitator from the most job-relevant competencies, based upon an analysis of the tasks, activities and work context that comprise this job.

The WPS is an integrated job analysis system for describing important tasks and behaviours that comprise a role, including work context and the environment. The Work Profiling System session began with the collection and analysis of job task and job context information using structured questionnaires. These questionnaires were administered via a questionnaire booklets and machine-readable answer forms. The information collected from the various data collection instruments for this case study was used as the framework to answer the various questions during the WPS session. Once collected, the information was imported into the WPS software database and the responses were analysed by the computer to produce detailed job analysis reports.

3.12. When administered and who conducted?

When administered indicates the logical flow of events that happened over a period of time to ensure that sufficient evidence could be gathered on this particular case.

Who conducted indicates that the researcher utilised the services of assistants because the researcher has a bias, which has been declared. Table 3.12 provides information on the various assistants, their duties and preparation for their respective tasks.

Table 3.12: Assistants used in the research project

Assistants	Duties / Preparation
Dr Sonja Grobler (D Cur) Independent moderator for focus group interviews Independent interviewer for the face-to-face interview	Her task: To conduct the focus group interview with the learners and face-to-face interview with the online facilitator. Preparation: I met with Dr Grobler and comprehensively informed her about the case study. She also had a chance to read through the various e-mail messages. I sent the focus group semi-structured questions to the facilitator three days in advance of the actual focus group interview. I sent the semi-structured questions to the facilitator two days in advance of the actual face-to-face session.
	I specifically made use of an independent person, as not to lead the discussion in a certain direction. This person is also qualified to facilitate stress management, conflict management and cultural sensitivity. I felt that this was necessary to appoint such a person, in case something flares up during the focus group interview.
	Dr Grobler is self-employed and a director of <i>Facilitation Excellence</i> (Reg no 2002/009539/07). She conducts corporate research, team coaching, executive coaching and business skills facilitation.

 Table 3.12:
 Assistants used in the research project (Continued)

Assistants	Duties / Preparation
Annete Ntswane (M.Soc.Sc (Nursing) Cum Laude) Scribe for focus group interview	Her task: To act as the scribe and to observe the learners during the focus group interview and to make field notes. Preparation: I had a two-hour meeting with Mrs Ntswane, prior to the focus group interview, informing her about the case study.
	This independent black woman was appointed as a scribe to take down field notes. The moderator was asked to conduct the focus group in English, but should a participant struggle with the language, the moderator could inform the participant to switch to his/her mother tongue. This scribe competently speaks and writes Xhosa, Zulu, Sotho, Pedi, the Namibian languages, Afrikaans and English.
	Mrs Ntswane has been used as a scribe on approximately 13 occasions.
Dr Sandra van Wyk (D Cur) Independent verifier	Her task: To verify the interpretation of the focus group transcription and face-to-face transcription. Preparation: Limited preparation was needed. Dr Van Wyk independently interpreted the transcripts where after she met with the researcher to discuss the issues at hand. Dr Grobler often makes use of Dr Van Wyk to conduct
	the team-coaching workshop.
Mrs Ilonka Malan (Human Resource Development (Hons)) Accredited 'City and Guild' Facilitator Independent verifier	Her task: To verify that the researcher provided information that was contained to the case study. Preparation: Prior to the working session, she received the field notes, content analysis, formal test responses and transcriptions of both interviews.
Mr Pieter Möller (M Comm) Qualified WPS facilitator	His task: To conduct the Work Profiling System session. Preparation: No preparation was needed.
Me Ilonka van Zyl (M Comm) Observer/verifier Me Sonet Vos (M Comm) Observer/verifier	Their task: To observe the Work Profiling System session to ensure that the correct process was being followed and that all documentation was completed. Preparation: Prior to the working session, they received the field notes, content analysis, formal test responses and transcriptions of both interviews.

3.13. Trustworthiness and authenticity

Alternative terms have been suggested by a variety of authors (Creswell, 1998) to replace 'internal validity', 'external validity', 'reliability' and 'objectivity'. To ensure trustworthiness and authenticity in the study, the following measures were put in place:

Member checking and peer reviews or debriefing sessions were conducted. The online facilitator and learners verified and judged the accuracy and credibility of the findings and interpretations of the researcher with regards to the roles, responsibilities, activities and competencies of the online facilitator.

Richardson (1995:5) disagrees with the concept of triangulation, stressing that the central image for qualitative inquiry is a crystal; not a triangle. Mixed-genre texts in the post-experimental moments have more than three sides. Crystals grow, modify and change. In the **crystallization** process (Richardson, 1995) the researcher told the same story through data gathered from different data sources. This is also followed by a process that considers the data from various angles – highlighting different aspects, depending on different phases of the analysis.



I form part of a research team of three partners who are all investigating the case study from different angles. The two partners acted as external commentators and played an important role regarding the triangulation/crystallization of the data from the case study.

3.14. Conclusion

This interpretive study (Carr & Kemmis, 1986; Burrel & Morgan, 1979) considered the social behaviour of an online facilitator in natural settings by direct and detailed observation of her interactions. The basis for the instrumental case study was a 2002 online module on eLearning (ORO 880) for the Master's degree in Computer Assisted Education of the University of Pretoria, South Africa. The module simulated the popular reality television series, *Survivor*, implementing the same rules and events that took place in the television series – except that the location had been shifted to cyberspace. The name was adapted to *CyberSurfiver*, emphasising 'surf', to indicate surfing the Internet to get to various locations. The case study focused on the facilitation of a six-week online course, and paid special attention to how the online facilitator interacted with the learners in a text-based environment.

The focus of the research was on the 'visible' roles played by the online facilitator and on identified competencies for these roles. Data collection methods included observing, selecting, analysing and synthesising texts from *Yahoo Groups*, *Yahoo Messenger* and *WebCT* (using *Atlas.ti*), formal electronic test responses, a self-administered questionnaire and interviewing. A face-to-face interview was held with the online facilitator as well as a focus group interview with participants who wanted to participate in the interview. Two separate interview schedules (Creswell, 1998:124) were designed. An independent interviewer and moderator were used to conduct the semi-structured interviewing to avoid any bias during the interview sessions. The transcripts of the interviews and sound files were used to corroborate evidence. Verification methods for this study were member checking, peer reviews and the crystallization of various points of view.

By using various data collection methods and data collection instruments as indicated in this chapter, I was able to build an in-depth picture of the online facilitator in the online environment.

Chapter 4 will report on the results of the various data collection instruments. The actual asynchronous text messages from *Yahoo Groups* and *WebCT*, the synchronous messages from *Yahoo Messenger*, the formal test responses and transcripts of the sound files were used as evidence to answer the research questions. The researcher's field notes corroborated the online facilitator's roles and visibility. The focus group interview transcript supported data revealed in the text messages. The face-to-face

University of Pretoria etd – Adendorff, D E (2004)

Chapter 3:

Research design and methodology

interview transcript and the self-administered questionnaire completed by the online facilitator reflected the online facilitator's lived experience of the online environment.

In Chapter 4 the research questions build upon each other and evidence from the data collection instruments support each question. The online environment is depicted. The person specific adjustments that the online facilitator had to make are revealed. Evidence is then provided to indicate the interaction between the online facilitator and the learners and how the online facilitator 'talked' to the learners. Whilst interacting with the learners and facing numerous challenges, the online facilitator displayed five visible roles. Finally, the five roles were analysed according to the *WPS* Job Analysis Questionnaire to identify the people competencies, thinking competencies and energy competencies for the online facilitator.