THE UNIVERSITY OF HULL

E-learning for transformation?
A Grounded Theory investigation of the student and staff experience in two educational programmes at the University of Malta

being a Thesis submitted for the Degree of
Doctor of Philosophy
in the University of Hull

by

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September 2013

Abstract

E-learning has become a mainstream feature in Higher Education. It is no longer restricted to the innovative practice of pioneer educators. But how are students and staff experiencing this change?

This research used the Grounded Theory methodology. Two courses at the University of Malta were selected as case studies: one being a fully online course, the other adopting a hybrid approach. Extensive data were gathered through semi-structured interviews with students and lecturers. All the data were systematically analysed using established Grounded Theory methods, including constant comparison, coding and memoing, enabling the researcher to construct a conceptual model from the student and staff experience in e-learning.

The thesis argues that e-learning, defined in this study as that learning facilitated online through network technologies, can be employed to support a range of pedagogies from knowledge-transmission or 'banking education' (Freire, 1970) methodologies to critical constructivist teaching and learning approaches. The latter, through the dialogic affordances of e-learning, allows students and educators to be engaged in critical discussion, the co-construction of knowledge and praxis. A theoretical model is presented which identifies key factors that contribute to effective e-learning in Higher Education. This model is original in that it shows how e-learning can be used to help a learning community achieve two interrelated Higher Educational objectives. First, through e-learning, students can gain the knowledge and skills required to function efficiently in society. Second, students can become conscious of and, possibly act against, the underlying social processes that work counter to the democratisation process.

Acknowledgements

I was very lucky to have worked with two brilliant supervisors.

My first big 'thank you' goes to my supervisor, Dr Peter Williams, for his constant guidance and support, not to mention his unwavering commitment, encouragement, friendship and British sense of humour. I will always treasure his first e-mail in which he wrote, quoting the final line from *Casablanca*, 'Louie (sic), I think this is the beginning of a beautiful friendship'!

My other big 'thank you' goes to my second supervisor, Dr Max Hope, for her knowledge of Grounded Theory and her guidance, caring and patience. She truly deserves the *Overall Outstanding Achievement Award* bestowed on her by the students at the University of Hull.

I also wish to thank all those who participated in this research.

Above all, thanks to my wife, Antonella, whose selfless time and care were sometimes all that kept me going.

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List of Abbreviations

APQRU	Academic Programmes Quality and Resources Unit
BScHS	Bachelor of Science (Hons.) Health Science
CETRI	Centre for Educational Technology, Research and Innovation
DITEL	Diploma in Technology Enhanced Learning
DMSTE	Department of Mathematics, Science and Technical Education (Faculty of Education)
PETDI	(Programme for) Educational Technology, Design and Innovation
UMDEC	University of Malta Distance and E-Learning Committee
UREC	University of Malta Research Ethics Committee
VLE	Virtual Learning Environment

Chapter 1

Introduction

> *Many academics argue that instead of simply encouraging graduates to pursue their personal ambitions of career, job readiness, professional status and high salaries in a competitive market culture, the role of universities should be to develop pedagogical practices that produce more 'rounded', more globally aware and 'citizen-minded' students who subscribe to an ethic of the common good.*
>
> ***Whackademia***, *Richard Hil (2012: 15)*

1.1   Motivation for the study

This researcher, like Richard Hil, believes that the true mission of the modern University is not *only* to enrich students with skills and knowledge that would help them function efficiently in their economic communities. The modern University also needs to empower its students to become conscious of, and act against, social injustices.

However, as a lecturer at the University of Malta, the researcher feels constrained by various factors that discourage the use of transformative pedagogies: the traditional schooling culture of the institution, the large number of students in each learning group, the assignment and examination requirements, and, above all, the classroom (or lecture hall). Though adaptable to alternative learning efforts, most students and

lecturers, still associate the classroom with lectures, PowerPoint presentations and note-taking. Its architecture, furnishings and technology (a whiteboard, and in the last decade, a digital projector, Wi-Fi, and lately, in a very small number of classrooms, an interactive whiteboard) are more conducive to lecturing. Even the 'tutorial', wherein, a small number of students meet their lecturer, is essentially used as an educational space where students reinforce the knowledge they acquired during lectures.

This researcher, who was also engaged as an adult educator in a variety of settings, including drug rehabilitation centres, prisons and hospitals, realised that the environment of these non-educational environments was more conducive to alternative pedagogies than rooms and halls on the University's campus. With the advent of online technologies at the University of Malta, another educational space became available to all lecturers and students. Could e-learning be a more effective educational space for university students and academics than the classroom?

This thesis was born out of the researcher's wish to answer this question. However, due to the researcher's prior sensitivity to transformative and democratic adult education, a research methodology was needed through which this bias could be consciously curtailed. For this purpose, Grounded Theory was selected. Through this methodology, conceptualisations were grounded in data. Grounded Theory also values the researched subjects' voices because their 'interpretations, perceptions, meanings and understandings' were 'the primary sources of data' (Mason, 2007: 56). The initial research question was also open: *How was e-learning being used at the University of Malta?*

There was no hypothesis and no attempt to prove anything in particular. No assumptions about e-learning, or about how it was being used, were made. The key aim was to gather 'rich data' (Charmaz, 2006: 13) from students and lecturers and develop a 'thick description' (Geertz, 1973: 6) of the phenomenon. For this purpose, two programmes, one a fully online course

run by the Faculty of Health Sciences, the BSc Health Science (henceforth, BScHS), the other a blended course (that is, a course in which both traditional, face-to-face classroom methods and Internet-mediated learning activities are used) of the Faculty of Education, the Diploma in Technology Enhanced Learning (henceforth, DITEL), were chosen as sub-case studies[1]. The researcher hoped to understand, through the data, how e-learning was being used at the University of Malta and its impact upon students' and lecturers' experiences. If possible, it was also hoped that some tentative or 'fuzzy generalisations' (Bassey, 1999: 44) could be made about e-learning in the wider higher education context.

1.2   Overview of the thesis

Chapter 2 explores the development of Grounded Theory by Glaser and Strauss (1967) within the positivist paradigm in the 'golden age' of qualitative research and its evolution into a constructivist research approach by Charmaz (2000; 2006). It also explores the methodology's basic theoretical assumptions and elements, and outlines the way it has been used in this research.

Chapter 3 explores the project's research design and provides details about the research setting, interviewing strategy, ethical considerations made to ensure that no subject was harmed by the project and measures taken to bracket the researcher's prior knowledge and beliefs. The Chapter also presents, as part of the researcher's reflexivity process, a brief overview of his academic and professional background.

Chapter 4 is the first in a series of four chapters that contain data gathered from interviews and observations of online discussions. This chapter presents data from the interviews with students from the BScHS. The data

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[1] Appendix 2 provides a brief overview of both courses.

from the interviews with the lecturers of the same course are presented in **Chapter 5**. **Chapters 6** and **7** present data from DITEL students and lecturers, respectively. The four chapters contain substantial quantities of the subjects' narratives following Corbin and Strauss's (2008) recommendation of using the participants' own language to enhance rigour in a Grounded Theory investigation.

In **Chapter 8** the researcher presents the theory that was generated from the data gathered from *both* courses. The importance of dialogue in education, but particularly in e-learning, is highlighted. The pedagogical importance of the transmission of knowledge and skills (from the teacher to students) is also acknowledged. However, it is argued, an over-reliance on the latter type of pedagogies increases the dependency of students upon their lecturers, reduces creativity and increases the resistance of students, and lecturers, towards alternative pedagogies. A fully-online dialogic programme, more than a hybrid programme, can liberate the students from prescriptive schooling practices and engage them in the co-construction of knowledge and praxis (action through reflection), in the context of the University of Malta.

Chapter 9 presents the first part of the literature review. In this chapter the researcher situates this study's theoretical model within the wider educational theory debate looking for areas of theoretical convergence and divergence. In **Chapter 10**, the researcher continues this analytical exploration. However, he places his focus on the extant literature about e-learning practice that emerged, mainly, in the past decade.

Finally, **Chapter 11** presents a critical summary of the main resonances between the theoretical model and the literature review. It also presents the areas of originality of this project. The chapter also discusses the research quality and its limitations. In conclusion, a series of ten 'fuzzy generalisations' (Bassey, 1998) are offered.

Chapter 2

The Grounded Theory Method

The grounded theorist thinks abstractly, critically, flexibly ...
Theory is the basis for social action.
(Corbin and Strauss, 2008: 9–11)

2.1   Introduction

The researcher, in the selection of a research methodology, had two main concerns: (i) he needed a methodology through which he could bracket his previously 'accumulated knowledge' (Dey, 1993: 66) and beliefs to ensure the rigour and reliability expected of a PhD project, and (ii) the researcher wanted the theory to emerge from the direct experiences and perceptions of students and lecturers engaged in e-learning.

Through a literature review (Lincoln and Guba,1985; Dey, 1993; Miles and Huberman, 1994; Taylor and Bogdan,1998; Knight, 2002; Holloway, 2005; Phillips and Pugh, 2005; Silverman, 2005; 2011a; Mason, 2007; Bryman, 2008; Denscombe, 2008; Wisker, 2008 and Creswell, 2009) and the insights gained by participating in various post-graduate courses at the University of Hull[2], a qualitative rather than a quantitative approach was deemed by this researcher to be more appropriate for this investigation. The reasons are echoed in Corbin and Strauss's (2008: 13) words:

> Qualitative researchers lean toward the fluid, evolving, and dynamic nature of this approach in contrast to the more rigid and structured format of quantitative methods. Qualitative researchers enjoy serendipity and

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[2] These included: *Research Design and the Practicalities of Research, An Introduction to Quantitative Methods, An Introduction to Qualitative Methods* and *The Successful and Effective Researcher* courses.

discovery. Statistics might be interesting, but it is the endless possibilities to learn more about people that qualitative researchers resonate to. It is not distance that qualitative researchers want between themselves and their participants, but the opportunity to connect with them at a human level. Qualitative researchers have a natural curiosity that leads them to study worlds that interest them … (and) enjoy playing with words, making order out of seeming disorder, and thinking in terms of complex relationships.

Of all the qualitative research techniques explored, Grounded Theory was considered to be the most suitable method for this project because (i) the development of theory occurred through an interactive and iterative process of collecting data and analysing data (Bluff, 2005: 148), and (ii) it required a conscious and continuous reflexivity so that data gathering and theory generation are not unduly contaminated by the researcher's prior knowledge and beliefs.

This chapter first explores the development and evolution of Grounded Theory. It then discusses constructivism and how Grounded Theory was adapted within this paradigm. The chapter also introduces the key characteristics of the method.

2.2   Grounded Theory

Dey (1999: 2) argued that there were 'probably as many versions of Grounded Theory as there were grounded theorists'. Indeed, after its development by Barney Glaser and Anselm Strauss in the late 1960s, the technique developed in 'somewhat conflicting directions' (Charmaz, 2000: 510). Even Glaser and Strauss parted ways. The former went as far as accusing Strauss of no longer being a true grounded theorist (Glaser, 1992), and, recently, claiming to be the original founder of Grounded Theory (Grounded Theory Institute, 2013). His claim is supported by his followers who argue that his article 'The Constant Comparative Method of Qualitative Research' (Glaser, 1965) confirms that Glaser 'already had

conceived and written about all the basic principles of Grounded Theory before his work with Anselm Strauss' (Grounded Theory Institute, 2013).

Researchers entered into this 'methodological fray' (Charmaz, 2006: xi) espousing their own interpretations of this approach (Clarke, 2005; Charmaz, 2006; Bowers and Schatzman, 2009; Babchuk, 2011) leading the debate to the brink of a 'theoretical Armageddon' (Babchuk, 2008: 10). A 'family of methods' (Bryant and Charmaz, 2007b: 11) eventually developed with 'certain (shared) key characteristics that distinguish all versions from other qualitative designs' (Babchuk, 2008: 10). These characteristics will be discussed at the end of this chapter [§2.8][3].

For this researcher, who was new to the Grounded Theory approach, this became a complicated endeavour: Which version should be used, the Glaserian or Straussian? Should the researcher use the 'second generation' (Morse, 2009; Birks and Mills, 2011) Grounded Theory approaches, such as the postpositivist approach proposed by Corbin and Strauss (2008)[4] and the constructivist approach elaborated by Charmaz (2000; 2006)? Should the researcher use the postmodernist approaches proposed by Clarke (2005) and Denzin (2010)? Which data collection methods were the most appropriate? Could the researcher be a neutral investigator as Glaser and Strauss (1967) and later Glaser (1978; 2001; 2002) advocated? Should a research question be developed before the research started? To settle these and other issues, a literature review on Grounded Theory was undertaken.

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[3] In this thesis, references to other sections are indicated as in this example: [§2.8].
[4] This book was first published in 1990 with Strauss as the main author. It was partially rewritten by Corbin and republished in 2008, after Strauss's death as Corbin and Strauss (2008).

2.3   The development of Grounded Theory

It is pertinent to start this review by noting a further issue in the Grounded Theory debate: the ambiguity of the term *Grounded Theory* itself. The term has been used to refer to (i) a research method that 'comprises a systematic, inductive, and comparative approach for conducting inquiry' (Bryant and Charmaz, 2007b: 1), and/or (ii) to the theoretical product of the method. Some authors, however, call the approach 'Grounded Theory Method' or GTM, while the theory that results from the use of the GTM, 'Grounded Theory' or GT. Hope (2010: 8) notes that 'this distinction is important because a GT could be generated through using other methods, such as Action Research' while the use of GTM does not always produce 'Grounded Theory'. Bryant and Charmaz (2007b: 2-3) note that 'in common parlance … the term 'Grounded Theory' refers to the method itself'. Conscious of this ambiguity, the researcher followed Hope's (2010: 8) reasoning and assumed that, in this current study, 'a GTM would be used to generate a GT and therefore the phrase 'Grounded Theory' was used to encompass both'.

2.3.1   Origins

In a Grounded Theory investigation a researcher can use any data collection strategy. These include quantitative techniques (see, for example, Glaser and Strauss, 1967; Lösch, 2006; Glaser, 2007; 2008). However, the roots of this methodology lie in the qualitative research tradition (Babchuk, 2011: 11; Birks and Mills, 2011: 6).

The 'Chicago School' sociologists, in the 1920s and 1930s, legitimised qualitative inquiry in sociology (Denzin and Lincoln, 2005: 2; Bryant and Charmaz, 2007c: 32; Babchuk, 2011: 11). However, up till the 1950s, scholars still 'relegated qualitative research to a subordinate status in the

scientific arena' (Denzin and Lincoln, 2005: 2) and quantitative 'objectivist' methodologies, akin to the experimental sciences, dominated the social sciences (Charmaz, 2000: 512; 2006: 5). Positivism was the 'gold standard' of educational research (Wright, 2006: 799-800).

Qualitative research gained the respect of the scientific world in the post-World War II era (Birks and Mills, 2011: 6). Denzin and Lincoln (2005: 17) refer to the period 1950–1970 as the 'modernist moment' and consider it to be the 'golden age of rigorous qualitative analysis'. One of the most important books of this second phase of qualitative research was the *Discovery of Grounded Theory* (Glaser and Strauss, 1967).

Glaser and Strauss developed Grounded Theory through their investigation of the experience of patients dying in hospital[5]. Glaser's background comprised rigorous training in quantitative methods. Strauss, in contrast, had a background in symbolic interactionism, 'embraced while in his doctoral program at the University of Chicago' (Charmaz, 2006: 7), and its emphasis on pragmatist philosophy, George Herbert Mead's social psychology (Mead, 1917; Mead and Murphy, 1959), and ethnographic field research (Bryant and Charmaz, 2007a: 32).

Pragmatist philosophers, including Mead (1917) and Dewey (1916; 1929), assume that knowledge is created through action and interaction and view reality as characterised by indeterminacy and fluidity, and as open to multiple interpretations. According to Charmaz (2006: 188)

> in pragmatist philosophy, meanings emerge through practical actions to solve problems, and through actions people come to know the world. Pragmatists see facts and values as linked rather than separate and truth as relativistic and provisional.

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[5] Apart from *The Discovery of Grounded Theory (1967), Glaser and Strauss* published their ideas in three other texts: *Awareness of Dying (1964), Time for Dying (1968),* and *Status Passage (1971).*

Symbolic interactionism is derived from pragmatism. Heath and Cowley (2004: 150) explain

> The term 'symbolic interactionism' was invented by Blumer (1937) and his development of the interactionist approach together with naturalistic inquiry is a key influence on grounded theory. Blumer (1956) stressed the role of concepts that are sensitising rather than definitive, that gain their utility and significance from patterned relationships rather than quantifiable correlations. Moreover, Hammersley's (1989) detailed analysis shows that Blumer's concept of inquiry involved comparison of cases to develop the features of each case, the production of emergent meaning and ongoing refinement of the characteristics of the relationship.

Thus, Glaser and Strauss (1967) sought 'to understand human beings and their behaviour by developing a systematic and detailed procedure which would be viewed as positivistic and, therefore, truly scientific' (Bluff, 2005: 148). This 'systematic inductive' (Charmaz, 2000: 509) approach to social science research was one in which 'the researcher has no preconceived ideas to prove or disprove' (Mills, Bonner and Francis, 2006: 27) and theory is grounded in data.

Mills, Bonner and Francis (2006: 27) succinctly describe the Grounded Theory process as proposed by Glaser and Strauss:

> The researcher analyzes (sic) data by constant comparison, initially of data with data, progressing to comparisons between their interpretations translated into codes and categories and more data. This constant comparison of analysis to the field grounds the researcher's final theorizing in the participants' experiences.

By developing this method, Glaser and Strauss (1967: 3) aimed to move away from a model where theory was 'generated by logical deduction from *a priori* assumptions'. They also challenged, as noted by Charmaz (2000: 511),

(i) arbitrary divisions between theory and research,
(ii) views of qualitative research as primarily a precursor to more "rigorous" quantitative methods,
(iii) claims that the quest for rigor (sic) made qualitative research illegitimate,
(iv) beliefs that qualitative methods are impressionistic and unsystematic,
(v) separation of data collection and analysis, and

(vi) assumptions that qualitative research could produce only descriptive case studies rather than theory development.

However, the Grounded Theory proposed by Glaser and Strauss, still resided in the positivist paradigm. Bryant and Charmaz (2007c: 33) indeed note that

> in seeking to provide a firm and valid basis for qualitative research, their early position can be interpreted as justification for a naïve, realist form of positivism, which holds that the veracity of a theory can be determined simply by recourse to 'the data'.

2.3.2　The evolution of Grounded theory

The diverse backgrounds from which Glaser and Strauss emerged before they developed Grounded Theory probably contributed to the methodological divergence that first saw their parting of ways and, later, publish work of conflicting ontological positions. Glaser (1978) 'remained in the positivist camp' (Charmaz, 2000: 512) and championed the objectivist Grounded Theory. Strauss, with Juliet Corbin, co-authored the book *Basics of Qualitative Research*, 'producing a reformulation' (Annells, 1996: 380) of the 'positivistic position' inherent in the classic mode (Strauss and Corbin, 1990b: 279). The book was first published in 1990, republished in 1998, and after Strauss's death, its 3rd edition was published in 2008 with Corbin as the main author.

A very important ontological and epistemological 'postpositivist' stance emerged in Strauss and Corbin's book (Charmaz, 2000: 509): the authors challenged the objectivist underpinnings of the initial formulation of Grounded Theory particularly the assumptions of the existence of an objective, external reality, and the neutrality of the researcher. These assumptions were clearly imbued with Strauss's symbolic interactionist beliefs (Licqurish and Seibold, 2011). The authors claimed that 'the truth is

enacted' and there are multiple variations of reality (Corbin and Strauss, 2008: 4). Thus,

> to understand experience, that experience must be located within and can't be divorced from the larger events in a social, political, cultural, racial, gender-related, informational, and technological framework and therefore these are essential aspects of our analyses (ibid.: 8).

2.3.3   Constructivist Grounded Theory

Denzin and Lincoln (2005: 16-17) note that between 1970 and 1986, 'the naturalistic, postpositivist and constructionist paradigms gained power' in qualitative research. In this period researchers struggled with 'how to locate themselves and their subjects in reflexive texts' (Birks and Mills, 2011: 6) and constructivist thinking became very important in social research.

Crotty (1998 quoted in Creswell, 2009: 8) succinctly describes the basic assumptions of constructivism as applied to research:

1. Meanings are constructed by human beings as they engage with the world they are interpreting. Qualitative researchers tend to use open-ended questions so that participants can express their views.

2. Humans engage with their world and make sense of it based on their historical and social perspective - we are all born into a world of meaning bestowed upon us by our culture. Thus, qualitative researchers seek to understand the context or setting of the participants through visiting this context and gathering information personally. They also make an interpretation of what they find, an interpretation shaped by the researchers' own experiences and backgrounds.

3. The basic generation of meaning is always social, arising in and out of interaction with a human community. The process of qualitative research is largely inductive, with the inquirer generating meaning from the data collected in the field.

The influence of constructivism on social research was, by the 1990s, very strong. In 1995, Kathy Charmaz wrote her first piece about a reformulated Grounded Theory. This author continued to develop her work and in 2000

published a milestone contribution in the *SAGE Handbook of Qualitative Research*.

In her contribution Charmaz (2000) took a further move away from positivism. She insisted that Strauss and Corbin, like Glaser, still stood 'in the objectivist terrain' and that they still believed that Grounded Theory was 'verificational' (ibid.: 512). Charmaz argued that in their development of 'analytic questions, hypothesis [relational statements], and methodological applications' (ibid.: 513), Corbin and Strauss assume the existence of an external reality. She thus proposed a 'repositioned' Grounded Theory which was 'ontologically relativist and epistemologically subjectivist' and positioned within the social constructivist research paradigm thus rejecting 'the notions of emergence and objectivity' (Annells, 1997: 179). This approach took 'a middle ground between realist and postmodernist visions' (Bryant and Charmaz, 2007a: 51) and viewed

> reality as multiple, subject to redefinition, and somewhat indeterminate … Furthermore, a repositioned GTM moves further into interpretive conceptual frames and further away from deterministic variables. This GTM builds on fluid, interactive, and emergent research process of its originators but seeks to recognize partial knowledge, multiple perspectives, diverse positions, uncertainties, and variation in both empirical experience and its theoretical rendering. (ibid.)

The constructivist Grounded Theory as proposed by Charmaz (1995; 2000, 2006), and supported by Bryant (2003; 2007), is 'realist to the extent that the researcher strives to represent the studied phenomena as faithfully as possible, representing the 'realities' of those in the studied situation in all their diversity and complexity' (Bryant and Charmaz, 2007a: 52). The approach is, however, also interpretivist because it acknowledges 'that to have a view at all means conceptualising it … data are always conceptualized in some way' (ibid.). Thus, the

> generalizing impulse in classical grounded theory, its strain towards parsimony and subsequent reductionism, the beliefs in discovery and distanced observation, all become problematic. A repositioned grounded theory bridges defined realities and interpretations of them. It produces limited, tentative generalizations not universal statements. It brings the

social scientist into analysis as an interpreter of the scene, not as the ultimate authority defining it. And this method acknowledges the human, and sometimes non-human, relationships that shape the nature of inquiry (ibid.).

In practical terms, Charmaz (1995; 2000) proposed that researchers co-create meaning with the subjects of their study, in the process producing tentative or 'fuzzy' (Bassey, 1998) interpretations of the phenomenon under study. However, as Hope (2010: 17) argues, although 'this affected the way in which researchers designed research, gathered data, analysed data, created categories, and wrote … it did not … give researchers a green light to do whatever they liked'. If the researchers were engaged in Grounded Theory, they had to apply the key principles of the methodology (ibid.). These are

- Everything starts from data – there were no pre-defined categories or pre-conceived hypotheses. They were firmly grounded in data;
- The process was iterative, moving from collection to analysis to collection;
- Cases were selected on grounds of theoretical sampling;
- Theoretical sensitivity (linked to researcher reflexivity) was important;
- Cases were analysed through the constant comparison method (ibid.).

In the reviewed literature, pertinent to Grounded Theory, this researcher identified many studies that drew on the work of Charmaz (2000; 2006). These came from a variety of disciplines which included education (Jones, 2002; Jones and Hill, 2003), psychology (Dodson and Dickert, 2004; Thompson, Cole and Nitzarim, 2012) and, particularly, nursing (Mills, Francis and Bonner, 2008; Long-Sutehall et al., 2011; Harling and Turner, 2012).   A number of EdD and PhD studies, which used a constructivist Grounded Theory methodology inspired and informed by Charmaz (2000; 2006), were also identified. These included Henderson (2009), Hope (2010), Smith (2010), Barden (2011) and Mueller (2012).

2.4 Essential constructivist Grounded Theory elements

The constructivist Grounded Theory, as proposed by Charmaz (2006) has the key elements of the 'first generation' Grounded Theory process which include '…data collection, coding and analysing through memoing, theoretical sampling and sorting to writing, using the constant comparative method' (Glaser, 1998: 12) - imbued with constructivist qualitative research principles. The methods of sampling, data collection and data analysis should not be considered as separate procedural steps in the research process. Instead, they need to be considered as a continuous cycle of data collection, analysis and sampling (Elliott and Lazenbatt, 2005: 50). In this final section of the chapter these key elements will be introduced. Their use in this study will then be described in other chapters, for example, the sampling and data collection processes will be discussed in detail in Chapter 3 (Research Design) and the coding process will be discussed in Chapter 4 (the first of four 'data' chapters).

2.4.1 Theoretical sampling

In other research designs, the sampling procedure is 'designed in advance and adhered to rigorously' (Schreiber and Stern, 2001: 64). In Grounded Theory, the sampling process is entirely controlled by the emerging theory (Glaser and Strauss, 1967: 45) and thereby called 'theoretical sampling'. The pioneers of Grounded Theory defined theoretical sampling as:

> the process of data collection for generating theory whereby the analyst jointly collects, codes, and analyses his (sic) data and decides what data to collect next and where to find them, in order to develop his (sic) theory as it emerges (Glaser and Strauss 1967: 45; Glaser, 1978: 36).

In the present study, the researcher entered the field, that is, the University of Malta, with a very open research question: *How is e-learning used at the*

University of Malta? The researcher, therefore, had no pre-conceived theory to guide sampling. This research started with an interview with a key informant as suggested by Goulding (2002: 66) - the person in charge of the University's e-learning service [§3.3]. After coding and analysing this first interview it became apparent that the majority of lecturers at the University of Malta were using e-learning *only* to support their lecturing. The interviewee, however, noted that a small number of lecturers were using e-learning for other educational approaches, such as online synchronous and asynchronous text-based discussions in forums hosted on Moodle (this was later confirmed by the statistics supplied by the same subject and data available online).

At this stage, a number of research options emerged: the researcher could study (i) both uses of e-learning, (ii) *only* the use of e-learning that supports lecturing, or (iii) *only* the use of e-learning for purposes other than as a support to lecturing. This researcher decided to study the latter use of e-learning and consequently modified the research question to: *How is e-learning being used at the University of Malta for educational efforts which do not only use traditional methods?* Instead of a single case study, two separate courses using non-traditional e-learning approaches, in two different disciplines, were selected for this research and the next interviewee (another key informant) was selected. This was consistent with the advice of Babbie (2011: 328) who argued that subjects, 'groups or institutions are selected on the basis of their theoretical relevance'.

As the research progressed, theoretical sampling continued to be used to guide and adapt the interview questions. It was also used, in the sampling of lecturers, so as to ensure the theory would develop as fully as possible – in Grounded Theory terms, until it reached 'theoretical saturation' (Elliott and Lazenbatt, 2005: 4). However, it was not possible to use theoretical sampling with students because they could not be selected by the researcher for reasons explained in sections 4.3.2 and 6.1.1.

2.4.2   Theoretical saturation

Theoretical saturation is the term introduced by Glaser and Strauss (1967) to describe the criterion for when to stop theoretically sampling for data pertinent to a category (Glaser, 1992: 102). It is achieved when gathering fresh data no longer sparks new theoretical insights, nor reveals new properties of the core theoretical category/ies (Charmaz, 2006: 113; Corbin and Strauss, 2008). Thus, theoretical saturation is more important than sample size (Charmaz, 2006: 114) – which may be small, as in this research.

Morse (1995: 148), however, warns that the frequency of a code is not an indicator of theoretical saturation. Rather, as she states, echoing Glaser and Strauss (1967) and other grounded theorists (including Charmaz, 2000; 2006; 2011; Schreiber 2001; Goulding, 2002; Chiovitti and Piran, 2003; Holton, 2007; Corbin and Strauss, 2008), 'researchers cease data collection when they have enough data to build a comprehensive and convincing theory'.

2.4.3   Theoretical sensitivity

Before starting this research effort, this researcher enjoyed an academic and professional background in adult education. For some years he was also in charge of the local Adult Education Unit and the Malta Literacy Campaign. He was then, for 18 years, a full-time lecturer at the University of Malta [see also the section about researcher reflexivity (§3.10)]. This researcher was faced with a number of questions related to his pre-research sensitivity: Should he ignore all these experiences and acquired knowledge (often known as 'received theory')? Could they be ignored? Should this researcher act as a value-free investigator as the positivist tradition imposes? What should this researcher's place in the current

research be? The review of the literature about Grounded Theory revealed that these issues have been part of a very complex debate about 'theoretical sensitivity' - perhaps the most contested and disputed concept in Grounded Theory.

In their original text Glaser and Strauss (1967) stressed the importance of approaching a social phenomenon with as few pre-conceptions as possible, in order to 'discover' what is of importance to the research subjects. In the same book they also argued that the researcher must 'have theoretical insight into his (sic) area of research, combined with an ability to make something of his (sic) insights' (ibid: 46). This presented an epistemological ambiguity. The pioneer authors were arguing for both an objectivist 'emergent sensitivity', that is, theory must emerge from the subjects of the study without being contaminated by the researcher's beliefs, and hermeneutic 'theoretical sensitivity', that is, the analysis of knowledge is indeed influenced by the researcher's personal and intellectual history, 'the type of theory that they have read, absorbed and use in their everyday thought' (Birks and Mills, 2011: 11).

It has already been argued [§2.3] that this conceptual ambiguity developed from Glaser and Strauss's different schools of training. The former came from a positivist environment, the other from an environment of pragmatism and symbolic interactionism, as noted before. These two schools of thought were instrumental in the development of Grounded Theory – at the time a positivist, and therefore scientifically respectable version of qualitative research – however, they also developed the schism between Glaser and Strauss, particularly in their thinking about 'theoretical sensitivity'.

In later years, Strauss considered 'key points in the *Discovery* book as being rhetorical' (Charmaz, 2006: 165) and that 'objectivity in qualitative research (was) a myth' (Corbin and Strauss, 2008: 32). With Corbin, he argued that (quoting from Guba and Lincoln, 1998),

> Researchers bring to the research situation their particular paradigms, including perspectives, training, knowledge, and biases; these aspects of self then become woven into all aspects of the research process (ibid.).

Glaser's (1978; 1992; 1998) position on the researcher's sensitivity is somewhat ambiguous and mirrors the original 'emergent' and/or 'theoretical' dilemma found in the 1967 book. In *Theoretical Sensitivity* (1978: 72) he writes:

> it is necessary for the grounded theorist to know many theoretical codes in order to be sensitive to rendering explicitly the subtleties of the relationships in his (sic) data.

The literature is a clear source for these sensitising theoretical codes. However, in his later work (including, Glaser, 1992; 1998; 2001; 2002; 2008), he argues that the researchers in Grounded Theory must keep themselves uncontaminated by extant ideas, in order not to force the discovery of concepts from the data.

In the present study, the researcher believed that education was a democratic project as advocated by Dewey (1916). The deductive choice to study e-learning efforts that were not *only* intended to enhance the transmission of knowledge (which is a prescriptive social activity, and therefore undemocratic) was clearly influenced by the researcher's sensitivity. This was more akin to Strauss's concept of 'theoretical sensitivity' than Glaser's objectivist concept which he defended in his later work (1992; 1998; 2001; 2002; 2008).

Many scholars, including the constructivist grounded theorists such as Charmaz (2006) and Bryant (2003; 2007) and others such as Dey (1999), Clarke (2005), Mills, Bonner and Francis (2006), Urquhart and Fernandez (2006) and DiStefano and Cayetano (2011), reject Glaser and Strauss's original pronouncement. These scholars, assume that Glaser, and perhaps Strauss, in *Discovery of Grounded Theory* (1967), in an effort to make Grounded Theory a rigorous scientific method, naïvely viewed the

researcher as a *tabula rasa* when entering a field of inquiry. They thus recommend that the grounded theorist should do everything possible to minimize the influence of his or her preconceived ideas upon the research.

For this reason, as argued before, this researcher conducted an initial literature review to establish the need for the research and satisfy the requirements of a postgraduate project proposal (Glaser, 1998; McGhee, Marland and Atkinson, 2007; Neill, 2010). This literature was then put aside and not revisited until the core category was established, to prevent foreclosure of the analysis by preconceived ideas (Heath, 2006; McGhee, Marland and Atkinson, 2007; Neill, 2010). Thereafter, this study was conducted from a stance of 'theoretical agnosticism', following Henwood and Pidgeon's (2003) recommendation to take a critical stance toward existing theories - a position consistent with Charmaz's (2006) suggestion to treat extant concepts as problematic and Glaser's (1978) advice that such extant concepts must earn their way into researchers' final accounts of findings. The researcher also followed Dunican (2005: 259) who advised that a safeguard against bias could 'be achieved by the researcher constantly asking (himself) whether or not the concept under investigation has originated from (himself) or (his) interviewees'.

The foregoing also has implications as to the place of the literature review in a Grounded Theory study. In the present study, the extant literature review was performed *after* the generation of theory to minimise the influence of prior knowledge on the constant comparison process which will be discussed in the next section.

2.4.4 Constant Comparative Method

Charmaz (2006: 187) and Bryant and Charmaz (2007c: 607) define the constant comparative method, first presented by Glaser and Strauss (1967), as

> a method of analysis that generates successively more abstract concepts and theories through inductive processes of comparing data with data, data with category, category with category, and category to concept. Comparisons then constitute each stage of analytic development.

This method, according to Glaser and Strauss (1967: 105-13), involved four stages:

1. Comparing incidents applicable to each category;
2. Integrating categories and their properties;
3. Delimiting the theory; and
4. Writing theory.

All forms of Grounded Theory, including the constructivist approach, have these four stages as the basis for constant comparison, albeit with some variations. For example, in the present study, which is imbued with constructivist principles, this researcher followed the recommendations of Charmaz (2006) and Birks and Mills (2011) as to what constitutes the essential features of the constant comparative method. These are introduced below and described in detail in other chapters.

2.4.4.1 Coding

Saldaña (2009: 3) explains that 'a code in qualitative inquiry is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data'.

Holton (2007: 238) explains the function of coding:

> Coding gets the researcher off the empirical level by fracturing the data, then conceptualizing the underlying pattern of a set of empirical indicators within the data as a theory that explains what is happening in the data. Coding gives the researcher a condensed, abstract view with scope and dimension that encompasses otherwise seemingly disparate phenomena. Incidents articulated in the data are analysed and coded, using the constant comparative method, to generate initially substantive, and later theoretical, categories.

The coding in the present study (see Figure 2.1) consisted of two main phases drawn from Charmaz (2006: 46), Saldaña (2009) and Birks and Mills (2011: 9-11): (i) an initial phase, that is, a 'first cycle' (ibid: 45) of *open coding* which involved 'identifying important words, or groups of words, in the data and then labelling them accordingly' (Birks and Mills, 2011: 9), and (ii) a 'second cycle' (Saldaña, 2009:149) of 'intermediate coding' (Birks and Mills, 2011: 11) in which the most significant initial codes were sorted, synthesised and/or integrated (Charmaz, 2006: 46), and, subsequent (and/or concurrent) 'theoretical coding' through which the substantive codes are related to each other 'as hypothesis to be integrated into a theory' (Glaser, 1978: 72).

The initial coding stuck closely to the data and was a non-sequential and iterative inductive process. It started with the development of an initial list of two types of open codes: (i) *in vivo* codes taken directly from the students' and lecturers' narratives and (ii) researcher codes (Glaser, 1978; Charmaz, 2006; Corbin and Strauss, 2008).

In the second cycle of coding the project did not use the 'axial coding' method as suggested by Charmaz (2006) and Corbin and Strauss (2008). The researcher, new to Grounded Theory, felt that this process was too complicated in the context of this research. Instead, he used an intermediate process consisting of focused coding: some codes were merged together because they were conceptually similar, infrequent codes were assessed for their utility in the overall coding scheme, and some
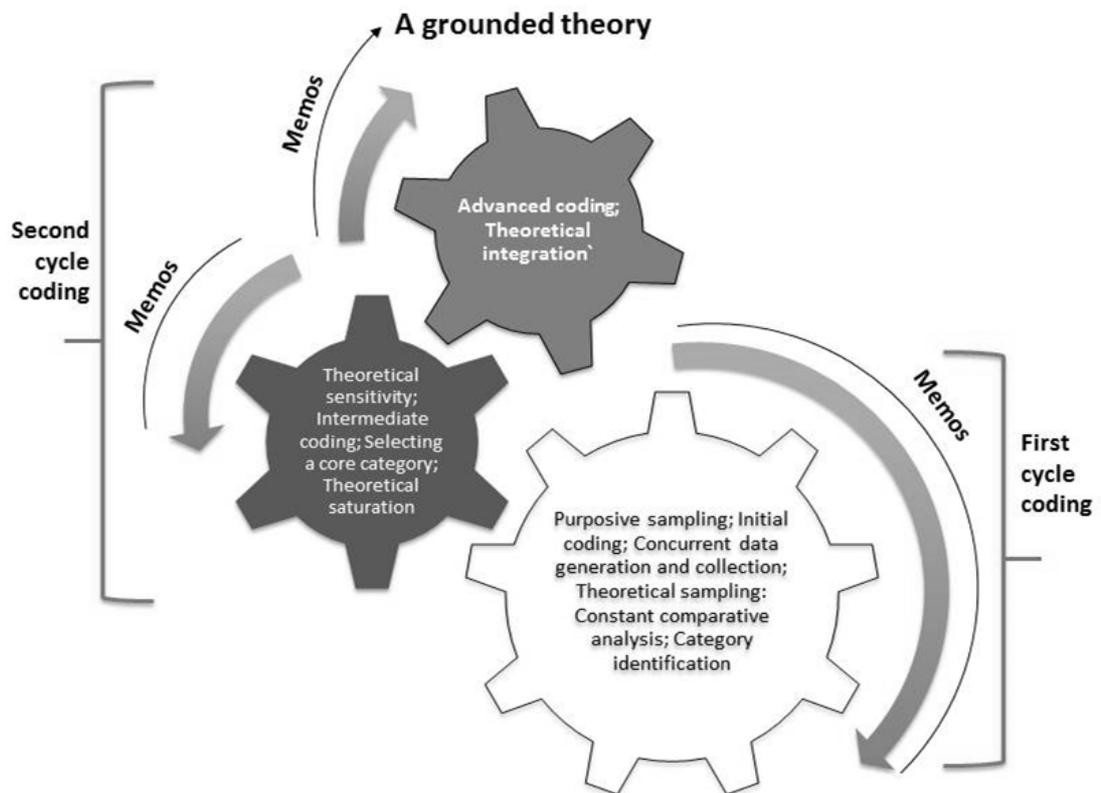
Figure 2.1 - The Coding Process (adapted from Saldaña, 2009: 45; Birks and Mills, 2011: 17)

codes that seemed like good ideas during the initial cycle coding were dropped all together because they were deemed marginal or redundant to the emerging theory. During this stage, this researcher also engaged in diagramming to integrate relevant categories to form a substantive theory of action.

Theoretical coding was then used to lend form to the focused codes and develop the core category, the one 'that appears to have the greatest explanatory relevance' for the phenomenon (Corbin and Strauss, 2008: 104). This will be discussed in depth in Chapter 8.

2.4.4.2   Concurrent data generation or collection and analysis

Birks and Mills (2011: 10) note that concurrent data generation or collection and analysis are fundamental in a Grounded Theory study. To achieve this in the present project, the researcher worked in the following manner: after the first interview he coded its transcript; he then examined the codes and found that some of these codes could be integrated into categories. This process started to highlight areas of theoretical interest which the researcher could revisit and re-evaluate (through other interviews) when returning to the research setting.

2.4.4.3   Memo writing

Throughout all the coding stages, as suggested by Saldaña (2011: 32), Friese (2012: 135), and Grounded Theorists, including Glaser and Strauss (1967), Charmaz (2006) and Corbin and Strauss (2008), this researcher engaged in the writing of memos concurrently with coding. Memos are analytical notes in which the researcher records his thinking. Saldaña (2009: 32) explains:

> The purpose of analytic memo writing is to document and reflect on: your coding process and code choices; how the process is taking shape; and the emergent patterns, categories and subcategories, themes, and concepts in your data – all possibly leading toward theory.

For Charmaz (2006: 94) the memos form the core of a Grounded Theory. They are also important in the audit trail that ensures rigour in a qualitative research investigation (Chiovitti and Piran, 2003: 432). Various examples are presented in the 'data chapters'.

2.4.4.4   Identifying a core category

The conceptual analysis processes described previously, that is, iterative coding, memoing and theoretical sampling, will help the researcher develop a 'core category' (Glaser, 1978; Clarke, 2005; Charmaz, 2006) that 'encapsulates and explains the Grounded Theory as a whole' (Birks and Mills, 2011: 12). Holton (2007: 251) explains

> This core variable can be any kind of theoretical code: a process, a typology, a continuum, a range, dimensions, conditions, consequences, and so forth. Its primary function is to integrate the theory and render it dense and saturated. In appearing to explain how the main concern is continually processed or resolved, the core becomes the focus of further selective data collection and coding efforts.

2.4.4.5   Advanced coding, theoretical integration and theory generation

These essential elements of Grounded Theory will be discussed in Chapter 8 which presents the theory generated through this project. In brief, advanced coding in this research was achieved through the intensive constant comparison of intermediate codes and memos that had previously emerged during the analysis of data [§8.2].

Glaser (2005) argues also for 'theoretical coding' during the advanced coding stages. Birks and Mills (2011: 12) explain that these 'can be drawn from existing theories to assist in theoretical integration while adding explanatory power to the final product of a Grounded Theory study by situating it in relation to a theoretical body of knowledge'. The result of this process will be presented in Chapters 9 to 11.

2.4.4.6   Writing

This researcher used the 'storyline', as suggested by Corbin and Strauss (2008: 107), that is, a 'narrative framework' to contextualise and integrate the various abstract elements (which emerged from the data) into a core category (Dunican, 2005: 256; 2006: 185; Birks and Mills, 2011: 117) and will present them in Chapter 8 of this thesis. The researcher was then able to go on to position the theory in the context of broader academic knowledge presented in Chapters 9 and 10. Through applying the work of others to the storyline, the researcher was able to augment, support and validate existing theories and in so doing explain and reinforce the value of this project's own contribution. Throughout this process, as recommended by Corbin and Strauss (2008: 107), the researcher returned again and again to the original data, trying to answer the following questions:

> What is the main issue or problem that these people seem to be grappling with? What keeps striking me over and over when I read these interviews or observations? What comes through, although it might not be said directly?

2.5   Summary

This chapter explored the constructive Grounded Theory methodology that underpinned the current project.

The Grounded Theory approach was originally developed by Glaser and Strauss (1967) within the positivist paradigm, elevating in the process the status of the method in the scientific world. Later, Charmaz (2000; 2006) took a middle ground between positivism and postmodernism, and developed an 'evolved' Grounded Theory (Mills, Bonner and Francis, 2006: 27) which assumed the relativism of multiple social realities, recognised the mutual creation of knowledge by the viewer and the viewed, and aimed

toward interpretive understanding of subjects' meanings (Charmaz, 2000: 510).

The present research process involved sampling, interviews and concurrent and iterative coding, category building and memo writing, consistent with the constructivist Grounded Theory methodology. The way these research elements were used is discussed in the next chapter.

Chapter 3

Research Design

Intensive qualitative interviewing fits grounded theory methods
particularly well. Both grounded theory methods and
intensive interviewing are open-ended yet directed,
shaped yet emergent, and paced yet unrestricted.
(Charmaz, 2006: 26)

3.1   Introduction

This investigation is a case study of the online learning initiatives of the University of Malta using the constructivist Grounded Theory method to guide the sampling, qualitative data collection, analysis and the generation of theory as described in the previous chapter [§2.4].

To ensure the credibility and trustworthiness of this Grounded Theory project three key sources of data, all gathered through qualitative research approaches, were used. This data gathering triangulation was achieved through:

1. one-to-one and group interviews with lecturers,
2. one-to-one and group interviews with students, and
3. non-participant virtual observations of online courses.

This 'methodological triangulation' (Mason, 2007: 109) helped to ensure that the research question was 'not explored through one lens, but rather a variety of lenses which allow(ed) for multiple facts of the phenomenon to be revealed and understood' (Baxter and Jack, 2008: 544) more completely.

This chapter will first explore the setting and case study parameters. It will then describe the interviewing strategies, the ethical decisions taken so as

not to harm the participants, and, in the last section it will describe the measures taken to bracket the researcher's prior knowledge and ensure the scientific rigour required of a scientific project. The sampling strategy will be described in Chapters 4 and 6 while the methodology used to gather rich data through virtual observation of online courses and discussion will be described in Chapter 5. Issues of credibility and trustworthiness will be described in the final chapter.

3.2   The University of Malta

The University of Malta traces its origins to the founding of the Jesuit *Collegium Melitense* which was set up through the direct intervention of Pope Clement VIII on 12 November 1592. In 1762 the Jesuits were expelled from the islands but, seven years later, with the permission of the Pope, the Collegium became a university through a Magisterial decree by Grand Master Emanuel Pinto de Fonseca. It is the oldest university in the Commonwealth outside the United Kingdom.

The 1988 Education Act established the present shape of the University of Malta. Today, this University is still the island's[6] main higher education institution. It is funded directly by the government but is, in terms of management, an autonomous institution with 'a mission to conduct teaching and corporate research, and to actively participate in the socio-economic development of the country' (Camilleri, 2010: 18). Over the past few years, the University of Malta has reviewed its structures in order to be in line with the Bologna process and the European Higher Education Area.

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[6] Malta is an archipelago of three main islands: Malta, Gozo and Comino. The latter is only inhabited by a single family. Gozo has a population of around 31,000 persons while Malta is the main island, with a population of over 400,000. The main educational institutions, including the University, and the governing structures are found on Malta. Gozo has a small branch of the same University.

The number of students attending the University of Malta has grown progressively over the years and during the 2011-12 academic year there were 10,889 students (of which 6,307 women and 4,582 men) including over 650 international students from 77 different countries, following full-time or part-time degree and diploma courses (Office of the Registrar, 2012). Today, the University has fourteen Faculties and a number of interdisciplinary Institutes and Centres (see Appendix 1).

3.3　E-learning service at the University of Malta

In 1997, the University of Malta set up *IT Services* to 'proactively support the teaching, research and related activities of the University through coordinated, efficient and effective use of information and communication technologies' (Camilleri, 2010: 56). The Rectorate, in 2006, created the *Distance and e-Learning Committee*:

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to supervise the setting up, co-ordination … (and)
implementation of a policy for the whole University …
(and) also to provide a support framework for e-
learning and possibly other forms of distance learning
… (it) has representatives from many faculties,
administration, and support departments and advices on
all matters related to e-learning'.⁷ (James, P1_44:44)⁸
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This Committee entrusted *IT Services* to develop and maintain the University Virtual Learning Environment (VLE) platform and support students and staff when using the VLE. It also chose Moodle as the e-Learning platform.

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[7] I have adopted Max Hope's (2010) idea of using the 'courier new' font when quoting empirical data.
[8] The *invivo* quotation style is described in section 3.7.2.

All lecturers have access to the VLE and IT Services offers training sessions in the use of Moodle. James[9], the Deputy Director of IT Services noted that:

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each year we are witnessing an increase in the number
of lecturers using the VLE. They come from all
faculties, institutes … and University Centres … from
the Faculty of Education, Medicine, to the Islands and
Small States Institute. They post notes, reading lists,
worksheets … they use the VLE to organise online
discussions, tutorials and to collect digital copies of
assignments and projects. (P1_50:50)
```

3.4   Case Study

This research focused on a 'specific' (Cohen, Manion and Morrison, 2008: 253) or 'single instance' (Opie, 2009: 74; Silverman, 2011b: 16) - online teaching and learning - in a 'bounded system' (Miles and Huberman, 1994: 25; Cohen, Manion and Morrison, 2008: 253; Silverman, 2011b: 16) - the University of Malta. It was therefore a case study.

Cohen, Manion and Morrison (2008: 253) argue that case studies are valuable because they 'investigate and report the complex dynamic and unfolding interactions of events, human relationships and other factors in a unique instance'. Thus, initially, the research sought to understand the online learning provision of the University of Malta, as a whole and 'unique system'.

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[9] Anonymity of the respondents will be maintained throughout this research for ethical reasons. However, the identity of some respondents, such as James, could not be concealed due to the positions they hold within the University of Malta. This issue was discussed with all the concerned respondents and this researcher used their real names only upon obtaining their signed consents.

3.5   Uses of the VLE at the University of Malta

A printed list of lecturers using Moodle during the 2011-2012 academic year was provided by IT Services in September 2011. This list specified the codes of the courses and the names of the lecturers involved (see also §2.4.1).

Another list, available at https://www.um.edu.mt/vle/1112/course/index.php was also consulted. This list provided the number of courses of each Faculty Department, Institute and Centre using Moodle. Both lists, together with all the course descriptions available online, were explored in order to identify and select the sample of lecturers of this research project.

During the 2011-2012 academic year there were 1,285 courses using Moodle. All Faculties, most Institutes and Centres were using the VLE in most of their courses. These courses involved 595 different lecturers from 113 Faculty Departments, Institutes and Centres. Only 24 University institutions were not using the VLE.

The analysis of the course descriptions of these courses which were using Moodle revealed that the lecturers concerned were using traditional face-to-face pedagogic techniques, predominantly, the lecture. 1,195 courses (or 93% of the courses that were using Moodle) used lecturing: the VLE was used primarily as a repository for notes, papers, for links to external sources and as an electronic noticeboard. 78 courses (or 6%) used a variety of non-lecture but face-to-face pedagogic techniques including the seminar, supervised clinical placement, fieldwork and workshop: the VLE was also used primarily by the lecturers to support their face-to-face educational efforts. More importantly, only 16 courses, that is, about 1% of the courses, were using online teaching and learning as the main pedagogy (rather than lecturing or other face-to-face educational encounters). 12 of these courses were 'full online courses'.

According to the course descriptions, most lecturers were using Moodle to support their teaching by using the VLE for either or all of these functions: as a repository for reading lists, as digital calendars, for the re-scheduling of lectures, for maintaining links to Internet-based resources and for giving students access to Turnitin (the anti-plagiarism software).

Within the group of courses, which used the lecture as the main mode of instruction, there were some, which used Moodle to complement and support face-to-face lecturing with non-traditional teaching methods. Thus, some courses were using the VLE for blended courses (that is, courses that used both face-to-face and online teaching and learning forms) through the use of, for example, e-seminars, collaborative e-portfolios and asynchronous online discussion. Some other courses within this group were, however, using Moodle as a repository for pre-recorded 'online lectures'.

3.6   Reconsidering the Case Study

The number of lecturers and courses using Moodle, and obviously the thousands of students involved, implied that a comprehensive understanding of the use of the VLE of the University of Malta as a 'unique location' (Opie, 2009: 74), as suggested by the initial research question, required a quantitative large-scale approach or a qualitative investigation involving a very large representative sample of lecturers and students.

Consequently, as described in section 2.4.1, this researcher decided to study the use of e-learning for purposes other than as a support to lecturing and accordingly modified the research question.

This strategy was in line with the suggestions offered by Cohen, Manion and Morrison (2008: 262) and Qi (2009: 25), all quoting Nisbet and Watt (1984: 78), who argued that

> because case studies catch the dynamics of unfolding situations it is advisable to commence with a very wide field of focus, an open phase, without selectivity or prejudgment. Thereafter progressive focusing enables a narrower field of focus to be established, identifying key foci for subsequent study and data collection.

The blended courses were run mainly (but not exclusively) by the Programme for Educational Technology, Design and Innovation (PETDI) section of the Department of Mathematics, Science and Technical Education within the Faculty of Education (DMSTE). The full-online courses were run mainly (but not exclusively) by the Faculty of Health Sciences through its Department of Nursing. This department was responsible for the University of Malta's only full-online Bachelor's degree – the BSc (Hons) Health Science (BScHS). This research's sample was selected from lecturers and students involved in PETDI and BScHS.

The University of Malta, therefore, only provided a kind of backdrop to the findings rather than a focus of interest in its own right. It was not the unit of analysis; rather it was the sample, made up of lecturers and students from the two chosen Departments, that was the unit of analysis.

3.7   Interviews

The literature reviewed – pertinent to qualitative research – indicated a continuum of interviewing styles from the highly structured to the completely unstructured. However, Birks and Mills (2011: 75), banking on the work of Corbin and Strauss (2008) and Charmaz (2000; 2006), argued that the interview for a Grounded Theory investigation must be

dependent upon the ability of the researcher to travel a path through the interview with the participant. The greater the level of structure imposed, the less able the interviewer will be to take the optimal route. Less structure is better from the perspective of following where the conversation takes you. This is not to suggest that the interviewer should be passive in the interview process; the interviewer acts as coordinator of the conversation with an aim of generating fodder for the developing theory.

This research, thus, adopted 'intensive qualitative interviewing' (Charmaz, 2006: 28), which, like Grounded Theory methods, were 'open-ended yet directed, shaped yet emergent, and paced yet unrestricted' (ibid.). These interviews developed into conversations (rather than a formal question and answer format), in which, however, unlike normal discussions, the researcher masked his beliefs not to influence the emerging dialogue. Burgess's (1984: 102) term 'conversations with a purpose' captures well the structure of the interviews.

To maintain fluidity and flexibility within the interview the researcher went to the interview with no complete and sequenced script of pre-formulated questions. The researcher did have a set of starting points [§3.7.1] for discussion and also a list of themes to be covered during the interview, but he allowed the interview to generate into a meaningful contextual and situated discussion. This style allowed the researcher to explore the required themes and the interviewee(s) to delve into unexpected and unplanned topics.

Moreover, this researcher operated from the ontological position that knowledge is situated and contextual, and therefore

> the job of the interview was to ensure that the relevant contexts are brought into focus so that situated knowledge can be produced … (In this process) data and knowledge are constructed through dialogic (and other) interaction during the interview … knowledge is at the very least reconstructed, rather than facts simply being reported, in interview settings. According to this perspective, meanings and understandings are created in an interaction, which is effectively a co-production, involving researcher and interviewees. Qualitative interviewing therefore involves the construction or reconstruction of knowledge more than the excavation of it. (Mason, 2007: 62-63)

Interviews with lecturers and students took place on a one-to-one and group basis. All interviews were recorded on a digital audio recorder. Respondents talked in their preferred language and most used Maltese, their native language. The interviews were first transcribed by the researcher and later translated into English.

It is pertinent to note, at this stage, that English is the official language of instruction at the University of Malta[10] and, therefore, all online interactions via Moodle have to occur in this language rather than Maltese, as can be seen from the screenshot[11] below (Figure 3.1). Therefore, all lecturers and students should have been competent enough to dialogue in English during the interview and the laborious task of translating each interview into English could have been eliminated. However, the researcher felt that he should give each respondent the opportunity to choose the language s/he felt more confident in. Most lecturers and all students chose the Maltese language.

This strategy was also adopted to minimize any perceived or real imbalance of power, between the interviewed and interviewees, particularly the students, since the researcher was also a lecturer at the University of Malta. Other measures taken to meet this end included:

i.   **holding the interviews in sites chosen by the respondents themselves** - which meant that the researcher had to visit a variety of workplaces, including various schools and the General Hospitals in Malta and Gozo;

ii. **following the narrative or sequence provided by the interviewee** - which also helped in allowing the researcher to follow up the interviewees' specific responses along lines which were peculiarly relevant to them and their context, and which were not anticipated in advance, 'in a highly organic way'(Mason, 2007: 64).

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[10] Refer to http://www.um.edu.mt/int-eu/visitingstudents/languageofinstruction
[11] The subjects' faces and names have been obscured for reasons of confidentiality.

Figure 3.1 - An online discussion using English rather than Maltese on Moodle

iii. **establishing rapport and a non-hierarchical relationship between the interviewer or interviewee** as suggested by Charmaz (2006: 19) and Bryman (2008: 64). This was also important because Charmaz (2006: 19) warned that 'if researchers do not establish rapport, they risk losing access to conduct subsequent interviews'. Thus, for example, during the interview with Thomas[12], the conversation veered, for about 10 minutes, to a discussion about digital photography which, it was discovered during the same event, was a passion shared by the researcher (who prefers Canon cameras) and interviewee (who made a very strong argument in favour of Nikon cameras).

iv. **maintaining a high degree of reciprocity on the part of the researcher** [as also suggested by Charmaz (2006: 19) and Bryman (2008: 64)]. As recommended by Charmaz (2006: 19), this researcher tried to look at the respondents' experience through their eyes, offering all participants respect and, to the best of his ability, understanding, although, at times, he could not agree with them. It also meant that the researcher was sympathetic with some of the respondents' expressed needs. Hence, during the interviews, the researcher answered all questions made by the interviewees, ranging from those concerning ethical issues to more mundane ones (such as, 'where do you (the researcher) live?'). For example, one respondent wanted to know which were the best online research engines to use for her own work, while another wanted to learn about what the University of Hull had to offer in terms of online learning at post-graduate level.

These strategies also ensured that the interviewees enjoyed being interviewed, as they all confirmed at the end of their interviews - even those who expressed discomfort when asked to participate in the research.

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[12] All the students' names were changed to ensure anonymity.

For example, Thomas, who lived in Gozo, was very hesitant when approached and asked to participate in the project. The researcher, having lived on Malta's sister island for four years, was aware of the difficulties that students living in Gozo encountered while studying in Malta. Gozitan students who opted not to live in Malta (for various reasons, including family responsibilities and full-time employment in Gozo) had bigger time management problems - mainly arising from the travelling involved (this included two daily ferry trips). Thus, the researcher offered to go to Gozo, on a Saturday, for the interview. The student accepted the invitation two weeks later.

During the interview, the student explained that his reluctance to participate in the research was not only related to time management. It was also related to the language used. He explained

```
I can write extremely well in English … I have no
difficulty in writing … but I'm not comfortable talking
in English. I'm not even comfortable talking in Maltese
… I mean the Maltese that we, the Gozitans, have to use
at University which would quickly identify us as
Gozitans. When the other students told me that the
interview is, how can I put it, very casual then I
accepted to meet you. I am very happy that I can and am
using Gozitan with you … it's much easier to explain …
to describe your feelings. (Thomas, P14_12:12)
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The dialect which the Gozitans call 'l-Ghawdxi'[13] is not much different from Maltese (see, for example, Said, 2007; Farrugia, 2010; Azzopardi-Alexander, 2011; Borg, 2011), except for its vocalic system, which, however, clearly identifies Gozitans from Maltese. Camilleri Grima (2009: 379) argues that 'l-Ghawdxi' and standard Maltese, are a 'diglossia', that is, two similar languages which however enjoy different social prestige. At all levels of the educational system, argues Camilleri Grima (2009: 390), 'l-Ghawdxi' is the 'variation of Maltese language' which enjoys 'the lower prestige'. Therefore, at school, in Gozo, Gozitans use 'l-Ghawdxi' in social

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[13] The word *Ghawdxi,* like *Ghawdex* (called Gozo in English), is Semitic. The *Gh* is silent but gives a guttural sound to the 'a'. Thus the word is pronounced as '*auchi*'.

interaction, for example, for telling jokes to friends and while playing, but use standard Maltese to talk to their teachers (Casha, 2006: 81), even if these are Gozitan. This socio-linguistic behaviour is also evident at post-secondary level. At the University of Malta, as Cutajar's (1999: 78) empirical study shows, and Thomas (P14_12:12) confirms, Gozitans tend not to use their dialect unless they are in a Gozitan-only group. They do this, explains Cutajar (1999: 79), because, coming from a minority group, they do not want to feel or be excluded from the larger Maltese student corpus, 'lose prestige' or 'become stigmatized'.

The interviewing strategy, which allowed the interviewees to choose their preferred language, thus, reduced the risk of imposing a language upon the interviewee that made him or her feel uncomfortable, or worse, disempowered. Thus, Thomas, talked in 'l-Ghawdxi' during the interview, but all the other Gozitan respondents used standard Maltese, 'switching code' (Camilleri Grima, 2009: 388), as they were used to in educational settings, in the presence of a researcher (who was also a University of Malta lecturer).

3.7.1   The interview guide

The interview guide for both students and lecturers, consisted of these questions:

1. Can you tell me a bit about yourself? [Marital status; family; social background; professional duties; previous educational experience (students); academic experience (lecturers); familiarity with ICT; use of ICT in your profession/leisure]
2. Can you tell me a bit about your course?
3. What does e-learning mean to you? [Perceived inter-relationship between e-learning and online learning]
4. How is online learning used in your course?
5. Are you comfortable with online learning? If yes/no, why?
6. What advantages/disadvantages do you perceive in online learning?

7. What is/should be, in your opinion, the tutor's/student's role in online learning?
8. What skills, attitudes and knowledge are required for effective online teaching/learning?
9. What is, from your experience, the most effective pedagogy/learning style in online learning?

As explained in the previous section these questions were not presented to the interviewee in the sequence shown above nor were all the questions asked. In many interviews the question '*What does e-learning mean to you?*' was enough to kick-start a long discussion that covered most of the required themes and unearthed new ones.

Furthermore, as suggested by Mason (2007: 72), a set of three questions were always asked at the end of the interview

1. Is there anything that you might not have thought about before that occurred to you during this interview?
2. Is there anything else you think I should know to understand better online learning at the University of Malta?
3. Is there anything you would like to ask me?

These questions prompted most respondents to add more to the interview. They also motivated some participants to keep thinking about the interview and to write to the researcher once the interview was over. Elaine, for example, sent this e-mail:

From: [redacted]
Subject: Some after thoughts
Date: 09 March 2012 09:15:28 GMT+01:00
To: Joseph Vancell

Hi Joe,

After our meeting I was thinking about what we discussed and feel I left out a couple of points which might be relevant to you.
- [redacted] uses video and audio links often and I think this makes us students feel more connected. It also makes it easier to understand more complicated tasks. Sometimes, she even delivers a whole powerpoint presentation online and this also is fantastic. One can rewind and hear it over and over again at his/her leisure.
- Another point which I feel I need to add is that, as we said, I do feel very at ease communicating online however, if I have a problem which is personal and which I do not want to share with my fellow student friends I usually use the webmail.

Best regards

[redacted]

Figure 3.2 - E-mail from a respondent

3.7.2   Quotation references

For textual *in vivo* quotations from interviews the referencing structure suggested by Friese (2012: 66 - 67) was used. This referencing technique, however, was mainly intended for primary documents, uploaded in an Atlas.ti hermeneutic unit (HU), which included only one interviewee, not group interviews. Thus, Friese's referencing structure had to be adapted and made suitable for quotations coming from both types of interviews. For example,

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They're not only lecturers … they're nurses too. They
learn from us, the course works two ways (Elaine,
P5_56:56).
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In the example above, Elaine is the name of the respondent. P5 refers to the primary document (P-Doc) number embedded in the Atlas.ti HU containing the interviews with all the students and lecturers. The last two figures, i.e. '56:56' mean that the quotation starts and ends in paragraph 56 of the same interview.
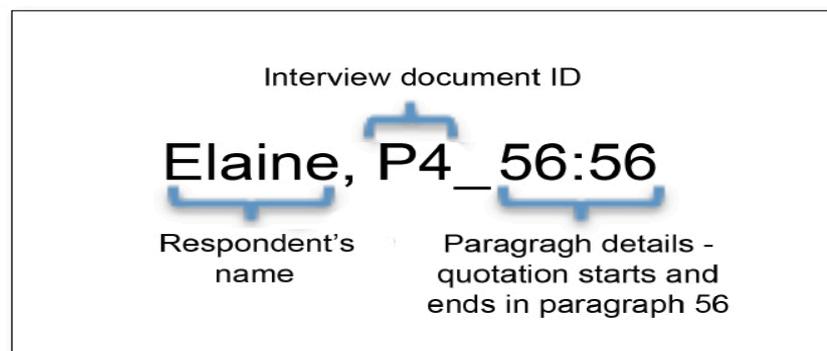
Figure 3.3 - Quotation reference style used in this thesis

3.8   Ethical considerations and decisions

The researcher was aware that, as argued by Sikes (2009: 29), 'any research that involves people has the potential to cause (usually

unintentional) damage'.   However, as noted by Olesen (2010: 425), the classic works in Grounded Theory, including Glaser and Strauss (1967), Strauss and Corbin (1990a) and Charmaz (2006), were all 'silent on ethical issues in the conduct of research'. Even in recent work, particularly Bryant and Charmaz (2007c: 425-426) and Birks and Mills (2011: 26-27), the debate about ethical issues in Grounded Theory research was only limited to a couple of paragraphs in each book. Birks and Mills (ibid.) however warn that Grounded Theory methods, 'while providing broad scope for the researcher in terms of explicating, exploring and explaining phenomena, can nevertheless be problematic' and, thus, there is the 'need for responsible conduct in respect of ethical and legal considerations'. This researcher had therefore to look beyond the Grounded Theory literature to understand and critically reflect on the multifarious ethical dimension.

According to Sieber (1993: 14, quoted in Sikes, 2009: 29), ethics have to do with 'the application of moral principles to prevent harming or wrongdoing others, to promote the good, to be respectful and to be fair'. Thus, qualitative research, argues Mason (2007: 8) 'should be conducted as a moral practice' and the literature reviewed, including Knight (2002), Zikmund (2003), Bryman (2008), Cohen, Manion and Morrison (2008), Denscombe (2008), Wisker (2008), Creswell (2009), O'Reilly (2009), Opie (2009), Sikes (2009) and Silverman (2011b), were unanimous in asserting that social, and particularly, educational researchers, must not harm or hurt – intentionally or unintentionally - the subjects of their studies.

Although this research project was primarily intended to contribute to the improvement of the online teaching and learning experiences of lecturers and students at the University of Malta, rather than just document what there was, the researcher was aware that potentially damaging or harmful situations might develop during the research and took great care for this not to happen.

3.8.1   Gaining Ethical Approval

The researcher first sought the ethical approval from the University of Hull to start the research by submitting a proposal to its Ethics Committee in December 2010 (Appendix 2). This contained information about the proposed research process, how informed consent would be obtained, how data would be generated and stored and how all those involved in the research would not be harmed by the project and its outcomes.

After gaining the ethical approval from the University of Hull (Appendix 3), the researcher then sought the approval of the University (of Malta) Research Ethics Committee (Appendices 4 and 5). This contained similar information to the proposal submitted to the University of Hull.

It is pertinent to note at this stage that the researcher was not required to seek ethical approval for starting research at the University of Malta. Indeed, according to the Guidelines of the University's Research Ethics Committee (UREC, 2007: 4) the researcher, a senior lecturer at the same University, was exempt from seeking ethics approval because the 'involvement of human subjects' consisted only in research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (i) research on regular and special education instructional strategies or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

This presented an ethical dilemma. The researcher was not comfortable with this 'exemption'. It was also divergent from the widespread debate about ethics in the literature reviewed. The literature and professional ethical guidelines by various research associations were unanimously consonant about the need that a researcher's proposal should be vetted by experts and should include a commitment to participants' rights and autonomy (for example, people must be free to make their own informed

decisions about participation in research); a commitment to 'respect' for participants; a commitment to knowledge (or the right for others to know, for example, how specific organizations operate); a commitment to the promotion of respect for social science (for example, to avoid 'spoiling the field'); and, protecting the researcher (for example, from litigation) (Wiles et al., 2004).

Moreover, many Faculty Deans, Heads of Departments, Institute Directors and lecturers were unaware of this exemption in the UREC guidelines and asked for the Ethics Committee approval before they would discuss, even informally, the research project with this researcher. Thus, the researcher decided to seek UREC's ethical approval. This was done, not only for ensuring rapport and trust with all those involved in the research but also, out of a sense of ethical 'beneficence, justice and fairness' (Orb, Eisenhauer and Wynaden, 2000: 95).

After gaining approval by UREC, the lecturer approached the University of Malta's IT Services Deputy Director, who as described previously, provided a list of lecturers who were using the University of Malta VLE during the 2011 – 2012 academic year. From this list, and aided by the course descriptions available online the researcher was able to identify the two courses which provided the sample of students and lecturers for this project. Eventually, the Deans of the Faculties of Health Sciences and Education were asked for permission to start the research, and when this regulatory approval was gained, the co-ordinators of the two courses were approached. They both, eventually, acted as a key informants and efficient gatekeepers in the present research.

3.8.2 Voluntary informed consent

The main subjects of this project were educators and students at the University of Malta. None were minors. Therefore, the research ethics policy of the University of Malta also exempted the researcher from seeking the informed consent of informants. However, for reasons similar to those described above, all participants were informed about the research process and the uses that would be made of the data generated. Informed consent was sought from every participant.

Voluntary informed consent is, in contemporary research, taken as given and essential (Wiles et al., 2004) and, as BERA's revised ethical guidelines warn, 'researchers must take the steps necessary to ensure that all participants in the research understand the process in which they are engaged, including why their participation is necessary, how it will be used and how and to whom it will be reported' (BERA, 2004: 6). In a similar vein, The British Psychological Society (2009: 12) insists that the researcher must 'ensure that clients … are given ample opportunity to understand the nature, purpose, and anticipated consequences of any … research participation'. Similar guidelines are found in the statement of ethical practice of the British Sociological Association (2002: 2) and the ethical guidelines of Social Research Association (2003: 23).

Even the Guidelines of the University of Malta Research Ethics Committee (UREC, 2004: 3) insist that, with regards to non-exempted research (that is research which is not related to educational practice and processes),

> Researchers shall obtain the consent, which has to be specific, from the data subjects prior to processing their personal data. In obtaining the consent, the researcher shall inform the data subjects about the purpose of processing, and about their rights under the Data Protection Act[14], namely the right to access, rectify, and where applicable erase the data concerning them. The data subject may also request written information about his personal data being processed by the researcher. In order to enable the

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[14] The Data Protection Act is accessible at
http://ec.europa.eu/justice/policies/privacy/docs/implementation/malta_en.pdf

data subject to exercise his right of access, the researcher shall provide his identity and habitual residence, when obtaining consent. Therefore the data subject has the right to request the researcher to correct, and where applicable erase such personal data that has not been processed in accordance with the Act. The consent of the data subject may also be withdrawn at any time.

These guidelines, which are similar to those of the University of Hull and the above mentioned established research associations, were applied to the research – even though they were intended for non-educational related research. A letter of invitation (Appendix 4) to participate in the research was sent to all participants or distributed by hand during face-to-face sessions. It contained details about the research written in simple English intended not to 'overwhelm the study participants with information' (as recommended by Wiles et al 2004). This letter contained the following items:

i.   an explanation of the purpose of the research;

ii.   the expected duration of the subject's participation;

iii.   the nature of the participant's involvement in the research;

iv.   assurances that the participant can stop his or her participation at any time;

v.   assurances that the research does not involve any foreseeable risks;

vi.   a guarantee for anonymity (when this is possible);

vii.   a statement that participation is voluntary;

viii.   an assurance that refusal to participate will involve no penalty or loss of benefits to which the subject is otherwise entitled; and

ix.   an assurance that the subject may discontinue participation at any time.

3.9 Measures intended to 'bracket' the researcher's prior knowledge to ensure rigour

The use of Grounded theory helped to ensure that the theory was grounded in data. The research project was not an effort to prove or disprove a preconceived hypothesis. The literature (see, for example, Gadamer, 1975; Rennie, 1994; 2000; Rennie & Fergus 2006 and Finlay, 2008), however, agreed that researchers were subjects who brought into the research process experience, beliefs and knowledge. Thus, in this research project, measures were taken to minimise any possible bias in the collection and analysis of the data, thus increasing the credibility of the research process. This is called 'bracketing' because, just as, in the mathematical sense, brackets can be used to contain certain formulations, so too in research, imaginary brackets can be used to highlight and put on hold the researcher's everyday assumptions (Wall et al, 2004: 21). Beech (1999: 35) offers the following definition:

> Bracketing is a fundamental methodological principle. You hold all preconceptions in abeyance in order to reach experiences before they are made sense of and ordered into concepts.

This section explores the 'bracketing' measures used in this project.

3.9.1 Using an open research question

The project attempted to answer a very open question:

> *How is e-learning being used at the University of Malta for educational efforts which do not only use traditional methods?*

The researcher was then very careful not to let his knowledge and beliefs interfere during the interviews [§3.7.1], and the analysis of data [§3.10.1].

3.9.2   Using semi-structured interviews

During the interviews [§3.7.1], the researcher was very careful not to 'force' (Glaser, 1992) his educational and political beliefs unto the respondents so as not to bias the participants' responses. For this purpose, in the initial interviews, open-ended questions were asked: such as '*What is your experience of this online learning programme?*'   In later interviews, questions developed through concepts that emerged from the participants' narrative were added to the interview list as described below.

3.9.3   Letting the participants guide the inquiry process

In order to ensure that the phenomenon investigated was accurately identified and delineated, participants in the study guided the inquiry process, as recommended by Chiovitti and Piran (2003: 430). As a practical example to illustrate how what the participant said guided the inquiry, a short interview excerpt from the data is provided:

> **Reflecting on your own practice** doesn't only count for work, but it helps in everyday life. How you **act** with your wife, your family, with people, friends, **socially**. So when you think about it … what we are studying, what we are discussing, **can be applied for everyday life**. It should be applied for everyday life. So you will live a better life. This course is an **empowering** experience. If you apply what you learn in your work and outside your work you will live better, obviously you will live your private life better. (Alfred, P4_82:82)

As shown in this excerpt, the respondent, a nurse participating in the BScHS, introduced the concepts of 'reflecting on own practice', 'social action upon reflection', '(learning) can be applied for everyday life', and 'empowering' when describing his e-learning experience. These codes were used to guide the inquiry process by adding them to the interview

guide [§3.7.1], as questions. For example, the code 'reflecting on own practice' was added to the interview guide as follows: '*One of the interviewees maintained that through the course he could reflect on his own professional practice. Did this occur to you?*' The subsequent interviews then confirmed and elaborated more on how 'reflection on own practice' was a very important aspect of the e-learning programme, as were the other three codes. Thus, modifying the interview guide and content areas of the emerging theory according to incoming information from participants allowed them to guide and thereby limit the researcher's influence on the inquiry process.

3.9.4   Respondent validation

During the study, the generated theoretical construction was checked against the participants' meanings of the phenomenon. In this process three levels of checking were used. First, as codes developed (based on the incoming data from participants), questions on the interview guide were changed, as described in section 3.9.3. Second, in the process of theory construction, codes were checked and verified, through direct questioning, for their relevance to participants' meanings. Third, the researcher returned to the research setting in the final months of the research project to refine and revise, with the participants, the theoretical model [§11.4 and 11.5.1.1]. This technique is often referred to as 'respondent or member validation' (Bryman, 2008: 377-378).

3.9.5   Use of participants' actual words in the emerging theory

The researcher, perhaps influenced by previous knowledge, always runs the risk of 'distorting or inaccurately representing a participant's intended meaning of a word, relationship, or action' (Chiovitti and Piran, 2003: 431). To minimise this risk, Corbin and Strauss (2008), recommend using the participants' own language, particularly as *in vivo* codes, at all levels of coding. For this reason, substantial quantities of student narrative were included in the empirical and theoretical sections of the thesis.

3.9.6   Memo writing to 'bracket' researcher subjectivity

Glaser (1992) insisted that, in Grounded Theory, codes and categories must emerge from the data and not from a predetermined framework. The researcher, according to Glaser (1992) must completely bracket his beliefs. However, Strauss and Corbin (1998) recognised the importance of researcher knowledge and viewed readings of the literature as important for enhancing theoretical sensitivity. However, they too advocated for the bracketing of the researcher's assumptions and preconceptions and suggested that concepts not derived from 'real' data 'must be considered provisional and discarded as data begin to come in' (Strauss and Corbin, 1990b: 205). They also suggested that researchers 'periodically step back and ask: What is going on here? Does what I think I see fit with the reality of the data?' (Strauss and Corbin, ibid.: 44). These reflections were recorded in memos.

3.10   Researcher reflexivity

Given that a researcher does not enter a research field as a *tabula rasa,* there has been considerable and conflicting debate about the researcher's impact on a Grounded Theory study [see also the section about researcher sensitivity (§2.4.3)]. Mruck and Mey (2007: 518) note that, since the theoretical foundations of Grounded Theory lie in symbolic interactionism 'one would expect reflection on the interaction between researcher and research participants to be a constitutive part' of doing Grounded Theory. However, as noted previously, Glaser and his followers, rejected reflexivity as 'paralysing' and 'self-destructive' (Neill, 2006: 62) leading to the 'forcing' rather than 'emergence' of concepts. However, Charmaz (2006: 189) explicitly recommends that, due to the researcher's sensitivity, s/he must assume a 'reflexive stance' in a constructivist Grounded Theory project. She defines reflexivity as

> the researcher's scrutiny of his or her research experience, decisions, and interpretations in ways that bring the researcher into the process and allow the reader to assess how and to what extent the researcher's interests, positions, and assumptions influenced inquiry. A reflexive stance informs how the researcher conducts his or her research, relates to the research participants, and represents them in written reports.

Similarly, Chiovitti and Piran (2003: 428) emphasise the need for researchers to explain their inquiry process, while Cutcliffe (2000: 1479) stresses the 'need for the grounded theorist to acknowledge his/her prior knowledge and tacit knowledge, to bring such knowledge into the open'. Considering these recommendations, the following section will present a brief outline of this researcher's views, beliefs and experiences. Further information as how these might have affected this research will be presented throughout the thesis.

3.10.1   Researcher's prior knowledge and beliefs

This researcher was brought up in a working class family, in which, his parents – a dockyard worker (with no other income other than his salary) and a housewife - struggled economically, perennially, to make ends meet. This notwithstanding, and in contrast to other working class families known by the researcher, all siblings attended fee-paying Church Schools, which his parents perceived to provide better education than local state schools (though cheaper than the elitist Private Schools), and thereby they offered better opportunities for future social mobility. Education was therefore perceived, in the researcher's family, as a means for empowerment.

From a young age this researcher was also exposed, through his father – a staunch Labour Party supporter - to the socialist dream of equality for all. Yet, growing up, this researcher saw many friends and neighbours - whose families made no financial investment in their education - ending up in working class jobs. Through his Bachelor's Degree in education, the researcher became intrigued by the political nature of education. Books like Paul Willis's, *Learning to Labor: How Working Class Kids Get Working Class Jobs,* explained a lot of things to the researcher. Later, when he started teaching in a state school for students deemed unfit to join the 'Junior Lyceums' (Malta's equivalent to the UK Grammar Schools), he directly witnessed events similar to those in Willis's book. He continued studying the political nature of education in his Master's degree in adult education. Subsequently he was employed as Head of Malta's Adult Education Unit. He then joined the University of Malta in 1995.

The researcher therefore brought a particular ontological and professional perspective to this investigation. He believed strongly in the democratic education project as envisioned by Dewey (1916). In his work, explained in section 1.1, the researcher, when free from the constraints of the traditional classroom, used alternative teaching and learning methodologies. For example, inspired by Jerzy Grotowski's (1968) *Towards a Poor Theatre* and

Augusto Boal's (1985) *Theatre of the Oppressed,* he asked participants, including drug addicts in rehabilitation programmes and prison inmates, to write and produce short plays about social problems they wanted to solve. The writing, rehearsals and production of these plays to interactive audiences of peers produced many interesting discussions, and, often, potential solutions to social problems afflicting the participants. At the University of Malta, students resisted similar attempts, even in courses about progressive pedagogies. Thus, could e-learning, that is learning which was not classroom-bound, provide an educational space where alternative and more democratic pedagogies be used?

This was no neutral question. It was an educational hope. So, utmost care was taken to ensure that the researcher's hope (which motivated the researcher to start this project), beliefs and experiences did not unduly influence the research process. As discussed in other sections, many measures were taken to 'bracket' the researcher's subjectivity throughout the whole project. Particular attention was paid during the analysis of data because the researcher was aware that 'if he wanted to prove a point, it might have been possible to find data which would support this' (Hope, 2010: 47). Grounded Theory elements, including constant comparison, which ensured that concepts were drawn directly from the students' and lecturers' narratives, reduced this risk.

3.11 Summary

This chapter first described the research setting and the parameters of the case study. It then analysed the interviewing choices made for this study. These methodological decisions were all consistent with Grounded Theory and the constructivist research paradigm.

Open-ended questions were used in semi-structured interviews. These allowed the dialogical encounters between interviewer and interviewees – students and lecturers of the University of Malta - to develop into 'conversations with a purpose' (Burgess, 1984: 120). This helped reduce the unequal power relationship and create rapport and trust between the two parties of the interview.

The chapter also described the ethical decisions made for this study. It was argued that all measures were taken to ensure that participants were not harmed, intentionally or unintentionally, during the research process. The measures taken to 'bracket' the researcher's subjectivity in this constructivist Grounded Theory investigation were described and critically analysed. In the last section, the issue of researcher reflexivity was explored.

Chapter 4

The Students' Interviews – *BSc Health Science*

*Apart from being lecturers they're nurses too. They learn from us,
the course works two ways. I work in a ward and I'm learning
something from that ward, so,
I can share it in the forums we have.*
(Cecilia, P2_67:71)

4.1   Introduction

The research sample was made up of four subsamples consisting of two groups of students and two groups of lecturers[15] from the two respective courses: the BScHS organised by the Department of Nursing within the Faculty of Health Sciences and DITEL, the postgraduate Diploma organised by the Department of Mathematics, Science & Technical Education of the Faculty of Education. The data from these subsamples were mainly gathered through recorded semi-structured interviews with students and lecturers. Further data, needed for triangulation purposes, that is, to support, verify or reject claims made by the students and lecturers, were collected through informal and unrecorded conversations, printed and online documents and virtual non-participant observations of online educational activities running on the University of Malta VLE, wikis and blogs, related to the two courses.

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[15] As will be argued in section 5.1, the word 'lecturer' – the professional designation of academics and teachers at the University of Malta - will be used even when the educator is not engaged in lecturing.

The analysis of these data will be presented in Chapters 4 to 7, as indicated in the Table 4.1 below. Chapter 8 will then describe the process through which the themes and concepts that emerged in the data analysis were integrated to generate a theory.

This chapter will first describe the process of analysis. It will then present the results of the analysis of the interviews of a sample of students participating in the BScHS.

Chapter	Content
4	• The process of analysis • BSc Health Science - Analysis of Students' interviews
5	• BSc Health Science - Analysis of Lecturers' interviews
6	• DITEL – Analysis of Students' interviews
7	• DITEL – Analysis of Lecturers' interviews
8	• Theory Generation

Table 4.1 - Contents of Chapters 4 – 8

4.2   The Process of Analysis

The analysis process involved coding, abstract conceptualisation through, mainly, inductive reasoning and memo writing. Diagrams were also created to map the connections between codes to help in the formation of theoretical ideas [§2.4.4]. An example is shown in Figure 4.1.
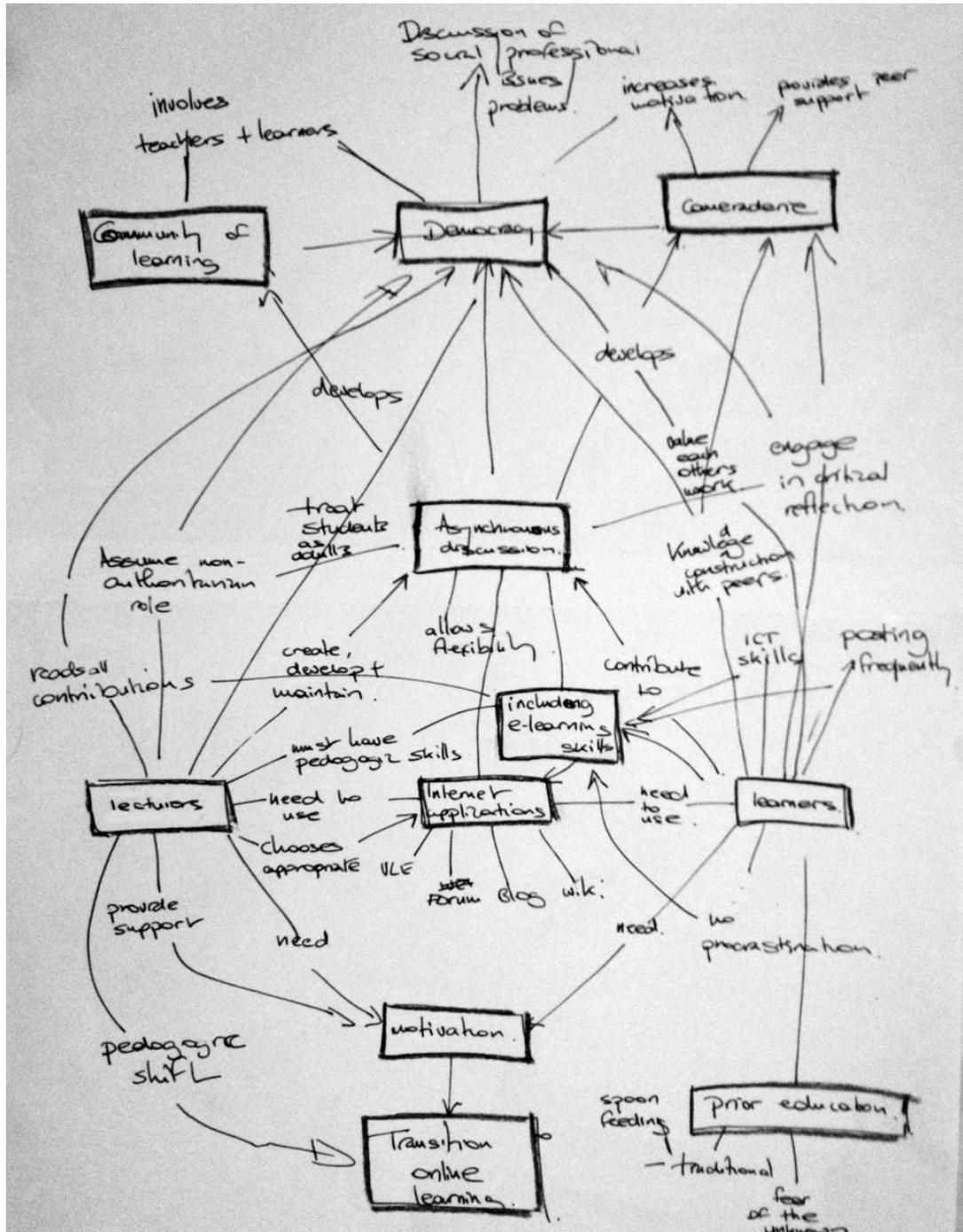
Figure 4.1 - Diagrammatic Mapping (BScHS – students' interviews)

The process started with the researcher reading through the printout of the first interview transcript and, through constant comparison, identifying and writing down open codes at the margins of the same printout. This first coding process was done on the same day of the interview, as suggested by Corbin and Strauss (2008: 163), because the researcher was aware that

these codes could 'serve as a foundation for further data collection and analysis'.

After this first coding process with pen and paper, the analytic process continued on ATLAS.ti, a computer aided qualitative data analysis software. First, a hermeneutic unit (HU) in ATLAS.ti was created, named and then saved. Second, within this HU, a blank Primary Document (PD) was added. Third, a rich text format copy of the transcript was pasted within the blank PD. The transcript was reread and the already identified codes were added to the Code Manager. During this second reading of the transcript some codes were merged while new codes were identified and added to the codes list.

The process was repeated for every interview. As is consistent with the iterative nature of Grounded Theory, through constant comparison, code names were modified, new codes were constantly added and others were merged together. 'Code families' developed progressively and, as Strauss and Corbin (1998: 197) argued, as the researcher moved

> along with analysis, each incident in the data (was) compared with other incidents for similarities and differences. Incidents found to be conceptually similar (were) grouped under a higher-level descriptive concept.

At this stage categories and subcategories emerged and memos recorded the intellectual journey as it was developing. This was not a linear or sequential process: it was rather a recursive process in which the researcher moved back and forth between each stage. In the process, the researcher revisited the already coded interviews and, when necessary, recoded them with emerging 'higher-level' codes or subcategories. Memos were written at every stage of the analytic process.

With ATLAS.ti the process of coding became more systematic and comprehensive. It was, for example, easier, during 'focused coding', for the researcher to merge codes, create links between codes, create 'code

families', create themes, categories and subcategories, and write, store, reassess and combine analytic memos. The software also allowed the researcher to determine the importance of a code through its frequency.

The process described above was also used for the analysis of data collected from virtual observations of online educational activities, websites and printed documentation, as well as notes written after unrecorded encounters with students and members of staff at the University of Malta.

4.2.1   Coding with ATLAS.ti: an example

The coding process on paper of the first interview produced around 80 codes. It was immediately apparent that further interviews would increase this number of codes making it more difficult to organise codes, notes and memos. Thus, as described above, the interviews were imported into and analysed using Atlas.ti. Friese's (2012) book *Qualitative Data Analysis with Atlas.ti* was used as a guide to any technical issues that emerged when using this software for coding, memo writing and category building.

What follows is an example of the analytic process through ATLAS.ti. In their group interview, two of the three Gozitan nurses were discussing the benefits and challenges of working and learning in a group:

> Rita[16]: … you can share your experience and someone
> else can tell you, 'I experienced something similar
> and this is how I dealt with it.' I think that when
> you work in a group you feel less isolated. For
> example when I started … I felt lost … because I had
> not yet understood what I had to do. Once you get
> going things get better.
>
> David: … as a group I find that, for a group
> assignment there is less work to do, although at times
> it takes more work to write in short, but then we all
> see each other's work and we correct it. The only

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[16] All the students' names have been changed to ensure anonymity.

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setback here is … that there are always one or two who
keep you back. (P4_148:149)
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The following codes were created for the above text: 'advantages of group work', 'disadvantages of group work', 'group work is difficult at first', 'there is always one who keeps you back', 'less work', 'more work to write in brief', 'sharing of experiences', 'peer-to-peer support', 'feel less isolated', 'collaboration', 'motivation', 'felt lost', 'support/scaffolding' and 'better instructions needed'. These were automatically sorted in alphabetical order in ATLAS.ti's Code Manager. When the rest of the interview was coded, the above set of codes was reused for other sentences or paragraphs. When the list in the Code Manager was still short, having the codes in alphabetical order was an advantage, because it was easy to find the needed code.

However, after coding three interviews the list of codes got more extensive – it reached almost 200 codes. With such a big number of codes the alphabetical advantage was lost: the default alphabetical sorting of the codes spread similar or related codes all over the list making it slow for the researcher to find the appropriate codes. This made the coding of text selections using previously existing codes difficult to achieve.

To sort and order the codes in a more usable way the following process, adapted from Friese (2012: 107-109), was followed. First, duplicates were deleted. Then, all codes that used a different label but appeared to have the same meaning, like 'peer-to-peer support' and 'students helped each other', were merged. Next, conceptual connections between codes were found, and, eventually, almost all codes became conceptual subcategories. Their category name was added to them and they were separated by an underscore. Thus for example, from the excerpt above, the code 'sharing of experiences' was connected to the category 'discussion'. Each category and subcategories group was also colour-coded. Below is an excerpt from the Code Manager list after the codes were converted into subcategories:

DISCUSSION
Discussion_sharing of experiences
Discussion_learning together
Discussion_critical reflection
Discussion_valuing others
Discussion_students as teachers
Discussion_educators as learners

This system took advantage of the default alphabetical sorting of ATLAS.ti and placed codes-turned-subcategories into highly discernible groups.

4.3   Setting and sample

4.3.1   Setting – the BScHS

The setting, as perceived by this researcher, consisted of two interrelated components: (i) the online Degree and (ii) the Department of Nursing whose academic staff created and taught in the Degree. In this chapter, the first component of the setting, that is, the BScHS, will be described. The second component with be explored in the next chapter.

The BScHS was established through the Education Act (Cap. 327) by Legal Notice 295 of 2009, which was published on the Malta Government Gazette of 23 October 2009. This was the only University of Malta part-time distance-learning programme, which, with the approval of the University of Malta's Senate, could run fully online.

The programme was created with the objective

> to enable qualified health care professionals to develop critical thinking, reading and writing skills through questioning their practice and ultimately becoming more effective in their work. In so doing, they will upgrade their traditional or diploma level professional qualification to a bachelor's level academic qualification. (Faculty of Health Sciences, 2012)

The course prospectus also promised that graduates of the programme would be prepared

> to assume leadership roles in improving the quality of health care services. The programme will enable them to build on their experience and develop higher levels of knowledge and skill at an academic level. Graduates of this programme may acquire positions in all parts of the health sector in Malta as well as overseas. Career prospects are diverse, with significant opportunities for professional development and specialisation. Candidates will be eligible for second cycle programmes leading to a Masters (sic) degree. (ibid.)

Also, according to the course prospectus, the BScHS was intended for all registered health care professionals:

> including traditionally trained and diploma trained professionals, who wish to improve their academic qualifications. (ibid.)

The course was also open to health professionals from overseas, who, however, were required by the University of Malta Bye-Laws to obtain equivalence certification from the Malta Qualifications Board.

A total of 150 students – 50 per year - joined the course between 2009 and 2012. None of these students had yet graduated at the time of the research because the first students who joined in 2009 could only complete the course in three years.

4.3.2   The Students' sample

The researcher had no prior contact with any of the students and lecturers of this course. He thereby asked the co-ordinator of the course, Michelle[17], to invite all the students and lecturers to participate in the research. She accepted and sent the researcher the following e-mail:

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[17] This is the real name of the co-ordinator of the course. Michelle was informed of the difficulty in masking her true identity. She accepted, through a signed consent form, that her real name be used throughout this thesis.

> I sent an email to all my colleagues who teach on our e-learning degree and informed them about your study … I gave them your email address and asked them to contact you.
>
> I'm confident that many of my colleagues will be happy to help.
>
> Students are a different story - I will put up a video explanation for them and ask them to contact you.

Michelle's video presentation was posted on all her Moodle-hosted courses. In the video she described the objectives of the research project and explained that the students 'are in no way obliged to participate in the study, and, if they accepted … they could withdraw from the study at any stage'. To ensure anonymity Michelle also asked them to contact this researcher directly via e-mail or phone.

Nine students accepted Michelle's invitation and contacted the researcher via separate e-mails. In their e-mails they expressed their wish to participate in the study, as in the example below, sent by Elaine:

> I am a student reading for the BSc (Hons) Health Science … I would be glad to participate in your research. I am one of the non-nursing students, a dental hygienist[18] by profession.

The researcher accepted the nine students and sent them digital copies of the formal letter of invitation and consent form. He then collected the signed consent form before proceeding with each interview.

---

[18] The nature of the profession has been changed to ensure anonymity.

Name	Reference Code	Course intake	Age	Profession	Years of experience	Workplace	Marital/family Status
Bernard	P1	2009	40 - 49	nurse	<20	Gozo GH**	Married, 2 children
Cecilia	P2	2011	20 - 29	nurse	>10	Malta GH	Single
Alfred	P3*	2009	40 - 49	nurse	<20	Gozo GH	Married, 2 children
Rita	P3*	2010	40 - 49	nurse	<20	Gozo GH	Married, 2 children
David	P3*	2010	50 - 60	nurse	<20	Gozo GH	Single
Elaine	P4	2010	30 - 39	dental hygienist	<10	Malta GH	Married, 2 children
Frank	P5	2009	40 - 49	nurse	<20	Malta GH	Married, 3 children
Mary	P6	2011	40 - 49	nurse	<20	Malta PH***	Married, 3 children
Louise	P7	2011	30 - 39	nurse	<10	Malta GH	Married, 1 child

Table 4.2 – Sample Profile of BScHS students

The profile of the students' sample is shown in Table 4.2 above. This sample was composed of four men and five women. All of the participants were nurses, except one (the dental hygienist). This roughly reflected the predominance of nurses in the course at the time of the study, where, only 4 out of 138 students, although health professionals, were not nurses.

Although this was a self-selected and opportunity sample it turned out to be quasi-representative of the three learning groups involved in the BSc, in terms of gender, profession and age cohorts as shown below in Table 4.3. However, while the Gozitan student cohort made up 5% of the overall student population, the sample contained 44% of these students. Moreover, no foreign student was represented in the sample. It was therefore anticipated that the results would not be fully representative of the whole student population of the BScHS. For this reason, and also to increase the

	BSc in Health Science	Sample
Gender		
Male	45.3%	44.4%
Female	54.7%	55.6%
Profession		
Nurses	97.1%	88.9%
Other	2.9 %	11.1%
Age cohorts		
20 - 29	13.5%	11.1%
30 - 39	27.0%	22.2%
40 - 49	51.4%	55.6%
50 - 60	8.1%	11.1%
Course intake		
2009	31.5%	33.3%
2010	33.8%	33.3%
2011	33.1%	33.3%
Place of Residence		
Malta	95.9%	55.6%
Gozo	2.7%	44.4%
Foreign country	1.5%	0%

Table 4.3 – Differences between the research sample and the BScHS student population

possibility of developing theoretical sampling rather than opportunity sampling, another call for volunteers, again through the co-ordinator of the course, but only via an e-mail, was made. This second call, however, did not produce new prospective participants for the research. At this stage, the researcher decided to use the nine self-selected volunteers as the sample. The interviews were held at sites selected by the students, including the General Hospitals in Malta and Gozo where the participants were employed, between October and December 2012.

4.4   The Students' Interviews

4.4.1   Motivation

All the students mentioned that they started the course motivated by the need to make progress in their professional career as health-care professionals – 'to climb the career ladder' (Frank, P6_04:04), as one respondent put it – by gaining a first degree. Mary, a nurse with 23 years of operating theatre experience in public and private hospitals, explained that, despite her extensive experience, younger and less experienced nurses, were winning promotions because of their tertiary degrees. Similar stories of failed attempts at promotions were told by all the other respondents, except Cecilia, the youngest of the sample. However, even Cecilia enrolled into the course primarily motivated by the need to develop her career opportunities.

4.4.1.1   Online rather than classroom-based course

All the students claimed that if the course were not running online, none would have joined. The Gozitan students claimed that if the course were classroom-based they could not participate: first, because it was difficult for them to get released from work to travel to Malta, and second, it was difficult to cope with family life, studying and travelling to and from Malta. The Maltese students also preferred an online over a face-to-face course citing similar reasons, including, reducing study-related travelling, maintaining their presence at home and decreasing job-associated problems.

Alfred, a Gozitan student, claimed:

```
I started this course because it is online … when it
was not online I could not participate. (P4_05:05)
```

The four Gozitan students agreed that before this course was available in its online form it was practically impossible for them to follow a degree course at the University of Malta. Alfred also explained that Gozitans had to 'resign from nursing' to follow a degree course and be successful in it (Alfred, P4_05:05). Both Rita and David, who participated in the same group interview, and Bernard, the other Gozitan respondent, corroborated Alfred's claim. Alfred also explained, that he did try to follow a classroom-based degree course in the past, 'however they (the administration at the Gozo General Hospital) made it very difficult' (Alfred, P4_08:08) for him and, consequently, he had to drop out of the course.

The Gozitan nurses explained that all Degree courses in health sciences, including Midwifery and Nursing, were all held, on a full-time or part-time basis, at the University of Malta's Faculty of Health Sciences which is housed at Mater Dei Hospital, in Malta. Therefore, if they had to follow a course in Malta, they either needed to 'work and live in Malta' (David, P4_06:06) or 'travel, each day, from Gozo to Malta, and back again' (Alfred, P4_07:07). However, given that three of the respondents are 'no longer single' (Alfred, P4_07:07) and 'have a family' (Rita, P4_08:08) and the other is heavily committed to his MUSEUM[19] branch (David, P4_09:09), the 'living in Malta option is no longer feasible' (Alfred, P4_10:10) unlike when they were younger and when they did their nursing certificate course. Travelling to Malta required an hour of driving and half an hour of crossing a two-mile stretch of sea on the ferry. This meant that these nurses needed time off their normal working hours, particularly when they were on night shift. This created a lot of problems with their colleagues and the Hospital's administration. Thus, Alfred noted

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[19] MUSEUM is the Latin acronym for *Magister Utinam Sequatur Evangelium Universus Mundus* – 'Master, may the whole world follow the Gospel! - the motto of the Maltese Society of Christian Doctrine. The Society, popularly known as the 'Museum', was founded in 1907. It is made up of celibate lay men and women who dedicate their life to the evangelization of the doctrine of the Roman Catholic Church. Today, the Museum has branches in every town and village, in both Malta and Gozo, in order to reach young people preparing for their first Holy Communion, and later Confirmation. Members of this group are called '*tal-Muzew'*, while a branch is called '*il-Muzew'*

```
online is a big advantage especially for us Gozitans,
because … otherwise, we would have to go to Malta.  We
don't need to keep on pleading with the administration
to go and study … with this online system we have
hardly ever needed to go over to Malta. We communicate
with the tutors (sic) and with our colleagues,
virtually, in the air. (P4_05:05)
```

Similarly, David explained

```
I always wished to do a BSc. But … it's very difficult
… for us Gozitans. I remember it was some 15 years
ago, and there was no concept of online learning. One
of my friends in Malta … I used to work in M3[20], had a
BSc. He always encouraged me to do the degree. I was
very interested but …  it's not feasible to quit your
job or do it after work. And sometimes you might not
even be able to leave work to attend. And then,
everyone has his commitments. I don't have a family
but I form part of tal-Muzew. But it's the same … you
have to be there every day. So you either follow a
course and take it seriously … I could have spent 2 or
3 years not attending il-Muzew to do a course … or not
do it at all. So, I decided not to do it because it's
a big commitment. Then, when this chance came, I took
it. (P4_28:28)
```

Rita, the Gozitan female nurse, mentioned another problem which worked against her participation in a classroom-based course in Malta: lack of understanding from her husband who would not support her if she had to go to and from the other island for a course. She insisted that her family was dominated by a husband who was 'very distant from (her) world' (Rita, P4_15:15). She was referring to her 'world' as a nurse and 'this studying situation' (Rita, P4_11:11). This respondent explained that her husband, besides being very patriarchal, for example, in insisting that child-rearing and household-care were her sole responsibility, was never supportive in her academic experiences. This is further explained through this excerpt from the group interview

```
Rita:     He never did these things, while your wife
Alfred …

Alfred:   I found a lot of backing from my wife …
```

---

[20] The 'M3' was one of the 'male' wards (hence, the M) at the previous General Hospital in Tal-Pieta' in Malta.

```
Rita:      I did not find any obstacles, but I found no
help. My husband does not help me. He never supported
me. It's something that you have to do on your own,
and you have to balance things, because my husband is
very busy.

Researcher:     What does your husband do?

Rita:      He's a butcher. He has a butcher's shop, he
has fields, he has animals, he is very busy. Very
busy. He hardly has time to sleep. He's very distant
from my world. But he understands me, because I'm not
up to date with the house right now. Because you need
time, although you can make your own time, you need
time to present a good piece of work. But otherwise
(that is, if the course was not online) it wouldn't
have been possible. (researcher's addition in italics)
(P4_07:10)
```

In the excerpt above, Rita uncritically accepts her role as a housewife. She goes on in the same interview to explain the difficulties she had encountered while following a face-to-face Diploma course, in Commerce (not nursing), at the Gozo University of Malta Centre in Xewkija. These difficulties were further compounded by the attitude of her work colleagues. Facing difficulties from two fronts, home and work, she could not manage to follow its degree follow-up. The online nature of the BScHS helped her cope with house and family responsibilities and chores as well as work commitments (Rita, P4_07:10).

Three of the four Maltese female respondents, Elaine, Louise and Mary, also insisted that online learning was preferable to classroom-based learning, because, like Rita, they had to cope with their full-time job, housework and coursework. They were all married and mothers and also described a 'traditional', albeit less-patriarchal, households (compared with Rita's), in which cooking, house cleaning and child-rearing were, also, primarily, the wife's responsibility. In this scenario, the students perceived online learning as a means to study for a degree and to cope with the needs of their children, husband and house.

4.4.2   Fear of the unknown

The students, at the time of the interview, chose online over face-to-face learning for the reasons mentioned previously. However, when asked how they felt before embarking onto the online experience, Elaine and Frank said they were 'apprehensive', Mary said she was 'doubtful', while all the others, said they were 'afraid' of the online experience. Only Cecilia said she was happy to start a course that ran online – this was, however, her second experience in online learning. Cecilia had followed, but not completed, an undergraduate course with the Open University (UK). Therefore, this section was developed through the perceptions of all the students in the BScHS sample, excluding Cecilia.

Alfred, for example, noted that

> Had I been offered the opportunity three years ago, before I started, I would have chosen a traditional course, because … I had no idea what online learning was. I hardly knew how to use a computer. (P4_354:354)

While Elaine confessed that, although she was 'apprehensive' (P5_15:15) about the online learning experience,

> It was the course that I needed ... and it had no face-to-face alternative ... it came only online. (P5_17:17)

Asked why they were apprehensive, doubtful or afraid of starting an online course the respondents concurred that it was due to the new way of learning which, they thought, would be completely different, and thereby 'possibly more difficult', 'uncomfortable' or 'less successful' compared to the previous learning experiences – all of which were classroom-based. Elaine explained

> My course was hands on, there was no online (learning) …in those days I doubt if we had a computer. Because I remember going to the library to find literature … (in order) to do the assignments. I used to read them one

```
by one. It was different but I was successful. Would I
be successful in an online course?  I didn't know. It
was a new experience. I was apprehensive. (P7_23:23)
```

Like Elaine, the other students described their previous experiences as being `traditional` (Alfred, P4_357:357) and `dominated by the teacher` (Mary, P7_56:56) where `the teacher teaches and we take notes` (Frank, P6_38:38) and `you learn what the teacher gives you` (Elaine, P5_23:23).   Class-based schooling and courses did not involve group work or collaborative learning activities and students `studied on (their) own … not in groups` and `in isolation` (Mary, P7_56:56). It rarely `involved discussion … or communication beyond the classroom … let alone discussion on the Internet` (Frank, P6_60:60), which, for most respondents `did not exist at the time`.

The students also noted that they were never treated as adults `even when (they) were older` and they `were always spoon-fed` by their teachers and trainers (David, P4_364:364). In this scenario `the best students … were those who imitated their teachers` and `followed their instructions to the letter` (Louise, P8_68:68). This type of education, Frank noted, `created dependency` (P6_36:36) of the students upon their teachers. However, learning was `comfortable` and `safe` (Frank, P6_36:36).

```
In the classroom … in a normal course … you cannot
take risks. The teacher does not allow you. If you
follow the teachers' instructions … if you read the
notes they give you … you are safe. It's more
comfortable too. You do not need to go look for books
and papers … it's all presented on a silver platter.
You do not need to discuss your ideas. (Frank,
P6_40:40)
```

The classroom also provided `instant feedback` and, according to Alfred `the minute you say something, your colleague answers you and, perhaps, your teacher answers you`

(P4_19:19). All the other students gave similar examples to show that physical contact and verbal interaction with other students and their teachers was important, but would be 'in great probability …

missing in an online course' (Mary, P7_28:28). Thereby, due to their previous traditional educational experience, the students were 'fearful of the unknown' (Alfred, P4_355:355) pedagogy that would be used in the online course.

4.4.3   Transition to online learning

The transition to online learning, thus, was, for all respondents, not easy. The students agreed that

> We're not used to this way of learning … so until you get used to the online environment, you feel a bit lost … especially when you have a difficulty … and at the beginning you encounter a lot of difficulties.
> (Alfred, P4_19:19)

The lecturers, the respondents noted, were aware of this difficulty in transition from the face-to-face to the online dimension and helped the students to cope through various means. First, the lecturers held a face-to-face meeting with the prospective students who were made conscious of the possible difficulties they might encounter online and the ways to tackle and solve these problems. Second, the students had training sessions in which they learnt the basic functions of Moodle. Third, the educators provided constant online and face-to-face support to their students through one-to-one and group meetings. Fourth, the educators encouraged the students to help each other.

Bernard, who joined the first intake of students for the online BSc, recalls

> It was the first time that this course was being held. So I could not even ask one of my colleagues 'how did it go?' Everyone was green. Even the lecturers told

> us 'we're learning with you'. Even the fact that the
> lecturers were learning with us, I think … made all
> the students feel at ease ... it was the first time
> for everyone and no one was wiser than us. So we moved
> on together, one helping the other. Even last night,
> one of my colleagues told me 'I have a problem with
> regards to accessing the blog'. I tried to explain to
> him by going on my computer and telling him step by
> step what he needed to do, but he did not manage. So
> tonight I'll go online and tell him how to do it.
> (P2_56:56)

The multi-faceted support strategy, developed and started by the educators, was enhanced further by another factor: most of the students were adult and experienced nurses who had known each other for a number of years before the course started and this helped create a strong camaraderie among these mature students who helped each other willingly, online or offline (for example, students sometimes met at a cafeteria to discuss a problem (Bernard, P2_28:28)), when problems arose. This support did not stop after the initial phases of the course, it continued throughout the course, and, moreover, it spilled over to and involved the younger students. Bernard, for example, explained:

> Most of us are nurses who have known each other for a
> number of years, so we communicate … through Moodle …
> which, for me, is similar to Facebook … although there
> is no face-to-face contact … when we have a problem …
> we discuss, help each other, we post online and our
> colleagues themselves give their opinions. Even the
> younger nurses join in. We learned a lot about
> computers and Internet from the younger ones … they
> learnt a lot about nursing from us. The lecturers are
> always there, too. They are very important. We know
> that if we do not solve the problem … together … us,
> the students, then there's Michelle, or another
> lecturer, on whom we can rely. They are of great help
> … whenever we need them they're there.
>
> I know all the Gozitan nurses … they work with me … I
> came to know most of the other nurses between (19)89
> and 98. During those years I used to work in Malta
> with them. I worked with them in wards … (and) the
> others, those who have only recently qualified as
> nurses … some … were my students because I'm a mentor
> as well. (Bernard, P2_22:22, 28:30)

4.4.4   Pedagogy

4.4.4.1   *The Virtual Learning Environment (VLE)*

The course was running online, mainly, on Moodle. However other free Internet tools and applications were also being used, including Facebook and Blogger: the former was primarily being used for informal communication between students and lecturers while the latter was being used for private group blogs that were created and maintained for course-related activities.

All the students possessed basic ECDL[21] qualifications, as per entry requirements into the course, and, therefore, were familiar with both the computer and Internet. However, only one respondent had studied through a VLE before this course. This notwithstanding, at the time of the interviews, all the respondents expressed confidence and comfort in using Moodle. However, students were still finding difficulties when working with blogs and wikis [§4.4.6(iii)].

4.4.4.2   *Discussion*

The open code with the highest frequency was `discussion`, followed by `group work`, `collaboration` and `participation`. During intermediate coding the researcher realized that discussion was the central element in the three other codes. The data analysis also strongly indicated that the lecturers were using non-traditional teaching methodologies to create an ongoing discussion within their courses. Bernard summed up this pedagogy as follows:

---

[21] ECDL is the acronym for European Computer Driving Licence. The ECDL certification programmes consist of modules which define the skills and competencies necessary for a student to be a proficient user of a computer and common computer applications, including word processing, using and developing spreadsheets, PowerPoint presentations and databases.

```
we (the students) need to read and research for at
least 15 hours per week. Plus, you need to post work
online, read comments, post your own comments, post
essays, follow your colleagues' discussions and build
upon them. (P2_46:46)
```

All the respondents perceived discussion to be the central learning activity in the online pedagogy that was being used in the BSc programme. They supported this argument using many examples from various courses in the BSc they were participating in.

The discussions ran mainly on Moodle, wikis and blogs. However, the students agreed that participating in a discussion by posting contributions on Moodle was 'less problematic' (Louise, P8_12:12) than posting in a wiki or a blog.

A discussion was initiated by the lecturer who posted a question that was often related to one or more scholarly works (chosen by the same lecturer). The question was posted within an online forum created by the lecturer. A link to the reading or readings, or its pdf copy, was created by the lecturer, either within the forum or in the resources section of the online course. Bernard explained that

```
the lecturer gives us a reading … then puts a question
… like 'what do you think about reflective practice in
the 21st century?' … 'What do you think about it?' …
and we start a discussion and build on it. I could say
'I don't believe being a reflective practitioner is
important' and be critical in a different way. We
access, read, post and criticize. (P2_92:92)
```

Similarly, Elaine explained

```
one of the lecturers posts a question, we have
readings to do and other readings, everyone posts his
(sic) answer, and from this first post we see what the
others posted and we start commenting, agreeing,
disagreeing, maybe adding a new post, literature, and
we comment on their posts. (P5_47:47)
```

The discussions were assessed, thereby, according to the respondents, increasing further their motivation towards the discussion process:

```
in all the modules, part of the assessment was
interaction online, the discussion that we held online
and the blog, (received) about 20 percent (of the
final marks). (Bernard, P2_64:64)

no, no … I did not take part in the discussions for
gaining marks but knowing that the discussions were
assessed by the lecturers made me work more … do more
research (and) posting better contributions. (Louise,
P8_80:80)
```

Discussions also occurred outside the context of the VLE or Internet-facilitated discussion, for example, students 'meeting at the Hospital's cafeteria' (Louise, P8_33:33) to decide how to work on a group assignment. In these face-to-face encounters, the students used the Maltese language, rather than English, for discussion.

4.4.4.3   Elements of successful online discussion as perceived by the students

Discussions linked to the academic context of the course - all initiated by the lecturers - were asynchronous, text-based and in English, the academic language of the University of Malta. The students were all comfortable with the asynchronous nature of online discussion, and with the use of English. They were not, however, comfortable with real-time online discussions or with using Internet services such as Skype. They all cited two common problems, that is, first, it was 'difficult for all to meet at the same time' (Frank, P6_21:21) and, second, the interviewed students did 'not like using Skype' (Rita, P4_153:153) or other free Internet services which allowed synchronous audio and video communication because they 'don't like talking through the computer' (Rita, P4_153:153) or 'appearing on the screen' (Louise, P8_43:43).

The respondents perceived a number of benefits of text-based asynchronous discussions:

i. **These discussions could be archived** – 'what I write will remain there' (Elaine, P5_93:93) - and individual contributions, as well as, whole discussions 'always remain available' (Rita, P4_153:153) and, therefore, could be retrieved, reread and used by the students in other discussions and assignments. Students claimed that they could return to the postings to re-examine issues or to remind themselves of the discussion that took place. One student even noted that:

> at the end of William's course, I could go back and look at the posts I made at the beginning of the course. My thoughts about caring for the dying were not the same … the course had encouraged me to look at the subject in a completely new light. (Frank, P6_32:32)

ii. **These text-based conversations allowed flexibility**. As described previously all the students needed flexibility in their course to cope with their job, home and family-related responsibilities and chores. The students could access a discussion at any time of the day and, as David points out 'you're not tied down by class time' (P4_26:26). However, some students noted, it was important for each student to keep pace with his or her colleagues' postings. Unfortunately, according to Louise, there were 'always one or two (students) who slowed down the discussion' (P8_90:90).

iii. **Asynchronous discussions gave the students ample time to think about the question being asked.** This allowed the students to research more if they needed to do so, and, consequently, write 'better-worded' (Mary, P7_76:76) contributions. In traditional classrooms, the students recalled, they had less time to think before producing an answer, and, moreover, their verbal contributions

would 'vanish into thin air' (Louise, P8_68:68). Alfred, for example, explained:

> … when you talk about your experience and you write it, you have the chance to think about it … and write it well. And that is an advantage in my opinion. Generally since we do it on (Microsoft) Word, we don't put it immediately on Moodle. We first do it in Word. I might then have something to eat before going back to it after some time, so you get to do it well, so that the people who will read it will understand it well, then I post it. So those who are reading it are reading an experience that's good and makes sense. On the other hand, had we been in a class, you just relate your experience briefly and the others can either understand it or not … (P4_150:150)

iv. **Students learnt from each other and valued each other's work.**

In the example below, Alfred speaks about how the older nurses shared their knowledge with the younger ones, while Elaine describes how she, a dental hygienist, shared her knowledge with, and learnt from, a group of 40 nurses:

> There was a generation gap … This was interesting (because) … we have learnt a lot from each other. They (the young participants) have learnt from us because we have certain experiences and a certain maturity in our lives. Then there are those who are 22 years old and started the course with us and are discussing with us … the way they argument, they are still green, they don't have many experiences to write about … and, they told us, they enjoy reading our experiences. (Alfred, P4_172:172)

> My background is different from that of the forty nurses, so … (it) was a little bit difficult at the beginning, when we started, until I learnt how to integrate with the professional culture of the nurse. I am not a nurse. Even though I worked for many years in a hospital … I only had a vague idea on what nurses do. (Now) … I have learnt a lot from the nurses. The nurses have learnt a lot from me. (Elaine, P5_97:97)

More examples are available in section 4.4.7 which explores the students' perceived outcomes of the course.

v. **The VLE-based asynchronous discussions encouraged students to use external resources.** These included literature databases such as Pro Quest and EBSCO through which students could use scholarly work to support their argument. For example, the three Gozitan students, who participated in the group interview, noted that these online resources were essential in enhancing their learning. During the interview they maintained that it was their intention `'to keep abreast'` (Alfred, P4_145:145) with the literature and asked the researcher how to retain their access to the databases accessible through the University of Malta Library once their Degree program was over:

> ```
> David: There are a lot of good articles which we
> have access to now that we are students with the
> University … and I was thinking, 'as soon as we
> finish the course we will no longer have access to
> them'. If only they could be accessible
> afterwards, there are a lot of good articles.
>
> Rita: You start wishing that you could still have
> access for things such as the University
> databases.
>
> Researcher: So as nurses don't you have some form
> of work resources to, for example, buy access to …
>
> Rita: I think you can … that's possible. But how
> many databases will you pay for?
>
> Researcher: No, no. You won't pay for the
> database. You pay for access to the University of
> Malta library.
>
> Rita: Is that possible?
>
> Researcher: Yes. (P4_137:143)
> ```

vi. **The discussion encouraged the reading of scholarly texts.** The students were all aware that they could not discuss efficiently without, at least, reading the recommended scholarly texts. Therefore, according to Elaine,

```
You must search the literature, it is evidence
based but you have to give your own ideas, your
own solutions to problems. But at the end of the
day it has to be evidence based. You can't just
indulge in pointless talk or talk gibberish.
(P5_41:41)
```

vii.   **Students were often involved in extra research before making a contribution** to the discussion because they did not want 'to sound unintelligent' (Louise, P8_109:109) in front of their colleagues when they felt that they did not have enough knowledge in the topic being discussed.

viii.   **The discussions built a sense of community and camaraderie**. In this context:

```
One helps another. There is no spite … to be
better than you. (Bernard, P2_36:36)

… there is so much sense of community that you
feel you have to share … even personal
experiences. I once … I talked about my grand dad,
because I still idolize him. And there was a wave
of response from my colleagues. I couldn't even
keep up. (Rita, P4_167:167)

Although we rarely meet … I feel like we are a
community … ready to help each other. (Louise,
P8_64:64)
```

ix.   **Through asynchronous discussion the students learnt other interrelated skills.** Bernard, for example, noted that through this pedagogy 'you build on your discussion skills … you learn how to research, how to teach others and how to reflect' (P2_74:74). Louise, claimed that writing for an audience, and posting regular contributions 'which can be criticised by other students', and the lecturer, rather than writing a summative assignment at the end, improved her critical writing skills, and, simultaneously, her English. The students also

learnt 'how to use the computer … and Internet better'
(Louise, P8_92:92).

x. **Participants are engaged in critical reflection and knowledge
building.** The respondents agreed that, compared with previous
educational experiences, the sharing of experiences and knowledge
during discussions improved their critical reflection skills. The
students argued:

> in text-based (discussion) you feel more
> comfortable writing and thinking and building
> thoughts. (David, P4_243:243)
>
> you can see what others think, and see other
> people's point of views, and others can read your
> views and the way you reason a situation, which
> may not be necessarily correct, but you discuss it
> and you learn about other peoples' points of view.
> It makes you think if what you think is all good
> or not. So you can analyse better. (Elaine,
> P5_25:25)

xi. **An effective asynchronous discussion needed a lecturer who
knew how to start, develop and maintain a discussion.** The roles
of the lecturers in the online medium, as perceived by the students,
will be explored in the next section.

4.4.5   The perceived roles and characteristics of the efficient 'online lecturer'

The students perceived the 'online lecturer's' role (that is, the
lecturer engaged in online teaching, *not* an educator engaged in lecturing
online) to be multifaceted and 'different from that of the
traditional teacher' (Mary, P7_61:61). In the foregoing, some of
these roles and characteristics, as perceived by the students, have already
been identified. Thus, the students mentioned the lecturer's role in initiating

discussion by creating and posting appropriate questions and choosing relevant readings. However, other roles could be deductively inferred from the students' narrative quoted above. For example, the appropriate posting of the lecturer's questions and readings suggested that s/he had the right skills to manage an online course. Since no student complained about the questions or readings one could, for example, logically infer that the lecturers were knowledgeable in their subject. The same argument holds for the other pedagogical elements: thus, the lecturer probably knew how to pace an online course and discussion, valued text-based online conversations, collaborative activities and critical reflection, encouraged the sharing of student experiences, guided and motivated the students during discussion and group work.

The students mentioned other roles and characteristics that made the lecturers in the BSc course effective in online teaching. The best lecturers in the online medium:

i. **Were also good teachers in the classroom and** `carried their good teaching skills` **(Louise, P8_43:43) into the online dimension:**

> ```
> We have (online lecturers) who used to teach at
> Sixth Form. I remember them from Sixth Form and
> when I heard that they would be on the course, I
> said 'Yes!' … I knew they would be good … even in
> the online course (because) their teaching methods
> were really good. (Cecilia, P3_31:31)
> ```
>
> ```
> I had some lectures with Michelle in another
> course. There, she was good too. She used almost
> the same methods … we had to discuss, work
> together … she treated us well. (Frank, P6_90:90)
> ```

ii. **Had to read all the contributions posted by the students** and constantly check if the students, during the discussion, were `diverging from the subject` (Bernard, P2_26:26)**.**

iii. **Took part, but did not interfere much, in the discussions.** The respondents also noted that the educators threaded and evaluated the students' contributions at the end of the discussion. Elaine explained:

> ```
> They do not involve themselves much in the
> discussion. Then at the end they do … most of them
> let the students express their opinions, see what
> they come up with, then go in at the end with a
> conclusion of everyone's ideas and maybe where we
> went wrong they re-direct. (P5_51:51)
> ```

iv. **Assumed a non-traditional and non-authoritative role.** Cecilia and Elaine explained:

> ```
> When I was doing my Diploma they were the
> lecturers and I was the student … during the
> lecture you have the lecturer who is up there
> while I was sitting down on the chair writing and
> paying attention. You had people who never talked
> in class … and now the same people make the best
> contributions and create the best discussion in
> the group. (Cecilia, P3_67:67)
> ```

> ```
> In this course I saw the difference between the
> people who taught us in the Diploma and those who
> are teaching us now. … The way we learnt before,
> the lecturer would give a lecture, you would do
> the assignment, study for the exam, be given
> marks. This course is more open minded, you are
> free to express yourself more, what you know will
> come out and what you don't you can ask. And it's
> ok if you ask. (Elaine, P5_85:85)
> ```

v. **Used the students' experiences and built new knowledge from what the students already knew.** The student narrative provided these two examples

> ```
> Experience gives you the basis on which to learn
> and the fact that you learn from experience, even
> to help others it's also important. But it's not
> enough to have experience, you need to reflect
> upon your experience. Because there's always
> something good which you can get from experience,
> and where you went wrong, it can be fixed. In fact
> they do emphasize a lot about it, for example,
> discuss an experience from the past. It is used a
> ```

> lot. And even I see the difference. I can see what
> is happening now, and what used to happen before.
> (Bernard, P2_44:44)

> … we are already professional in our areas. I did
> not need to learn about my profession. I went
> beyond that and I learnt different things.
> (Elaine, P5_29:29)

vi.   **Valued and learned from the students' experiences.** This is described, for example, in this excerpt from the interview with Cecilia:

> Cecilia: the communication between lecturers is
> different…
>
> Researcher: Between lecturers?
>
> Cecilia: Between us and … the lecturers.
> Obviously you will still treat them as lecturers,
> however you have more … we are peers, I'm speaking
> to a nurse like me.
>
> Researcher: You're talking about the
> lecturers?
>
> Cecilia: Yes. Apart from being lecturers,
> they're nurses too. They learn from us, the course
> works two ways. I work in a ward and I'm learning
> something from that ward, so I can share it in the
> forums we have. The lecturers themselves are also
> learning from us. I don't believe that …
> undergraduate courses work like this. (Cecilia,
> P3_67:71)

vii.   **Provided regular and continuous support and feedback.** They were also flexible enough to satisfy students' demands. The students explained:

> The lecturers are always there to guide you. They
> don't create obstacles for you … like other
> lecturers did in other courses. (Rita, P4_42:42)

> We receive feedback, practically from all the
> lecturers … from all the lecturers we have worked
> with. I always felt that their feedback was
> genuine. (Alfred, P4_45:45)

```
We get a lot of help in this course. (Mary,
P7_38:38)


Even if, as in the case of the blog, she sees that
we're falling back, she gives us time for the
readings and other work. She'll say 'let me give
you another week.'  (David, P4_48:48)


They understand when things get tough at home …
once Michelle called me because I wasn't posting.
It was the week when my daughter was having her
half-yearly tests and needed my help. (Louise,
P8_42:42)


Michelle (is) always prepared to meet me. (Rita,
P4_130:130)
```

viii.   **Acted** `'like students'.` All the interviewed students agreed that their lecturers actively sought to build a strong rapport with them. The lecturers did this, according to the students by valuing their experiences, and using their knowledge in the programme, but, more importantly for the students, because the lecturers shed their authoritative attitude [see point (vi) above] with the students and, for example, encouraged the students to address them on a first name basis. Bernard explains:

```
I think that all the lecturers I have had so far,
all seem to be at our level. At times they're like
students. In one particular module, she used to
access our discussion daily, and encourage us to
research more. She was like a student with us, I
did not see her as a teacher … she was like one of
us. (P2_86:86)
```

ix.   **Treated the students as adults.** Various factors were mentioned by the students through which they felt that they were treated as adults within the course. These included: the non-authoritarian attitude of the lecturers towards the students mentioned previously, their continuous encouragement for the students to share their knowledge and experiences during discussions and group assignments, their constant reinforcement of the importance for independent learning,

and the lecturers' strategy in creating camaraderie among students. These three excerpts are examples from the students' narrative:

```
They have a way and style that makes you feel more
adult. (David, P4_32:32)


We are not treated like children … the lecturers
treat us as adults. (Louise, P8_86:86)


The lecturers appreciate the ideas we bring to the
course, they are not strict, they … appreciate the
fact that you're an adult student who came to the
course with a lot of experience and many ideas …
(Cecilia, P3_65:65)
```

4.4.6   The students' roles

The students noted that being treated `as adults` by their lecturers was an important pedagogical practice, however, the students were required to also do their part and `act like adults … mature adults` (Cecilia, P3_66:66). This, the students agreed, meant that they had to `take part fully` in the course by participating actively in the text-based online discussions - by posting contributions which ranged from the anecdotal to the well-researched, reading the recommended papers, doing additional research, collaborating in group assessment projects and helping out each other.

These educational commitments were not always easy to fulfil for part-time students who also needed to cope with their professional and familial duties. Bernard, for example, explains that he was always struggling to find time for independent or collaborative online and offline course-related work because he had also to cope with two demanding jobs - that of a full-time

nurse at the Gozo General Hospital and part-time tutor at MCAST[22]. He argues:

```
even if one must live with the problem of shifts and
night duty … you need to try and find time, even if
it's just an hour here and there during the day, you
don't need to work 'straight'. For example yesterday
morning I accessed Moodle about three times. I was off
in the morning and then I had the night shift. In the
morning I accessed about three times, check(ed) the
Webmail, (saw) what my colleagues posted. And then at
night I accessed another two times. When things were
quiet at work I would go in and check what was
happening. It is an ongoing process. (Bernard,
P2_46:46)
```

Coping with the online degree programme, and their professional and family responsibilities, was `tough` for all students. They all agreed that although they now preferred online over traditional face-to-face learning, the online dimension had its challenges. The students listed the following:

i.   **Their presence at home to participate in an online degree from home was, at times, problematic, particularly for the female students.** Various examples were given including: (i) young children demanding their mother's attention when she was meant to be studying independently or participating in online discussions, (ii) family members needing to use the same computer, and (iii) long telephone calls from close relatives during `the time they saved for studying`.

Louise, for example, explained that at home she had to share one computer with her husband and children, and therefore, she had to `make a rule … (that) after 8.00 p.m. the computer is always mine` (Louise, P8_90:90). While Rita reconfirmed that her paternalistic household was, at times, not very conducive to

---

[22] MCAST stands for Malta College for the Arts, Science and Technology which is Malta's second Government-funded tertiary institution, which, however, to date, does not offer degrees.

studying online because 'she was often interrupted'
(P4_345:345) during her online work.

The students also argued that in a face-to-face course they could
'have a definite time' for attending a lecture, and no one from
home could 'annoy' them during that time. This was not the case in
online learning and 'people around us don't always
understand that we need time to be alone … on the
computer' (Mary, P7_51:51) to participate effectively in the course.

Despite these problems, the students still preferred online over
traditional courses.

ii.   **No student 'can procrastinate' (Elaine, P5_137:137) in an**
      online course. Every student 'must do his (sic) part'
      (Elaine, P5_137:137), otherwise, online activities would not be
      successful. Moreover, if a student does not participate as required
      s/he may demotivate his or her group, as Bernard explains:

> If you're in a group that works, one stimulates
> the other. But if there's one or more … (who) has
> a lot of work either in the wards or … family,
> they will fall back. The whole group will then
> suffer. (P2_46:46)

iii. **The students were comfortable with online forums but not with**
      other online tools including the blog and wiki. They agreed that
      the lecturers used various types of forums on Moodle for most of
      their online courses and, therefore, the students were more familiar
      with 'how it's used … and how we work in the forum'
      (Frank, P6_55:55), than contributing to a blog or wiki. They also
      explained that the forum's pedagogy namely, contributing to
      discussions initiated by the lecturers involved 'less skills and
      less work' (Mary, P7_52:52), than blogging or taking part in the
      development of a wiki. Moreover, the students agreed, that learning

through a blog or wiki required further skills and 'was more

difficult to handle' (Mary, P7_56:56). One student, Louise,

even perceived the blog and wiki as being more 'appropriate

for younger learners … who are used, more than we

are, to these sort of things' (P8_108:108) , while another,

Mary, noted that she did not even know what a blog was before she

was asked to use it in the Degree programme:

> I discovered blogs in this course. They were new
> for me. The skills involved were something totally
> new for me. I was very confused at the start.
> (P7_56:56)

Bernard, who had 3 years of experience in the course, explained that

the blog was used in more than one module and served 'like our

personal website' (P2_23:23). He also described how a blog

was created through Google's Blogger and how it was used:

> Our lecturer chooses a topic … posts links to some
> papers … we read these papers, write our
> contribution and post it in the blog. My
> colleagues access the blog and discuss the issue
> or the topic. (Bernard, P2_23:23)

Rita, Alfred and David were in their second year of the Degree

programme and were involved in their first blog experience at the

time of the interview. They explained:

> David: We are now learning how to use a blog.
>
> Rita: We did it. We started.
>
> David: We started.
>
> Alfred: Sometime today I will try to send my
> first post.
>
> Researcher: Are you using the blog on Moodle?
>
> David: No we're using Blogger. The lecturer
> said that the blogs on Moodle are not as good as
> the ones on Blogger.
>
> Rita: Yes, we're using Blogger.

```
Alfred:    Blogger.com.

Researcher: How are you using the blog?

Rita:      We're in groups of about 7. Everyone
needed to make his own blog. This is made private
and then you add the others as readers … plus the
supervisor and the coordinator of the study unit.
Right now it's hasn't started working yet. I have
not posted anything. It seems that Alfred's going
to be the first! (laughs). (P4_201:211)
```

Rita and David noted that, while Alfred was now ready to post his first contribution, they were still at the stage of creating the blog and they were still struggling with technical issues such as 'how to create a page', 'how to post', 'how to make it private' and how to give access to their colleagues, lecturer and co-ordinator of the course. For this reason, they were seeking the help of Alfred and 'the younger members', like Cecilia, 'who were more friendly with this stuff.' Despite the fact that the younger members of the group helped the more mature members, they too expressed an initial discomfort with blogging, as Cecilia explained:

```
The blog was not easy to create. I had to learn
how to create the blog … pages, posts. How to
insert a picture, a video … links … I needed
Michelle's help to set it up … then I helped the
others. (P3_101:101)
```

Notwithstanding these difficulties all the interviewees agreed that they were aware that the blog was being used by their lecturer to provide another medium for online discussion, but not only:

```
I think that Michelle wants more than just getting
us through this course. She wants us to learn
these things. New things. Because she's always for
innovation. (Rita, P4_216:216)


Michelle in fact told us that she found blogging
very useful during her own online course … and so
she wants us to learn to use it through this
course. (David, P4_217:217)
```

```
We are learning to use what's on the Internet …
not only about nursing. (Louise, P8_92:92)

I have learned to create a blog … and to keep it
going … with discussion through the posting made
by others. (Elaine, P5_106:106)

(Through the blog)… I learned to solve problems by
using YouTube … I learned how to think … how to
communicate with others not only about the topic
(but) … about Internet (tools). (Frank, P6_56:56)
```

The students made similar positive remarks about the use of the wiki in their course. The students also perceived the wiki as a tool that was meant to create and develop online asynchronous discussion. However, most students found greater difficulties in learning to use a wiki because of its relatively more complex technical requirements.

4.4.7   Perceived outcomes of the course

The students were all aware that the use of wikis, blogs and forums, were not only meant to enhance the students' professional knowledge and skills. As Elaine explains, the course with its use of various Internet tools was meant to encourage communication, collaboration and the use of technology in their professional life and their undergraduate learning process:

```
The course included things like supervision,
mentorship, medical devices … (and) it also taught us
how to communicate, how to share experiences. I learnt
how to use technology to work as a group. I feel more
modern … I now know how to use technology to learn at
University … and when I'm finished with the degree …
to learn on my job. That's what I mean. Now in my area
I already have experience of the profession then
you're going to build on that, online learning for me
was fantastic. (P5_29:29)
```

The students also agreed that the course has instilled in them the need for continuous professional development and lifelong learning, that is, 'the

need not to stop learning once our course is over' (Elaine, P5_144:144). Moreover the course was 'sharpening their computer and Internet skills' which was essential for students and professionals in an age dominated by technology. Alfred, Rita and David explain:

> Alfred: I didn't know anything about computers, I didn't even know how to use a computer. When I started this course, I realised what I was missing out on, and the opportunities that this course gave me to enter this world.
>
> Rita & David: Exactly.
>
> Alfred: Because, whether you like it or not, to move forward you need to be well familiar with the computer world. You cannot say, 'I don't want to have anything to do with computers or the Internet'. (P4_84:86)

The students also agreed that the course was giving them the possibility to 'discuss injustice at work' and 'the will to fight for (their) rights' as professionals in the Maltese Healthcare System. The students provided many examples to confirm, that, through their discussions and collaborative activities, they have 'come to see (their) work … (their) practice in a different light' (Mary, P7_62:62), while before they embarked on the course, they were 'hesitant to protest' (Frank, P6_88:88), or 'voice (their) opinion with superiors' (Elaine, P5_122:122), now they 'had more courage … and skills to discuss situations which were not suitable to the patients or to the nurses with (their) superiors' (Louise, P8_101:101) . Rita, Alfred and David gave this example:

> Rita: Till you're a student you are given access to certain literature.
>
> David: That's true!
>
> Rita: I now feel that this should be extended to all the nurses. How can we be competent and keep on working, when we cannot access the Internet?

```
Alfred: At the Gozo Hospital it's the people at the
top, doctors and surgeons … only, who have access to
the Internet.

Rita: I cannot understand why a nurse, at this day and
age, is trusted with a person's life … and there are
times when you have to decide yourself … and then
you're not trusted with Internet access.

David: How can I check what's new? At times when I'm
with a consultant and he has a problem he goes on to
the Internet and check on Google. Because he's not
updated about every disorder. What about us? I feel
that they're not respecting us.

Researcher:      What can you do about it?

Rita:       Talk to the Union. And I have every
intention of talking about it.

Alfred:     As students, as nurses, we should be
entitled to the Internet, more so since our course is
online.

Rita:       I have asked for it in writing.

Alfred:     I asked for it too. (P4_89:99)
```

The students noted that the course was about `reflective practice` and during the discussions many stories from the wards were told, by different nurses. These stories, according to the students `make you reflect` and `learn from them (the stories)` (Bernard, P2_16:16), often urging the course participants to identify and discuss discriminatory practices. This, in turn, motivated participants to carry these discussions outside the online dimension into the real world.

The interviewees also noted that the online discussions helped younger nurses to learn how to defend or fight for their rights. For example, Alfred was involved in a serious hospital accident, with possible criminal consequences. He recounted how 50 pints of stored blood went bad because someone left the door to the Blood Bank open during Alfred's night shift. Consequently, since he was the most senior nurse on the shift, he was `accused of sabotage` (P4_158:158) and risked his career. Alfred described this experience in an online forum and discussed, in length, how

he dealt with this situation with young and experienced nurses. He explained:

```
I told the whole story to all in my group … how I
sought advice from a lawyer who told me that I had no
professional duty towards the Blood Bank. I explained
the legal issues involved to the whole group and how I
defended myself … and what I said to the Public
Service Commission.(P4_165:165)
```

This story, the other students in his group noted, created a long online discussion, between young and older nurses, about the health professional's risks, legal rights and duties as well as how similar situations could be tackled in the future. David, the oldest nurse in the Degree programme, confirmed that

```
from these and other experiences, those who are
younger than you, who have less experience than you …
in discussion possibly learn not to make the same
mistakes … how to deal with similar situations, who to
talk to … Even I learnt a lot from Alfred's experience
… but I have also learnt from young nurses who …
discussed our right to have Internet access in the
wards, better computers, more technology, which can
help us during emergencies. (P4_166:166)
```

All the students provided examples of how the course, particularly through discussion and critical reflection, encouraged them to talk about problems in their professional world and how they were now encouraged to seek `change in the wards`, their professional practices and rapport with their superiors.

4.5   Conclusion

All the students, in their interviews, showed great enthusiasm for the course – the first of its kind at the University of Malta - and insisted that its online nature made it possible for them to participate in a degree programme which (i) overcame geographical, work-related and family-induced

obstacles, and (ii) increased their professional mobility and promotion prospects. This enthusiasm, aided and enhanced by a strong support strategy, helped the interviewed students - most of whom were only used to traditional classroom-based schooling and professional training where, predominantly, the 'students take notes' of knowledge chosen and delivered by the teacher – to overcome the fear of an unknown pedagogic approach.

In the Degree's new pedagogic approach the students perceived discussion, in its asynchronous and online form, to be the central learning activity. Discussion, for the students, was also the most important and conspicuous variant between the new and traditional educational methodologies. The students agreed that, compared to traditional forms of learning practices, discussions improved their learning experience because they encouraged the critical reading of scholarly texts identified by their lecturers or their own independent research, valued their contributions and their shared professional experiences and improved their writing and ICT skills. Moreover, through the online asynchronous discussions, the students perceived their contributions to have more value in the learning process because they were not as ephemeral as in the face-to-face classroom dimension. These contributions could be stored, retrieved, reread and reused by all members of the learning group. Discussion, therefore, enhanced the students' motivation towards the Degree programme and its online nature.

The students also noted that the online interactions and dialogue built a sense of community and camaraderie within the learning group, which, although predominantly from the nursing profession, was made up of a mix of young and mature nurses. In this learning community, the students felt that they were treated as adults and that the lecturers often 'became students' themselves. To facilitate this process, the students agreed, the lecturers shed their authoritarian roles and never were the students involved in teaching situations where 'the lecturer is up there' and

they were 'down there' sitting patiently taking in his or her knowledge without ever being denied the opportunity to challenge it.

This, the interviews confirmed, created a learning environment in which students could actively engage in the discussion of issues that were of importance to them, such as harmful or discriminatory professional practices. The data provide strong evidence that this online Degree, through its online dialogic approach, was not only improving the students' knowledge of their professional world and their academic prowess, it was also empowering and transforming the students into active actors who were seeking or driving change in their workplace, and society, as the Degree prospectus had promised.

Chapter 5

The Lecturers' Interviews – *BSc Health Science*

The opportunity for a teacher to engage in conversation and communicate with students is so much more available in the online setting than it is in the classroom.
(Maria, P9_23:23)

5.1   Introduction

This chapter presents the analysis of the data gathered from the interviews of a theoretical sample of lecturers involved in the BScHS. Data from published and online documents, as well as virtual observations of the online courses support this analysis.

It is pertinent to point out that, the use of the word 'lecturer' – the professional designation of academics at the University of Malta - was and will continue to be used throughout the 'data chapters' (that is, Chapters 4 to 7), rather than other terms such as 'e-educator', 'e-moderator', 'e-tutor' or 'e-facilitator' which may better describe an educator involved in e-learning processes. This researcher took this decision for three reasons: first, in their interviews, the students - from both the Faculty of Health Sciences and Faculty of Education - *mainly* referred to their teachers as 'lecturers' even when the latter were involved in e-learning activities; second, the educators - from both Faculties - when referring to themselves or their professional colleagues, also *mainly* used the word 'lecturer'; and, third, to ensure groundedness when reporting the data.

Also, during the interviews, to avoid forcing, the researcher was very careful not to use terms such as 'e-moderator' or similar. For example, in the interviews with students, the researcher asked about '*dak li jgħallimkom*' meaning literally 's/he who teaches you'. In Maltese there is no word for 'tutor', while the term '*edukatur',* of romantic origins as the English word 'educator', is rarely used in common parlance. The semitic word '*għalliem*' (pronounced 'alleem' – the digraph '*għ*' is silent as the *gh* in the English word 'bought'), from which the verb '*jgħallem*' (pronounced 'yallem') is derived, is invariably used to mean teacher, instructor or educator. When used in the primary and secondary school contexts '*għalliem*' refers to a school teacher. When used in the tertiary educational context, '*għalliem*' is intermittently used to refer to either a traditional educator, including the instructor or lecturer, who engages mainly in transmission of knowledge educational practices, or the progressive educator who engages in non-traditional approaches. Thus, for example, when the students were asked '*min qiegħed jgħallimkom online*' (who is teaching you online) the students always answered 'il-lecturer ... ' (the lecturer ...).

5.2 The Setting, Sampling Technique and Analysis Approach

5.2.1 Setting - The Department of Nursing

The researcher considered the setting of this first case study to consist of two interrelated components [§4.3.1]. The first component of the setting, that is, the Degree programme, was analysed in the previous chapter (ibid.). This section will explore the second component of the setting: the Department of Nursing of the University of Malta whose academic staff created and taught in the Degree.

Ten lecturers were involved in the online programme. They were all full-time members of the Faculty of Health Sciences: seven were members of

the Department of Nursing, two were members of the Department of Physiotherapy and one was part of the Medical Physics Unit staff. They were mainly engaged in classroom-based face-to-face courses offered by the same Faculty. Their involvement in the online course was only a small part of their full-time teaching commitments.

The BScHS, as described previously, is offered by the Department of Nursing. This is the largest department within the Faculty of Sciences and offers a vast array of courses at undergraduate level in general and mental health nursing, leading to registration with the Malta Council for Nurses and Midwives. According to its Head of Department:

> the Department of Nursing seeks to be a centre of excellence, contributing to the Maltese health care service through the education of nurses, research and participation in health care and social policy development. (Sammut, 2012)

The course co-ordinator and Head of Department, in their joint interview, also noted that the Nursing Department collaborated with the national public and private health care institutions: the latter provided support for the students' clinical experiences while the Department `developed and delivered nurses of the highest quality`' (Michelle, P9_61:61). They also argued that, during their three year course the `students were well supported by clinicians in practice … as well as by academics`' (Roberta, P9_89:89). Moreover, the Department `collaborated with other Universities and actively promoted student and faculty exchange through the Erasmus programme`' (Michelle, P9_65:65).

In its effort to promote lifelong learning and continuous professional development of practising nurses, the Nursing Department offered part-time undergraduate degrees in mental health and community nursing and undergraduate certificates in a wide range of specialities including critical care, paediatrics, cancer care, care of the elderly and rehabilitation. It also offered courses at master's degree level in Nursing and Mental Health

Nursing and supported nurses in their studies at Doctoral level. The online degree in Health Science was part of this 'lifelong learning' strategy (Sammut, 2012).

5.2.2   The Lecturers' Sample

This researcher (although a University of Malta lecturer) had no prior contact with the lecturers of this course. He therefore wrote to the Dean of the Faculty of Science asking for help and permission to proceed with the study. During a meeting held at the Dean's office on 23 February 2012, the researcher was given the necessary permission to study the online degree. He was also introduced to Roberta Sammut and Michelle Camilleri[23], the Head of the Nursing Department and the co-ordinator of the online degree, respectively. In a separate meeting with Michelle and Roberta, this researcher described in detail the research project and its design and asked for their assistance in inviting the students and lecturers to participate in the project. Consequently, on 28 February 2012, Michelle sent this e-mail to all the lecturers involved in the online programme:

> Dear Colleagues,
>
> Yesterday Roberta and I met with Joseph Vancell - a lecturer at Junior College who is in the process of doing a PhD with Hull University on e-learning. He is using a Grounded Theory approach and … would like to interview lecturers who are involved in this programme … and he would also like to follow some of our study units.
>
> So I am writing to you all to ask you if you could spare an hour to meet with him and answer his questions (i.e. an interview). For the sake of anonymity, I suggest that you contact him yourselves. His email address is joseph.vancell@um.edu.mt
>
> Thanks for your cooperation.
>
> Michelle

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[23] The identities of the Head of Department and co-ordinator of the course could not be concealed for obvious reasons. This inability to ensure their anonymity was discussed with both persons. Both Michelle and Roberta understood this researcher's difficulty and allowed him to use their real names when quoting from their interviews and when reporting about the online course. Their signed consent was also obtained. Carmel Caruana, also gave his consent to the researcher to use his real name because one of his recent publications will be mentioned in this thesis. Fictitious names will be used for the other lecturers.

All ten lecturers involved in this degree, including Roberta and Michelle, accepted to participate in the study and, initially, all the lecturers were considered for participation. However, after the sixth interview, 'theoretical saturation' [§2.4.2] was deemed to have been reached and the researcher stopped the cycle of interviews. This was explained, during short face-to-face meetings, to the other four lecturers who had volunteered for participating in the research.

5.2.3   Sampling

Since *all* the lecturers, unlike the students, accepted to participate in this project, the researcher could use theoretical sampling as described in section 2.4.1. Grounded theorists recommend that the process must start with 'convenience sampling' (Morse, 2007: 235) 'to locate persons who are available, who have already gone through, or have observed the process (i.e. 'experts' who have experienced most of the phenomenon)'. Therefore, at this stage of the project (that involving lecturers), the data collection and generation process started with a group interview with two key informants - Roberta and Michelle (who were also lecturers engaged in the course). The initial coding process of the same interview and the categories that had already emerged in the student interviews, directed the choice of the next interviewees.

The interview with Roberta and Michelle indicated that lecturers prepared themselves for the online experience in one of two ways: either by following an online course in e-teaching and studying with a foreign university or by consulting colleagues who had completed such a course. In other words, there were lecturers who tried and tested their online teaching skills and knowledge with foreign experts in the field, and there were lecturers who only learnt the basic skills through help from peers – refining these skills through their online course experience.

Roberta and Michelle informed the researcher how each lecturer had learnt the online skills necessary for the course. The students, on the other hand, did not know how their lecturers had prepared themselves for online teaching. However, they identified the better lecturers. The researcher therefore decided that the next interviewee would be one who was (i) good in e-learning as perceived by the students and (ii) who followed a course in e-learning prior to starting teaching online. After analysing this second interview, it became clear that, in order to investigate certain codes and categories that had emerged, the next interviewee should be a good online educator (as perceived by the students) who learned his/her online skills from colleagues and direct e-learning experience (as identified by Roberta and Michelle and the preceding interviewee).

Theoretical sampling continued and two more lecturers were selected and then interviewed. Both had no professional training in e-learning and were not mentioned by name by the students in their interviews (that is, they were not identified among the better online educators). With these interviews and their subsequent analysis, the researcher observed that the data 'no longer spark(ed) new theoretical insights, nor revealed new properties of core theoretical categories' (Charmaz, 2006: 113). The researcher understood that he had achieved 'theoretical saturation' (Glaser and Strauss, 1967:8) and, for this reason, no further interviews were deemed necessary.

To reach saturation this researcher did not seek *only* the repetition (i.e. the frequency) of described events, actions, and/or statements, as was done in the analysis of the interviews from the students' sample. He also sought to reach the 'saturation' defined by Glaser (2001: 113):

> Saturation is not seeing the same pattern over and over again. It is the conceptualisation of comparisons of these incidents which yield different properties of the pattern, until no new properties of the pattern emerge. This yields the conceptual density that when integrated into hypotheses make up the body of the generated theory with theoretical completeness.

5.2.4   Coding with ATLAS.ti

The first cycle coding processes, that is, the initial and focused coding used in the analysis of the lecturers' interviews were similar to those used for the analysis of the students' narrative. The coding process started with the researcher reading through the printout of the first interview transcript and writing down open codes at the margins of the same printout. The analytic process continued on ATLAS.ti. The interviews were uploaded into a new Hermeneutic Unit created for the lecturers' interviews and a new code list was created as explained in the previous chapter [§4.2].

The following sections will present the main categories that emerged from the lecturers' interviews. These categories will then be revisited and integrated into a theory in Chapter 8.

5.3   The Lecturers' Interviews

5.3.1   Motivation

A section of a memo, dated 4 February 2012, read:

> The students agreed that they would not have joined the course had it not been offered online. But how did this course originate? Who designed it? Were the lecturers involved experienced in designing such a course? What had driven the Department of Nursing to design and offer an online BSc degree?

The first question the researcher asked Roberta and Michelle therefore was: 'Why was this online degree created?' This was their answer:

```
Michelle: We designed this course as a need because we
were depleting the wards cumulatively as the
Department of Nursing, here in the Faculty, is the
largest department. How many students do we have
roughly?
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Roberta: We have over 800 … around 820.

Michelle: Now when they're full-time students learning
to become a nurse, that's not a problem because
they're full-time students. Everything else, all other
courses … we offer a degree in community nursing for
community nurses, a degree in mental health nursing
for mental health nurses … we have a Master's in
Nursing. So … those are all people in professional
practice. They come to us from the wards. And there's
this academic top-up degree which we have been doing
for years as a classroom based course since … I'll
tell you when … the first cohort joined my group when
I was third year (student) in 1995.  So, since 95,
we've been offering this academic top-up degree for
anyone with a diploma or traditional training prior to
1989. And cumulatively, 800 people minus 300 pre-reg
students, you know 500 people and also we have short
CPD courses, continuous professional development … we
were depleting the wards from all staff.

Roberta: Which is a problem … a big problem for our
hospitals. (P9_03:06)
```

So, to reiterate, the Department of Nursing had a student population of over 800 students – that is*, almost one tenth of the University of Malta student population – *of whom, 300 were studying to become nurses while the remaining 500 were in full-time employment in Maltese hospitals. With its courses, including its 'academic top-up degree' (Michelle, P9_07:07) the Department of Nursing was thus 'depleting the wards' (Michelle, P9_05:05) from nurses.

The 'top-up degree' is an undergraduate programme that was created and first offered in 1995 to satisfy the demand made by many 'mature' nurses who had a warrant to practice their profession but did not possess a degree. Nursing, according to Michelle, is the largest health care profession without a University Degree, so, the Department was 'busy converting nurses as much as we can' (Michelle, P9_18:18). Although, at first, it was mainly intended for 'mature nurses' (Michelle, P9_18:18), the degree was later also offered to all health professionals who did not possess a University degree.

Michelle, echoing the students' concerns with regards to their participation in a University programme [§4.4.1], noted that, for those students who remained in their job while following a course with the Department of Nursing,

> … it was becoming very stressful for (them) to attend
> lectures. They were being made to work overtime to
> accumulate time in lieu to get it deducted when they
> attended lectures during their working time. So it was
> really stressful. (Michelle, P9_08:08)

Julia, another member of staff, shared Michelle's preoccupation. After studying, working and living in the UK for some years, she returned to Malta and retook her post at the University of Malta. During her first year of teaching in Malta she

> immediately sensed a very big problem amongst
> qualified nurses who wanted to study. These are surely
> adult people, adult candidates … who wanted to pursue
> studies in nursing and develop within their profession
> but were unable to pursue the courses which the
> University was offering at the time because, one, many
> of them had family commitments, but, more than that,
> many of them were not able to leave the wards to
> attend classes because of the persistent shortage of
> nurses in the country. And … the few who managed to
> leave the wards to attend classes for the programmes
> we were offering at that time, were always riddled
> with guilt … guilt of leaving the ward and piling the
> work onto their colleagues. So even the few who
> attended did not learn as much as they could have,
> because this guilt, this discomfort, this edginess,
> was always prevalent across all students. They would
> never come and dedicate themselves fully to learning.
> They were always elsewhere. (Julia, P10_18:18)

Apart from this demand for a 'non-stressful course' (Roberta, P9_20:20), the academic staff at the Department of Nursing also felt the need to help nurses and health professionals, particularly those without a University degree, develop further. Julia explains:

> there (was) a need and … a demand - which you
> appreciate are two different things. It wasn't just
> the students who were demanding to learn, but we were
> also fully aware as professionals ourselves that there
> was a need for our nurses to develop further. We

```
needed them to specialize, we needed them to become
more professional, we needed them to develop some
attributes, we needed them to increase their knowledge
so as to be able to remain abreast with developments
in medicine. (P10_18:18)
```

Therefore, the academic staff at the Department of Nursing, some of whom were previously involved in online courses as students, realised that a non-classroom based course needed to be created, (i) to reduce the number of health professionals, particularly nurses, who were either abandoning their jobs or leaving their offices or wards for long hours to follow a degree course, which, as the students also noted, increased their career prospects, (ii) to reduce stress in those who had to cope with a full-time job and a face-to-face course, (iii) to improve the academic preparation of health professionals and (iv) to 'provide a holistic educational experience' (Roberta, P9_76:76) . Thus, according to Julia,

```
that's where I sat with a colleague of mine … Michelle
and said 'we really need to bring our courses out of
the classrooms and deliver courses, reach out to the
students anyway. (P10_18:18)
```

Michelle and Julia first decided to redesign the already existing 'top-up' Degree in Health Science into a blended programme and some of its already existing courses were developed for the online medium and transferred to Moodle. Julia explains:

```
Michelle and I said 'rather than reinvent the wheel …
there was in existence a top-up programme which
offered the opportunity for qualified nurses to top-up
their diploma qualification to a degree qualification
and we started at first to move bits of the programme
into online, on the online medium. (P10_18:18)
```

However, just adding an online component to the programme only 'worked well to a limited extent' (Julia, P10_18:18). The two lecturers realised that the face-to-face component 'was one of the biggest hindrances' which did not allow 'the online medium to take off

as much as we would have wanted' (Julia, P10_18:18). Julia explained:

> Students were kind of confused, not fitting into this double-faceted approach to their programme and that's where we realized that it was time to take the plunge and try and develop a fully online BSc top-up programme which we did with the co-operation of so many and with the approval of all the respective authorities and the response to the online BSc programme has been phenomenal really. (P10_18:18)

The predominantly online degree was mainly designed by Julia and Michelle but many other lecturers, and the Head of Department, were also involved. The course was then launched in October 2009 and 56 students enrolled (Camilleri, 2010: 46).

5.3.2   Lecturers' preparation for teaching online

All the interviewed lecturers had received professional training and awareness of adult and, particularly, nurses' and health-professionals' education, prior to, or after, they joined the Faculty of Health Sciences but before participating in the online degree. They had all become aware of classic and contemporary theories and practices of adult education, through professional post-graduate training in the field, ranging from post-graduate Diplomas to PhDs in adult and nursing education. These theories and pedagogical principles were 'an important and integral part of their teaching activities … (and) course design' (Debbie, P13_18:18). The lecturers, for example, agreed that they were conscious that their students, whether young or old, joined this educational experience 'carrying with them a baggage of knowledge and experience' (Carmel, P12_40:40) which, the lecturers deemed 'important … essential to learning' (William, P11_16:16). However, only two lecturers, Michelle and Julia, had received training in online teaching and learning. Of the two, only Julia had experience in online

teaching before the online BSc degree was designed and first offered in 2009.

Michelle, the co-ordinator of the course had no experience in online teaching and learning. So, to be able to co-design, and later co-ordinate the course, she participated in 'an online course with Massey University in New Zealand' (Michelle, P9_07:07) when she 'was converting a post-grad diploma in adult education into a master's.' (Michelle, P9_ 37:37)

On the other hand, Julia was academically prepared for e-learning and teaching through an online learning programme with the University of Illinois, US, and had online teaching experience with the University of Aberdeen, UK, before she re-joined the Department of Nursing as a full-time lecturer.

Unlike Michelle and Julia, the other lecturers involved in the degree programme had no such awareness of online teaching and learning and possessed no online teaching skills. So, in the first year of the programme, Michelle and Julia 'worked with (their) colleagues' (Michelle, P9_07:07) training them in the skills of teaching online:

> Sitting in offices and explaining. The people … I've chosen who (would be) teaching on this programme, people who are open to … e-learning. And want to learn about e-learning. Because not everyone is interested in e-learning. There's some of my colleagues who don't, they're absolutely phobic of technology and they don't want it. They're happy with lecturing. (P9_07:07)

Michelle also explained:

> I've taught a few (lecturers) the first year and now those few helped me teach the others. So we teach each other … lecturers … as a by one to one basis and role modelling sort of. (P9_09:09)

One of these lecturers, William, after learning to teach online through Michelle and Julia, had in the following years helped the former to train other lecturers. Any prospective educator in the online degree had to learn how to teach online before s/he could participate in the programme. The prospective online educator had to follow the course as

```
a guest on some of the study units being offered so
(s/he) can watch how we interact with students, what
we're saying, what we're doing, how we're setting
things up. (Michelle, P9_07:07)
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William, for example, confirmed that he knew nothing about online teaching or learning when he joined the Department of Nursing. Consequently, when Moodle was available for all University of Malta lecturers he only used the VLE to issue communiqués to students and as a depository for notes:

```
I first encountered online learning when this online
degree was created. I mean, before, in the year or two
that I worked with the Department (of Nursing), I only
knew about face-to-face learning and I organized all
my study units for face-to-face teaching. When Moodle
was introduced … I used it to communicate with
students, simple things like a change in lecture time
for example, to share material, such as papers,
external links and such. (William, P11_20:20)
```

Then, he learned online pedagogy, through Julia and Michelle, and technical aspects through IT services. It was learning 'by actually watching' (William, P11_20:20) the more experienced lecturers teaching online.

5.3.3   The transition to online learning

The interviewees agreed that the first online components were introduced to the BSc (Health Science) during the 2007–2008 scholastic year. Michelle claimed that when they were designing this e-learning programme, and testing some of the courses, they 'planned to have it blended

because (they) thought students wouldn't like to be
entirely online, they'll want that face-to-face contact.'
(P9_ 07:07).

Two student cohorts were involved - the 2007 and 2008 intakes. The new
online courses 'were tested' (Debbie, P13_26:26) with these groups but
were, according to all lecturers, not as successful as they were expecting.
As already pointed out, Julia claimed, these students 'were kind of
confused, not fitting into this double-faceted approach
to their programme' (P10_18:18). While Debbie noted that, the
students 'who were only used to our lecturing in class …
to taking notes, to reading only what we ask for, to
working on their own not in groups, to writing a final
assignment rather than posting and discussing online'
found it 'very challenging … (and) inconvenient to learn
online' (P13_ 26:28).

Many questions emerged in relation to this claimed unsuccessful
introduction to online learning. These were recorded in a memo dated 12
March 2012:

> Was it the students' schooling background to blame for this unsuccessful
> introduction of online courses, as Debbie suggested? Was it due to the
> possible inability of the lecturers (freshly turned e-educators) in designing
> and conducting an effective online course? Was it because some lecturers
> had no appropriate and/or intensive training in online learning? Was it the
> fault of the Virtual Learning Environment and its support structure?   Since
> no student from the 2007 and 2008 intakes accepted to participate in this
> study, it is impossible for me to obtain the students' answers to these
> questions. So, to fill this gap in the data, I must address these questions to
> the lecturers involved.

Michelle, Debbie, Roberta and Julia – all involved in the first online courses
– agreed that the 'courses were well prepared' and the VLE was
excellent for their needs. With regards the lecturer's abilities to design and
conduct the online courses, they noted that, all lecturers, even Michelle and
Julia who already enjoyed experiences in e-learning (albeit limited), found

the blended option problematic. To prove her point, Michelle gave the following example. She ran the same online study unit, in the first semester of the 2009-2010 academic year, 'first with a group who were on the traditional classroom based programme' (P9_09:09) and then, in the second semester, with the 2009 intake group who joined the completely online programme.

> So, in semester one, the people who had 2 years in class listening to lectures … that was a disaster that study unit. It didn't work very well at all. And the following semester I ran it for the students who are on this entirely online study unit. Then … it was a success. It was the same course … (which) I taught in the same way … It worked for those who joined the completely online course. It did not work for those who were following the traditional course. (Michelle, P9_09:09)

Roberta gave another example as further proof of the same point, that is, that the same online course would only work for those not already involved in traditional courses. She ran an online study unit, primarily developed for the online BSc students, with a master's group who 'had done a year of face-to-face' teaching and learning. The course was successful with the undergraduates but 'disastrous' (Roberta, P9_13:13) with the master's students.

So, as Michelle pointed out,

> when the students are engaged immediately into online (learning), and that's all they know … they engage entirely and they're good. If you try and put a few online, once you've taught them face-to-face, they don't take to the online learning. (P9_13:13)

Similarly, Roberta noted that if, at the start of the course, the students are given the 'expectations' that the course is going to be a face-to-face course, then:

> it's difficult to introduce it (the online degree)to them. But if their expectations are 'this is the way

```
it's going to be', then they take to it much more.
(Roberta, P9_52:52)
```

This was a very important realisation for those involved in designing the course - one which `pushed the co-ordinator of the course` (Debbie, P13_32:32), her collaborators and the Head of Department, to go for the full online option. By the 2011-12 academic year the online course was running almost fully online. According to Michelle:

```
we now have … (just) a few face-to-face study units …
in a whole semester. We've all gone predominantly
online. (P9_11:11)
```

and

```
I found that this 100% online business is better than
trying to blend. (Michelle,P9_28:28)
```

The designers of the online Degree, and their Head of Department, were always conscious of the fact that most of their new students had no prior experience of online learning. Moreover, those few who did have experience of online learning were new to the University of Malta Moodle platform. Therefore, in September, when each new intake of students was determined, the whole group was divided into smaller groups, and then, each sub-group had `a few sessions about online learning` at the Faculty's computer laboratory. Attendance to these face-to-face sessions was compulsory.

One of these sessions was about `how to use Moodle` and was conducted by a lecturer from the University's IT Services. During this session, the lecturer `explains the layout of Moodle` (Michelle, P9_58:58), describes and introduces its various functions, and `helps students to use … first-hand … these functions … (such as) the forum` (Michelle, P9_58:58) and the wiki hosted in Moodle. Some of the lecturers involved in the online BSc `sit with the`

`students in the lab`' (Michelle, P9_58:58) and 'help them …
`whenever they ask for … help`' (Roberta, P9_59:59).

These sessions are followed by other face-to-face sessions with lecturers
from the Department of Nursing, including Michelle, Roberta and William, in
which the basic student learning activities, including: 'how they (the
students) should participate effectively in online
asynchronous discussions' (Debbie, P13_41:41) and how 'to make
good contributions' (Roberta, P9_59:59). The academic demands and
the students' duties relevant to the degree are also explained: for example,
how they should 'write and correctly reference academic work
(and) … using *Turnitin*' (Julia, P10_65:65) to reduce plagiarism.
Michelle explained what happens in these sessions:

> They have to do a library session … and they do an
> academic reading and writing session. In that academic
> reading and writing session - it's about 3, 4 hours
> (long) - we explain … to them about online learning,
> that they have to interact frequently, they can't
> leave it to the last minute, what we expect. I show
> them what I mean by a good posting, what's a crap
> posting, how to find new material, and how they should
> reference it. (P9_61:61)

The Degree programme then starts in October with a course run by William
who mainly uses asynchronous discussion but 'keeps it very simple'
(Michelle, P9_61:61) so that the students are 'learning and …
figuring out' (Michelle,P9_63:63) the skills needed for effective
asynchronous discussion and working together. William allows this to
happen 'slowly but gradually' (Roberta, P9_62:62) while the
students are adjusting 'to the onlineness' (Michelle, P9_61:61) and
the academic level of the Degree. This goes on throughout the first
semester of the programme.

Through this strategy, by the second semester, the students would have
'already learnt how discussions should be done' (Michelle,

P9_61:61). They would also have received feedback `on the online 30% element …(and) what could they do to do better`' (Michelle, P9_63:63). The feedback `is not only given as a percentage mark`' (Roberta, P9_64:64) – every single student is also invited to discuss his or her progress with Michelle:

> So they come (to)… my office, all first year students … I meet every single first year student at the end of semester one, we go through the *Turnitin* (report), the plagiarism (if any), look at their discussions and give them advice and show them how they can better their discussion and critiquing. Also … lecturers give(me their) … overall feedback, on the content … as well as the way the discussion has evolved … which I relay to the students. (Michelle, P9_65:65)

The full online course was however not beneficial to all students who started the programme. For example, during the 2011-12 academic year, 9 out of 50 students dropped out of the course. According to Michelle these students `found the online programme very demanding`' (P9_111:111) because, in her opinion,

> they're used to sitting, doing in inverted commas bugger all for years, and then they're used to working at the last minute to pass the exams and do the assignments … The people who are keen and motivated, who really want to get the degree, will adapt. (Michelle, P9_111:111)

Thus, the lecturers agreed, a high level of motivation is required for online learning and the online course `filters out those who aren't really engaged`' (Roberta, P9_121:121). This also happens, Roberta insisted, because, `unlike for most undergraduate courses at the University of Malta … the students for the BScHS must pay tuition fees`' (P9_123:123). So, when students realise that the online degree `is going to be too much`' (Roberta, P9_124:124) for them or `different to what they were expecting … for example, some (students) think that the online option will make their life easier … which is not the case`'

(Debbie, P13_78:78), they would not pay the required fees to start a new module. This often happens after the first semester, and, therefore, 'in December we get the biggest dropout' (Roberta, P9_124:124).

5.3.4 Factors working against the success of the blended option

The lecturers recognised various factors that worked against the success of the blended option – which, at first, they perceived as the better educational alternative. They argued that the predominantly face-to-face programmes in which the students were involved - the previous BScHS programmes and other courses offered by the Department of Nursing - in contrast to the 'predominantly online course' that has been offered since 2009:

i. **Created 'passive' rather than 'active' learners**. This reduced 'critical reflection' and encouraged the 'uncritical consumption of the knowledge delivered in the lecture room' (Debbie, P13_64:64).

   According to Michelle, in the other face-to-face programmes in which she is involved, she has students

   > sitting in class … some don't even write any notes any more. It's so annoying. You're talking and nothing's happening, going in one ear and out the other. They regurgitate for the exams or they work hard for the assignment (and)… that's it. (P9_16:16)

   Therefore, according to the lecturers, when asked to take part in online discussions - which was the predominant pedagogy used in the online learning courses - the students who were mainly familiar with classroom-based lecturing, found it difficult to participate. They

preferred the passive consumption of lecture notes rather than `actively learning from each other` (Debbie, P13_69:69).

ii. **Did not create a `community of learners`.** The lecturers agreed that the students, in predominantly classroom-based courses, preferred working on their own rather than `look for others through Internet-based … communication` `(Julia, P10_78:78)`. The students also abhorred and rejected collaborative and cooperative online learning activities favouring individual work in isolation or, more rarely, face-to-face group learning activities if `the groups were small … no more than three persons working together` (Debbie, P13_82:82).

iii. **Created fear in the students because of the unknown nature of online learning**. Students who were for years accustomed to traditional educational practices `were fearful of this new adventure` (Michelle, P9_106:106) because it entailed being part of `unknown educational practices and demands` (Carmel, P12_60:60).

5.3.5 Perceived factors which helped in making the online Degree a success

The lecturers identified various factors which they perceived as helping in making the online degree `successful`:

i. **The online nature of the course was satisfying two important needs**: (i) it was stopping `the haemorrhage of nurses from wards`, and (ii) helping experienced nurses and other health professionals to cope with their professional and family duties.

William (P11_38:38) confirmed what the students said in their interviews:

> `(the students) … tell us, that if it weren't`
> `online they would not have started the course.`

ii. **The lecturers worked together as a group and shared their knowledge and experience in online education**. Michelle noted that while designing and running the course the lecturing staff had

> `lots of staff meetings and lots of discussions and`
> `we shared a lot of ideas between us. This helped`
> `us grow into a community of teachers and learners`
> `… I mean learners of online methods and`
> `techniques. (P9_206:206)`

This lecturers' learning community was perceived to be '`vital to the success of the programme`' (Debbie, P16_90:90).

iii. **The students were '`forced`' into the online learning system**. From 2009, the Degree was offered only in its predominantly online form. Every new intake was given no opportunity to participate in face-to-face study units - except for the induction sessions which were mainly aimed at introducing the students to the online system and the academic practices and requirements. The students were therefore '`forced into it, they had no other option`' (Michelle, P9_65:65).

Driving students into the online teaching and learning dimension, however, caused '`panic`' (Michelle, P9_65:65) during the first semester of each programme. This panic, according to the lecturers, had two effects. First, it was overwhelming for around 1/5 of each intake: in 2011, 9 out of 50 students dropped out of the course after the first module. Second, this panic, forced the other students to '`seek each other out`', in order to '`help each other`' and to find together solutions to common or individual problems.

The lecturers explained that the students tried first on their own to solve problems or to learn, for example, a new Moodle function. If unsuccessful, they then sought out each other. If they could not solve the problem within the student group, they sought out one or more of their lecturers. This, `definitely helped in creating a community of learners` (William, P11_90:90) that involved not only the students but also their lecturers.

iv. **The online setting enhanced communication between teachers and learners.** Compared to the classroom,

> ```
> the opportunity for a teacher to engage in
> conversation and communicate with students is so
> much more available in the online setting than it
> is in the classroom. (Julia, P10_23:23)
> ```

v. **New and experienced online learners intermingled in most online modules.** Although the initial module offered during the first semester included only new intake students, all the other modules had students from all intakes.

> ```
> it's all muddled, in a study unit – an elective
> study unit- you have first years, second years,
> third years and next year we'll even have fourth
> years. (Michelle, P9_61:61)
> ```

Thus, students, with varying levels of online and academic experience, `mingled together` (Debbie, P13_81:81). This helped create camaraderie between the students with `fresh students seeking out help from the already experienced ones` (William, P11_66:66). This camaraderie also had another dimension; young nurses intermingled, most often virtually, sometimes face-to-face, with older and more experienced nurses. This helped `in creating a thriving learning environment` (Debbie, P13_83:83).

So, according to the lecturers, the hardest part of the degree programme is the first semester when the students are involved in core subject units - during which they do not come together with students from other intakes. From the second semester onwards the students join `elective study units` which brings the `fresh students` in contact with the already experienced ones.

vi. **The greatest asset, of this online degree, according to the lecturers, was its `alternative pedagogy`** (Debbie, P13_65:65). This will be discussed in the next section.

5.3.6   The pedagogy used in the online Degree

The lecturers agreed that, through the BScHS, apart from giving the students the opportunity to `top up` their academic knowledge and skills, they also sought to develop `learning communities` (Julia, P10_51:51) in which the students `learned from each other` (Michelle, P9_15:15) with the hope that, once they graduated,

```
they continue working with people they've studied with
... (for example) … if they design new guidelines for
their ward, they can send them to someone in another
ward whom they've known as a student saying 'isma'
give it a look and tell me what you think. Correct the
English. Give me your comments … (Michelle, P9_15:15)
```

The interviewed lecturers also agreed that, through this online Degree, they could use `progressive ideas and methods` of `contemporary adult education`, and particularly, nursing education, to help students nurture various educational and social values, including learning within a community, working and creating knowledge collaboratively and using technology to enhance their learning.

The lecturers also claimed that they were aware of classic and contemporary adult educational theories and practices because they all had post-graduate training in adult and nursing education [§4.3.2]. These lecturers also confirmed that all their colleagues – those involved in the online BSc programme - were also professionally trained in adult education and practice. One of these non-interviewed lecturers was a student of this researcher in the post-graduate Diploma in Adult Education of the Faculty of Education, while all the other lecturers studied with foreign universities.

Three lecturers also published scholarly papers in the field, including Caruana (2012) who presented a critical evaluation of his online module 'Working with medical device technology and ICT in practice'. The foregoing was also confirmed through a review of each lecturer's biography and *curriculum vitae*, accessible through the Faculty of Health Sciences website.

Asked whether they applied adult education principles in their teaching, they agreed that, in their predominantly face-to-face courses, they did not. They mostly resorted to lecturing, most often aided by PowerPoint presentations and Moodle – which was only used as a repository for notes and for communicating with students. They also explained that it was very difficult to apply student-centred teaching approaches with students who are only `comfortable with traditional teaching techniques` (Debbie, P13_94:94) and reject `collaborative … and other progressive methods` (Debbie, P13_94:94). On the other hand, the online nature of the BSc allowed the lecturers to use `dialogue`, `critical reflection` and `collaborative work` as the main pedagogic approaches. These were mainly achieved through online asynchronous discussions through forums hosted in Moodle, blogs and wikis.

5.3.7   Asynchronous discussions

The asynchronous discussions had the following characteristics:

i.   **Most of the discussions were assessed** and carried 30% of the overall mark of each module. All students were expected to contribute through frequent postings [refer also to (vii) below].

ii.   **All discussions were carried out in English.** The lecturers agreed that most of the students had a `sufficiently good level of English`' (Debbie, P16_87:87) with which they could make good contributions to the discussion. Julia explained that writing good postings in English `developed the skills leading towards one of the objectives of the Degree … improving the students' academic reading and writing skills`' (P10 _55:55). Moreover, the lecturers also noted that the use of only English in the Degree was essential because there were a number of foreign students in the course.

iii.   **The discussions were mainly held as forums hosted in Moodle**. This VLE offers five types of forums as shown in the text box below: *Forum Types in Moodle.* The choice of forum `whether it's question and answer, simple discussions or else`' (Michelle, P9_22:22) depended on what the lecturer was `trying to elicit in the discussion`' (Michelle, P9_22:22) and the module's learning objectives. The virtual observations of the online modules of the Degree confirmed that the lecturers used all five forum types in their modules. However, most lecturers preferred the 'single simple discussion' forum which allowed the lecturer to keep the students `focused on particular issues`' (Debbie, P13_93:93).

iv. **Large student groups were subdivided into smaller `discussion groups`**. The lecturers agreed that there is a '`threshold`' when it comes to the number of students who can effectively participate in a discussion and which a lecturer can handle '`in an effective and efficient way ... effective in the sense that the mark awarded will really reflect what they have done and efficient in the sense of time`' (Carmel, P12_106:106).

Forum types in Moodle

1. **'A single simple discussion'** - A single topic discussion developed on one page, which is intended for short and focused discussions.

2. **'Standard forum for general use'** - An open forum where anyone, including the students, can start a new topic at any time.

3. **'Each person posts one discussion'** – As the name implies, each person can post exactly one contribution intended to provoke a discussion (everyone, however, can reply to each contribution); this is useful when the lecturer needs each student to start a discussion about, for example, his/her reflections on the week's topic, and then everyone else responds to these.

4. **'Q and A Forum'** - Instead of initiating discussions participants pose a question in the initial post of a discussion. Students may reply with an answer, but they will not see the replies of other students to the question in that discussion until they have themselves replied to the same discussion.

5. **'Standard forum displayed in a blog-like format'** - This forum behaves in the same way as the default standard forum for general use, allowing users to start their own discussions. However, it displays differently in that the first post of each discussion is displayed (as in a blog) so that users can read it and then choose to respond by clicking the "Discuss this topic" button on the bottom right of the post.

From http://docs.moodle.org/22/en/Using_Forum

Thus, the lecturers agreed, a discussion group should not contain more than 20 students. Carmel, for example contends:

> Once you exceed 20 it's very difficult to thread … (and) they (students) can lose on issues. In the sense that when you're reading you might not realize … certain scaffolding is lost. Perhaps a student needs to correct his English and you can

```
help him, you cannot do that when you're reading a
lot of work. How can you? (P12_127:127)
```

The lecturers knew, from their previous experiences, that large groups (a) produced far too many contributions for students and lecturers to cope with, (b) encouraged lurking, that is, `reading the contributions of other students but rarely posting your own contributions` (Carmel, P12_34:34), and (c) reduced the opportunity for the lecturer to support effectively each student. For these reasons, the learning group in the first semester of each programme, which was made up of 50 students or more, was divided into two equal groups. Dividing a group into two, however, had a drawback: it `doubled the work for the lecturer` (Michelle, P9_89:89).

The 'elective modules' had different student group sizes. They varied from 9 to 62 students. The larger groups (40 or over) were also split into two groups - also doubling the work of the lecturer.

v. **Before initiating a discussion the lecturer identified one or more readings which the students were then asked to read**. These readings provided `a stimulus for reflection and discussion` (Carmel, P12_88:88).

In most modules, these readings were usually found in `text books` that the lecturers compiled specifically for their modules, and published by the Department of Nursing:

```
if the lecturer doesn't want them wasting time
searching themselves, we provide it. (Michelle,
P9_69:69)
```

However, some lecturers preferred to develop in the students the ability to search for relevant and appropriate papers:

```
Sometimes we don't provide the readings. We make
them look for the readings. Or we provide one
article and say 'find similar … like this one'.
(Michelle, P9_69:69)
```

vi. **The lecturer creates a forum in Moodle and initiates the discussion with one or more questions**. For example, Carmel started one of his forums with these two questions:

```
What are the key issues that healthcare
professionals are facing with respect to medical
devices and ICT in healthcare?  How can we change
the educational setup to help healthcare
practitioners and students cope with the problems
identified? (P12, 70:70)
```

For this particular forum, Carmel had previously asked students to read five articles relevant to the theme. Carmel explained that the aim of this forum was

> to nudge students into identifying significant issues and help them recognise that some of the feelings that they were experiencing with respect to device use were also felt by healthcare professionals worldwide. (Caruana, 2012: 34)

The students were normally allowed one week to go through the readings before starting contributing to the discussion.

vii. **The students were expected to participate in the asynchronous discussion by (a) developing their own contributions (b) posting their own contributions, (c) reading the contributions of others, and (d) responding to the contributions of others**.

Two to five forums were normally created per module, depending on the lecturer's requirements and module's theme. In most modules, the first forum was mainly intended for students to familiarize themselves with the required texts and Internet sites, as well as 'to give the students the opportunity to practice use of the Moodle' (Caruana, 2012: 34) and to `get to know each other`' (Debbie,

P16_44:44). All the interviewed lecturers did not assess the students' contributions in the first forum of their module.

The other forums were however assessed [refer to (i) above]. For example, in Carmel's module, students were required to post two substantial contributions on each question (see above) and post comments on the contributions of others. A mark was then awarded according to the

> originality of contributions, familiarity with readings, demonstration of reflective processes and demonstration of application to own practice. (Caruana, 2012: 34)

viii. **The lecturer followed but did not intervene frequently (if at all) in the discussion.** According to Caruana (2012: 34) the lecturer only needed to interfere 'when the discussion was veering in the wrong direction or to correct misinformation'. Moreover, Julia insisted that the lecturer must have 'the ability to sit back and contain one's own participation as lecturer'. (P10_23:23).

ix. **The lecturer must** 'interfere cautiously' **in an online discussion.** The lecturers agreed that the online setting, compared to the classroom, as has been previously argued, provides a greater opportunity for a teacher to engage in conversation and communication with students. This however often proved problematic because the lecturer had to put greater effort not to interfere with the ongoing and 'easily accessible' (Debbie, P13_80:80) discussions. Julia notes:

> very often … in the classroom you'd want to say something or participate or contribute, but you hold back as a lecturer because you know that if you do … you're going to divert attention or set the tone or influence the class. The temptation is there for two hours then you're out of the class and you'll probably not meet your students again till the next week. However, in the online

> setting, if you're following … a discussion forum
> online, it takes a lot of skill and a lot of
> control and a particularly different approach for
> the lecturer to sit back for a whole week in
> silence. (P10_23:23)

The lecturer must therefore maintain his or her presence `in as silent a way as possible` (Julia, P10_23:23), by following the discussion but only contributing directly through posts in the asynchronous discussion when `it was absolutely necessary` (Julia, P10_23:23).

x.   **Professional issues are used as the basis of discussions.**
      Most students `came to the Degree with many years of professional experience … and stories to tell` (Debbie, P16_99:99) and they were encouraged to draw upon these experiences. The lecturers involved `valued these experiences` (William, P11_67:67). Michelle and Roberta argued:

> Michelle: They have experience. And we use it …
>
> Roberta: … it engages them … it makes learning
> more interesting.
>
> Michelle: We make them reflect and draw on their
> experience. But not just 'I used to do this',
> that's not adequate. They have to be critical of
> it then. (P9_143:143)

xi.   **The asynchronous discussions improved the students' critical thinking and reflection skills.** The lecturers agreed that they did their best to improve the students' `critical reading of scholarly texts`, `reflection upon their reading and own experience` and `effective communication of their thoughts`. Michelle, for example, explained:

> the concept of this degree is we're developing
> critical thinkers, readers and writers.
> (P9_143:143)

The lecturers also noted that the main difference between the Diploma which most of the 'mature nurses' possessed and the 'top-up' Degree was 'this element of critical thinking'. Michelle explains:

> A diploma in nursing and a degree in nursing (in Malta) lead to the same professional qualification. With both (a student) became a state registered nurse. The difference is the degree is producing critical thinkers … nurses who are ready to change things in their wards. The Diploma only produced good practitioners. (P9_145:145)

The online discussions helped the lecturers to improve their students' critical thinking skills because, as Debbie notes:

> while they are reading the texts we provide … and other students' contributions and experience … and their own experience … they are developing reflective skills that will surely help improve their practice within their specific clinical setting. (P13_101:101)

xii. **The lecturers and students learnt from each other.** This developed a community of learning involving both parties in the educational process. William provided this example:

> the undergrads (those who are only taught face-to-face)… always call me 'Sir'. Now I do tell them to use first name basis, but automatically they refer to me as 'Sir'. In the online course, first name basis is used from the first day. I think the gap is reduced immediately, because it's like creating a community of which all … lecturers and students … form part. I learn a lot from them, and I make it clear (to them). I tell them 'that's a really good point and I'm learning from it'. (P11_16:16)

This community of learning reduced the authoritative position of the teachers upon their students making the latter 'feel more comfortable'. William provides another example: if the students

> would like to ask something, they won't feel embarrassed because 'I know nothing and he knows

```
everything'. If they want to say something that
might not be liked, they won't mind saying it. I
think that it helps in this way, this lack of
authority. (P11_44:44)
```

Julia notes that online teaching has helped her change the authoritative stance she used in the face-to-face class. In the online dimension

```
the lecturer does lose a lot of the power … that
the educator enjoys in the classroom, holds in the
classroom. However, I don't think that that's a
negative, I think it is very conducive in fact, it
accommodates adult teaching even better. And that
sort of further demonstrates how apt, how good the
online setting is for adult learning. (Julia,
P10_31:31)
```

Julia also contends that online teaching and learning is therefore akin to adult education principles and practices

```
… because with adult learning the lesser the power
struggle, the lesser the power division, the
control division, the better. While in an infant-
adult teaching environment, the split is probably
healthy and necessary, with adults it's completely
unnecessary if we have respect for each other, if
lecturers are respectful of the students and vice
versa. So I think this reality that it's true that
the lecturer loses power, is conducive towards
adult learning. (Julia, P10_31:31)
```

5.3.8   Other pedagogical approaches

Apart from the asynchronous discussion - which was the main pedagogical tool used in this online course - various other teaching and learning approaches were utilised by the lecturers. These included PowerPoint, audio and video presentations, e-seminars and games. Moreover, for assessment purposes (for covering the other 70% of the marks), further pedagogical tools were used: these included written assignments and e-

posters. Efforts were also being made to introduce interactive story boarding (Michelle, P9_22:22) and e-portfolios to the programme, however,

```
This year we wanted to use the e-portfolio but IT
services fell behind because they were moving to new
premises … So it didn't happen, so … instead of using
an e-portfolio system, we're using blogger. (Michelle,
P9_22:22)
```

The blog was used to reach other learning objectives. The more experienced lecturers in e-learning, Michelle and Julia, also used the blog, as well as the wiki, for three main educational aims: (i) the blog and wiki provided a variant to online discussion and an alternative to the much used forum, (ii) they involved the students in the learning of Internet-related skills for the efficient use of these freely available Internet tools, and (iii) they provided the lecturers with an approach through which they could follow each student's learning effort and progress.

5.3.8.1   *Use of blogs and wikis*

Michelle and Julia preferred their students to use Google's Blogger, rather than Moodle's blogging facility, because the latter was 'bugged' and 'unattractive'. Michelle explained that, using only forums to create discussions, for three or more years, would make the programme 'a bit boring in a sense'(P9_22:22). Therefore, 'to make the programme more interactive … (and) a bit more fun and … to avoid coming to a point where our students might end telling us 'Ok, forums are good but now they have become a bore''(P9_22:22), Michelle and Julia included blogging in some of their courses. For example, in the study unit she was involved in at the time of the interview, Michelle asked the students to set up a blog in three weeks. This was not easy for most students, as already indicated through the students' interviews. For most groups,

```
there's utter confusion, panic, despair … but they end
up helping out each other, through Moodle, through e-
mail, Facebook. They're asking questions and helping
out each other. If they can't solve the problem … I
step in. (Michelle, P9_65:65)
```

When she does step in, Michelle uses a traditional approach through which she provides step-by-step instructions:

```
With one group I actually had to put up an audio
guide, explaining to them how to make their blog
private, because it's automatically set to a public
setting. And I told them 'you must do this'.
(P9_20:20)
```

Besides the task of setting up their blog, the students are also given a set of readings which they are required to read and comment on. These readings, together with further instructions, are posted on Moodle. Once the blogs have been set up, the students must post regularly their reflective contributions on their blog. Michelle noted:

```
Once they've created blog accounts … they're going to
start blogging every week because the study unit is
called 'Becoming a reflective practitioner'.
(P9_22:22)
```

This was important, according to Michelle, because

```
we're trying to teach them how to be reflective and
they have to do it by weekly inputs and writing.
(P9_22:22)
```

Then, after four weeks, the whole student cohort is divided into smaller groups and the students are asked to

```
critique each other's blog so they will peer review
each other. Then the lecturer will come in and comment
over all. And then another four blogs and again
another peer review process. (P9_22:22)
```

The wiki is used in a similar way. Like the blog it was used to develop discussion 'in a novel way'. However, different from the blog, it required a group effort to develop the wiki. Michelle noted that,

```
we use wikis either as one group wiki where we want
the students to create, say, a list of teaching
strategies when we're discussing mentorship and
clinical supervision, for example. Or, as we're doing
right now, on our research methods study unit, we've
got them into groups and they have to use the wiki to
do group work as they go along. And we keep an eye on
what they're doing and then produce an end product as
a group at the end. (P9_22:22)
```

Julia also noted that the blog and wiki are '`precious assessment tools`' because, during their development process, lecturers

```
can see the process of the end product growing and if
you're patient enough you'll follow through and you'll
see what everybody's doing. And there you can see the
learning of individual people … across a collaborative
piece of work. We can therefore determine whether
learning has happened or not in each student.
(P10_27:27)
```

5.3.9   The lecturer's roles in online teaching

In the previous sections various perceived effective roles of the lecturer engaged in e-learning have been described. The foregoing has also shown that to work efficiently and effectively online, the lecturer must provide constant support for his/her students, use scaffolding of knowledge and skills, identify the most effective and efficient teaching and learning activities, including appropriate forums and readings. The lecturer must also open and manage discussions without being intrusive, provide constant feedback and assess the students' online contributions and substantive end-of-module assignments.

The lecturers identified another role that they perceived to be important in online teaching and learning. They all insisted that the lecturer must treat his or her students as adults [§5.4]. Debbie, for example, said:

```
All our students are adult. Many have been in their
jobs for years. Many are very good nurses … and take
```

```
pride in their work. You must use their experience.
You must make them feel … and believe … that you place
value in what they know … in what they have
experienced in their life, in their job. Otherwise how
can my course be a success?  These are not children …
they won't be ready to accept only what I tell them.
(P13_106:106)
```

Conscious of this wealth of knowledge and experiences that their students come with to the online Degree, the lecturers agreed that they must constantly create opportunities for student dialogue and discussion. These discussions, as Julia argued, quoting Paulo Freire, '`involved reflection … which may ultimately lead to action`' causing changes in the sectors in which these professionals work. This, all the lecturers agreed, was the '`major rationale`' (Carmel, P12_88:88) of the online Degree.

Thus, according to Carmel, the lecturers must become '`change agents … at least as much as (they) can`' (P12_62:62) and the Degree should offer the opportunity to help the students themselves become '`agents of change out there … in reality … in the ward`' (P12_62:62). So, Carmel's online module's '`hidden aims`' (P12_66:66) were:

> To reduce the anxiety of healthcare professionals with respect to the use of medical devices by showing that the major source of their feeling of trepidation is not their own inadequacy but the deficiencies in the educational provision in this area.

> To create indirect pressure on the local healthcare provider to produce better training provision. This is consonant with the role of the academic as an agent of change. (Caruana, 2012: 34)

5.3.10 The online learner roles and skills

Various perceived student roles and skills have emerged in the preceding discussion of the lecturers' interviews. Learners must participate in

asynchronous discussions by critically reading scholarly works, writing and posting contributions in English and reflecting on their own and others' postings. For assessment purposes they must collaborate and work with others, participate in various online activities including group blogs and wikis. They must also support each other.

The lecturers identified other student roles and skills needed for effective and efficient participation in online learning activities. The most important, according to the lecturers, were:

i.   **Students needed to** `have a reasonable ability to express themselves … in English`' (Julia, P10_45:45). However, not all students had a good command of the English language and these needed help from friends and lecturers to cope. Michelle, indeed, noted:

> We tell these students to get people to proofread their assignments before they submit them. Literately we tell them 'get help!' This colleague in your class is very good with English. Ask him. 'This person might not mind proof reading your assignment.' We encourage them to network. (P9_80:80)

The level of English is `sufficiently good`' in most students but `not as good as we want`' (Debbie, P13_09:09). This encourages widespread plagiarism. Those who are relatively good in English are engaged in `mild plagiarism`' while those who are weak in the language resort to `cut and paste plagiarism`'. According to Carmel not all plagiarism is harmful: `mild plagiarism` can be `a good thing` because it helps the less proficient students `to learn new terminology`'. He argues that, in his field, many of the terms that are used cannot be changed and if `there is a specific term, or expression … it's an ideal term so why change it?`' (P12_74:74).

Nevertheless, the majority of lecturers were concerned with plagiarism and the fact that the online dimension 'encourages the tendency to cut and paste'. However, asked whether they saw any difference in this tendency for written assignments submitted in face-to-face and online courses, no lecturer said that more plagiarism was evident in the online dimension.

ii. **Students required familiarity with the computer, Internet and social networking.** For this reason, according to Legal Notice 295 of 2009, applicants needed a pass in the following ECDL Core Course Modules for admission into the course:

> Module 2: Using the Computer and Managing Files
> Module 3: Word Processing
> Module 6: Presentation
> Module 7: Information and Communication.

Notwithstanding that all students possessed the required ECDL passes, the lecturers perceived that the younger students were at an advantage with regards to IT skills. Debbie (P13_72:72), for example, noted that 'the young ones, are much more familiar with computers and social networks'.

However, Debbie also contended that this did 'not automatically mean that (the younger participants) were better online (students)' (P13_72:72). William agreed, and noted that, the younger students, most of whom were in their 20s and had just 'finished their Diploma during the past 2 years … from the technical aspect they were more prepared … but not necessarily for learning' (P11_28:28). He argued that, the older students, 'who were in their 50s' do

> suffer a little bit where it concerns technology …
> because some of them might have rarely used a
> computer … at the beginning they feel the

```
technological barrier, but when the ball starts
rolling, they do better … (and) it's more the
younger who crave for face-to-face contact.
(P11_28:28)
```

In other words, as Julia (P10_70:70) explains, `'the older students quickly make up for their obvious disadvantage in IT … and become the better online learners'` because, the lecturers agreed, they are more motivated to learn.

iii. **Students needed a frequent online presence and the constant inputting of contributions.** The lecturers agreed that the students were expected to follow and contribute actively in the online discussions. Michelle warned the students:

```
Don't leave weeks and then say, 'now I'll spend a
day and catch up'. It doesn't work like that.
People who don't cope, quit. (P9_111:111)
```

Lurking was therefore discouraged but not condemned. All lecturers agreed that, at times, some students preferred to follow the discussion without intervening with their own contributions. Debbie (P13_88:88) noted that these `'silent students'` often read all the recommended texts, and without contributing much to the discussion, in their final written assignments, they showed that they had reached the set goals of the module. In this regard, Julia, argued that lurkers do not worry her as long as she is confident

```
that there are valid and reliable assessment
processes. (But) … I would have great concerns
about lurkers in scenarios or in contexts where
I'm not convinced about the assessment processes.
But if there are assessment processes in place
which will accommodate lurkers then I'm happy to
have them onboard and remain silent. (P10_25:25)
```

The lecturers also agreed that lurking is a learning style which `'we should respect … since these students are adults`

and by definition are all different' (Debbie, P13_89:89). However, as Julia hinted, and the other lecturers noted, assessing lurkers online was not easy. William, for example, insisted that it was very difficult to `assess the originality of a piece of work if the student is rarely online` (P11_94:94). Even Julia, who respected lurkers, argued that securing `valid assessment processes, was a very taxing facet of online learning` (P10_26:26).

5.3.11 Perceived challenges of online learning

The lecturers detected various challenges in online learning: some have already been described in the foregoing, including the relatively high dropout rate, lurking and the difficulty of having discussions for large groups.

i. **Compared to face-to-face courses lecturers needed more time to design and manage an online course**. For example, Roberta and Michelle noted that during a face-to-face session, the lecturer is involved in a discussion which may last one or two hours – normally, the duration of a session. On the other hand, with an online discussion you need much more time because

    ```
    in an online discussion you get at least 135
    postings … because every student must post … there
    are 45 students in each group and they've done 3
    postings each, you have to read it, follow it,
    give feedback. (P9_71:71)
    ```

ii. **The online modules could not be reused without effecting changes that satisfied the specific needs of the students;** nor could the lecturer prepare `generic feedback which could be used from year to year` (Roberta, P9_75:75). Michelle explains

> So when I'm putting up an introduction notes page,
> to welcome them into a theme, if I'm organizing my
> study unit in 3 themes, from year to year, we
> change our readings we improve things. We have to
> rewrite the thing again. (P9_76:76)

iii. **Not all topics are suitable for the online setting**. Some subjects, for example, Critical Care Nursing - a subject which is taught to full-time student nurses needed `face-to-face contact to explain certain things`, because it involved `an element of passing on the facts` and manual dexterity (William, P11_10:10). William explained that the experience that the students got from the ward could not be taught through the online medium. Therefore, topics for the online course were specifically `chosen to function well in the online setting`. The online course designers opted for study units in which the students could, through reading scholarly papers, reflect critically on their experiences. William explained, that, in the online programme, his subject was Evidence Based Healthcare,

> which is more about concepts, it's skills as well,
> but different skills, not manual. Skills on how to
> search and analyse literature for example. How to
> evaluate what the research shows. How to apply it
> to practice. (P11_12:12)

5.4   Conclusion

The BScHS, in its online format, was developed to satisfy the `demand` of state registered nurses for an `academic top-up degree` that could enhance their career prospects but did not interfere with their professional and family life as much as a traditional undergraduate course that required their presence on the University campus. The online degree was also required to cater for the `need`, identified by the Department of Nursing, to prepare `more professional` nurses who could `remain abreast

with `developments`' in the medical field. The degree was also required to stop the nurses from 'depleting the wards' in Maltese hospitals.

The lecturers involved in the BScHS programme were professionally prepared in the theory and practice of nursing and adult education. Two of these lecturers – the co-ordinator and co-developer of the course - were also trained in e-learning approaches through online learning programmes with foreign universities. The other lecturers received basic training in online teaching skills from the two more qualified lecturers. This fusion of nursing, adult and e-learning knowledge and skills produced an online course in which dialogue became the central pedagogic approach.

This dialogue amongst learners, and also between learners and their educators, was created and maintained through student-centred text-based asynchronous discussions which required the lecturers to shed their traditional authoritative role and adopt a constructivist approach which valued the learners' ability to collectively create new knowledge. The lecturers, now engaged in e-learning, developed discussions, by identifying the appropriate online tool, indicating suitable scholarly writings, promoting the critical reading of this work and encouraging the posting of contributions by all participants. In this process, the educators often became learners themselves. They learned from the baggage of experiences and knowledge that both the young and mature health professionals brought into the educational project and which they shared during the Internet-based discussions.

The narrative also confirmed that the online option was offering these educators an educational space in which they were not bound by the schooling paradigm that was still pervasive at the University of Malta and was affecting strongly their own face-to-face teaching. This educational space in which dialogue was the central learning approach helped the educators to break away from the clutch of traditional educational practices

and engage in an education project that was trying to create `'agents of change'(Carmel, P12_62:62).`

Chapter 6

The Students' Interviews – *Diploma in Technology Enhanced Learning*

If it's coming from the lecturer so it's the right information, no?
(Thomas, P13_16:16)

6.1   Sampling, Setting and Process of Analysis

The review of the course descriptions available online and the information provided by IT Services agreed that, apart from the lecturers involved in the BScHS programme, there were many other University of Malta lecturers who were using the VLE for online courses. However, most of these lecturers were scattered around many Faculties and involved in a diverse array of undergraduate and postgraduate programmes. For comparative and practical reasons, this research project needed another educational programme, in which, a lecturing team was involved in online teaching and learning activities.

The researcher identified the post-graduate Diploma in Technology-Enhanced Learning (DITEL) of the Faculty of Education which, according to its course prospectus, was engaging students in e-learning activities.

6.1.1   Sampling

DITEL was designed and managed by the Centre for Educational Technology, Research and Innovation (CETRI) of the Department of Mathematics, Science and Technical Education of the Faculty of Education (DMSTE). For this reason, the researcher met the co-ordinator of the course and CETRI. In the meeting this researcher asked the co-ordinator to encourage the DITEL students to participate in this research project. The researcher was consequently invited to address the students during a lecture they had with the DITEL co-ordinator on 1st February 2012. Subsequently, six out of seven DITEL students, accepted to participate in this research. Thus, another convenience (rather than theoretical) student sample was created.

Name	Interview Reference Code	Course intake	Age	Teaching Specialisation	Years of experience	Workplace	Marital, family Status
Thomas	P15	2011	25 - 30	Computing and ICT teacher	>10	Boys' Secondary School, Gozo	Married
Susan	P16	2011	25 - 30	Primary School teacher	>10	Primary School, Malta	Married, 1 child
Rebecca	P17	2011	31 - 35	Primary School teacher	>10	Primary School, Malta	Married
Helen	P18	2011	25 - 30	Primary School teacher	>10	Primary School, Malta	Married, 2 children
Gina	P19	2011	40 - 45	Business Studies and ICT	>10	Girls' Secondary School, Malta	Married, 3 children
Anthony	P20	2011	25 - 30	Computing and ICT teacher	>10	Boys' Secondary School, Malta	Single

Table 6.1 – Sample Profile of DITEL students

The profile of the students' sample is shown in Table 6.1. This sample was composed of two men and four women. One student lived in Gozo, the other students all lived in Malta. All the participants were qualified teachers with less than ten years of professional experience. Half of these teachers were employed in primary schools, the other half taught in secondary

schools. The average age of this sample was 32 with the youngest student being 27 years old, while the oldest 41. Four out of the six students (that is, 66.7% of the sample) were in the 25 – 30 age cohort while one was in the 31 – 35 age cohort and the other in the 41 – 45 age cohort. Two of the students were professionally trained to teach about computers and ICT, another was teaching ICT although not trained in the area. These three students were teaching in secondary schools. The other three students were employed as primary school teachers and had no professional training in IT. However, according to the Diploma entry requirements, they possessed core ECDL knowledge and skills.

6.1.2   Setting - DITEL

As in the previous case study, the researcher perceived the setting to consist of two separate but interrelated components: the postgraduate Diploma itself and the Department of Mathematics, Science and Technical Education, whose academic staff created and taught in the Diploma. In this chapter, the first component of the setting, that is, the Diploma in Technology-Enhanced Learning (DITEL), will be described. The second component will be explored in the next chapter.

The course prospectus claimed that the main objective of DITEL was to provide qualified and practising teachers with

> an opportunity to explore different modes of learning through technology and how these can be applied in formal and informal educational contexts. (Faculty of Education, 2011a)

To achieve this objective, the prospectus promised the potential participants that, through the Diploma, they would be exploring different digital technologies and their application in the teaching-learning process. The prospective students were also assured that, through DITEL, they would critically examine 'key pedagogical models and emerging

technologies and practices', develop 'skills in designing technology-enhanced teaching and learning across the curriculum' and engage 'in technology-intensive collaborative learning environments and professional growth' (CETRI, 2011).

To reach these objectives the students were therefore required

> to adopt a hands-on approach using the Moodle environment benefitting from a blended learning approach that integrated autonomous and collaborative on-line learning with face-to-face guided practice. (Faculty of Education, 2011a)

Thus, through the two-year programme, the students would not only become critically aware of the theoretical framework underlying technology-enhanced learning, but also, through direct experience, 'successful online learners' and 'tutors' (Faculty of Education, 2011b). Therefore, the DITEL prospectus assured the prospective participants that they would be exposed to various Internet-based tools which were either specifically designed for e-learning, including Moodle and other freely-available VLEs, the ePortfolio (Faculty of Education, 2011b) and webquests (Faculty of Education, 2011c), or had the potential for e-learning, including the massively multiplayer online role-playing game (MMORPG), cloud computing and social networking applications (Faculty of Education, 2011d) and podcasting. Moreover, the programme also aimed at introducing teachers to the educational design and management of blogs and wikis for collaborative learning practices, both for themselves and for their learners in 'the blended learning classroom' (Faculty of Education, 2011e; 2011f).

Therefore, for the final project of the Diploma the participants were required to eventually develop

> an on-line course about a topic/theme in an area of specialisation identified by the participant. (Faculty of Education, 2011g)

Applicants for the course needed a professional teaching qualification as well as a pass in all the core ECDL modules or 'a recognised Teacher's

Certificate in ICT prior to commencement of the course' (Legal Notice 152, 2011: 1).

6.1.3   The Process of Analysis of the students' interviews.

The analysis process was similar to that used in the analysis of data of interviewees who were participating in the BScHS [§4.2]. This was also a non-sequential and iterative inductive process involving coding, abstract conceptualisation through, mainly, inductive reasoning, analytic memo writing and diagrammatic mapping of codes.

In brief, the analytic process involved the following:

1. **'First cycle coding'** (Saldaña, 2011), that is, (i) open coding on paper through which *in vivo* codes taken directly from the student narratives and researcher codes were determined, and (ii) focused coding through which the open codes were reorganised and reanalysed.
2. **Interview transcripts and codes transferred to Atlas.ti** where (i) further open codes were identified, (ii) similar codes were merged.
3. **Writing of analytic memos** concurrently with coding to document and reflect on the emerging categories and themes, possibly leading toward theory.
4. **Diagramming**, that is, producing diagrams that map the conceptual relations of categories that emerge through the process of analysis.

The process described above was also used for the analysis of data collected from websites and printed documentation and the virtual observation of online learning activities.

6.2   Information from the students' interviews

Six students were interviewed [§6.1.1]. Each interview was held at a location and in the language preferred by the student. The students were given the right to choose the venue and language in order to minimize any perceived or real imbalance of power, between the interviewer, a University of Malta lecturer, and interviewees, and for the comfort of the same students [§3.7]. Two students, Rebecca and Susan, preferred a group interview.

The students preferred using Maltese rather than English during the interviews. Moreover, as described before, a Gozitan student preferred to use his island's variation of the language. All interviews were recorded and lasted around an hour. Each interview was transcribed in Maltese, translated into English, proofread by another person, printed and coded on paper. The digital copy of the interview was then transferred into a new Atlas.ti Hermeneutic Unit (HU). The researcher did not use the set of codes and categories developed in the analysis of the data gathered from the students and lecturers involved in the BScHS degree. This was done to reduce the forcing of codes and categories from the analysis of the previous data set upon the new data. This notwithstanding, many similar codes and categories emerged from the data.

6.2.1   The students' motivation towards the Diploma

The students agreed that they joined the Diploma programme to increase their career opportunities and to gain access to further study. They referred to the course prospectus which indeed claimed that:

> Teachers holding a PGDITEL will have the necessary knowledge and skills to act as ICT-support teachers, be involved in the formulation and implementation of eLearning (sic) policies, develop, manage and evaluate

training and CPD initiatives in eLearning (sic). (Faculty of Education, 2011)

The students, in their interviews, agreed that they were also encouraged to participate in the course because 'we knew that the co-ordinator of the Diploma was doing his best to upgrade it to a master's degree' (Anthony, P18_76:76).

A review of the available documents revealed that, in 2007, the designer and co-ordinator of DITEL had proposed a Master's in Educational Technology, Design and Innovation (METDI) to the Board of Studies of the Faculty of Education. The degree was intended to promote research into 'innovative technology-intensive learning initiatives' that would 'cater for future educational and training needs' (Faculty of Education, 2007). The Master's degree, if approved, would also have been managed by CETRI and supported through students' fees and funding from UNESCO and European Union education programmes. The plans also envisioned the internationalisation of the programme 'by upgrading it to a European Masters (sic) through collaboration with other European Universities' (Faculty of Education, 2007). However, according to the students, the course co-ordinator and their lecturers informed them that, because of the 'unavailability of enough Maltese and foreign experts who could supervise the students' dissertations' the Master's programme 'could not be approved' (Anthony, P18_81:81) by the Board of Studies of the Faculty of Education.

DITEL, which was launched in 2011, was perceived by the students to have been an attempt to revive and renew interest in this project. It was hoped that, once 'there were enough students following the Diploma' more interest would be shown 'by the (Faculty) authorities' (Anthony, P18_81:81) in the proposed Master's programme. The prospective students were optimistic that DITEL would be extended into the Master's programme 'by adding just another

year', that is, '`30 credits for Research Methods and the dissertation`' (Anthony, P18_81:81) to the Diploma.

The students agreed that this possibility was the most important motivating factor that attracted them to DITEL rather than to any other course. Anthony, for example, claimed:

> ```
> Like me all the other students joined the course
> because they wanted the Master's. (P18_81:81)
> ```

The students were also hopeful that the upgrade from the postgraduate diploma to the Master's degree would occur during any of the two academic years of the course. However, they were given no assurance that this would happen, as Thomas (P14_40:40) confirmed:

> ```
> I joined DITEL hoping that it would extend into a
> master's (however)… no one promised us that it would
> happen … they told us that it might be possible ….
> (Thomas, P14_40:40)
> ```

By February the students were still hopeful that the Diploma would be extended to a master's as confirmed by this comment posted by an anonymous student that appeared on the home page of a wiki used in one of the DITEL courses:

> For this week I intend to write about mobile & wireless access to learning. This field is one of my favorites and ….hmmmm well let's say, it is an area that I'd like to specialize if this DiTEL course will hopefully happen to be extended to a MASTERS course. (wikiuser0007, 16 February 2012, accessible at http://innovaedu.pbworks.com/w/page/50750229/Home)

However, by the end of the first academic year, the Master's degree had not yet been approved by the Board of Studies of the Faculty of Education.

Moreover, by the end of the first year of the course, the students also came to realise that this upgrade '`was never guaranteed`' (Anthony, P18_86:86). Indeed, they were informed by the course co-ordinator, and

later their lecturers, that this upgrade was 'difficult to happen' (Rebecca, P15_40:40).

Consequently, in May, at the time of the interviews, the students were all very disappointed because they had all joined the programme with the expectation of proceeding to a master's degree. They argued that 'just a diploma' (Susan, P15_76:76) could not secure new career opportunities or higher financial gains:

> The Diploma … as it stands will not increase our salary or our hopes for promotion. However, when and if it … becomes a master's it can help. (Rebecca, P15_14:14)

They needed a master's degree to increase their career possibilities, and, they agreed, its probable unavailability 'considerably reduced' their 'motivation for the course' (Susan, P15_43:43), particularly during the final months of the first academic year.

This notwithstanding, there were other motivators that kept the students in the course. These, although not being primary motivators, also helped in attracting and keeping the students in the Diploma. The students identified four interrelated secondary motivational factors: (i) the participation in a post-graduate learning experience and, consequently, the acquisition of a Post-Graduate Diploma, (ii) learning to become better teachers through the application of technology in their own classrooms and beyond, (iii) self-actualisation and fulfilment, and (iv) the main pedagogy, lecturing, was similar to that used in the students' previous educational experiences.

Thus, for example, Gina claimed the she was doing this Diploma 'for me … to feel better … to become a better teacher and for my students' because, through the course, she was 'trying to find better ways to teach' (P17_06:08). Similarly, Helen argued that, apart from her greater wish to obtain a master's degree via the Diploma,

she decided to participate in the course because she 'always liked technology' and 'wanted to learn more how to use technology in the classroom and other things, like applications, which' she 'could use with the children in class' (P16_09:09).

Rebecca and Susan mentioned another motivational factor: they joined the course because 'it's a Maltese programme … it's held in Malta' since they never wished to take part in a foreign distance-learning course 'where they learnt on their own' and needed a classroom-based course where they 'could learn by listening' (Rebecca, P15_23:23). They also described how they, two long-time friends and colleagues in the same primary school, joined the course:

> Susan: I was looking for a master's …
>
> Rebecca: I was also looking for a master's about creative writing or technology. And … I was also tempted to start a course in Administration for future Assistant Heads …
>
> Researcher: Is that a diploma?
>
> Rebecca: Yes it's a post-graduate diploma. Emmmm … and Susan told me … there's a new course about technology. It's a Diploma which may become a master's. I said "is that true? I know nothing about it". We said why don't we try it. And she encouraged me to join her in the new course.
>
> Susan: I got interested in the course after I read its course description.
>
> Rebecca: Yes … and we said that we can surely use these things in class.
>
> Susan: I wanted to be more aware of the possible uses of technology in class.
>
> Researcher: Which technology?
>
> Rebecca: Online technology … the interactive whiteboard …
>
> Susan: The Internet … (P15_23:32)

Moreover, Rebecca and Susan agreed, as did all the other interviewees, they had all been applying what they were learning in DITEL to their teaching at school and that the knowledge and skills they were gaining through the course were improving their teaching experience. This, all the interviewees agreed, provided further motivation towards the course.

However, the students agreed that in the absence of the primary motivator, that is, the possibility of moving from a diploma to a master's, it was the pedagogic mode which was providing the strongest motivator for the course. The students preferred lecturing and their responses were unanimous and unambiguous: if lecturing were completely substituted by alternative methodologies they would drop out. This is illustrated by the following comment:

> ```
> I wanted to learn new things, how technology is used
> in the classroom … how I can use the Internet with my
> students … that's why I'm in this diploma ... but if
> the course were different from the B.Ed. … if
> lecturing were not the main pedagogy I would not have
> continued the course. I'm happy with lecturing … I'm
> not comfortable with other methods. (Gina,
> P17_160:160)
> ```

The students perceived Internet-based pedagogies as being more demanding and time-consuming and, as Thomas noted, `'we felt like we did not want to go into further trouble just for a Diploma'` (P14_130:130).

The students were motivated by lecturing and discouraged by alternative pedagogic experiments even though the Diploma was about technology-enhanced teaching and learning. This seemingly contradictory situation will be discussed in the next section.

6.2.2   Classroom-based rather than online learning

Thomas, the Gozitan student, was the first DITEL student to be interviewed. The first question asked was: *How would you describe the teaching approach in DITEL?* This conversation developed:

```
Thomas:   Mainly lecturing.  But some lecturers used
innovative approaches such as the blog and wiki.
However, I prefer lectures.

Researcher:    That is surprising to me … I mean … you
are a computer teacher … and … you live in Gozo …

Thomas:   To have someone … I don't know how to put it
in words … emmm (long pause) … having someone to guide
me is important … it feels more comfortable.

Researcher:    You prefer face-to-face teaching even
if this means going to Malta twice a week for the
lectures?

Thomas:   Yes … and it's not easy … having to drive
down to Mgarr (the Gozo harbour)… waiting for the
Ferry, crossing to Malta, then driving for 45 minutes
from Cirkewwa to tal-Qroqq (University of Malta) … and
then back after a 2-hour lecture. This week I filled
the car with €80 of petrol.  Before I used to fill it
up with 20 or less.

Researcher:    If you had the option to follow this
course online …

Thomas:   I wouldn't do it. I prefer to be in a class
with others. (Thomas, P14_13:19)
```

As the excerpt above shows, the researcher was surprised with Thomas's response because this was diametrically opposite to the response of the Gozitan BScHS students he had interviewed previously. Thomas, unlike the other students living in Gozo, was adamant that if the course were not classroom-based he would not have joined - even if this meant driving to and from Malta, twice a week.

Thomas was consequently asked why he preferred face-to-face over distance learning in the online dimension. This was his answer:

```
Probably because … (pause)… it has always been the way
I have been taught … in a classroom.  Having always
been taught in a classroom … that experience … must
affect me.

Through this course I did have an experience with
Internet-based work. With Anna we worked on a wiki. It
was a very different way of learning. Working on your
own at home … it was an interesting experience.
However … the fact that we met before we actually
started working on the wiki and she explained and
guided us … in class … I wanted that. I needed that
before I started working from home. (P14_22:23)
```

Therefore, in his answer, Thomas noted that his previous educational experience, which included 16 years of schooling and four years of undergraduate studies, was predominantly classroom-based and, for him, any alternative or new way of learning was considered undesirable unless it involved a face-to-face component. Nevertheless, elsewhere in the interview, he confirmed that he preferred lecturing (P14_45:45). He argued that `'online learning is not only reading texts and writing an assignment at the end of the course'` as in traditional university courses; it involved discussions, working with others and posting comments (P14_45:45). He did not like these online activities and, consequentially, was `'never at ease when working online'` (P14_45:45).

Rebecca and Susan were also `'unsympathetic to online learning activities'` (Susan, P15_184:184). They also insisted that years of traditional teaching affected their learning style preference. They argued, that unlike younger students who had grown up with technology, and who had appreciated teachers who employed technology in the classroom, including the interactive whiteboards, and were also at ease with social networking, chatting and using the various affordances of the Internet, they were uncomfortable with computers and `'anything online'` (Susan, P15_175:175). Thus, they needed to be physically present in the classroom because:

> Rebecca: I learn by listening. The more I listen the more I learn. I panic on my own. I'm not comfortable learning alone. I want to learn in a group. I feel better. (P15_23:23)
>
> Susan: we need to be there. We need to crack jokes, see others' faces … (P15_176:176)

For Rebecca and Susan this was due to the fact that they had 'spent many years in an educational system that was very traditional' in which 'the best students were passive learners' who uncritically absorbed all that was offered to them by their teachers (P15_182:182). In this educational scenario students and teachers celebrated competitiveness and individualism in which 'it was best to be better than others' and to 'study on your own' (P15_182:182). The traditional education which Rebecca and Susan 'were brought up in', communication between students during learning was minimal, 'discussions did not exist' and 'almost all knowledge came from the teacher' while students had to respect their teacher's authoritative role in class (P15_182:182). Thus, non-traditional learning approaches, for Rebecca and Susan, like Thomas, represented a too risky and fearful journey into the unknown:

> Rebecca: For us it's too a big change. Change is difficult. I mean changing from learning in a traditional way to learning through the Internet. We are used to the old way and it's difficult to change. It's too big a challenge for me to try something new. I may be able to be a good online learner but the change frightens me. I prefer not to take risks.
>
> Susan: I'm more comfortable being there in a classroom, asking questions directly, being with people.
>
> Rebecca: Me too. I prefer the learning style that I'm used to. New learning ways frighten me. (P15_183:185)

Gina too was afraid of abandoning traditional schooling methodologies for alternative ones. She was emphatic when she said that in her view, the classroom only was the 'environment which allowed learning' (P17_121:121). She also explained that:

```
I was always comfortable at school. For me that method
worked. There are people for whom it did not work, but
it worked for me. So even now, the way I think, the
way I react, is based on what has always worked for
me. So if before I used to write a note here and
there, and for me that worked, I don't see why I
should change that, even though we have technology.
(P17_87:87)
```

The following extract from the interview with Gina explains why she was only comfortable with classroom-based teaching and learning:

```
Gina: I need to be in contact with others. I need
contact. That's the way I am. I prefer to meet people
… I feel more comfortable. Comfortable and motivated.
I feel it's more challenging.

Researcher: Challenging?

Gina: When you're with others, you can see the way
they behave. This is like … in a team sport … when you
see someone who's giving his best, you tend to do your
best as well. If you see that the other members are
taking it easy …

Researcher: So here … are you talking about an element
of competition?

Gina: Not as competition, no. But …

Researcher: I don't mean 'competition' in a negative
way.

Gina: I mean…

Researcher: You want to do better.

Gina: Not to do better. I want to do what I can do.
But the feedback of others helps me do my best. That's
the way I am. The feedback of others helps me,
motivates me, stimulates me. (P17_45:53)
```

The other two interviewees were also asked about their learning preferences. They too agreed that face-to-face lecturing was their preferred learning approach.

The respondents were also unanimous in noting that had the course prospectus claimed that the approach would be predominantly online none

would have joined. Moreover, a year into the course, only two interviewees said they were comfortable with the `online component of the Diploma` provided that it remained a `minimal part of the course` (Helen, P16_27:27).

Echoing Thomas, all the other students argued that traditional schooling, including their previous, undergraduate, teacher-training experience, affected their preference for lecturing. They insisted that, due to their past educational experiences, they all needed to be in a classroom with other students and required `face-to-face human interaction`. Helen, for example, noted that she would never opt for a full online learning course because

> it means … being completely alone … and not knowing
> anyone, not having someone to ask if I didn't
> understand something. That scares me. Also, as a
> person, I find it difficult to trust people I don't
> know. When you're doing a course, you don't really
> know who would genuinely help you or not. (P16_30:30)

The students within the sample perceived other factors that made a course with a predominantly lecturing mode preferable to an online course. These were:

i. **A lecture had a fixed day and time and provided the students with a `learning space`.** This space was difficult to `gain at home` (Gina, P17_117:117) through e-learning activities particularly in those households where one computer needed to be shared amongst all the members of the family.

Gina also noted that, to participate in online learning she had to stay at home which she did not consider an advantage. Reflecting on the online course with Lisa, remaining at home meant that:

> … I could not be free from my husband's and
> children's needs and household duties. I had to
> take my children here and there … they had exams

```
and I had to help them. Instead of using my time
to read and write postings I had to take care of
the children. (P17_24:24)
```

On the other hand,

```
When you have to attend a lecture, you have to
leave everything because you must be away, come
what may. You have to leave the children at home …
and it is easier to find help from your husband or
dad … I can ask my dad to pick the children up if
my husband cannot do it. If I'm at home no one
will say 'let's help her because she must go
online'. (P17_26:26)
```

Similarly, Helen also noted that:

```
once you are at home, you get distractions all the
time. If you are there, mum this, mum that,
because this and that, fighting with each other…
When you're at home… now if they're doing the same
but I'm not there, I can't see them. I can't see,
I can't comment, I can't put my foot down, I don't
need to do anything. (P17_117:117)
```

Gina insisted that, online learning required more work and consequently, more time, than was required for attending lectures. For Gina and Helen, it was very hard to find the required time for efficient and effective participation in Internet-based activities. Similar difficulties were described by two other interviewees, Susan and Thomas. Susan was married and had a young child who also sought her attention and help when she remained at home. Thomas was a part-time photographer who juggled between his full-time and part-time jobs and participating in DITEL.

ii. **Students felt dependent on the lecturer for knowledge and guidance**. Thomas, for example, insisted that he needed the lecturer `'to guide'` him (P14_16:16) because he was used to a passive learning role in which he uncritically assimilates what's offered to him by the teacher who is perceived as the purveyor of unchallengeable knowledge:

> I'm used to receiving instructions and notes. I'm
> used to receiving information … and that's the
> information. I mean, if it's coming from the
> lecturer so it's the right information, no?
> (P14_16:16)

Susan said that she 'must be in the same room as the
lecturer' (P15_46:46) because 'I need to learn from
someone else' (P15_89:89), that is, the teacher. Rebecca, noted,
while reflecting on online discussions, that

> no matter how much I read … I always rely on the
> lecturer. I need the lecturer. I need to ask him
> things that I don't understand when I'm reading.
> (P15_46:46)

iii. **Students needed 'to take down notes' during lectures.** They
perceived writing notes during a lecture as being a more effective
learning experience than, for example, an online discussion. Susan
and Gina provided these arguments:

> I prefer writing down notes rather typing them. I
> prefer handwriting notes during a lecture than
> writing online. Even when writing an assignment I
> prefer to handwrite it down first, creating the
> structure on paper. I create the design for the
> assignment on paper, then I type it. (Susan, P_14,
> 188:188)

> I prefer writing something … while I'm listening.
> I feel that I learn more when I jot down notes
> that come from the lecturer. (Gina, P17_73:73)

iv. **Online discussion was difficult for most students.** Thomas, for
example, insisted that the asynchronous discussions were
uncomfortable for him (P14_71:71) and noted that:

> I'm not at ease when I'm commenting ... always
> thinking ... 'is my comment correct?', 'am I
> posting the wrong comment?' 'will I be saying
> something that does not make sense?' There were
> fifteen marks for comments. At the end I had to
> learn to comment because I was feeling the
> pressure of the assessment. But I'm always

```
thinking that my posts are not good. That I am
wrong. I'm not used to commenting. (P14_41:41)
```

v. **Attending a lecture was less demanding than participating in an online learning experience.** The students agreed that all Internet-based learning activities, including the asynchronous discussion or the development of a wiki, took more of their time than a lecture. Gina, for example, noted that:

```
for a lecture … it's two or three hours sitting
and hearing what the lecturer has to say … and
writing notes. If you have a discussion it stops
at the end of the lecture. Than you just have the
assignment at the end of the module. With a blog
or a wiki it's different. Postings are assessed.
You need more work … many more hours to do
research, read the contributions of other students
and to write good postings. (P17_150:150)
```

vi. **All the students needed immediate feedback that only lectures were perceived to provide.** Susan, for example, noted that 'we are always asking questions during the lectures', and, for this reason, Rebecca argued,

```
I need to be in direct physical contact with the
person who is teaching. If I do not understand
something I must ask him (sic) there and then ….
(P15_46:46)
```

vii. **The lecture served as a space and time for socialisation and meeting friends who shared similar educational beliefs.** Helen provided the best explanation for this motivational factor:

```
At the same time … it's true that you're doing a
diploma, something serious, but at the same time,
it's a pleasant relief, it's not like a club of
course, but I like … as I told you, I have friends
in the course. You're tired after school, it still
takes an effort, but at the same time, it's, in
inverted commas, an outing … And if you're working
with friends you don't even realize how time
passes, you work more eagerly than if you're on
your own. (P16_56:56)
```

viii.   **The lecture encouraged face-to-face learning and social encounters which the students enjoyed**. The group was often divided into two subgroups for collaborative work: the primary school teachers and secondary school teachers. These two groups often met to work on group assignments at various places including bars and cafeterias. For example, for a particular group task in which the students were required to collaboratively create an innovative online learning resource, Susan, Rebecca and Helen, the three primary school teachers, went to a cafeteria:

> Helen: … because there's Internet connection and a
> power socket for the laptop … and we spent a whole
> day there. We saw the shift change … (P16_48:48)
>
> Rebecca: We stayed there from when it opened till
> late at night …
>
> Susan: Till it closed down (laughing) and we had
> to leave.
>
> Rebecca: We like working in a group …
>
> Susan: Yes we do … as long as it's face-to-face.
> (P15_156:160)

6.2.3   Pedagogy used in DiTel

The students confirmed that they had no need, found no scope and, thereby, made no demand for a predominantly online diploma. Moreover, they insisted that they would not have joined the course if lecturing were not the main teaching approach.

The students also confirmed that the lecturers were using lecturing as the main pedagogic approach. For example, this was Gina's comment:

> Most of the time we attend lectures … like we did
> before in our B.Ed. (P17_22:22)

They also agreed that only two lecturers, Lisa and Anna, had used the Internet for a predominantly online course `'where instead of going to university we did our own research at home, on the Internet'` (Gina, P17_22:22). Moreover, most of the lecturers `'made little use of the Internet'` (Helen, P16_118:118). Thomas explains:

> ```
> Most of our lecturers have not used the Internet a lot
> ... I mean, except one or two, no one used online
> collaborative activities, discussions, assessment on
> postings. Which, mind you, was better for me because …
> I'm never comfortable enough for postings. Yet I think
> we should have received more exposure to online
> activities. (P14_71:71)
> ```

The other students agreed with Thomas in that, given the nature of the Diploma, their exposure to and use of Internet-based tools as learning resources, either as adjuncts to traditional courses or in full online modules, was important, however, online learning was lacking from the diploma. Helen noted that `'this was contradictory'` (P16_70:70) to the stated objectives of DITEL and suggested that

> ```
> every now and then, even once a term, we could have a
> session like that (online learning) so that you can
> experience both. I would like that. I wouldn't prefer
> it if it were all like that however. I'm not sure
> though because I have never done it. But once a term
> would be ok. I think. (P16_62:62)
> ```

The Diploma prospectus claimed that participants would be using Moodle for 'autonomous and collaborative on-line learning' in a blended programme in which lecturers also used face-to-face guided practice (Faculty of Education, 2011). However, the students argued that all the lecturers, except two, used the VLE solely for depositing papers, for the submission of assignments, as a noticeboard and calendar of events. Some of these lecturers also used the VLE to upload PowerPoint files which they had presented during their lectures. The following is a sample of the students' responses:

```
On Moodle there are the descriptions of each unit, the
notes and readings which we must download. We also use
it to submit our assignments. (Thomas, P14_113:113)


They (the lecturers) deposit a lot of documents in the
VLE, we then download them and print them. (Rebecca,
P15_169:169)


… for most credits we use the VLE for downloading
readings … There were courses which specifically run
on the VLE. In most of the other courses we just use
it to find information and to upload assignments …
there are (also) the assignments, titles, due dates,
that is, the dates when we must hand them in … (Susan,
P15_87:87, 171:171)


Moodle is used by the lecturers … to upload their
PowerPoints and notes. (Helen, P16_40:40)


The VLE is being used by the lecturers to deposit
notes and readings needed for lectures, assignments …
I mean the assignment is posted there … that's
basically it. (Gina, P17_97:97)


Everything is posted there (on Moodle), the resources,
notices … (Anthony, P18_48:48)
```

The students also agreed that the VLE was being mainly used to help the lecturers in their traditional pedagogic approach. They also perceived a marked imbalance between the use of lecturing and Moodle-based learning activities in the course and, Rebecca and Anthony, noted, in separate interviews, that 'we did not use it (Moodle) much' (P15_76:76 and P18_44:44).

6.2.3.1   *Asynchronous discussion through Moodle*

The online forum hosted in Moodle was used only once in a unit designed and run by Lisa. This course was part of the introductory module of DITEL – *Introduction to Technology-Enhanced Learning.* Various lecturers participated in this course but only Lisa used Moodle for online interaction and discussion as Helen, for example, noted:

```
it was just with Lisa that we used the VLE to comment
and interact together. (P16_40:40)
```

The module's course description stated that this introductory unit aimed at familiarising participants with theories of learning, including 'the socio-constructivist, constructionist and connectionist perspectives' and 'their implications for technology-enhanced learning' and practice, including online pedagogy. For this purpose, through the module, the participants were promised that they would have used Moodle 'in the role of student and tutor' and through this practice, the module aimed at producing

> successful online learners, in netiquette for facilitating on-line interaction, safety issues and responsible on-line behaviour. (Faculty of Education, 2011b)

Thus, in relation to online learning, the course description claimed that, by the end of the study-unit, the students would be able to:

  i. Use generic skills for online learning;
 ii. Apply theories and principles of online learning in the design of technology-enhanced learning and teaching contexts;
iii. Use Moodle in the role of student and tutor;
 iv. Structure learning experiences in Moodle in topic and discussion formats;
  v. Develop and manage a personal ePortfolio and use it as an evaluative tool for the course;
 vi. Develop cognitive, teaching and social presences when using a virtual learning environment as a learning medium; and
vii. Understand and practice netiquette. (Faculty of Education, EDU5640, 2011b)

The students revealed that, within this course, the online learning component was only used as an introduction to online teaching and learning practice. All the other topics, including the theories of learning, were taught through `straightforward lectures` aided by PowerPoint presentations. The VLE was only used as a depository for these presentations and the digital copies of the required readings.

Lisa's course 'came after the learning theories section' (Helen, P16_40:40) and, according to the students, it was mainly aimed at introducing them to (i) the pedagogic models for online learning and (ii) the skills involved in teaching and learning through Moodle. Susan and Rebecca succinctly described the teaching methodology that Lisa used:

> Rebecca: during this course we had to discuss online learning … in a forum.
>
> Susan: Yes … she used the forum. She gave us a number of readings which we first had to read and then discuss in a group online.
>
> Rebecca: … we were then asked to discuss the readings together with other students.
>
> Susan: And we had to prepare a kind of presentation.
>
> Rebecca: We had to write about what we thought about the course. (P15_90:94)

Lisa did more than just create a forum on Moodle, deposit a number of papers and ask the students to read, write contributions and comment on each other's work. She 'divided the group into smaller groups of two' (Gina, P17_111:111) and gave each group a set of readings. Each group had different readings, and working 'as a team' (Gina, P17_111:111), the two members of each group had to collaborate together 'to write a summary about the paper' (Helen, P16_40:40) s/he had chosen. Then, each student had to 'to write comments about the summaries of (their) colleagues saying why (they) agreed or disagreed with what they wrote' (Helen, P16_40:40). For each group to function, Lisa created 'private chatrooms' which she also monitored. Helen notes that her group used these virtual spaces

> to discuss the presentation which we had to do and she said 'instead of communicating by telephone or meeting in person, you can meet online.' And we used it. (P16_40:40)

Gina, on the other hand, noted that

```
the person I was working with and I communicated
during lectures, e-mails and telephone calls. We did
not use the comment space in the same VLE to
communicate. (P17_113:113)
```

The course however, according to Anthony, only made the students aware of the possibilities of the VLE. It did not teach them how to create a course:

```
We did not learn how to create a course on Moodle … we
just talked about the importance of VLEs … we did not
create a course … we just practiced there. I felt that
just practicing using Moodle was not enough to create
a course. (Anthony, P18_76:76)
```

6.2.3.2   *The use of a Wiki in DITEL*

The wiki was developed by Anna for her course that formed part of module EDU5643 *Learning through Instruction 2: Innovative Instructional Scenarios.* According to its course description the module aimed at

> empowering students with skills and knowledge which deal with immersive and 'cloud-based' learning environments within the classroom practice framework. It will bring together concepts derived from "Learning through Instruction I" to explore a more in-depth approach towards innovative learning practices. Participants will experience available free applications "in the cloud", which are very easy to use and beneficial as teaching/learning tools. (Faculty of Education, 2011d)

In the preceding module, EDU5642, *Learning through Instruction 1: Technology-Enhanced Teaching*, the students were introduced to 'pedagogical processes underpinning instructional technologies and technology-enhanced teaching'. They were also trained to use Internet-based search engines, webquests, concept mapping and Internet-based brainstorming tools, and interactive whiteboards more efficiently. The students noted in their interviews that the pedagogic approach used throughout this module, which involved various lecturers, was lecturing. The VLE was mainly used for downloading notes while the Internet was used by the students and lecturers to access various web resources to

'design and deliver effective presentations' (Faculty of Education, 2011c).
No interactive web-based activity, such as the asynchronous discussion,
was used throughout this module.

EDU5643, *Learning through Instruction 2,* sought to introduce the students
to 'the use of mobile and handheld devices for education practice, by
analysing a number of projects and case scenarios in schools adopting this
innovative practice for teaching/learning' (Faculty of Education, 2011d).
Another objective of the module was to encourage students to read and
reflect upon 'the use of technologies which users are exposed to within
daily lives' such as the 'Massively multiplayer online role-playing game
(MMORPG) used for role playing, simulations and enhanced problem
solving skills, and social networking applications'. The course had another
objective: to introduce the students to a free web resource through which
they could learn collectively by reading and discussing scholarly papers in
the field (Faculty of Education, 2011d).

For this purpose Anna created a private wiki she called *innovaedu[24]* (see
Figure 6.1) through *PBworks.com.* Anna was the administrator of this wiki
and the students its contributors. The objective of the wiki was described in
its home page:

> The scope of this wiki is that of creating our own space, contributing with
> our insights, thoughts, experiences and how we feel would best reflect
> what we can do for classroom and school practice. Education just doesn't
> happen in the classroom only. Education is all around us. However we
> can choose to spark off the interest from the classroom and then move on
> from there. There are a lot of aspects of Innovation in Education and we
> cannot, will not talk all about them here. We will just start off and then
> hopefully you will continue your work as you proceed in your teaching
> careers.

For all the students except Anthony but including the other two ICT
teachers, this was their first wiki experience. For this reason, according to
Susan and Rebecca, Anna met all the students in a face-to-face session in
one of the Faculty's computer laboratories to explain 'what her credit

---

[24] The wiki is available at http://innovaedu.pbworks.com/w/page/50750229/Home.

would include' and 'discuss the basic functions of the wiki' (Anthony, P18_160:160). Thomas was emphatic that this session was very important for him:

> … the fact that we met before we actually started working on the wiki and she explained and guided us … in class … I wanted that. I needed that before I started working from home. (P14_23:23)

In this session, however, Anna 'did not go deep into technical details' (Susan, P15_55:55) such as 'press here and here' (Anthony, P18_160:160). Thus, the students noted, they had to learn on their own, and collectively, how to use the wiki, including how to 'properly upload' (Susan, P15_55:55) their contributions and make their comments. Anthony explained that Anna 'didn't spoon-feed' (P18_160:160) him and the other students and he was 'happy with this approach' (P18_160:160). He also felt that his lecturer was treating him and the other students 'as adults' (Anthony, P18_164:164), who needed to use their willpower to learn, on their own, simple, non-academic and menial tasks, as he explains in this excerpt from his interview:

> Anthony: She treated us as adult students. But she was always available … even though she treated us as adults, if we had problems, she was always there to help us.
>
> Researcher: Treated as adults? How?
>
> Anthony: She did not tell us how to do things … step by step … like, you should first access *innovaedu*, make a post like this, to make a contribution you need to press that button, then you write the subject, press OK and then the others can press that same button to make a comment. This happens often in ICT teaching. It irks me. Not with Anna … and I felt good learning this way. (Anthony, P18_162:164)

However, for the other students, this strategy proved daunting, at least during the initial stage of the development of the wiki, as these five comments confirm:

```
It wasn't easy at first. We first had to learn how to
use it … on our own. (Thomas, P14_39:39)

At first it wasn't easy … but slowly, slowly, we got
used to it. (Susan, P15_193:193, 195:195)

It was tough at the start. (Rebecca, P15_194:194)

Since it was the first time I didn't know exactly what
was expected of me. I struggled to learn how to use
the wiki. (Helen, P16_81:81)

It was difficult at first. I did not only need time to
read … I also needed to learn how to use the wiki.
(Gina, P17_101:101)
```

These difficulties at the start of the programme encouraged the students to seek out each other for help. The interactions between students happened outside the wiki through face-to-face interactions, e-mails, Facebook and Skype. Hence, the students created a learning community to solve practical problems related to the skills required for effective participation in the wiki. Thomas described this in the following way:

```
we learnt by doing and by discussing. We worked
together and learnt from each other. (P14_77:77)
```

This interaction and collaboration between students also helped to `strengthen the group` (Helen, P16_121:121). Anthony explained:

```
At first … at the start of the Diploma we were not a
group. With the wiki we began acting like a group. We
are closer to each other … we seek each other out more
when problems arise … like we did when most of us were
learning to use the wiki. We respect each other more.
(P18_150:150)
```
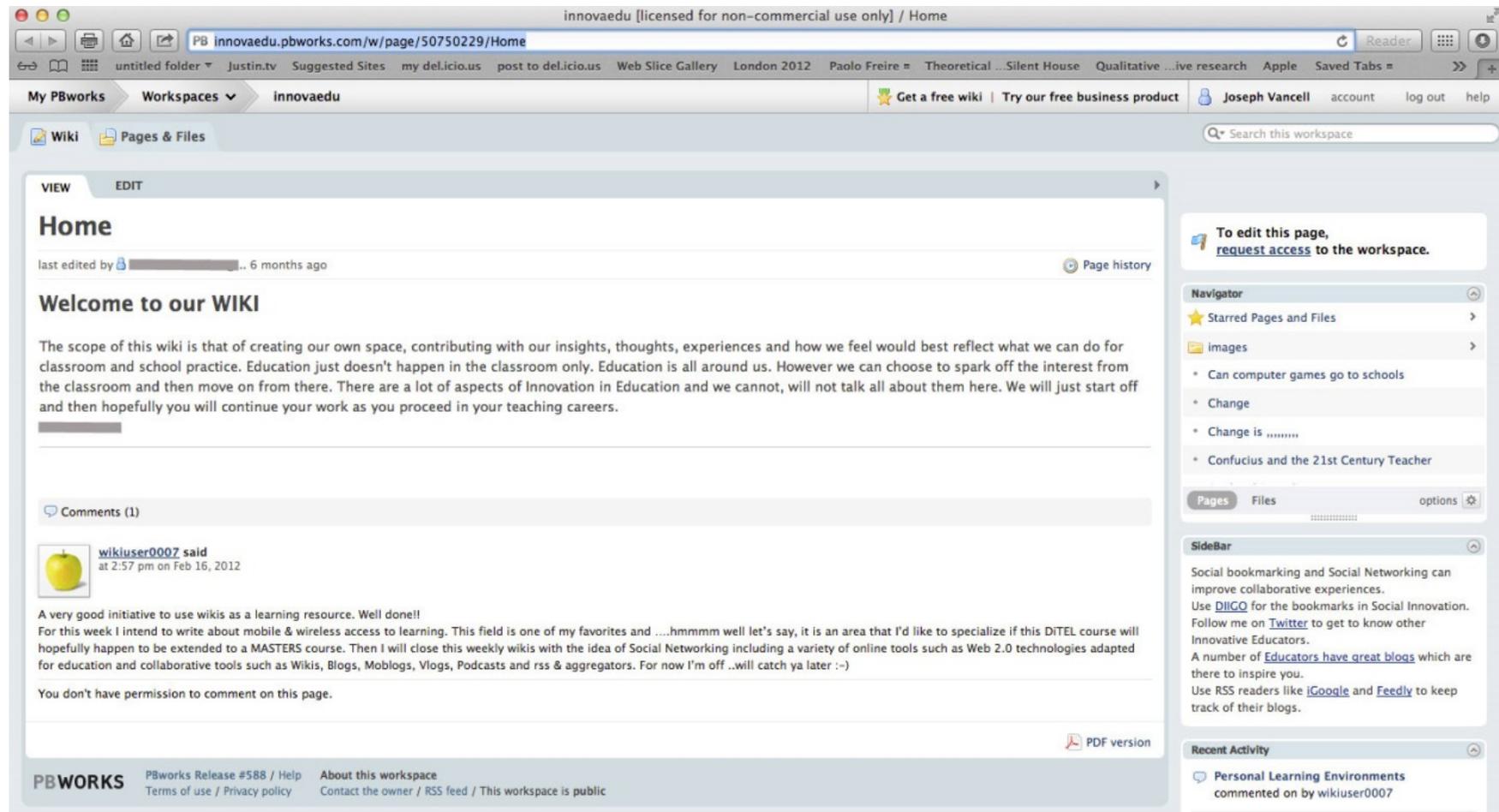
Figure 6.1 - Screenshot of innovaedu's homepage

Thomas also noted that learning by collaborating with others, without the intervention of the lecturer, created a richer educational experience:

```
If she came into the lecture room, with a PowerPoint
presentation, listing all the details of how to post,
how to write, how to collaborate in a wiki, we
probably would not have learnt as much as discovering
on our own through real work. Through collaboration
and talking with each other. (P14_75:75)
```

Anna re-informed the students about what they were required to achieve through this posting in the wiki on 9 February 2012:

The main goals of this course are to experiment with different technologies, and to describe unique learning environments. You will be expected to demonstrate different approaches to learning using technologies choosing different paths to learning. You will also be expected to show a degree of innovation in your approach to applying ideas to real life situations and classroom contexts.

More specifically at the end of this short course this Wiki will contain:

- Information about case studies showing innovation in Education;

- Reference to projects being carried out innovating the way Education is being done;

- Our thoughts and experiences as we go through a number of online games to try and understand what goes on in these serious games and if these can be applied to classroom contexts;

- Links to other Educators and Educational researchers who work with innovating classroom practice.

The lecturer then created a wiki page with a 400-word posting titled 'Web Tools for Learning'. This was intended to kick-start the research process and ensuing discussion. It also provided the students with an example of a good posting that was complete with references and links. Subsequently, the lecturer only intervened by providing feedback in the form of short comments intended to improve the student's posting, for example, 'Thomas can you please include some references to this entry?'

The students talked extensively about their experience in the wiki. Thomas explained that 'Anna would give (the students) a number of

topics' (P14_39:39) about technology in the classroom. The students were then asked to choose a topic 'from those suggestions' (Helen, P16_13:13) and to 'do the research on the topic' (Thomas, P14_39:39). The lecturer also posted 'suggestions on how (they) should research' (Thomas, P14_39:39) and, eventually, write their contribution. The students were also required to 'read the work of other students' (Thomas, P14_99:99) and 'comment on each other's work' (Rebecca, P15_97:97). The students were required to do 'two postings per week' (Helen, P16_29:29), on 'different educational technologies in education' (Anthony, P18_60:60), for three weeks.

This created an 'ongoing discussion' online

> As a Wiki, it was interesting that we started creating
> a discussion that - it's not synchronous - but we
> created a discussion where we could research. Where
> you don't just answer with what you already know, but
> through literature … literature which you would have
> read. In this process you can develop a strong
> argument because you have the chance to read and
> think. (Anthony, P18_120:120)

The students compared the wiki with lecturing which was their preferred mode. They however perceived the following educational advantages in the wiki:

i.   In developing the wiki they did, 'not only learn about the topics, but, (they) also learnt how to use a wiki' (Thomas, P14_39:39). Through this experience the students believed that they had gained enough knowledge and skills to, eventually, develop wikis with their own students. Thomas, for example, explained:

> I now know how to use a wiki. I will use the wiki
> with students. I have some topics in computing
> which the students can develop in a wiki. I will
> give them the topics and then I'll ask them to

```
research the topics. I'll tell them to find more
information about the topic and we'll update the
wiki together. (Thomas, P14_31:31, 33:33)
```

ii. The students had a more active learning role in the development of
     the wiki than in the other lecture-intensive courses. Helen explains:

```
working on a Wiki is more demanding than attending
a lecture … In a lecture you just go there and sit
down for three hours listening. Ok, you do have
the inconvenience of having to leave home and
going to the lecture, but … a lecture is quite
passive. In the Wiki you have a more active role,
because you have to research, you have to do the
write-up, share the links linked to the write-up
if you have made any references, add videos … One
of the disadvantages is its advantage … I mean …
you learn a lot but you have to work a lot.
(P16_22:22)
```

iii. Although difficult at first, because it was a new approach to learning,
      the students learnt quickly, and without depending on a lecturer, the
      skills required to contribute effectively to the development of the wiki.
      This encouraged autonomous and collaborative learning rather than
      reliance on instructions coming from the lecturer. Thomas expressed
      this in the following way:

```
You do not need to be an expert to use a wiki or
any other Internet-based thing. You can learn with
your friends, when you are part of a learning
group, or with the students you create it for. I
can understand, from my own experience, that it
can be a frightening thing at first.

Anna … did not use the usual lecturing ... she
showed us a way and then said 'you must go through
here'. And left us on our own. However we managed
to meet her expectations. In three weeks we made a
wiki. (P14_67:67, 71:71)
```

iv. Through the wiki the students learnt more in comparison to what
     they learnt through a course based on lectures. Helen, for example,
     had this to say about this 'enhanced learning' (P16_16:16):

> through the wiki we learnt because we used to do
> two entries each week for three weeks. So let's
> say that I learnt six things, because I posted six
> entries. But I also read the others' entries, so
> it didn't just double, but it was six times seven
> times because there are seven of us. And through
> this approach it was much easier to remember
> certain things because you see images, videos …
> more than you would in a normal lecture.
> (P16_16:16)

v.   The wiki developed problem-solving skills within the students.

Anthony explains this benefit while reflecting on the eventual use of

a wiki with his secondary school students:

> I might not end up teaching them to use problem-
> solving skills directly … however … working on the
> wiki can achieve such a learning outcome. At the
> end of the day … they won't only be learning
> computing skills but, by working together, they
> also learn things like this. (P18_33:33)

vi.   The wiki, compared to lectures, created more interaction and

communication between the students. Helen described this

eloquently:

> There is more interaction with the wiki. This may
> sound contradictory, because we are not meeting
> physically, but there was more communication.
> During a lecture we do see each other … however we
> have no chance to comment on what others are
> saying, because there's the lecturer who's giving
> the lecture. Apart from talking before the lecture
> starts, or afterwards, there is no chance to talk.
> But with the Wiki, you work at your own time, at
> your own pace … (and) you can easily see what
> others are saying and comment. (P16_13:13)

vii.   The wiki, unlike lecturing, allowed the sharing of students'

contributions and resources. Anthony noted:

> my work remains stored and is shared with everyone
> who is invited in the Wiki. That is another
> advantage from the old way of learning. I think
> that nearly everything is based on this, nowadays.
> Sharing. Whereas before you had the computer which
> you would use on your own, then they invented the

> ```
> network, then the Internet, so that these could be
> shared. (P18_120:120)
> ```

viii.   The students could therefore `'value each other's contributions more in the wiki'` (Gina, P17_142:142). This was because their postings were available to all the participants, could be stored and retrieved `'irrespective of day or time'` (Rebecca, P15_236:236). The contributions, including both the extensive posts about educational technologies, and comments about them, were not as ephemeral as the spoken word in a classroom.

ix.   Through their research, the students discovered other technologies that were not suggested by their lecturer. This made the wiki experience, according to the students, more interesting and stimulating than a lecture. Helen describes her experience:

> ```
> it's like when you're searching for x, you end up
> finding y, and then you say 'how interesting this
> is!'  When I was researching mobile learning, by
> coincidence I came across exergaming and Anna
> hadn't mentioned anything about exergaming. And I
> told her 'this really looks interesting –
> exercises in a technological way and you can also
> learn academics'. And because of this, one of my
> entries was about exergaming. (P16_13:13)
> ```

Notwithstanding the fact that the students became conscious, through their educational experience with Anna, of all these educational benefits of the wiki they still considered lecturing as their preferred mode of learning. However, as will be described later, the students unanimously agreed that the wiki should always be integrated into courses that predominantly used traditional teaching methods, including lecturing.

6.2.3.3   The use of a blog in DITEL

The other online experience occurred through a blog. This was used in a course regarding podcasting which, like Anna's course, was also part of module EDU5643. The objective of the course was to introduce the students to 'mobile learning experiences based on Podcasting' (Faculty of Education, 2011d).

The students were introduced to Podcasting through some lectures. For assessment purposes, each student was asked to produce an educational podcast and to upload it on a blog. For this purpose, the students were asked to use Blogger to create their blog. Thomas, for example, explained:

> ```
> I did some research … and I prepared a script … The
> topic I chose was Raspberry Pi. I recorded the podcast
> and then placed it into my blog. I added links and
> some other things. (P14_55:55)
> ```

As in the wiki experience, the students were provided with no help from their lecturer about the technical issues involved in creating and developing the blog, as Thomas attests while noting the importance of collaboration between the students:

> ```
> We managed to learn how to post, how to set a
> background without the minimum of help from the
> lecturer. But we did it together. (P14_76:76)
> ```

The students also revealed that `'the only audience for the blog was the lecturer'` (Helen, P16_87:87). Indeed, each student sent his or her link only to the lecturer so that he could be able to assess the uploaded podcast. The students could not view the podcast and comment on it. There was no discussion involved and Anthony noted:

> ```
> The blog … was not meant for online discussion … I
> just created a blog, created a podcast and placed it
> on the blog through an RSS feed so that the lecturer
> could receive automatic updates. It was just an
> assignment. Nothing more. (P18_74:74)
> ```

6.2.4   An increased awareness of advantages in online learning

The students, particularly after their experience with the online forum and the wiki, and by the time of the interviews between May and June 2012, had perceived several advantages of online learning activities over lecturing, as the foregoing suggests.   Thomas, for example, initially only comfortable with lecturing, explores this subtle change in perspective:

```
since I've been in this Diploma ... perhaps because of
the new demands which see us asking each other, for
example, how to post on the wiki ... my propensity to
discuss has increased. I've never even talked so much.
Particularly when we explore new topics. There is a
certain culture ... a new culture which is slowly but
surely changing me. But, this is a slow process. And
this should be a slow process otherwise I won't be
able to cope. (P14_43:43)
```

Like Thomas, the other students also perceived online activities as being valuable learning experiences because they allow `you to share …` `(and) others learn from you and you learn from others` (Anthony, P18_120:120). This created dialogue and reflection and provided mutual student help creating a better educational experience, in which they `learnt more`.

The students also realised that online learning activities required `working in a group where everyone had to do his job` and were each student felt `equal … in the sense that we were all important`, yet `different because we all had different experiences to share` (Anthony, P18_211:211). On the other hand, traditional educational approaches do not allow

```
this kind of community to grow ... (because) there is
no discussion, no sharing … the Internet offers a
myriad of tools for sharing … the classroom, the
lecture, does not. (Gina, P17_144:144)
```

Despite this increased awareness of the possibilities of online teaching and learning the students were, at the time of the interviews, still adamant that lecturing was their preferred educational approach. However, they were now more open to new ways of teaching and learning, particularly Internet-based ones, as these comments demonstrate:

```
I think we should have received more exposure to
online activities. (Thomas, P14_71:71)

I want the new way forward … (but) I am not
comfortable abandoning the traditional thing.
(Anthony, P18_136:136)

Nothing beats the human interaction … but we need to
have more courses like Anna's. (Helen, P16_113:113)
```

So, the students were now insisting for `'the new ways of teaching … to become a greater part of this course'` (Gina, P17_152:152).

6.3   Conclusion

In a course aimed at helping the students to develop and manage innovative learning scenarios through technology-enhanced teaching methodologies, there was a conspicuous imbalance in favour of lecturing. The students did not resent this disparity, however, after their participation in asynchronous discussions through Moodle and a wiki, they became more conscious and appreciative of the possibilities of e-learning. Indeed, although they previously and at the start of DITEL preferred lecturing, by the end of the first academic year of the course they were insisting for further experience in alternative teaching and learning methodologies. However, they still had not rejected their preference for lecturing.

Two main reasons have been identified for this preference for lecturing. First, the respondents were fearful of the unknown nature of alternative pedagogies. This fear was deeply rooted in the schooling paradigm.

Second, the online learning experiences required more effort and motivation. However, unlike the BScHS, this course, without its upgrade to a master's, was not offering the participants the career opportunities they had associated with a higher degree. Therefore they were experiencing a lack in motivation which also affected any new learning experience that created added work.

Despite the setbacks, the students participated in at least three e-learning experiences: blogging, discussing asynchronously in forums hosted in Moodle and collaboratively developing a wiki. The blog was mainly used for the uploading of a podcast for assessment purposes. However, the forums and wiki were used to encourage dialogue between students and to create a community of learning.

Online learning, the students agreed, was different from their previous educational experiences in which only the classroom was considered to be the 'environment' where learning could happen. In that scenario, `discussions did not exist` and knowledge delivered by their educator was never challenged. Thus, the good learner was one whose duty was to understand what the teacher or lecturer was offering as knowledge, not to question that knowledge. In the new scenario, students worked together, shared knowledge and experiences, reflected critically on scholarly work and peers' contributions and collaborated together to learn how to solve problems related to the use of the Internet tools they were engaged with as media for active learning.

Chapter 7

The Lecturers' Interviews – *Diploma in Technology Enhanced Learning*

You need an agent (the teacher) ... a set of resources (including the course material), a set of online tools ... and a set of students. And what makes an e-learning course ... is the communication between these three components. (Leonard, P22_07:07)

7.1   The setting and sampling

Data were gathered through interviews with lecturers involved in DITEL and the Deputy Director of IT Services, virtual observations of Internet-based learning activities running on Moodle, the blog and wiki mentioned by the students, and, online and printed documents.

7.1.1   The Setting – DMSTE

Most of the lecturers involved in DITEL, particularly those mentioned by the students in their interviews, were full-time or part-time members of the Faculty of Education's Department of Mathematics, Science and Technical Education (DMSTE). This Department 'offers units on the pedagogy of various subjects relating to science and technology taught at secondary and post-secondary level as part of the Bachelor of Education (Honours)' (Faculty of Education, 2012g).

The Department also offers postgraduate certificate and diploma courses in 'Innovative Learning Technologies (ILT)' such as DITEL. These programmes are meant to provide 'the Faculty of Education with a complementary dimension of technology-enhanced teaching' and e-learning and thereby promote the integration of 'pedagogy, educational and training design, technologies for learning and knowledge building, instructional psychology and innovation management' (Faculty of Education, DMSTE, 2012).

Moreover, most of the members of DMSTE, including the lecturers involved in DITEL, have published extensively, in refereed journals, conference proceedings and professional publications, about e-learning (Buhagiar, 2012: 1 - 32). These lecturers, particularly Anna, Patrick, John and Philip[25], were also involved in various national and international projects related to e-learning (Buhagiar, 2012: 33 – 38).

Philip holds a doctorate in Instructional Psychology and Technology from the University of Joensuu, Finland, and his PhD Thesis was titled 'A Process-oriented pedagogy for Game-based Learning'. Patrick obtained a Master's in Science Education from the University of Sheffield with special emphasis on e-learning and Internet based applications in the teaching of science, and later, an EdD through research on Technological Frames. Anna, John and the other two lecturers participating in this research were all involved in PhD research, with British universities, also in the field of e-learning.

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[25] The lecturers' names have been changed to ensure anonymity. However, it was difficult to conceal the identity of Philip, the co-ordinator of DITEL and Patrick, his most senior assistant. This difficulty was discussed with both and this researcher was allowed to use their real names when quoting from their interviews.

7.1.2   Sampling

All the lecturers involved in DITEL were invited, through an e-mail message, to participate in this project. They all accepted and, therefore, theoretical sampling was also used with the DITEL lecturers and six out of fifteen lecturers were interviewed until theoretical saturation was deemed to have been reached. Two of these lecturers were Lisa and Anna who, the students indicated, used the asynchronous discussion through Moodle and the development of a wiki, respectively, as educational activities.

Two of the six lecturers preferred using English in the interviews, the other lecturers preferred Maltese. All interviews were held at venues chosen by the lecturers. Two of the lecturers, Anna and John, participated in a joint interview.

7.2   The Lecturers' interviews

7.2.1   Lecturers' perception of e-learning

In a memo dated 6 May 2012, the researcher, while reflecting on the manifest imbalance between lecturing and e-learning in a course whose prospectus professed that the students would be able to 'develop and manage innovative learning scenarios' and 'apply different pedagogic models to enhance current teaching-learning practices', became intrigued by the following questions:

  i.   Did this situation develop *only* because the students resisted change?

  ii.   Was this situation created because the lecturers were not trained in the use of the VLE?

  iii. Did the lecturers prefer lecturing about rather than using alternative pedagogies?

iv.   Did the lecturers believe that a blended approach which involved more lecturing than technology-enhanced learning to be the right approach with these students?

v.   Did the lecturers believe that lecturing, contrary to what they were teaching, was the most appropriate methodology for any Maltese student?

A revisit of the students' interviews indicated that, in many courses, the opportunity to change from the traditional to technology-enhanced learning was *never* offered to the students. This conclusion required to be confirmed. This researcher also needed to understand why most lecturers, some of whom had advocated the advantages of e-learning in scholarly papers and at international conferences, were, according to the students, using traditional instead of alternative pedagogic approaches.

7.2.2   Defining e-Learning

Therefore, through the interviews, the researcher first tried to understand what e-learning meant for each lecturer, and, subsequently, whether or not e-learning was being used to facilitate their teaching. Moreover, the researcher also tried to validate or refute the fact that emerged from the students' interviews, namely, that in this Diploma programme traditional teaching approaches were mainly being used. If this fact was confirmed, the researcher needed to establish the reasons behind the preference for traditional over alternative pedagogies. Hence, the first interview question sought to discover how the lecturers perceived e-learning, and for this purpose, they were all asked '*What does e-learning mean to you?*'

Philip, the co-ordinator of CETRI and creator of DITEL, argued that `the concept of e-learning has evolved` and has `become very commercialised` (P19_03:03). Today, for Philip, e-learning is often taken to mean, by many scholars, designers and training and education providers, including tertiary educational institutions, as online `corporate

`learning ... for mainly adult workers`' (P19_03:03). He, however, did not agree with this `popular definition`' (P19_03:03), that is, that e-learning is only online learning intended, primarily, to fill the universities' coffers. Philip argues:

> `I challenge that position especially in the University context. For that reason, I prefer to use the terms 'technology-enhanced learning' rather than 'e-learning'. Our programme therefore aims to critically analyse how technology is enhancing different learning processes and promoting modes of learning that are different. So, for me, e-learning is the process through which a person develops a different way to learn … using technology … including the Internet but not excluding other forms of technology. (P19_03:03)`

Similarly, Lisa notes that, `'today the 'e' in e-learning has changed from electronic to enhanced`' (P21_06:06). This change, therefore, has widened its meaning:

> `In the past I took e-learning to mean only learning through social networks and virtual learning platforms … today, for me, it means learning through a CD, or whatever, anything that is not paper-based but digital, including gaming.`
>
> `E-learning has also come to mean … when the students use the Internet to carry on learning … for me it means they generate and construct knowledge together helped by technology … including researching on Internet … rather than assimilating notes offered by their lecturers … packed in papers available at photocopy clubs.`
>
> `However … the most important aspect of e-learning is effective online collaboration. (Lisa, P21_06:06, 10:10, 16:16)`

Mark also believed, like Lisa and Philip, that the concept of e-learning included all learning, but particularly collaborative learning, aided by technology. However, he still associated the word mainly with online teaching and learning as this excerpt from his interview confirms:

> `Mark: It's not easy to define e-learning. However, if I had to really, really say what e-learning is,`

```
personally, probably I would define it as being, using
electronic techniques, be it ICT, Internet, what have
you, to facilitate learning.

Researcher: Does that mean that you're also including
television, for example?

Mark: Yes, especially the interactive TV, at this day
and age.

Researcher: But in practice, when you yourself speak
about e-learning …

Mark: In practice, I would probably lean towards
Internet-based.

Researcher: Does that mean that for you it's online
learning …

Mark: Yes, I would tend to subscribe to online
learning. (P22_16:22)
```

For Anna defining e-learning, in a few words, was too difficult a task because:

```
… technology is complex. The fact that there is
learning, is already a complex thing. Now when you add
the 'e', although it's one letter, you're increasing
its complexity. (P23_06:06)
```

Nevertheless she did attempt to explain what e-learning meant to her. She contended that it `is that form of learning that uses digital means and uses pedagogic ways that are more alternative than the traditional ones` (P23_06:06), that is, `pedagogies built on dialogue and the collective construction of knowledge` (P23_06:06). Moreover, Anna explained, e-learning `goes beyond the classroom walls` because the teacher or lecturer `makes use of a number of tools, applications, modalities that are digitised` from the Internet (P23_06:06).

John, in the same interview, agreed with Anna's definition. However, he noted that e-learning had `forked out of Distance Education`, that is, print-based correspondence courses (P23_07:07). Today, however, e-

learning is mainly conceived as the use of 'technology that is often online, adapted for learning' (P23_07:07). John subscribed to this definition.

Patrick said that for him e-learning was a relatively new and important 'opportunity' (P20_05:05) at all levels of education including adult and tertiary education. Asked what this 'opportunity' meant to him he explained:

> e-learning provides huge possibilities for creativity … and flexibility. You are creative and flexible both when creating the learning platform and when you use the learning platform. With e-learning there are no time boundaries or geographical limitations. It can be accessed whenever you have access to Wi-Fi or mobile Internet … it gives you freedom. You can literally bring the world into your bedroom and … instead of using my energy to drive to University, go to the classroom and meet the students, I would use my energy for a different purpose … to create something new. (P20_07:07)

Like all the other lecturers, Patrick also associated e-learning, mainly but not exclusively, to 'Internet-facilitated' or online learning (P19_09:09). He explained:

> When you talk about ICT-facilitated learning, or e-learning, IT means information technology, the C is for communication … and … I think that the most flexible and strongest means of communication is the Internet. ICT is not ICT if you don't have the Internet. Or else it is very, very limited. Even where you have mobile learning ... mobile interaction is very limited because you have to pay. If you use Skype and you have Wi-Fi, then you can talk and discuss as much as you want to without paying anything … So instead of thinking about the expense, you're thinking about what you are doing. The Internet gives you freedom of thought. (P20_09:09)

The lecturers agreed with Patrick that online learning, since it used the Internet and its resources, not only gave the lecturers and students 'freedom of thought' (Patrick, P20_09:09) but also most of the other

'freedoms afforded by democracy' (Lisa, P21_18:18), including 'freedom of communication … expression and speech' (Mark, P22_119:119). Patrick went further, arguing that, for him, online learning, like the dimension it existed in, the Internet, was more than 'democratic': it was 'liberal' (P20_11:11). He explains this distinction in the following way:

> The word 'liberal' is more democratic than the word democratic. 'Liberal' for me means … almost total freedom, not limited freedom as in democracy … You do not have a limited freedom imposed from above … as you have in a democracy. You therefore have no barrier on what you do and say. E-learning is nothing without the Internet. E-learning, for me, means total freedom in creativity, communication with students, content, course structure, relationship with students. It's an educational dimension in which you are almost totally free to explore new ways of teaching and learning. (P20_13:13)

The other lecturers did not agree with Patrick's 'liberal' definition of online learning, claiming that all forms of education, including technology-enhanced ones, must 'function within democratic parameters' (Anna, P23_266:266) and 'foster democratic principles' (Mark, P22_120:120). Lisa, for example, argued

> Even during a discussion … the students must be careful what to say … they, for example, should not speak badly of any student, they must respect each other and … follow netiquette. (P21_143:143)

Similarly, Mark noted that

> Students must respect … and value diversity within the learning group. They must help each other. They must work together and share what they know. That's what should happen outside the classroom … or outside the virtual learning group … in society, in a democracy. Lecturers must also be democratic … and they must treat each student equally. They also need not impose themselves on their students … I mean … they should interfere as little as possible during group work … discussions. (Mark, P22_120:120)

While John argued that

> ```
> Students must obey certain rules for maintaining
> harmony within the learning group … and to function as
> good university students. They must not copy others'
> work without … making the right references. They must
> not plagiarise. They must stick to deadlines. They
> must fulfill their duties … not only enjoy their
> rights. Online learning offers many democratic rights
> to the students … including, free communication,
> better interaction … and more participation in the
> learning process. (John, P23_250:250)
> ```

Thus, for example, dialogic exchanges between students during discussions 'should not damage students' (John, P23_268:268), lecturers 'must treat all students as equals' (Anna, P23_269:269) and 'lecturers must not impose their knowledge upon the students' (Mark, P22_144:144). The lecturers also agreed that online learning, compared to traditional teaching and learning approaches, provided greater opportunities for a more democratic education.

7.2.3 A distinct theory for e-Learning?

The next question the lecturers were asked was whether they believed that e-learning should have a specific theory that would then guide their practice in technology-enhanced education, including, online teaching and learning. All the lecturers disagreed with a specific theory for e-learning, as these two comments evince:

> ```
> Why do we need to make distinctions between online
> learning and offline learning?  (Lisa, P21_14:14)
> ```

> ```
> The distinction of online … any form of distinction
> that categorises learning, I don't concede to it.
> (Mark, P22_30:30)
> ```

The lecturers argued that 'human learning offline and learning online are equal', except the latter was 'mediated' and 'enhanced' by technology. Philip, whose main research interest is 'game-based learning', explains:

> Technology is evolving, continually … this process will continue and the person is adapting to technology. Now I can create a theory of games-based learning because I would be focusing on games' technology. But I can also look at it in a different way … 'how is human learning being amplified, modified in the gaming context?', for example. (P19_09:09)

Therefore, Philip contends, the educator's focus would still be on human learning and:

> there is no need for me to make a theory of game-based learning if I'm not going to tackle the technological components, the technological affordances this context is giving me. But I'm seeing how human learning is being elaborated, expanded … increasing in the context of games, of learning by designing, virtual realities and mobile learning technologies. Because are we going to make a theory of virtual reality, of game based learning, of mobile learning? There is the human learning factor in all the cases. (P19_09:09)

Human learning, the lecturers concurred, occurs in three stages or levels: (i) the competencies level, (ii) collaboration and participation level, and (iii) contribution level – whichever the dimension the students and their educators interact in. Mark explained these three stages of learning:

> (In the competencies level) … you have the **acquisition** aspect … which involves the acquisition of knowledge and skills.
>
> Then you go to the participation level. At this level … you learn by collaboration and participation and therefore you no longer learn the content, but you learn more how to participate and collaborate with others through technology and through other tools provided by your environment. Your learning, now, occurs in a social dimension.
>
> Then you go to a higher level of learning … and here we enter the dimension where instead of talking about

> ```
> knowledge building, you're talking about learning
> through contribution. Where you - and this is at the
> expert level - have become an expert in the area. For
> example you're a psychology student, you graduated,
> you continue to increase your knowledge and expertise
> in your area. At this level … your learning takes
> place more by contribution … it is what we call
> 'knowledge creation'. (P22_109:111)
> ```

The educator's role is 'obviously different in each of these learning stages'. At the lowest level of learning, that is, at 'the learning by acquisition level', learning occurs through the delivery of knowledge and modelling of skills. The educator is in a hierarchical relationship with the students and communication is, mainly, from top to bottom. At this level, the educator is the authority in the learning group and acts as the main purveyor of knowledge and skills. Philip explains this instructive role which is akin to the traditional modes of teaching and learning:

> ```
> … the educator is a tutor who 'is there to be
> consulted'. The teacher … is a tutor because of the
> low level of competence in his (sic) student and he
> (sic) is more competent than him (sic).  So as a
> tutor, the teacher, is going to guide him (sic) to
> acquire more … more knowledge. (Philip, P19_11:11)
> ```

Therefore, in any learning situation, it is very risky and possibly harmful to the students' learning process to 'throw them in at the deep end' (Philip, P19_11:11). In online learning, the lecturers agreed, this meant giving guidance and support, at least at the initial stages of, for example, using the virtual learning platform or developing a wiki.

At the next level, where there is 'a participative form of learning', the educator becomes, according to the lecturers, a 'guide by the side' (Philip, P19_15:15, Mark, P22_66:66, John, P23_29:29):

> ```
> where he (sic) will organise the learning context,
> most of which is socially mediated and is there to let
> the student move on, while he (sic) guides him (sic)
> and scaffolds him (sic).  Every now and then he (sic)
> checks that the student is moving on, checks if he's
> ```

```
(sic) developing his (sic) ideas, developing his
(sic)collaborative skills and guiding  … scaffolding.
(Philip, P19_15:15)
```

At this level, the respondents agreed, the educator needs teaching aids or means which enhance participation, collaboration and dialogue. At this level of human learning technology is very important as an aid or medium for learning.

At the last and highest level of learning, that is, in 'the knowledge creation' stage, the teacher is just the 'modeller' of the learning process.

```
In knowledge creation, the teacher is nothing but the
person whom the student looks at and upon which he
models his learning process. (Philip, P19_15:15)
```

The educator, at this level of human learning, therefore acts as a facilitator within a learning group which is engaged in knowledge construction. The teacher is less engaged, at this learning stage, in the delivery of knowledge, nor is s/he imposing any learning pattern on the students. The teacher's two main roles at this stage are, according to the respondents, to provide the environment in which learning can occur – this may require the provision of a learning medium - and to 'model' the learning process. As Mark explains:

```
I'm not there (the learning process) to give my
students what I know. I'm there to show them how to
look for the best knowledge, how to deal with
problems, how to work together, how to construct new
ideas, together … use the Internet in the best way
possible. I'm not there to tell them 'look this is the
Gospel'… 'don't challenge it because it's coming from
me' … I'm present to guide them to find the best way
to learn, and to show them things like how to learn
together. (P22_120:120)
```

Thus, according to the lecturers, it is at this last level of human learning that technology, which affords better communication, is most important because

it gives the students the freedom and possibility to learn individually and collaboratively.

7.2.4 Resistance to e-learning

Through the lecturers' interviews three forms of resistance against e-learning were identified. This resistance came from (i) the DITEL's students' reduced motivation towards the course because it would not be upgraded to a master's degree; (ii) the students' present and previous predominantly traditional educational experiences; and (iii) the overwhelming use by University of Malta lecturers, including some of the lecturers involved in DITEL, of traditional teaching approaches.

7.2.4.1 The DITEL students' reduced motivation

The lecturers confirmed the improbability that the Diploma could be upgraded to a master's degree. This, they agreed, worked against the students' more active participation in the course. Philip and Patrick also confirmed that despite their efforts to upgrade the course there was a strong resistance 'from the upper echelons of the Faculty of Education' (P20_81:81) towards its upgrade, mainly due to the unavailability of the required number of suitably qualified academics to supervise the students' master's dissertations.

7.2.4.2 Resistance caused by the students' previous educational experiences

Philip, argued that, in the Maltese context,

```
the education system is too orientated to the first
level (of human learning), development of competences,
rather than 21st century skills … collaborative skills
and mediation skills. (P19_15:15)
```

The other lecturers confirmed Philip's observation. Lisa, for example, who, at the time of the interview was a part-time lecturer in DITEL and a full-time lecturer at the University of Malta's Junior College, reflected on her dual role and noted that, at pre-University level:

```
many of my colleagues … still use drill and practice.
They give the students loads of questions similar to
the ones on exam papers. (Lisa, P21_22:22)
```

Thus, even if a progressive teacher believed in non-traditional pedagogies, including 'constructivist approaches involving discussion and collaborative learning' (Mark, P22_26:26), the demands of the school curriculum hindered the use of these pedagogies. Lisa reflects on her own experience at the Junior College as a lecturer in Chemistry:

```
I would love to use constructivist pedagogic
techniques with my Chemistry students. I know that
group work and increased interaction would make the
students feel more engaged … I would like to use the
communication possibilities of the Internet, and its
research capability. The class would no longer be so
passive because they would come to know each other
better … (and) learn from each other. (However) … the
syllabus is a huge problem … you must go fast or else
you will not manage to finish the syllabus. So, you
cannot afford discussion … collaborative work.
(P21_26:26)
```

The other lecturers all knew what was currently happening in the Primary, Secondary and Post-Secondary school systems since they were all involved in teacher training through their work with the Faculty of Education. Moreover, Philip, Patrick, and John were previous teachers in secondary schools and the Junior College, while Lisa and Mark were both full-time lecturers at the same institution.   All the respondents, like Lisa, argued that most Maltese school curricula were 'exam-centred', and therefore promoted 'individualism' and 'ritualised learning' (Lisa,

P21_24:24) thereby creating 'generally … passive learners' (Lisa, P21_26:26).

The lecturers agreed, that, because of this 'traditional schooling paradigm', where 'instructive methodologies are the order of the day' (Patrick, P20_15:15), students came to higher education carrying 'a baggage full of many years of schooling practices' and were 'already moulded' into passive learners. Most students knew 'nothing other than passive forms of learning' and felt uncomfortable when involved in any educational approaches in which they needed to take a more active role. This created strong resistance within the student corpus against new and non-traditional forms of learning. Anna and John explained what this resistance meant:

> John: the student feels more comfortable when he comes here to sit down for 14 hours of lectures.
>
> Anna: If you were a student … what do you prefer? Sitting down, sleeping? Chatting on Facebook or on a social network? Or develop a blog, wiki … ?
>
> John: … take part in discussions? Read, write, comment on others' posts …?
>
> Anna: Courses based in the classroom … are easier for students.
>
> John: Some do not even attend all lectures.
>
> Anna: … especially when they are in a large group … and when they don't attend their friend will sign up for them. Not a problem.
>
> John: Then you present the final assignment. And you pass …
>
> Anna: And he's done. That's it. Learning nothing more than writing a good assignment.
>
> John: e-learning requires more interaction …
>
> Anna: it's ironic … but it needs more presence … and students resist it. (P23_90:99)

Thus, the undergraduate students started their university course after having lived their lives in a predominantly `instructive system`. Asked whether the lecturer's role was to change the students' perception of learning, the lecturers agreed that this was a very risky and unpredictable approach. Most, but not all, believed that it would `most probably create resistance for new approaches` (Mark, P22_28:28). Thus Philip and Patrick believed that they always had `to ride the wave` (Patrick, P20_19:19).

The Maltese University lecturers could therefore, according to Philip and Patrick, never completely shed their traditional approaches: otherwise, the students would feel alien to the learning effort. Online learning facilitates teaching and learning, however, it can never fully substitute the traditional approach. Patrick explains, making reference to his use of the VLE of the University of Malta:

> The VLE is like a 'dishwasher'. You know what a
> dishwasher's used for. You place the dishes in, it
> rinses them, adds soap, washes them, dries them and
> they are ready. In the meantime what am I doing? I
> can do other things. Creative things. So ... when I'm
> using the VLE, I'm doing the same job but I'm teaching
> in less time. Thus, virtual learning, the platform,
> ICT, give me time to do more than just the
> instructional part. It helps me to be more creative.
> I am, for example, creative in choosing content,
> including video clips, which are by far more
> interesting to the students than a lecturer's
> monologue. (P20_19:19)

Thus for Patrick - who provides more examples like the above - technology, particularly the Internet, motivates and stimulates the students, but is only a part of a wider educational process. He explains:

> I use online learning to stimulate the student to
> learn. Basically I am preparing the student to be part
> of the learning process … Whereas before I had to
> think of a way to prepare him (sic), now with ICT I
> can actually catalyse the process. I can give that
> spark to stimulate the student to become open to …
> ready to be part of the learning process. And even
> myself, I become part of the learning process.

```
Together we will learn along this platform, in this
medium. What I mean is that more than the actual
knowledge … which is important … but which the student
didn't get from a book, you are giving the student an
attitude … an attitude to be creative, to be critical,
to learn to weigh between things. Before we had ICT,
this was difficult to achieve. (P20_23:23)
```

Philip holds a similar perception of e-learning. He, however, also noted that most projects which ran predominantly online were structured on a grave misconception, which, according to him, also exists in the literature:

```
The fact that the students, the younger generation are
very competent in using technologies for communication
and entertainment doesn't mean that it is going to
translate to the use of those technologies in
learning. This has proved to be the case in all my
courses, and confirmed by my research. (P19_17:17)
```

Philip also criticises Marc Prensky's concept of 'digital natives', which has often been used to justify the claim made by many researchers and educators that today's students have readiness, and are therefore motivated and self-sufficient, for e-learning initiatives, including online learning. He also notes that, Prensky's concept of 'digital natives'

```
referred to situations where technology is used
specifically for communication, mobile technologies
and digital gaming, entertainment and  other things
such as Facebook. But not in the learning context!
What it means is that through those technologies, they
are developing the skills for communication, for
entertaining, but that does not necessarily translate
into skills in learning … the students are not … ready
to use technology for learning. It's a big
misconception and generalization … like when I say
that since I can drive a motorbike, therefore I can
drive all means of transport. And it's not like that.
(P19_17:17)
```

Hence, the interviews revealed a strong but legitimated scepticism in the two most qualified and experienced lecturers in DITEL, that, a predominantly e-learning project, per se, could not provide an efficient learning experience to students who were (i) not `digital native learners`' (Philip, P19_19:19) and (ii) who were used to years of

predominantly traditional teaching and would 'probably be unwilling to partake in alternative educational methodologies as learners' (Philip, P19_19:19). Moreover, Patrick argues, 'in contemporary reality' (P20_55:55), a learner must live both the 'physical and virtual' worlds and 'people ... must work seamlessly online and offline', and therefore he preferred blended over other forms of educational programmes (Patrick, P20_56:58).

Not all the interviewees, however, agreed with Philip and Patrick. John and Anna did not perceive the students' resistance to be an insurmountable 'problem ... but a challenge' (John, P23_149:149). They explained that this resistance was very strong at the start of an e-learning programme, yet, if handled well, it became 'the subject of discussion in the course ... and (its elimination) one of the main objectives of the course' (John, P23_104:104). Thus, Anna and John argued, the lecturer must aim at making the students aware of their own condition and use the e-learning effort to make the elimination, or at least, the reduction of the initial resistance against e-learning a primary target for students and lecturers to reach together. This occurred through the identification and critical exploration of the resistance, that was created and developed by the schooling experience, through discussion, the reading of scholarly papers, reflection and commenting on the contributions made by students and their educator (P23_149:151).

Anna and John however noted that, sometimes, this strategy had the opposite effect to the desired outcome. The process of critical analysis and discussion, during a course, often increased rather than decreased the students' resistance towards e-learning methodologies mainly because of the greater and more active student participation required. This notwithstanding, by the end of the course, Anna and John claimed, their students understood that they had learnt more, and consequently, their resistance towards e-learning decreased (P23_150:150).

However, Anna and John also conceded that, although the students' resistance towards e-learning, through an e-learning course, decreased, it was never eliminated. Thus, since the students were living within a traditional institution the resistance against e-learning approaches remained significantly high and obtrusive. However, Anna was optimistic that, once e-learning is given more importance and is used more at the University of Malta, and

```
if it is done properly, we will have much less
resistance, much more participation from the students'
part. (P23_150:150)
```

The two lecturers gave various examples to prove their point. For example, in a PGCE course, which ran almost entirely face-to-face, Anna used the blog with a group of one hundred and thirty students. At first she found a lot of resistance against the online nature of the course and also against the independence in learning she wanted to create in her students through her online teaching effort, as this excerpt from her interview confirms:

```
When I talked to the PGCEs … the first time … in the
first lesson I had, they bombarded me. They protested.
'Of course not, no one does this!' 'I will not do
this!' Because I told them that I expected them to do
the work, and not me. (P23_40:40)
```

However, by the end of the course, the students said, according to Anna, 'alright, we ended up learning more' (P23_104:104). John provided similar examples, and he too confirmed that students claimed to have learnt more 'compared to other courses' in which they mainly 'copied notes' (P23_100:100).

However, the initial resistance is often so great that, for an online course to function, Anna and John had to 'throw the students at the deep end', otherwise, the students' resistance would be so great that they would have 'remained dependent on us … and (any) effort would have crumbled' (P23_184:184).

Lisa and Mark did not agree with this full and sudden immersion strategy because of the risks involved, including the creation of an insurmountable resistance which would block any learning effort. Neither did Philip and Patrick. Since Philip was the creator and designer of DITEL and Patrick his most senior collaborator, their interviews confirmed that their outlook on e-learning and pedagogy impacted on the pedagogic choices and orientation of the course. DITEL, therefore, adopted a blended approach in which online learning experiences were mainly used to (i) familiarise the students to the online learning dimension, in both theory and practice, and (ii) support a predominantly classroom-based and traditional approach.

Thus, the lecturers confirmed what the students had indicated in their interviews: the pedagogy used in DITEL was predominantly lecturing. Internet tools and resources, including the University of Malta VLE, were used primarily to enhance this mode of teaching.

7.2.4.3 The Lecturers' resistance to e-learning

The lecturers agreed that most lecturers, at the University of Malta, are still using technology that was first introduced into the lecture-room thirty years ago, as this example, from Anna and John's interview shows,

> Anna: many people who teach here, do not have a
> pedagogic background. What happens? You hear a lot of
> complaining in many faculties. Complaints about the
> lecturers. Students complain that their lecturer sits
> down with the notes in his hands…
>
> John: … reading them.
>
> Anna: … dictating and everyone writing … We have
> lecturers who still work with the overhead projector
> and transparencies. I'm not saying it's wrong …
> however they are still using the same approach they
> experienced as students thirty years ago. (P23_79:81)

One lecturer[26] even noted, when referring to the Faculty of Education and its lecturers, that:

```
The faculty is a mammoth, a bulky mammoth, big and
outdated. We therefore find resistance. There are
those who say they know what is supposedly best for
today's student but are putting spokes in our wheels.
These people … are going to hold on to their trenches.
```

The interviewees agreed with this lecturer, albeit with more subdued declarations. They also noted that, collectively, the University of Malta lecturers `have sought not to undermine this status quo` through two processes (i) the Academic Effort and (ii) the promotion system.

(i)   The Academic Effort system

The four full-time lecturers involved in this case-study agreed that the Academic Programmes Quality and Resources Unit (henceforth APQRU), which was mainly responsible for the accreditation of new courses, was biased towards lecturing and face-to-face teaching and learning encounters.

According to its mission statement, APQRU:

> is dedicated to the facilitation of quality assurance and improvement activities intended to promote a culture of commitment to excellence in the provision of academic services. Our mission is driven by the ultimate aim of supporting teaching and learning and of ensuring that the education provided to our students is of the highest standards. (University of Malta, APQRU, 2008)

This Unit measures the Academic Effort of a lecturer through the 'agreed benchmarks' as established in the Collective Agreement (2009-2013) between the staff and the University of Malta. These benchmarks identify

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[26] Full anonymity is being maintained, in this case and at the discretion of the researcher, to avoid any possible harm to the lecturer concerned due to the sensitivity of this declaration.

the various forms of face-to-face teaching practices, including lecturing, but give no mention to online learning practices. The latter are classified as 'some other building blocks' (University of Malta, 2009: 68) which can be approved by the Programme Validation Committee appointed by Senate.

Another problem perceived by the respondents was that, for APQRU, lecturing and other face-to-face teaching efforts, unlike online teaching and learning sessions, could be quantified in terms of the direct contact between University of Malta academics and students.

Thus, while APQRU gives 5 to 7 hours of lecturing the specific weighting of 'a unit of Academic Effort' or '1AE', the weighting of, for example, an asynchronous discussion is at the discretion of the APQRU and the Lecturers' Trade Unions, as the Collective Agreement (2009-2013) unequivocally states:

> For each new type of study-unit determined as a necessary type of building block the academic effort involved will be analysed and established by the University in consultation and agreement with the Unions. (University of Malta, 2009: 70)

Thus, Patrick noted that, as things stood at the time of the interview, according to APQRU

```
a lecture is one AE … but an online session which
involves more time to prepare and to follow,
particularly if it involves a discussion, … might only
be considered to count as half an AE. (P20_83:83)
```

This, Anna notes, was happening because the personnel of the APQRU had no clear criteria with which to measure the Academic Effort of `someone who wants to do an online course` (P23_140:140). Moreover, online learning was still perceived by APQRU as being mainly, a teaching aid associated only with the VLE which was used as a depository for notes and other teaching material. Therefore the APQRU, according to

Anna, did not have the appropriate criteria for weighing the effort of an online course and was troubled with these questions:

```
What will the parameters be?  If someone puts a
PowerPoint presentation on a VLE, is he doing an
online course?  What else does he need to do?  Who and
how will the parameters be established? (P23_140:140)
```

For this reason, John noted, a Distance Education Committee was created at the University of Malta with the remit to develop `a culture of e-learning` and, to achieve this, `one of its tasks was to establish the criteria for measuring the Academic Efforts of lecturers involved in e-learning` (P23_131:131).

Philip, Patrick, Anna and John, the full time lecturers of the Faculty of Education, and the most affected by the AE system, confirmed that this lack of motivation created by the `shortcomings in the Academic Effort system` was another factor that worked against their own use of online learning activities. One of the respondents[27] explains this predicament:

```
Offline, in a lecture, for example, you have two or
three hours and then you leave.  Two, three lectures …
that's four or six hours of work with the students.
Online, for the same idea or topic you need more than
six hours. You need at least two hours daily for at
least two weeks. Check e-mail, postings, answer them.
Do you get it?  So until you have people the famous
men in black, the administration, that don't
understand, don't see the need, don't see the amount
of work involved, don't understand that this is
bringing about a change in the student's attitude
towards learning … you're going to be pinned down. And
we are living in these things.
```

The full-time lecturers however agreed that when the proper AEs are accorded to online teaching more e-learning courses will probably be developed, even by the Faculty of Education, and particularly by CETRI.

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[27] Full anonymity is again being maintained, at the discretion of the researcher, to avoid any possible harm to the lecturer concerned due to the sensitivity of this declaration.

(ii)   The Lecturers' Promotion system

The lecturers perceived another factor that worked in favour of a traditional educational culture at the University of Malta. This was the lecturers' promotion structure.

At the University of Malta a lecturer is not awarded a promotion for innovation or for his/her search for excellence in educational approaches but for efforts in research and publications of scholarly work.   Thus, most lecturers invest a lot of energy and time in research but not in pedagogic training because the latter does not help in their promotion requests. Anna and John noted:

> Anna: … due to the fact that professional development is not considered, certain academic staff give priority to research and not educational development, in the sense as how one should teach, pedagogy.
>
> John: I confirm … When you're employed by the University - I haven't been here long and Anna too, because we were employed together - when I started working here no one asked me to attend a pedagogic course. (P23_73:74)

This found resonance with the interview with James, the Deputy Directory of IT Services:

> When it comes to getting promoted from lecturer to senior lecturer, from senior lecturer to associate professor, from associate professor to professor, what is the promotion system focusing on? Normally it focuses on papers published by the lecturers in their area. If you have, for the argument, a lecturer and you're promoting him from senior lecturer to associate professor, very often one looks at the papers he has published. (P1_14:14)

So, the great majority of University of Malta lecturers face a professional dilemma:

> … if an academic who has eight hours extra weekly … where will he invest them? Will he try to improve his PowerPoints, set fora, prepare for collaborative

```
teaching?  Or will he work … on some research to
publish a paper? (P1_14:14)
```

James identifies another problem. The lecturer, although s/he can only advance in his/her career through research, s/he will not be involved in research about teaching methodologies in his/her academic dimension for either or both of these two reasons: (i) teaching at the University of Malta is considered by the majority of lecturers a lesser skill than researching, and (ii) lecturers consider it more prestigious and rewarding to research within their own field rather than about teaching and learning approaches. James provided the following example:

```
One could always publish papers on how to teach
thermodynamics. However … for the engineer, teaching
is a lower skill … (and) when he attends a conference
he is more confident in presenting a paper in
thermodynamics rather than one about the teaching of
thermodynamics. (P1_14:14)
```

To solve this dilemma, the University authorities must reconsider the promotion process and James suggests that

```
the University needs to change the criteria … by
adding … a publication in the teaching strand … and
promotions are awarded even for excellence in
teaching, and innovative teaching. This is something
which obviously entails a change in culture.
(P1_14:14)
```

This is an educational culture in which most lecturers did 'not have a pedagogic background' (Anna, P23_79:79) and innovative pedagogic approaches, including e-learning, are not valued. James who had direct contact with many lecturers through his experience as Deputy Director of IT Services - which provided training in e-learning practices and the use of Moodle – confirmed that

```
the teaching of most of the academic community is
based upon experience. From what we see during our
courses, the bulk of the academics have no pedagogic
formation. They had no induction. Very often they did
their first degree, master's, PhD and started
teaching. If the type of teaching they were exposed to
```

```
in their first degree, master's and PhD, was the
transmission style of lecture, most probably that is
what they are doing now. This is their concept of what
University education should be like. (James, P1_13:13)
```

This educational scenario, according to James and the DITEL lecturers, `'is difficult to change'` (Patrick, 20_88:88) and works against a culture of e-learning. Indeed, most lecturers lack pedagogic skills `'let alone e-learning skills'`. Training in e-learning `'is not adequate'` and there is a `'lack of professional development'` (Anna, P23_67:67) in the field. James confirmed that IT Services only provides training for lecturers to learn the basic functions and affordances of Moodle. Anna noted:

```
So if you see the training courses which are being
offered to lecturers here, to academia, they are not
training courses of how one should teach in an online
environment. They are training courses, like those in
industry, where you are just taught to upload a file.
(Anna, P23_25:25)
```

The lecturers and the Deputy Director of IT Services agreed that, in this educational environment, the University VLE is being used predominantly by lecturers to deposit notes and reschedule lectures. They also agreed that students are still immersed in the lecturing paradigmatic cast and, thereby, prefer lecturing and resist, at least initially, e-learning approaches based on dialogue and collaborative work.

7.2.5   Online pedagogy and the roles of the educator

The analysis of the lecturers' interviews confirmed that all the lecturers had a common understanding of online learning, both in theory as well as in practice. The lecturers agreed that online learning consisted of three components: (i) the educator, (ii) a set of Internet-based resources and (iii) the learners. These three components only became a learning experience if effective and efficient communication existed between them. John explains:

> You need an agent (the teacher) … a set of resources
> (including the course material), a set of online tools
> … , and a set of students. And what makes an e-
> learning course … is the communication between these
> three components. So … you have student-student
> communication, student-tutor communication, student-
> content communication. If any of these dialogic
> interactions are missing … you do not have e-learning.
> (P23_07:07)

Teaching online can however involve educators who are only 'using tools or applications or modalities' (Anna, P23_08:08) available online. This, the lecturers agreed, is not e-learning. To be truly involved in e-learning, educators must create an online learning environment which supports a 'process of interactions that are happening through the use of these applications and tools' (Anna, P23_08:08). Those educators who embark on an online learning project, at any educational level, and use the Internet 'only as a tool … and give a lot of importance to the tool but exclude the interactive process' (John, P23_10:10) are bound to fail.

Thus, the e-educator must (i) create, develop and enhance interaction and communication between students, and between him/herself and the students, (ii) encourage the use of collective learning through discussions and collaborative tasks, and, (iii) not use the VLE *only* as a repository for notes, calendar of events and/or the scheduling of lectures.

7.2.6   A paradigm shift

Another important characteristic that the lecturers identified was the need to make a 'shift in mindset' (John, P23_21:21), that is, 'a paradigm shift' (Anna, P23_23:23) through which the e-educator 'no longer is a lecturer … s/he becomes a mentor' (Anna, P23_23:23). John

explains that this change involved a move away from lecturers 'dishing out information' (John, P23_29:29) to e-educators encouraging the construction of knowledge. John explained:

> you have to move from a sage on stage to a guide on
> the side, where instead of being there to dish-out
> content - which is what happens normally in a lecture
> - in the e-learning environment you have the luxury
> that the content is all there. So your job now is not
> to try and make a summary of the content. Your job is
> to help the student engage with the content and you
> act more as a mentor to help him (sic) rather than
> hand out knowledge. (John, P23_29:29)

This paradigm shift, argued Anna, involved the 'democratisation of knowledge and learning' (Anna, P23_150:150). Most lecturers, she contended, believed that they 'owned the knowledge that they had painstakingly discovered through research' and that this knowledge would be 'benevolently distributed to their students' who 'patiently went to class to receive it' (Anna, P23_150:150). She also noted that:

> Many lecturers find it difficult even to let go of a
> note. Even a PowerPoint presentation … they convert it
> to pdf, and, if possible, they add their name on each
> page so that no one will take it away. (Anna,
> P23_150:150)

For all the interviewees, the lecturers' 'ownership of knowledge', in an age when 'all forms of knowledge are available on the Internet' (Mark, P22_116:116), went contrary to the ideals of higher education because it did not encourage the students to become independent learners. Instead of stimulating the students 'to learn how to learn' (John, P23_63:63) most lecturers are filling them up with 'knowledge they believed they owned' (Anna, P22_150:150). Anna argues strongly against this traditional paradigm:

> For me this doesn't make sense, because what I know I
> got from others who got it from someone else and what
> I learnt, I learnt not from one person but from a
> mixture of experiences. So I would like the students

```
to have this mixture of experience as well. I want to
teach them how to learn. (Anna, P23_150:150)
```

John, reflecting on his role, as a teacher-trainer, agreed with Anna and added:

```
I want to show the students how to learn … and this
means that the students become conscious that they
must learn because they want to, love to … not because
I tell them that they have to do it. That they, must
learn because they have an assignment or exam … That
they have to read that author, that they have to use a
blog, that they have to use a Wiki … not because I
tell them but because they are conscious of the need.
(P23_151:151)
```

If the student-teachers make this paradigm shift then they will be able to

```
change the mentality in our schools, in our
educational system, this is the mentality we need.
(John, P23_151:151)
```

Unfortunately, the interviewed lecturers agreed, this was not happening. John notes:

```
Go and see the teachers, how many of them go to school
and try new and innovative things?  I'm sure there are
some, but the majority will teach in a traditional
way, the same way as they were taught here and as they
were taught when they were young themselves. (John,
P23_151:151)
```

The e-educator, at the University of Malta, including the Faculty of Education, must therefore '`work against the grain`' (Mark, P22_118:118) amidst lecturers and students who are still immersed, according to the interviewees, in the schooling paradigm.

7.2.7   Use of collaborative learning tasks

The lecturers agreed that the most important characteristic of e-learning was collaboration through which students shared knowledge and experiences, and, collectively, created new knowledge. The e-educator had the very important role of 'creating collaboration among students'.

Lisa argues that, however, collaborative learning did not just mean 'students doing research together on the Internet'. It meant, for example, 'initiating a discussion by posing a problem' and then the students 'are encouraged' by the e-educator 'to find solutions to the problem through research and … the discussion of their findings' (Lisa, P21_88:88). She also notes that, 'groups are composed of different individuals with different learning skills and abilities' (Lisa, P21_88:88), and therefore, the e-educator must be very careful how to design the collaborative task.

7.2.8   Pedagogy in DITEL

Philip argued,

```
If you want to prepare learning experiences that are
relevant to the students, isn't it their context and
previous experiences that you have to start from?
(P19_19:19)
```

Thus, the students carried into DITEL (i) their past experiences of 'instructive learning', and (ii) technology-related skills which they acquired from using the Internet for entertainment purposes and social networking. However, as argued previously, the Director of the course deemed that these technology-related skills were not automatically effective

or `translatable in a learning context`. Therefore, it was decided that the DITEL lecturing staff would adopt a blended approach in which lecturing would be the predominant teaching mode and e-learning activities would be used, primarily, to transform communications and digital skills, which the students were already confident with, into learning skills.

During the first year of their Diploma programme, the students were thus helped to explore and use various technologies that they could then apply (i) to their own learning experience and (ii) their professional practice. These included digital gaming, photography, podcasting, blogging, asynchronous discussions through Moodle and the collaborative development of a wiki. For this thesis, in consonance with the research question, only the Internet-based activities were investigated.

7.2.8.1   Using Moodle

The interviewed lecturers had at their disposal the University of Malta's VLE. This is an adapted version of Moodle - an open source course management system hosted on the University of Malta web server. All the lecturers used Moodle as a depository for their notes, to integrate links for external Internet sources and tools, as a calendar of events and for the submission of assignments by their students. However, only two of the interviewed lecturers, Anna and Lisa, used Moodle to initiate and maintain an asynchronous discussion during the first year of DITEL.

Moodle is integrated within eSIMS - the Electronic Student Information Management System - of the University of Malta. This portal is available to students, and academic and administrative staff and enables them to view information and perform various tasks online. For example, through eSIMS students enroll for each academic year, register for each year's study units, view messages via the eSIMS intray, view and/or update their personal

details and view registered course and study-unit details, as well as their academic record. Lecturers, through Moodle or directly through eSIMS, can contact their students with regards, for example, the scheduling or postponement of lectures, post assignment tasks and questions, and inform the students about lecture-room allocation.

The DITEL lecturers were not fully satisfied with the VLE and complained that, in its present form, the VLE had many pedagogic lacunae because it was neither chosen nor developed or maintained by educators.   According to Anna:

> ```
> the university started experimenting and piloting the
> idea of a Virtual Learning Environment since 2008. The
> IT services took over from the technical side, however
> the mistake was that only the technical side has been
> developed. (P23_25:25)
> ```

James confirmed that he 'was the one who started the VLE' (P1_03:03) and that he had no pedagogic formation at the time. He also confirmed that he preferred Moodle over other online learning platforms for many technical reasons but mainly for its open source nature.

None of the interviewed lecturers were satisfied with Moodle. They instead preferred an array of Internet tools including Ning, Edmodo, Wordpress and PBWorks to use for their e-learning efforts. They then used Moodle mainly as a repository for notes and for inserting links to the Internet tools they used.

The lecturers also noted that, in their past experiences of using Moodle, their students also complained about the learning platform, mainly, that it 'was too linear' and 'boring' compared to digital experiences such as virtual social networks and strategy games. Lisa explained that, when her students were asked to evaluate more than one VLE,

> ```
> they were more attracted to those Virtual Learning
> Environments that were similar to Facebook and they
> ```

```
said that they were the best for their (young)
students. For example they liked Ning, and they liked
Edmodo but not Moodle. (Lisa, P21_118:118)
```

She also noted that Moodle, compared to many social networking sites, such as Facebook, was less aesthetically pleasing and lacked interactivity. These limitations could, however, be overcome if '`you can take your teaching effort out of the system, with, for example, external links`' (Lisa, P21_120:120). Therefore Lisa, like Anna, John and Patrick, also preferred outside sources that were however accessible through links posted in their Moodle unit.

Anna and John explained how they used Moodle:

```
Anna: I often use a blog …

Researcher: Which is not the blog in Moodle?

Anna: No. Because the blog in Moodle is bugged.

Researcher: Like the wiki?

Anna: Yes. It's the same with the Wiki. In fact I use
everything which is outside Moodle and I link it to
Moodle.

Researcher: Is there the need for Moodle?

John: Let me tell you. This idea that to have e-
learning you need just one (tool) to incorporate
everything, is wrong.

Anna: Yes. I like to use a variety of Internet tools
which are not available in Moodle.

John: The web offers so many different tools that all
you need to do is use the right tool for the job. Then
yes, use Moodle, you need Moodle to offer a backbone
for the system. (P23_40:48)
```

Anna used Moodle for three main purposes: (i) to reach and communicate with students (ii) to create asynchronous discussions needed for the development of a wiki and (iii) to structure her teaching. She explained that:

```
since students are enrolled automatically through
eSIMS … I don't need to search their e-mail addresses,
```

```
they're all there and it's handy to use. It's the same
if I need to upload a document, or a presentation, or
a video, or other things. Even to structure things. I
like to structure learning, in the sense that I'm all
for flexibility, but I like structure, so that I know
where I left from and where I will arrive. And my
students know this as well. And Moodle presents a
visual of your structure. A blog and a wiki, may be a
bit disjointed; if you just use a blog and a wiki, you
might not be able to see the overall picture. But with
Moodle, the way it can be structured, for me it's more
organized. (P23_49:49)
```

Anna, John and Lisa did not use Moodle's blog and wiki facilities because `'they're bugged'` and were not as efficient as, for example, blogs created through Wordpress or Blogger, or wikis created through PBWorks. So John, Anna and Lisa used Moodle, mainly as a repository for notes and to keep contact with their students while they used blogs, wikis and other tools available on the Internet for their e-learning efforts. Anna and Lisa also used Moodle for initiating and maintaining asynchronous discussions.

Philip and Patrick were less enthusiastic about the VLE, particularly because it was developed and maintained by non-educators. Patrick even argued that, if he used Moodle, he could become dependent on IT Services, because

```
if I need to do something new on it, and I don't know
how to use it, I have to call IT services who will
tell me, 'do this, do this, do this, do this'.
(P20_55:55)
```

However, he claimed that he was aware of the various affordances of Moodle, including the possibility that through the VLE he could create a link to his personal homepage from which students could access his `'public bookmarks … Delicious or Diigo'` (P20_55:55). Thus the VLE could offer him

```
a gateway, a backdoor where I can spill out into other
utilities that I am more familiar with. (Patrick,
P20_55:55)
```

This notwithstanding, Patrick used the VLE only as a repository for notes. So did Philip, who, however, justified his limited use of the VLE claiming that:

> ```
> I don't really use it a lot because more than once I
> had intrusions in it. Intrusions where people just
> accessed and … copied my work … and copied students'
> assignments lock, stock and barrel and then made it
> their own. So I decided that since this happens in the
> University Moodle … I would keep away from it. And I
> use other tools that are accessible to me and the
> students only. (P19_28:28)
> ```

Instead of Moodle, according to Philip, he used the Google environment for much of his e-learning work.

7.2.8.2   *Asynchronous Discussion*

The lecturers explained that Moodle was not the best tool available for e-learning. Yet, it was the only tool that the students and lecturers had available through the University of Malta learning management system (eSIMS). Anna and Lisa, although both not very comfortable with the VLE, used Moodle in their courses during the first year of the Diploma.

For her course Lisa used Moodle to (i) familiarise the students with a VLE, (ii) to help students discover, analyse and compare various VLEs, including Moodle, (iii) to develop asynchronous discussions, (iv) to allow the students to explore the advantages and disadvantages of asynchronous discussion and online collaboration as active learning approaches, and (v) to help the students develop the basic skills required for effective virtual asynchronous discussions.

Anna also used Moodle for asynchronous discussion, however, her main objective was to engage the students in dialogue in order to, collaboratively, solve problems related to the development of a wiki. She noted:

```
When I had the wiki I used Moodle as well … in
parallel. In Moodle I set a series of topics which
could stimulate the students to discuss in the wiki.
(Anna, P23_49:49)
```

In this process Anna interfered minimally in order to help the group to coalesce into a learning community which was able to provide support and help to each participant. Lisa used a similar strategy also with the intention to create camaraderie among the members of the learning group.

Like Anna, and as already noted in section 7.2.1, Lisa also believed that effective e-learning in higher education meant, primarily online collaboration between students. To achieve this she used online collaborative tasks that required asynchronous discussion. Online discussion was important, according to Lisa, because

```
when students discuss amongst themselves … they come
up with many things. They see each other's
difficulties, they encourage each other, they learn
together, they learn in their own students' jargon.
(P21_16:16)
```

Lisa also insisted that the lecturer must always be present but not intrusive in the online discussion.

```
If they ask me something … instead of giving them a
direct answer, I give them something else to think and
talk about. To encourage them to research. (P21_16:16)
```

Reflecting on her experience in DITEL Lisa noted that, in the first week of the course, she met a lot of resistance from the students. This resistance was created, in her opinion, because the students did not have sufficient online learning skills for them to participate effectively in the course, and as outlined in the previous section, also because they were immersed in a `culture of schooling` (Lisa, P21_31:31). However, once the students started to understand the dynamics of online participation, discussion and, particularly, writing and posting their contributions, their resistance towards the e-learning effort diminished.

However in DITEL, as in any of her other courses, there were some students 'who refrained from taking part … and remained passive learners' (P21_26:26). She explained that through her PhD studies she had determined that for changing passive into active learners the courses needed to be longer than just a couple of weeks. Ideally they should span over a number of months. Over a long period of time the passive student, usually, but not always,

> gained enough courage to start asking … and participating, and, eventually … go to another stage where he starts helping … and slowly begin posting stronger contributions. (Lisa, P21_22:22)

However, in a short course such as Lisa's course in DITEL, it was very difficult for a passive learner to become more active in the learning process.

Lisa also noted that, in the face-to-face domain, converting a passive learner into a learner who actively participated in discussions was comparatively harder to achieve because there were many factors in play: including, the general University of Malta traditional educational environment, the large student-to-educator ratios and the examination factor.

7.2.8.3   Use of the Wiki

Anna used the wiki with the DITEL students as the primary teaching and learning approach. The main objective of her study-unit was for students to discover various pedagogic uses of the wiki and other e-learning tools and strategies. For this purpose she held a single face-to-face 'orientation session' with the students in which she 'spent two or three hours talking to them', instead of using her usual approach, that is 'throwing students at the deep end' (P23_183:183). She changed her student immersion approach because she was conscious of

their `fragile motivation`, created by the master's upgrade improbability scenario and the students' deep resentment of alternative pedagogies, she decided to offer them `a life saver which they could hold on to` (P23_185:185).

For this purpose, during the face-to-face session, Anna explained the objectives of the course, how teaching and learning would occur, and how the students were expected to develop and maintain a wiki. The students were informed that they needed to post at least two contributions per week about a technology that could be or was used to enhance learning. She also demonstrated what a correct posting involved. To stimulate discussion and to encourage students to help each other, particularly to solve technical issues related to the wiki, Anna set up a forum on Moodle and encouraged them to use it.

To explain the role she adopted in the development of the wiki Anna first described how she perceived her role as an educator in any dimension - face-to-face or online:

> I see myself as being on a stage and I prefer my role to be backstage. It's not that I'm a person who would walk into a class and keep back. Not at all! But I prefer to see myself and my students as if we're in a play, where they're all onstage while I'm helping them from backstage. Passing on props, things that they might need, helping out. But they have to do the work. (P23_40:40)

So, in the face-to-face encounter she told the students

> 'I will help you as much as possible, there will be things on Moodle, but then it's up to you if you access them or not. You will do the work. And all the work will be done online. We will no longer meet, this is the only face-to-face which we will have, simply to tell you what's going to happen. The course will be carried out through a wiki.' I used a wiki for the aim of this course. (P23_40:40)

Anna, insisted that her role in the wiki was that of a guide, and, consequently, she intentionally kept her interventions at a minimum. Her role was to help students 'by providing resources, like 'look at this book, check this paper, look at this', and guide them' (P23_168:168) to build the wiki. She wanted the students to discover, and thereby treasure, autonomy, in their learning:

> I strongly believe that we should not tell the students what and how to learn. We are part of a higher education institution … we should give them enough tools … (P23_36:36)

> … and guide them so that they learn on their own. And if they can't manage to learn on their own, then, perhaps - and this might sound wrong - they have to do something and get their acts together. They're in a university; they have to get their acts together. So this is one issue of contention. Not everyone has the same opinion about this but I feel very strongly about this matter. (P23_38:38, 40:40)

Anna also felt that the students, through the wiki, did not only need to acquire new knowledge because 'this quickly (became) outdated' particularly knowledge about technology in education. Nor did the students need to learn only manual and technical skills. The students, according to Anna, needed to develop 'cognitive skills', particularly 'the ability to think critically' and 'not accept all the knowledge that's sitting out there' (P23_52:52). Therefore, according to Anna, in the e-learning effort involving the wiki:

> The focus must not all be on knowledge … the focus needs to be on learning.

> Especially when dealing with educational technologies. If I teach you today how to use the iPad, I teach you by telling you that you need to press that button and then you'll have that programme. Tomorrow, that programme might not be there and there will be a different programme. If I didn't tell you 'explore, see where you're going to get the apps from, how you'll download them, see how these apps work, tell me what you found and where you get stuck, don't worry. Or else I may provide you with a site where to search

```
that problem. Because there will always be a problem
there.

I can tell you where you can go to find the solution.
I can guide you. But I will not give you the solution.
(P23_54:55, 57:57, 59:59)
```

However, Anna noted, that the DITEL students who were used to `years of schooling` (P23_109:109) and who were therefore more comfortable receiving ready-packaged knowledge, first, from their teachers, and, later, from their lecturers, the wiki experience was, at least in its initial phase, very challenging. There were a lot of complaints and resistance from the students at the start of the wiki experience, however, all submitted two good contributions per week, for three consecutive weeks. By the end of the unit, `we got there` (P23_107:107) and all the students were satisfied with the wiki project.

7.3   Conclusion

The lecturers shared a non-traditional perception of 'e-learning' and agreed that it is that form of learning that uses technology to enhance dialogue, collaboration and the collective construction of knowledge. The Internet, according to the lecturers, offered the best tools, applications and modalities for this to occur. Internet-facilitated learning also offered, the lecturers concurred, a democratic learning environment where, particularly during discussions, knowledge is not `dished out` by the teacher and uncritically assimilated by passive learners. E-learning involved a more active student's role which required reflection, individually or in a learning community, upon the knowledge that is presented or discovered through research.

Effective e-learning approaches, thus, involved different and more demanding roles for both the students and lecturers compared to

classroom-based pedagogies, including the lecture. In DITEL, the students, were however too immersed in the '`traditional schooling paradigm`' and not sufficiently motivated to cut loose from the comforts of lecturing. The lecturers too were predominantly not ready to take the plunge into a mainly e-learning effort and opted for a blended approach that leaned heavily on lecturing. Moodle was thus mainly used as a repository for notes and as a calendar of events.

Apart from the perceived risk of engaging apparently unwilling students to partake in alternative educational methodologies, the lecturers' narrative identified two further factors that acted against the use of Internet-based pedagogies. One was the Academic Effort system which rewarded face-to-face educational encounters. The other was the University's lecturers' promotion system which rewarded, and thereby encouraged, excellence in research but not in educational approaches.

This notwithstanding, and in order to satisfy the Diploma's objectives, two of the respondents were involved in online learning activities during the first academic year of the course. One lecturer used Moodle to familiarise the students with a VLE and to develop asynchronous discussions through which the students explored the advantages and disadvantages of this learning method. The other lecturer used a wiki which was mainly intended to engage students in a discussion about educational technology but which also served to create a learning community that, collaboratively, solved practical problems related to the development of the wiki.

At the University of Malta a culture wherein lecturers 'owned knowledge' still exists. This works against e-learning and this narrative unequivocally shows that lecturers may find it difficult to make the '`paradigm shift`' from being '`sages to guides`' in the learning process. This narrative however also shows that, in midst of a traditional educational culture, lecturers can '`work against the grain`' and engage in dialogical approaches through Internet-facilitated learning.

Chapter 8

Generation of Theory

When you theorize, you reach down to fundamentals, up to abstractions, and probe into experience. The content of theorizing cuts to the core of studied life and poses new questions about it.
(Charmaz, 2006: 135)

8.1   Introduction: the Context

The setting of this research project was the University of Malta where e-learning was first introduced in 2008 in an attempt to keep the University 'at the forefront of education provision' (Distance and E-Learning Committee, 2012: 3) on the Maltese islands. This university was always almost fully funded by the Government of Malta and, therefore, never needed distance learning to sustain its economic needs. E-learning was required, primarily, to support the teaching vocation of the University of Malta and enhance the students' learning experiences. Full e-learning programmes were therefore only designed and offered in exceptional circumstances such as the BScHS, whose participants, prior to the degree's conversion into a full online course, were 'depleting the wards' [§5.3.1] of Maltese Hospitals.

Initially, the research intended to investigate the various uses of online learning at the University of Malta and the researcher was aware that the deployment of e-learning, as with any other learning and teaching method, would necessarily and appropriately vary across subject and discipline boundaries. However, preliminary investigations found that, pervasively, the

academic staff was using e-learning *mainly* to support the transmission of knowledge methodologies, predominantly lecturing.

Subsequently, two courses, whose prospectuses promised a different use of e-learning, were identified and selected as case-studies. These were the BScHS and DITEL. In the former, the degree study-units were being delivered entirely online and, the research later revealed, technology was being used to support learning through the use of interactive and collaborative learning activities in all its study-units (Chapters 4 and 5). On the other hand, DITEL was a blended programme in which, the data indicated, only some study-units were being delivered online. The other study-units were delivered in a face-to-face mode, namely as lectures enhanced with PowerPoint presentations and online resources (Chapters 6 and 7).

The students in the BScHS course were all health professionals, in their majority nurses. Through this course, the Department of Nursing was trying to satisfy the health professionals' demand for a distance-learning top-up degree which could improve their career mobility [§4.4.1; §5.3.1]. Through DITEL, the Faculty of Education was trying to empower teachers with 'technology-enhanced' teaching and learning methodologies. It was also trying to satisfy the students' need to improve their career prospects through a diploma that had the potential but not the guarantee to be upgraded to a master's degree [§6.2.1; §7.2.4.1].

8.2   Theory Generation

The previous four chapters presented the results of the analysis of data through the use of initial and intermediate coding [§2.4.4.1]. This chapter presents the final phase of this analysis. This phase involved advanced coding achieved through the intensive constant comparison of intermediate

codes and memos that had previously emerged during the analysis, as illustrated in Figure 8.1. In this process the researcher looked for similarities and variants, as well as new concepts, in the already formed categories. The researcher then related these categories to each other through logical patterns of connectivity in order to develop an explanatory scheme. Many rough diagrams were created during this phase, until a theoretical model was developed [§8.11]. The researcher did this, as recommended by Glaser and Strauss (1967), in isolation of both extant theory and the contemporary literature [§2.4.3]. However, he was conscious that his previous knowledge and beliefs could influence the analysis process, and with rigour, through a continuous researcher reflexivity process [§3.10], in congruence with a constructivist Grounded Theory project (Charmaz, 2006), he always questioned and checked his evolving theoretical sensitivity through which the theory was developing.
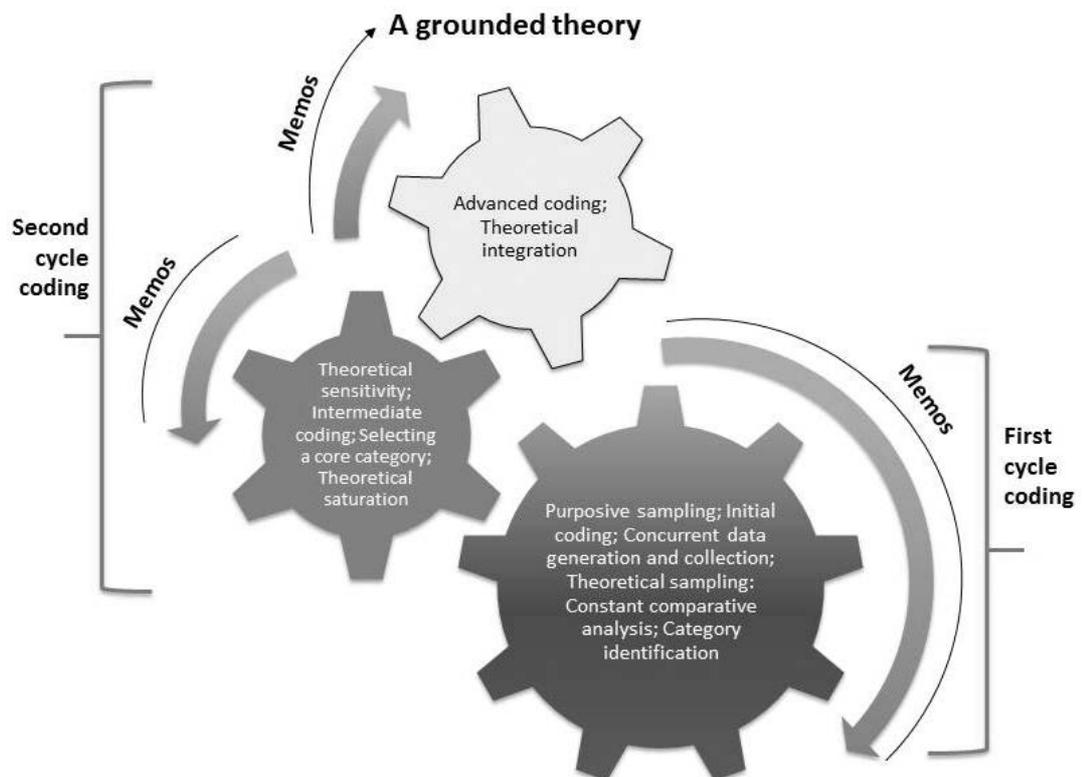
Figure 8.1: Advanced coding and theory integration (adapted from Saldaña, 2009: 163; Birks and Mills, 2011: 114)

This chapter presents the theory produced through this analytic process. It starts with a brief summary of the theory, followed by a detailed explanation of all its elements. Finally, it presents a diagram of the theoretical model.

8.3   Summary

The data presented in the previous four chapters strongly suggested that *dialogue* was a crucial pedagogic element in a programme which not only provided the students with academic knowledge and professional skills, but also empowered them to reflect and act on social and professional problems and injustices. There was also strong evidence to suggest that a programme in which educators used a predominantly traditional pedagogy, namely lecturing, reinforced the `'culture of schooling'` (Lisa, P21_31:31) thereby creating resistance to alternative pedagogies and/or new learning mediums, including e-learning.

However, dialogic and traditional education processes should be seen as nested within each other rather than mutually exclusive or diametrically opposed. The data suggested that the development of dialogue, at times, required the transmission of facts, rules, skills and knowledge by the educator. However, traditional education forms become problematic when they constitute the predominant pedagogic focus, as they are likely to enhance the dependency of the students upon their educator.

E-learning is conducive to both educational forms. In higher education, it can be used to support lecturing, dialogue through democratic discussions and the collective creation of digital artefacts such as blogs and wikis. The data also strongly indicated that e-learning is more conducive to dialogic education than the university classroom.

The data also offered considerable insights into the roles of the educator and student. The former must have a central role, but this should not be taken to mean that the educator must always maintain his/her traditional authoritarian position in the educational process. The student must assume a more active and participative role and this, in e-learning, might require a drastic transition from the perceived 'safer' traditional forms of learning.

8.4   Learning through dialogue

According to the Oxford Dictionary, the word 'dialogue' means 'a discussion' in written or verbal form 'between two or more people or groups, especially one directed towards the exploration of a particular subject or resolution of a problem'. The word originated from the Greek word *dialogos*, itself derived from *dialegesthai* which meant to 'converse with'.

The data indicated that dialogue developed in both courses [§4.4.4.2; §5.3.5(iv); §5.3.7; §6.2.3.1; §6.2.3.2; §7.2.7], albeit comparatively more intensely in the predominantly online BScHS than in DITEL. Dialogue developed during face-to-face and Internet-based formal and informal educational situations, in lecture-rooms [§6.2.2(vii)], lecturers' offices [§5.3.3], cafeterias [§4.4.3; §4.4.4.2] and bars [§6.2.2(viii)], as well as on the Internet through e-mails, Facebook, blogs, wikis, Moodle and Skype [§4.4.6; §6.2.3.2]. It developed in verbal and text-based forms, in the Maltese and English languages, between peers and in educational encounters between students and teachers. Dialogue also developed in groups ranging from two [§6.2.3.1] to over forty persons [§4.4.4.3(iv)].

For the respondents, *dialogue* was important for learning for the following reasons:

i. The students were adult and professionals in their respective fields and the sharing of the knowledge and experiences they had gained from their professional, familial and social commitments, as well as through the educational programmes they were involved in at the time of this study, enriched their learning [§4.4.4.3(iv); §5.3.7; §5.3.9; §6.2.4]. In both courses, each student carried into the learning effort a unique lifeworld, that is, the 'experiences, needs, beliefs and knowledge that make up the world of each individual' (Oxford English Dictionary) which s/he valued. Through dialogue each student could thereby share his or her lifeworld with other students and educators, and thereby feel essential in collaborative learning efforts aimed at the collective construction of knowledge. These are exemplar quotes from the two courses:

> ```
> The lecturers appreciate the ideas we bring to the
> course (they) appreciate the fact that you're an
> adult student who came to the course with a lot of
> experience and many ideas … (Cecilia, P3_65:65)
> ```
>
> ```
> All our students are adult. Many have been in
> their jobs for years. Many are very good nurses …
> and take pride in their work. You must use their
> experience. You must make them feel … and believe
> … that you place value in what they know … in what
> they have experienced in their life, in their job.
> (Debbie, P13_106:106)
> ```
>
> ```
> (when)you … share … others learn from you and you
> learn from others. (Anthony, P18_120:120)
> ```

ii. This sharing of experiences developed an educational experience where, often, knowledge was not imposed from above. Neither was knowledge 'dished out' by the educator to the students [§7.2.5(i)]. This created a more democratic learning environment which empowered the students and lecturers to become more 'active' [defined in §8.4(iii) below] in the learning process.

iii. This dialogic and more democratic learning environment encouraged students to become more 'active' learners through the reading of

scholarly texts identified by their educators, and less frequently, by themselves on their own initiative and in independent or collaborative research, and the subsequent discussion of their critical reflections upon these readings and their experiences in the field [§4.4.4; §5.3.7(v); §6.2.3.1; §7.2.4.2]. Several examples similar to the quotation below were found in the narratives:

> `Our lecturer chooses a topic … posts links to some`
> `papers … we read these papers, write our`
> `contribution and post it in the blog. My`
> `colleagues access the blog and discuss the issue`
> `or the topic. (Bernard, P2_23:23)`

iv.   Critical thinking, particularly but not exclusively in the BScHS where dialogue was more prevalent, created 'agents of change' (Carmel, P12_62:62) in both the educators and learners. Dialogue created a democratic learning environment which empowered students to 'come to see (their) work … (their) practice in a different light' (Mary, P7_62:62) and consequently, to discuss issues of importance in their professional and social environment (that is, their lifeworld) and to seek change in the real world - outside the context of the educational effort. Thus, for example, through discussion, the nurses in the BSc reflected about and tackled problems they identified in the local healthcare system (Carmel, P12_70:70) while the teachers in DITEL, in a comparatively more limited way, sought change in their traditional classrooms. All the lecturers involved in dialogic education, but particularly those involved in the BScHS, sought change in the traditional educational practices of the University of Malta and worked against the 'culture of schooling' (Lisa, P21_31:31).

v.   Dialogue created camaraderie, through which students helped out each other, consequently helping in the creation and development of a community of learning [§4.4.4.3; §5.3.7; §6.2.3.2; §6.2.4; §7.2.8.2], in which, they 'discuss amongst themselves … (and) come

`up with many things. They see each other's`
`difficulties, they encourage each other, they`
`learn together, they learn in their own students'`
`jargon'` (Lisa, P21_16:16).

vi. The educator's role changed from one of transmission of knowledge to one of facilitation of dialogue. The learner's role changed too, from one of acquisition and assimilation of knowledge to an active process of knowledge sharing and reconstruction with other learners and the educator. The role of technology, consequently, also changed into one which enhanced dialogue rather that the transmission of knowledge. Anna, for example, 'did not use the usual `lecturing ... she showed us a way and then said` `'you must go through here'. And left us on our` `own. However we managed to meet her expectations.` `In three weeks we made a wiki'` (Thomas, P14_67:67, 71:71).

vii. When dialogic teaching and learning approaches were used *more frequently* than traditional methodologies, as in the BScHS, the educators felt closer to the students. This happened not only because they used first names [§4.4.5], but more importantly because the students became more active and less dependent learners. Consequently, the authoritarian role of the educators changed and the learning environment became more democratic. The respondents reported that the educators themselves, at times, became learners [§4.4.5; §5.3.7(xiii)]. Quotations similar to Cecilia's (P3_69:69) 'we (students and lecturers) are peers ... `we learn from each other'` emerged from all the BScHS respondents' narratives but not from the DITEL interviews.

8.5   Learning through the transmission of knowledge

The respondents identified and described another teaching and learning process: **a hierarchical, teacher-centred educational process characterised by the delivery of knowledge and/or skills from the educator to the learner.** A DITEL lecturer used the term 'instructive' (Patrick, P20_15:15) to refer to this kind of teaching. In this chapter, this researcher will use the most frequently mentioned term, that is, 'traditional', to refer to pedagogies which mainly adopt the transmission of knowledge and skills in the educational encounter between teachers and students.

The narratives indicated that transmission of knowledge approaches, particularly lecturing, involved the top-down transmission of knowledge that was either 'owned' (Anna, P23_150:150) or selected by the educator who dominated the learning process as a 'sage on the stage' (John, P23_29:29). At the University of Malta, the good learner patiently and passively received, uncritically assimilated and memorised the knowledge received from the lecturer [§4.4.2; §4.4.5(iv); §5.3.4(i); §6.2.2; §7.2.4.2]: as one student put it, while describing her experience at the University of Malta 'you have the lecturer who is up there while I was sitting down on the chair writing and paying attention' (Elaine, P5_85:85). The students then reinforced this knowledge by reading scholarly 'texts and (mainly) writing an assignment at the end of the course' (Thomas, P14_45:45). In this process, the educator's ownership and authority over the delivered knowledge increased and the learner became dependent on his/her educator who was regarded as the main purveyor of knowledge [§4.4.2; §5.3.3; §6.2.2; §7.2.6]. The students did not challenge this knowledge because, as one student put it, 'if it's coming from the lecturer so it's the right information, no?' (Thomas, P14_16:16).

In their interviews the BScHS students looked back on their previous learning experiences: the older nurses had participated in a certificate course at the now defunct Nursing School, the dental hygienist and the younger nurses followed Diploma programmes with the Faculty of Health Sciences [§4.4.2]. The DITEL students described their previous educational experiences: as student-teachers with the Faculty of Education, learners in the diploma and full-time teachers, in Maltese primary or secondary schools [§6.2.2]. The lecturers, from both case studies, described their and other lecturers' teaching practices at the University of Malta. The DITEL lecturers and students also described the teaching practices in Maltese primary and secondary schools [§7.2.4.2]. The respondents agreed, that, in Malta, traditional approaches were pervasive in schooling and, thus, students started their University experience `already moulded` (Patrick, P20_15:15) as passive learners who preferred traditional over any other form of teaching. The students favoured sitting in class `to take down notes` of knowledge selected and `dished out` by their lecturers rather than, for example, participate in collaborative learning activities which demanded more work, time and interaction with other students and their educator.

Moreover, the students' dependency on traditional approaches created a fear of alternative and unknown approaches [§4.4.2; §5.3.4(iii); §6.2.2]. This fear, coupled with the students' reticence towards alternative pedagogies - created by the perception that non-traditional learning experiences needed more of their time and meant more work in terms of reading and developing their own contributions - produced resistance against non-traditional forms of education including dialogic e-learning.

Lecturers at the University of Malta, the respondents concurred, also preferred traditional teaching. Even the majority of the interviewed lecturers – including those who hailed the importance of dialogic e-learning - confirmed that they engaged more often in traditional methodologies, rather

than dialogic and, therefore, more student-centred approaches, during their face-to-face and classroom-based sessions.

Five main reasons for this preference were discerned from the narratives. First, as already outlined above, the students came to the University of Malta comfortable with traditional approaches and resisted new teaching and learning methodologies. Second, lecturers perceived most students as lacking higher cognitive learning skills and, thereby, the students were perceived as needing knowledge-transmission approaches to succeed in their respective study-units. Third, the interviewed lecturers agreed that most lecturers at the University of Malta lacked pedagogical skills [§7.2.4.3] and applied lecturing methodologies `they experienced as students` (Anna, P23_79:81) and, consequently, reinforced the `culture of schooling` (Lisa, P21_31:31) on the University campuses. Fourth, the University's Academic Effort system was biased towards the more easily quantifiable face-to-face and classroom-based educational encounters - namely lectures [§7.2.4.3(i)]. Finally, the lecturers' promotion structure encouraged excellence in research in their field of expertise rather than pedagogic innovation [§7.2.4.3(ii)].

In this educational scenario, the lecturer's role was to transmit knowledge as effectively and efficiently as possible. The learner's role was to acquire this knowledge in the best way possible. Technology, including the Internet, was important, in this context, to enhance the effective and efficient transmission and acquisition of this knowledge. For this purpose, Moodle, the University of Malta's VLE, was used to provide information and resources to students (for example, study-unit descriptions, lecture notes, audio and video recordings, reading lists, links to additional web resources, past exam papers and model answers) and to perform basic administrative functions (for example, announcements, e-mails, providing a link to *Turnitin* and assignment submission).

Therefore, the data indicated that, within the student corpus at the University of Malta, traditional approaches created a dependency on lecturers, encouraged the uncritical assimilation of knowledge, did not help in the creation of a learning community and developed a fear of unknown pedagogies [§4.4.2; §6.2.2]. This notwithstanding, the students and lecturers identified various factors which made traditional approaches, particularly lecturing, preferable over dialogic approaches, including e-learning, in higher education. A lecture, for example, offered a `'learning space'`, in terms of time and location [§6.2.2(i)]. This helped the students maintain physical and verbal contact with peers and their educator and, different from dialogic online learning efforts, students did not have to cope with distractions at home [§6.2.2(i)]. The lecture also provided an educational space where verbal, visual and gestural feedback, from peers and educator, was more immediate than in online learning [§4.4.2; §6.2.2]. Traditional approaches were also more suitable for certain study units, for example, when the demonstration of certain skills or the introduction of new concepts and knowledge by the educator was required. Indeed, in both case studies, online learning efforts were always preceded by introductory face-to-face and traditional sessions wherein the basic skills and functions of the Internet learning tool were demonstrated and discussed [§4.4.3; §5.2.2; §5.3.3; §6.2.3.2; §7.2.8.3]. Moreover, the DITEL lecturers pointed out, most students, due to their traditional educational experiences and expectations, were still at the cognitively lower `'acquisition phase'` of learning and it was `'very risky to impose'` a predominantly dialogic education on them [§7.2.3].

8.6 Integrating dialogic and transmission of knowledge/skills pedagogies

Thus, this research indicates that both traditional and dialogic teaching efforts are needed in higher education. Both forms of pedagogy must co-

exist in the online medium or classroom, to ultimately create, develop and maintain an efficient learning effort. However, the traditional approach should be a means towards a more democratic dialogic learning approach, not an end in itself. Otherwise, the students may remain stuck in the 'acquisition' cognitive level.

The data also indicated that the more the students remain immersed in the traditional approach, the greater and more prolonged their resistance, to new forms of pedagogies, and dialogic approaches in particular. In the online medium, to produce an effective and efficient dialogic learning experience, an abrupt but well-supported transition from lecturing is therefore required [§5.3.3; §7.2.8.3]. A hybrid alternative will not be as successful as a predominantly dialogic and student-centred course in terms of higher-order learning because the students will remain attached to what the students perceive as being the more 'comfortable' (Gina, P17_45:45) and 'safe(r)' (Frank, P6_36:36) traditional approaches.

8.7   E-learning

The DITEL lecturers considered 'e-learning' to include all forms of technology that could aid the teaching and learning process and, therefore, they argued, the 'e' in e-learning stood for the word 'enhanced' rather than 'electronic' [§7.2.2]. Thus 'e-learning', for the DITEL lecturers meant 'technology-enhanced learning'. However, all but one of these lecturers perceived e-learning to consist of, mainly, Internet-enabled communication for educational objectives.   A similar perception emerged from both the students' cohorts and the BScHS lecturers' sample. Moreover, the *E-Learning Strategy Development Framework* (UMDEC, 2012) defined e-learning as 'the use of web-based and networked technologies to enhance and/or support learning at university'. Consequently, within this project, e-

learning was regarded as being learning conducted via the Internet, or *online learning*.

The data indicated (see Figure 8.2) that online learning tools, in both courses, were used to support both traditional and dialogic learning. However, there was a marked preference for an e-learning that supported lecturing in DITEL, while in the BScHS, Moodle and other web-based and networked technologies were used, primarily, to facilitate discussion-based and collaborative learning. The data also indicated that online learning, as used in the BScHS, produced more dialogic learning opportunities than the hybrid DITEL programme. The data also strongly indicated that when e-learning was used to mainly support traditional approaches, as in DITEL, it did not free the individual and/or the learning group from the `culture of schooling` (Lisa, P21_31:31). On the other hand, a predominantly
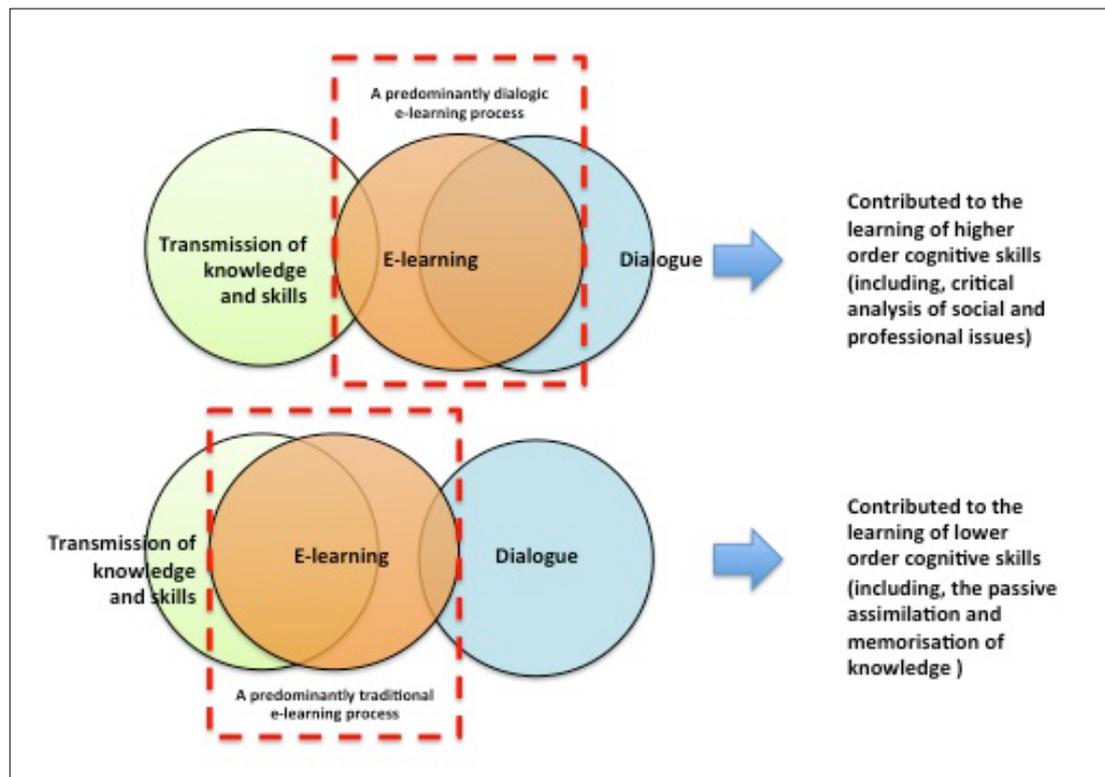
Figure 8.2 - Dialogue, transmission of knowledge approaches and e-Learning

dialogic e-learning effort, like the BScHS, cut the ties to schooling. It freed the learner and educator from traditional approaches and all that they entailed: including the fear of the unknown, the passive assimilation of knowledge, the dependency on the teacher and the hierarchical and undemocratic teacher-learner relationship.

The narratives also suggested that both learners and educators, from both courses – including the respondents from DITEL who preferred lecturing – perceived that the dialogic e-learning process was more attune with adult and higher education ideals because it developed higher cognitive skills (including, analysis, problem solving and construction of knowledge) through discussion and collaborative activities.

The data confirmed that, in both courses, dialogic e-learning encouraged the students to engage in independent research and improved the students' reading, writing and critical reflection skills. It also enhanced their ICT-related skills, including their abilities to use Moodle and Web 2.0 social networking technologies and to develop and post contributions in forums, blogs and wikis. Dialogic e-learning created, developed and maintained camaraderie [§4.4.4.3(viii); §5.3.5(v); §7.2.8.2] which, in turn, helped to develop a learning community involving learners and educators: the latter were also often engaged in learning from their students. Above all, students learnt from each other and valued each other's contributions [§4.4.4(ii); §5.3.7 (x); §6.2.3.2(viii)], creating a more democratic learning environment.

8.8   Pedagogy

The data indicated that an efficient dialogic e-learning pedagogy consisted of three components: (i) the educator, (ii) the students and (iii) a set of online resources which allowed communication and dialogue between the

students and their educator and between the students themselves during collaborative learning activities.

8.8.1   The online educator

The narratives identified various factors which contributed to an efficient and effective online educator. These included:

i.   The educator was an expert in his/her subject discipline. This was guaranteed by the University of Malta recruitment process and its promotion system [§7.2.4.3(ii)].

ii.   The educator needed to work within an academic team that could, collaboratively, design a learning programme, or part of (with regards to hybrid courses), in which the content and skills were appropriate for the online learning medium. For example, the BScHS academic team developed a programme wherein no nursing or health professional manual dexterity skills were taught directly by the teaching team [§5.3.10(iii)]. Thus, the educator responsible for the module 'Working with medical device technology and ICT in practice' asked the students to critically reflect on the 'effective and safe use of a medical device employed in own practice' including 'responsibility for basic risk assessment and appropriate safety precautions' (Caruana, 2012: 33). The educator was never involved in the demonstration of the effective and safe use of these instruments (ibid.). In DITEL, courses which required the learning of manual skills, such as that in photography for web design, were carried out on a face-to-face basis, while courses about VLEs and wikis, were carried out online [§7.2.8].

iii.   The educator was trained in both dialogic pedagogy and online learning approaches. In the BScHS each lecturer had post-graduate training in adult and/or nursing education and could therefore use

'progressive ideas and methods' of 'contemporary adult education' to help students nurture various educational and social values, including learning within a community and constructing knowledge collaboratively through dialogue [§5.3.6]. With regards to online learning, the BScHS team was composed of two lecturers who were also professionally trained in online pedagogy, and who, in turn, trained, on a one-to-one basis, all the other lecturers involved in the online degree [§5.3.1]. The DITEL lecturers were all involved in teacher training and development programmes. They all researched, attended conferences, wrote scholarly papers and/or were involved in past or current PhD investigations, which described or studied, respectively, the importance of dialogue and the collaborative construction of knowledge in learning, and particularly, e-learning [§7.1.1].

iv. The educator needed to identify relevant study-unit materials, including scholarly papers, websites, video and podcasts, which were 'understandable and stimulating' (Caruana, 2012: 36), and primarily intended to initiate, develop and/or maintain an online asynchronous discussion. In the BScHS, the scholarly papers were made accessible to the students in three ways: in a booklet compiled by the respective educator and published by the Department of Nursing, as full digital copies deposited in Moodle by the educator, and as links to external sites where these papers were available through Moodle [§5.3.7]. In DITEL, the study-unit material in the two dialogic online courses was made available on Moodle as digital copies [§7.2.8]. The educators in both the BSc and Diploma programmes also encouraged the students to engage in independent or group research in order to discover new material relevant to the study-units.

v. The educator encouraged the students to critically read the study-unit materials and to frequently post their reflections as written contributions. This was intended to develop critical thinking skills in

the students and create, develop and maintain an asynchronous discussion in the learning group. The educator then identified the most appropriate online learning medium for his/her study unit, and the students concerned.

vi.   The educator initiated the discussion through one or more questions which were directly related to the study-unit material that the students were expected to read and reflect upon, and subsequently write their reflections about. The data also indicated that the educator followed the discussion but did not intervene frequently. According to one educator this meant taking `a backstage role` but still remain close to the actors [§7.2.8.3]. In this metaphor the actors are the students. The educator, the respondents agreed, in dialogic online learning, shed his/her traditional authoritative teaching role and, during the discussions, did not impose or deliver knowledge to the students but `interfere(d) cautiously` and `when it was absolutely necessary` [§5.3.7(xi)]. This notwithstanding, the educator provided regular feedback and also assessed the students' discussion.

vii.   The educator was conscious that his/her students carried into the higher education programme a wealth of knowledge and experiences and encouraged them to look into their professional experiences as health professionals and teachers, thereby treating them as adults and, at times, learning from and/or with the students through active but cautious involvement in the discussions. In this process the educators became learners. A more democratic student-teacher relationship was created. This prompted one student to comment `we are peers … I'm speaking to a nurse like me` (Cecilia, P2_69:69).

viii. The educator did not conform to conventional pedagogic expectations. Unlike many University of Malta lecturers, the online educator opted

for an online programme which, when compared to lecturing, required more time to develop and conduct. Moreover, the BSc lecturers, as a team, challenged and started the process of change in the Academic Effort system which was still biased towards the more easily quantifiable lecturing mode [§7.2.4.3(i)]. This required the educator to be highly motivated for e-learning to make the paradigm shift from traditional to dialogic education [§7.2.6].

ix. In their transition to a dialogic e-learning process, the educator did not 'spoon feed' [§6.2.3.2] the students with the knowledge and skills required for effective use of Internet tools such as blogs and wikis. This increased the students' individual and collective problem solving skills. However, the educator needed to provide constant online and/or face-to-face assistance to his or her students and encourage all members of the learning group to help each other out thereby supporting camaraderie within the learning group.

8.8.2   The online students

The foregoing suggested that the students, like their educators, had to make a 'shift in mindset' [§7.2.5(i)] from the 'culture of schooling' (Lisa, P21_31:31) in order to participate efficiently and effectively in dialogic online learning activities. The students, who were used to years of traditional teaching and learning, where the teacher or lecturer dominated the educational encounter and in which they mainly assumed passive [§4.4.2; §5.3.4(i); §6.2.2; §7.2.4.2] and 'comfortable' [§4.4.2; §5.3.6; §6.2.2; §7.2.4.2] learning roles such as note taking [§4.4.2; §5.3.3; §6.2.2(iii); §7.2.4.2], and who, consequently, became dependent on their educators for the acquisition of knowledge, had to assume more active and demanding learning roles. In this new scenario, the students had to participate in collaborative learning activities, including asynchronous

discussions, which required frequent and constant posting of text-based ideas [§4.4.6; §5.3.10].

In these discussions, running mainly on Moodle, but also on wikis and blogs (only in the BScHS), the students were engaged in various learning activities: they first read the study-unit material identified by their educator and then developed and posted their critical reflections as text-based contributions in the English language. They also read and replied to the contributions of the other members in their learning group. To assure that each student could participate in these discussions, and thereby assure, a democratic educational community, the courses' bye-laws agreed that the students were all practising professionals, possessed a 'satisfactory level' of English (a pass or better in the Ordinary Level English language) and basic ICT knowledge and skills (a pass in the core ECDL modules). This notwithstanding the BScHS lecturers and students agreed that the younger students were at an advantage with regards to ICT skills and social networking. However, as the DITEL lecturers noted, this did not automatically mean that the younger participants were better online learners – one lecturer even debunked Marc Prensky's concept of the young student being a `digital native learner`. Indeed, the younger teachers' sample from DITEL, including the qualified IT teachers, felt disorientated and uncomfortable with online learning. The data confirmed that the older students, although at a disadvantage with regards to Internet-based skills, through their stronger motivation and camaraderie - which eventually also involved the younger learners - became more comfortable in dialogic online learning.

8.8.3 Internet-based learning resources

Three tools were used in both courses: forums hosted on Moodle, blogs (developed mainly through Google's Blogger) and wikis. The educators had

a clear preference for forums because these required less ICT-related skills to be used with efficiency by both the educators themselves and their students.

In the BSc programme, most online educators were trained by two qualified peers and therefore enjoyed only limited knowledge and skills of online learning methodologies and tools, and therefore resorted only to the online forum as the study-unit's learning medium. On the other hand, the two qualified online educators also used blogs and wikis which required more skills to organise, develop and maintain in the learning group.

In DITEL, the forum was used to introduce the students to VLEs and the skills involved in using Moodle. The wiki was used, as in the BScHS, to introduce variation to the learning programme, for developing dialogue among the students, to nurture problem solving skills within the students, and to, consequently, create camaraderie within the student group which helped in developing a learning community involving the students and their educator.

The data thus indicated that the choice of the medium was also determined by the educator's level of preparation in online learning. Therefore, when the educator was appropriately trained in online learning methodologies and tools s/he could choose from a wider variety of online media, including blogs and wikis.

8.9   An efficient transition to dialogical e-learning

The respondents argued that, in general, students starting a higher education experience in Malta were already `moulded` as passive learners

[§7.2.4.2] who, thereby, preferred traditional over dialogic learning experiences. The unknown nature of the relatively new Internet-based education dimension compounded matters further: it increased the fear and, consequently, the students' resistance towards online learning. Both teams of lecturers were aware of this reality; however, they tackled the students' introduction to dialogical e-learning in two different ways. The BScHS academic team opted for a drastic introduction to a full e-learning programme while the DITEL team opted for a more cautious introduction and, consequently, only inserted a small number of dialogic e-learning study-units into what was perceived to be a less risky blended option.

Through the advanced coding process it was however noted that, in the DITEL group, the students' transition into the two dialogic learning study-units followed the same procedures as the students' transition into the initial study-units of the full online BScHS programme. First, in both courses, the transition involved introductory face-to-face sessions in which the basic functions of the online tools were explained through traditional approaches [§4.4.3; §5.2.2; §5.3.3; §6.2.3.2; §7.2.8.3]. In these face-to-face sessions the educators took on authoritative roles. Second, the first online tool that the students used was the forum hosted in Moodle. This tool, and the pedagogy involved - namely the asynchronous discussion initiated and developed from readings and questions set by the educator - the students and lecturers from both courses agreed - was simpler to use than any other tool, including the blog and wiki. Third, during the introductory sessions, although a traditional approach was used, the students were not overly 'spoon-fed' and only limited information and skills were transmitted to the students [§8.8.1(ix)].

This strategy, eventually, 'created panic' in both sets of students when they needed to start interacting online. This panic, according to the respondents, had two effects. First, it forced most students to 'seek each other out', in order to 'help each other' and together find solutions to common or individual problems, creating camaraderie and a learning

community. Second, but only in the BSc programme, this panic caused 1/5 of each intake cohort to drop out of the course [§5.3.3]. The inference was that this strategy was beneficial to those students who were either highly motivated in the course, or who had lecturing as a safety net to rely on in the same course. However, those students who were not as motivated in the course or e-learning, and only had the online option to fall on, dropped out of the course.

Another important consideration must be made: the data indicated that the previous BSc hybrid experiment was not successful [§5.3.4], while in the hybrid DITEL programme the students preferred lecturing, even after they had experienced e-learning [§6.2.3.2]. This, the data confirmed, meant that the students felt more comfortable with traditional teaching and learning, and in a hybrid programme, they resisted e-learning because of its more active demands - even though they recognised its multifarious learning benefits [§6.2.4]. Thus, a hybrid programme, such as DITEL, would not free the students from the `culture of schooling`.

The above strongly suggests that a dialogic e-learning programme is most successful, in terms of the development in the students of higher cognitive skills that are closer to the ideals of higher education, if the transition to e-learning is drastic and cuts the ties to traditional teaching and learning methods, including lecturing. The foregoing also suggests that the student's motivation towards his/her course must be high for e-learning to be effective.

8.10 Motivation

The BScHS and DITEL learning communities had different levels and forms of motivation with respect to e-learning. The BSc students were relatively more motivated because they needed a distance-learning programme, the

degree offered them better career prospects and they were given `'no expectations'` for or exposure to face-to-face study-units [§5.3.3]. The BSc lecturers were also more motivated, compared to most of the DITEL lecturers, because they wanted to satisfy the demand for a distance learning degree, reduce the absence of nurses from wards and fulfil the need of preparing better Maltese nurses, particularly those without a degree [§5.3.1]. This motivation was manifest in various ways, including: the co-ordinator following a postgraduate course (as part of her master's degree) in online teaching and learning [§5.3.2]; lecturers choosing voluntarily to participate in the programme and then training through peers [§5.3.2]; teaching online notwithstanding the constraints of the Academic Effort and promotion systems.

DITEL students were less motivated towards e-learning - although their participation in a postgraduate diploma about Technology Enhanced Learning had suggested otherwise to the researcher before the interviews commenced - because they were immersed in a `'culture of schooling'` (Lisa, P21_31:31), both as professional teachers and as learners at the University of Malta, and preferred lecturing over other forms of pedagogies; and their hope for advancing into a Master's degree through an upgrade of the Diploma could not be realised [§6.2.1]. This reduced their motivation towards the course and also for e-learning activities which were perceived as needing more effort and time [§6.2.1]. The DITEL lecturers were also less inclined towards dialogic e-learning because they considered the classroom approach better suited to the context of their students' professional experience: the DITEL students were qualified and practising teachers in Maltese primary and secondary schools. Like their students, the DITEL lecturers were also too immersed in the schooling paradigm and only *two* were actually involved in dialogical e-learning during the first year of the programme [§7.2.8.1].

8.11   The theoretical model

The theory, which was presented in this chapter, is illustrated as a model in Figure 8.3.

The central part of this model is Figure 8.2 which indicates that e-learning in higher education, according to the data of the current research, is used in two main ways: (i) as a **support to a predominantly traditional pedagogy**, namely lecturing, which is dominated by the transmission of knowledge and skills from the teacher to students, and (ii) as an educational medium through which **dialogue is *mainly* developed within asynchronous discussions** in forums, blogs and wikis [§8.7]. The data also suggest that the development of dialogue may require the transmission of facts, rules, skills and knowledge by the educator [§8.6]. Therefore, both educational forms should be seen as nested within each other [§8.6].

The model suggests that the **culture of schooling** is pervasive in the local educational system, including the University of Malta. In this educational environment students are *mainly* engaged in the **passive assimilation of knowledge**, are **dependent on their teachers** and are **fearful of** and **resistant to non-traditional approaches**, including dialogical e-learning [§8.5].   The lecturers are *mainly* engaged in **the transmission of knowledge and skills**, they **assume authoritarian roles** and **use technology to support their lecturing** [§8.5].

Since many students and lecturers are immersed in the 'schooling paradigm' the transition to a predominantly dialogical e-learning process requires a **shift in mindset** in both the students and educators which a blended programme, such as DITEL, cannot fully achieve [§8.9]. A **drastic** but **supported transition,** as adopted in the BScHS, is therefore needed [§8.6] to cut the ties with schooling practices. However, the students and educators must be **highly motivated** towards their course and eager to participate actively in dialogic educational experiences [§8.8.2]. Educators
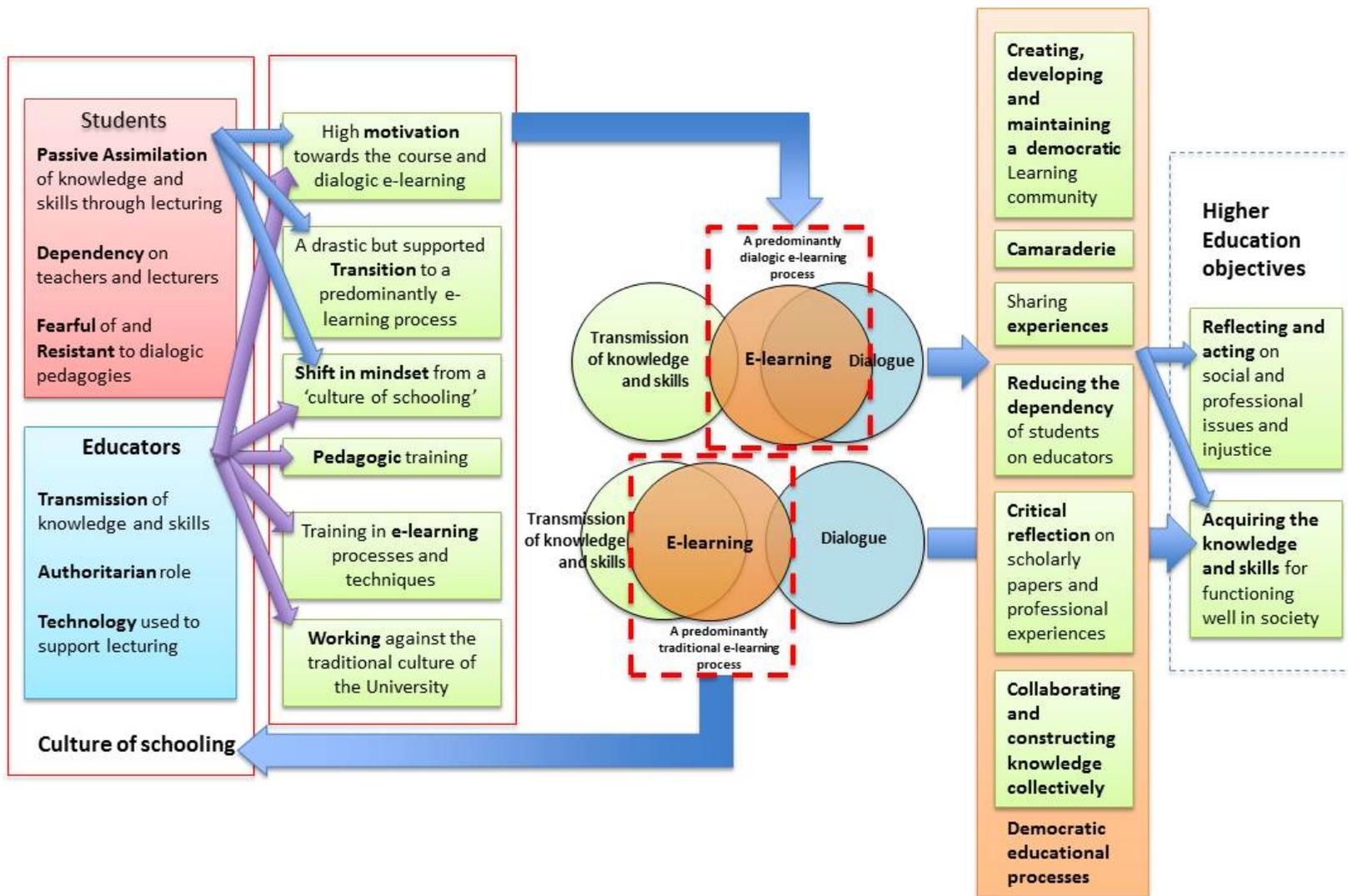
Figure 8.3: The Theoretical Model

also need **training in pedagogies other than lecturing** and **specific training in e-learning processes and techniques** [§8.8.1].

A predominantly dialogic e-learning process **creates, develops and maintains a learning community** in which students and educators engage in **democratic dialogue** [§8.4]. This encourages the **sharing of knowledge and experiences** which the students bring to the learning effort, the **collaborative construction** of digital artefacts and knowledge [§8.4(i)] and **camaraderie** within the learning community [§8.4(vi)]. To engage efficiently in dialogue students must take active and democratic learning roles: they must **read and reflect upon scholarly work** identified by their lecturer or through their own research [§8.4(iv)], discuss academic, professional and social issues, and **collaborate with educators and peers in the construction of new knowledge**. This educational process can help students to *both* **acquire the knowledge and skills required for functioning well in society** and also to **reflect and act upon social and professional issues and injustice** [§8.4(v)].

If on the other hand e-learning is used mainly to support the transmission of knowledge, namely through lecturing, the culture of schooling is **reinforced** [§8.5]. Although this may also help students acquire the knowledge and skills that are required in the economic and knowledge society, it is less likely to empower students to come to see their lifeworld 'in a different light' (Mary, P7_62:62), to discuss issues of importance in their professional and social environment and consequently becoming 'agents of change' (Carmel, P12_66:66).

8.12   Concluding comments

At the University of Malta e-learning was used to support both traditional and dialogic approaches. When e-learning was used to *mainly* supplement

lecturing, as happened in DITEL, it reinforced the schooling paradigm and did not free the students from the transmission of knowledge model. Although appreciative of the benefits of dialogic e-learning, the DITEL students remained more comfortable with lecturing.   On the other hand, the predominantly dialogic e-learning effort in the BScHS reduced the students' dependency on the transmission of knowledge model. It freed the learners and educator from traditional approaches and their effects on learners, including the fear of unknown pedagogies, the passive and uncritical assimilation of knowledge and the hierarchical lecturer-learner relationship. The data also suggested that both learners and educators, from both courses - even those in DITEL who preferred lecturing - perceived a dialogic e-learning process to be more akin to adult and higher education because dialogue improved their critical reflection skills, camaraderie and facilitated the collective and democratic construction of knowledge.

The theoretical model proposed in this chapter suggested that the transition from schooling to a critical and dialogical education, through e-learning, would never be easy because the schooling paradigm reinforced traditional fears, including the belief that 'the teacher was always right'. A strong support structure was therefore needed, yet, a drastic transition was required for e-learning to be effective. This might involve 'throwing the students at the deep end'.

Chapter 9

The Literature Review (Part 1) – Educational Theories

> *Through dialogue, the teacher-of-the-students and the*
> *students-of-the-teacher cease to exist and a new term emerges:*
> *teacher-student with students-teachers.*
> *(Freire, 1970: 67)*

9.1   The role of the literature review in a Grounded Theory Investigation

The *SAGE Encyclopedia (sic) of Qualitative Research* defines the literature review as 'a tool' that is used 'to increase understanding of a subject area and test a research question or hypothesis, and to examine the methodology and data literatures that form important parts of the research process' (Race, 2008: 488). Thus, most quantitative and qualitative approaches to research require that literature is reviewed *before* commencing a research study (Knight, 2002: 11; Mason, 2007: 16; Bryman, 2008: 81; Denscombe, 2008: 210; Machi and McEvoy, 2009: 4; Hyatt, 2009: 51; Dixon-Woods, 2011: 332; Silverman, 2011a: 10).

The issue of *how* and *when* to use existing literature during a Grounded Theory study remains one of the most problematic issues in the Grounded Theory debate. In their original publication*,* Glaser and Strauss (1967), and later Glaser (1978; 1998; 2001; 2002; 2011), were unequivocal *against* conducting a literature review in the substantive area of research at an early stage of the research process, arguing that

>an effective strategy is, at first, literally to ignore the literature of theory and fact on the area under study (Glaser and Strauss, 1967: 37).

The reasoning behind this call for abstinence from existing literature is 'essentially related to the desire to allow categories to emerge naturally from the empirical data during analysis' (Dunne, 2010: 114). Uninhibited by 'predetermined understanding and existing frameworks on the investigation' (Heath, 2006: 519) which may 'taint the researcher's view of the field' (McCann and Clark, 2003: 25), the researcher is afforded the 'potential for a wider repertoire of theoretical innovation' (Dey, 2007: 176).

The positivist position of Strauss with regards to the literature review, however, eventually changed. Indeed, Wiener (2007: 298-299) noted that there was uneasiness in many Grounded Theory researchers regarding the postponement of a literature review. This, according to Wiener (2007), led Strauss to deviate from the original position and Strauss, together with Corbin (1990a: 7; 2008: 37), acknowledged the fact that researchers were often experts in their field and therefore brought into the research project their 'professional/experiential knowledge' (Corbin and Strauss, 2008: 46). Thus, as Corbin and Strauss claimed, a preliminary review of the literature in the substantive area *before* beginning data collection was important for stimulating theoretical sensitivity, developing research questions and directing initial sampling (ibid.). A more thorough literature review would then be undertaken later, in order to critique the emerging theory not only 'to find areas of resonance and convergence, but also to identify whether (the) research offered anything original' (Hope, 2010: 208).

Charmaz (2006: 166) argued in favour of such a strategy, claiming that a delayed literature review ensuing from an emergent Grounded Theory was essential not only for academic honesty, but also to demonstrate how the study builds on and contributes to extant knowledge within the field. The present study followed this strategy.

The literature review was structured upon the key aspects of the theoretical model proposed in the previous chapter. It is presented in two chapters: in this chapter the researcher presents a critical review of educational theories from behaviourism to connectivism to contextualise the role of *dialogue* in education, in the next chapter the researcher analyses the literature on *e-learning* in higher education.

9.2 Educational theories

An extensive literature search revealed a plethora of educational theories that were convergent with the elements of the theoretical model presented in the previous chapter.

This chapter will first discuss *behaviourism, cognitivism* and *constructivism*, John Dewey's contribution to educational theory, and the critical theory of education. It will then investigate the role of Higher Education in the democratic lifelong education project as envisioned by Dewey. The chapter will also explore the role of technology in an education inspired by the educational thinking of Paulo Freire, Ivan Illich and Seymour Papert. Finally, it will critically discuss *connectivism* and *connected knowledge* as proposed by George Siemens and Stephen Downes, respectively.

9.2.1 Behaviourism

According to many authors, including Jarvis (1988), Pritchard (2009), Pritchard and Woollard (2010), Lee and Lin (2009) and Selwyn (2011b), pre-1970 educational efforts were often aligned with 'behaviourist' theories of learning including Pavlov's (1927) classical and Skinner's (1948) operant conditioning. Behaviourism 'is based on a positivistic approach to science'

(Webb, 2007: 1086) and, consequently, behaviourists consider only 'observable, measurable, outward behaviour (as) worthy of scientific enquiry' (Bush, 2006: 14) and, thereby, equate 'learning with changes in either the form or frequency of observable performance' (Ertmer and Newby, 1993: 55). Learning, according to the behaviourists, is accomplished when learners 'demonstrate the desired behaviour in response to a stimulus' (Lee and Lin, 2009: 59).

Jarvis (1988: 77) briefly describes the two main theories of behaviourism:

> The theory of classical conditioning … asserts that the learner learns (is conditioned) to associate the presentation of a reward with a stimulus that occurs … prior to it … Operant conditioning, however, occurs when the response is shaped by the reward, so that every action that approaches, approximates or achieves the desired behaviour the learner receives a reward.

Much of the educational debate inspired by behaviourism 'focused on how to design systematic instruction to help learners achieve learning objectives through reinforcement, reward, and punishment' (Lee and Lin, 2009: 59). The influence of behaviourism on education 'has endured for more than five decades' (Scholtz, 2007: 43) and, in contemporary education, its overt legacy is still evident in the transmission of knowledge model – wherein students are often treated as empty receptacles ready to be filled with knowledge - that is still pervasive at all levels of education, including higher education. Students, in this context, are primarily rewarded for 'observable' knowledge and skills acquisition. As Scholtz (ibid.) contends, behaviourism is still so much ingrained in education that students, teachers, administrators and other key role-players, including parents, find it difficult to contemplate alternatives to the behaviourist concept of 'scientific measurement of ability and achievement' (Shepard, 2000: 5) and reward.

The educator, inspired by behaviourism, maintains an authoritative role, sets the performance objectives and creates a systematic approach to the learning content s/he chooses. According to Gold (2001: 36) education takes mainly the form of 'teacher-centred instruction' in which the

educator's role is to efficiently transmit to the student a well-circumscribed body of information and skills within a well-defined learning environment. Thus, argues Rogers (1993: 46), the behaviourist-inspired pedagogy

> tends to stress the active role of the teacher-agent; the student learner is often seen as more passive. Although the learner offers a variety of responses, it is the teacher who controls the stimuli, who chooses the 'correct' response and 'rewards' it appropriately, discouraging the other responses. 'Feedback', the return from the learner to the teacher, is largely related to the reward; it stands on its own, separate from and following after the learning process.

As the present study indicates, this may be the pervasive mode of instruction in local schooling and the University of Malta [§8.5]. The teacher or lecturer acts as the guardian of knowledge, which she or he bestows on the learners, and purveyor of external rewards through the grading of summative assignments.

The research model proposed in Chapter 8 argues that if such an approach is used as an end in itself, as occurs in traditional schooling, it may not lead to other types of learning (that is, cognitive, constructivist and/or critical learning discussed later on) and may ultimately create a dependency of the learner upon this pedagogy. However, Jarvis (1988: 77), Rogers (1993: 47) and Fenwick and Tennant (2004: 59) argue that such learning processes are the basis of cognitive and other forms of learning. Rogers (1993: 47) also notes that 'stimulus and reinforcement are elements of all theories of learning'. Thus, for example, classical conditioning occurred when the mature BSc students learned the basic function of correctly posting a contribution in a wiki; operant conditioning occurred through the process of grading assignments or an educator praising a reticent student for contributing to a group discussion.

9.2.2   Cognitivism

Wakefield (2007: 170) noted that in the 1970s, behaviourism 'was overtaken by a variety of research results that yielded anomalies revealing its limitations as an overall account of psychological functioning'. Moreover, as Weegar and Pacis (2012: 11) argued, 'as the field of psychology continued to evolve, researchers began to reject behaviourism and seek ways to identify cognitive processes in learned behaviours'. Thus, although behaviourism was still a 'guiding influence' in education, its principles began to be criticized for 'providing a rather bounded 'input/output' understanding of learning' (Selwyn, 2011b: 70). Lee and Lin (2009: 59) and Jarvis (1988: 47) note that, for this reason, cognitivist theories emerged in the 1970s and 1980s as researchers studied the influence of mental processes on learning, developing in the process, according to Selwyn (2011b: 70), 'computational metaphors of the mind – that is, descriptions of how the mind 'computes' information'. Selwyn (ibid.: 71) explains that

> this computational orientation of cognitive psychology led to the development of computer-like models of the mind, involving three main stages of information processing where 'input' first enters a sensory register, then is processed in the mind's short-term memory, and is then sometimes transferred to long-term memory for storage and retrieval.

The emphasis in a pedagogy influenced by cognitivist theory, particularly that proposed by Piaget, is that students should be engaged in 'learning by 'doing' rather than learning by being instructed' (Selwyn, 2011b: 72) and therefore moves the emphasis of learning 'beyond issues of behaviour and introduces an enhanced notion of learner control' (ibid.). Rogers (1993: 46) explains:

> These theories point to the active engagement of the mind in relation to the matter under consideration. They stress the processes involved in creating responses, the organisation of perceptions that goes on in the mind, the development of insights. In order to learn, understanding is necessary; the material must be marshalled step by step and then mastered. The setting of goals is related to each part of the material encountered. Feedback is seen as an essential element in the process of learning, not separate from it.

Although this set of views may be seen as laying emphasis on the active involvement rather than the passivity of the learner, in essence this activity is controlled by the inherent structure of knowledge itself. The knowledge that the 'teacher-agent' (Rogers 1993: 47) orders and the learner seeks to master dominates the process. Therefore, epistemologically, cognitivism shares with behaviourism an objectivist view of knowledge (Pérez Cavana, 2009: 2). Moreover, also like behaviourist theories, cognitivist theories have been criticized for 'encouraging a strongly individualistic approach to learning, and perhaps losing sight of the social nature of human learning' (ibid.).

The reviewed literature confirmed that while behaviourist and cognitivist theories of learning have continued to influence the ways in which education is shaped, the educational debate, and particularly that about e-learning, in the last decade was dominated by an offshoot of cognitivist theory, that is, constructivism, in its various forms and derivatives.

9.2.3   Constructivism

Constructivism provided the epistemological underpinning of the present research project and its basic assumptions as applied to research, have already been discussed in section 2.3.3. The literature review revealed an enormous range of definitions of constructivism (see Steffe and Gale, 1995; Phillips, 2000; Pérez Cavana, 2009), and its offshoots including *constructionism* (Papert, 1980) and *connectivism* (Siemens, 2004). In these different strands of constructivism there is however a common epistemological creed, as Pérez Cavana (2009: 3) puts it, 'our beliefs and perceptions of the world are purely human constructs'. In 'constructivist pedagogy', therefore, learning is considered to occur when the learner constructs his or her own knowledge and understanding.

Three major perspectives exist in constructivism. The first is built on Piaget's (1950, quoted in Seifert and Sutton, 2009: 23) cognitive theory and called 'cognitive', 'psychological' (Seifert and Sutton, 2009: 23) or 'individual constructivism' (Moreno, 2010: 298). This form of constructivism maintains that knowledge is 'constructed' by the individual, acting as a 'lone scientist' (Pritchard, 2009: 24), through the process of assimilation, accommodation and equilibration as described by Piaget (1950). Consequently, pedagogically, according to Woolfolk (1993: 65), the key idea is that the student must be actively engaged in the learning process to be able to construct his/her own knowledge aided by an educator who has a significant role in determining how the learner 'constructs' knowledge.

'Cognitive constructivism' has an inherent philosophical dilemma: it calls for the reconstruction of an ontological objective reality as in cognitivism (Rogers, 1993: 47; Pérez Cavana, 2009: 3), that is, it considers the learner to be involved in the construction of knowledge that already exists. Thus, Ernst von Glasersfeld (1989: 162) proposed the second perspective of constructivism: 'radical constructivism'. This considers knowledge to be a subjective reality constructed by the individual. He argued that

> the revolutionary aspect of constructivism lies in the assertion that knowledge cannot and need not be 'true' in the sense that it matches ontological reality, it only has to be 'viable' in the sense that it fits within the experiential constraints that limit the cognizing organism's possibilities of acting and thinking. (ibid.)

Pedagogically, therefore, 'radical constructivism' calls for the educator to take no directive role in his/her teaching while the learner is required to take an independent role in his/her learning.

The third type of constructivism is called 'social constructivism' and builds on Vygotsky's (1978), Bruner's (1983) and Bandura's (1997) social cognitive theories which consider learning as an active social process in which learners construct new ideas and concepts based on their current knowledge (Pritchard and Woollard, 2010: 16). Dialogue – through social interaction, cooperation and collaboration within a learning community - the

central theme in the model proposed through this research is considered, in social constructivism, to be 'the vehicle by which ideas are considered, shared and developed' (Pritchard, 2009: 24).

Dialogue is also very important in Vygotsky's 'zone of proximal development' (ZPD). This, according to Vygotsky (1978: 86),

> … is the distance between actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers. What children can do with the assistance of others might be in some sense more indicative of their mental development than that they can do alone.

In other words, in his/her ZPD a learner is able to work effectively, but only with support (see figure 9.1, below). Moreover, as Vygotsky (1987: 211) also claimed:

> What the child is able to do in collaboration today he will be able to do independently tomorrow.
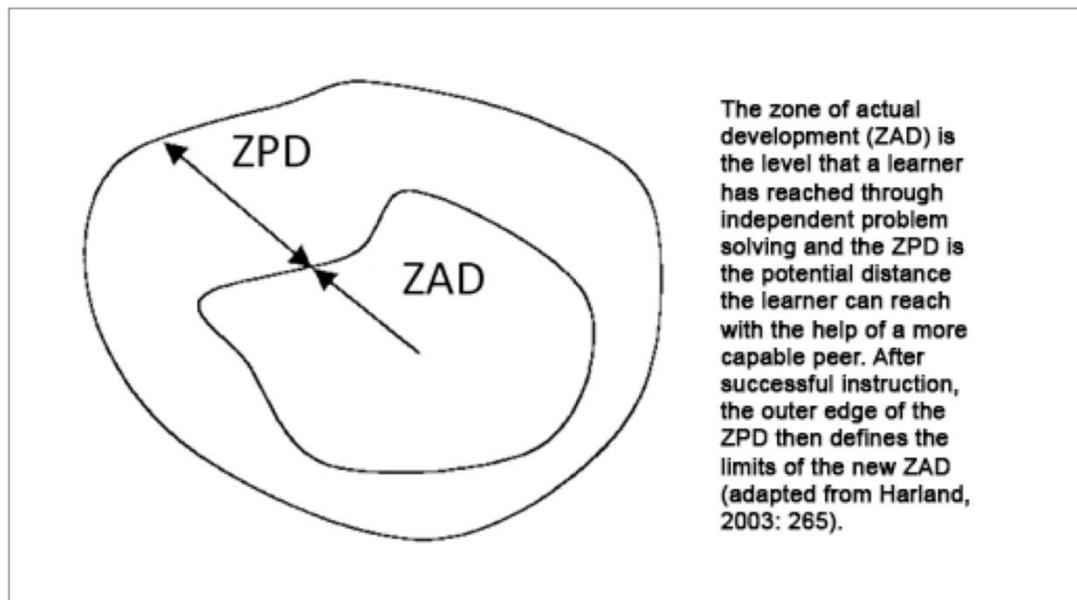

Figure 9.1 - The zones of actual and proximal development

In the context of schooling, a pupil can move into the higher level of development by receiving support from either or both the significant adult,

that is the teacher, or other pupils who are more knowledgeable and/or skilful (Pritchard and Woollard, 2010: 14). In the context of higher education, the significant others are the lecturers or e-educators and the more knowledgeable, capable and/or experienced peers (Harland, 2003: 264).

In both contexts, the literature reviewed argued that this process is part of a larger educational process which Bruner (1975) called 'scaffolding'. This has been defined as 'the process of providing higher levels of initial support for students as they entered the ZPD with the gradual dismantling of the support structure as students progressed towards independence' (Harland, 2003: 268). According to Pritchard and Woollard (2010: 41), to be of benefit, the scaffolding must be temporary and should 'slowly be removed' (Moreno, 2010: 91) and 'a new one built to help construct the next stage of learning' (Harland, 2003: 268). In this process students would be taking 'on more responsibility for their own learning' (Moreno, 2010: 91) reducing 'dependenc(y) and helplessness' (Pritchard and Woollard, 2010: 41).

The empirical data reported in the present study provided various examples of scaffolding. For instance, the students in the BScHS programme were introduced to online learning through face-to-face sessions and throughout the first months of the course, the educators were always available for meetings, online or otherwise, with their students [§5.3.3]. The BScHS lecturers also encouraged students to help each other out (Michelle, P9_15:15).

Brown (2006: 109) noted that most 21st century education policies, models and practices focused on constructivism, rather than other learning theories. Taken together, the constructivist theories propose a pedagogy, in which the student is central to the learning process wherein the teacher must assume a lesser active role so that the learner's construction of knowledge is not influenced or contaminated by the teacher's knowledge. In this scenario, White-Clark, DiCarlo and Gilchriest (2008: 44) note, the

teachers must assume 'the role as "guide on the side" which requires them to step off the stage, relinquish some of their power, and release the textbooks to allow their students to be actively engaged and take some responsibility of their own learning'. The educators who were involved in the predominantly dialogic e-learning experiences investigated in this research made a similar argument. One educator insisted that, in his e-learning experiences, rather than `dishing-out` content, he moved on `from a sage on stage to a guide on the side` (John, P23_29:29). Similarly, another educator confirmed that `I see myself as being on a stage and I prefer my role to be backstage … I prefer to see myself and my students as if we're in a play, where they're all onstage while I'm helping them from backstage` (Anna, P23_40:40).

The model proposed in Chapter 8 indicates that dialogue does not only help the individual to learn within a group. When used sensitively by a teacher, dialogue can produce a more democratic learning environment and consequently, can empower the students to act on issues of common concern such as social injustice. This did not find convergence with the theories presented in the preceding literature. The review of literature indicated that the political dimension of education could be explained through the work of John Dewey.

9.2.4   Dewey and his democratic project

For Dewey 'education was part of a broader project that encompassed an exploration of the nature of experience, of knowledge, of society, and of ethics' (Smith, 2001). As such, argues Kelly (1995: 87), Dewey offers us 'the ideal bridge from theories of knowledge, to democratic theory and onwards to education theory'. For Dewey (1929: 294), education was the

fundamental process to social justice and democracy and in his *Pedagogic Creed* he insisted that

> Education is a regulation of the process of coming to share in the social consciousness; and that the adjustment of individual activity on the basis of this social consciousness is the only sure method of social reconstruction.

Dewey (ibid.: 292) argues that education must begin with 'insight into the (student's) capacities, interests, and habits'. In his work, particularly in *Democracy and Education* (1916) and *Experience and Education* (1938), Dewey called for the democratization of education and, thereby, the placing of the student at the centre of the educational process. In more modern literature, Dewey's creed has often been restated as 'student-centred learning' where, according to Sherman (2009: xvii) 'the student is challenged to approach each subject, academic discipline, or assignment through the lens of her or his interests and where the faculty's role is in part to encourage and guide the student'.

Dewey (1929: 292) also believed that 'the school is primarily a social institution' and, thereby, 'education being a social process, the school is simply that form of community life in which all those agencies are concentrated that will be most effective in bringing the child to share in the inherited resources of the race, and to use his own powers for social ends'. He argued that educators must consider teaching and learning to be an active and 'continuous process of reconstruction of experience' (Dewey, 1938: 38). Authors, such as Jarvis (1985; 1988), Jarvis and Griffin (2003), Pérez Cavana (2009) and Jackson (2012), note that, although Dewey's primary focus was primary education, this and most of Dewey's other philosophical observations hold true for higher education – the context of this Grounded Theory investigation. Dewey's theoretical project is also important for online education (Karen, Garrison and Richardson, 2009; Pérez Cavana, 2009).

The present study indicated that educational programmes, such as the BScHS, could achieve Dewey's educational and political goals – that of

creating a democratic learning environment which over spilled into the public sphere. However, pedagogies inspired by the theories described in the foregoing, that is, behaviourism, cognitivism and constructivism, as applied to education, cannot, on their own, offer a language of critique of this phenomenon. For this reason, this researcher looked for literature that considered education to have a democratic political agenda bent towards social justice and egalitarian principles. In this process the researcher revisited what Joe L. Kincheloe (2005) called 'critical constructivism' or what is more popularly known as 'critical theory'.

9.2.5 Critical theory of education

The basic tenet of critical theory is that there is no such thing as a neutral or apolitical educational process: education is therefore either for domestication or liberation (Freire, 1970). Thus critical pedagogy, of its very nature, is 'a political, moral, and critical practice' (Giroux, 2006: 31). As Shaull (1970: 34) argues in his preface to Paulo Freire's (1970) book 'Pedagogy of the Oppressed'

> Education either functions as an instrument that is used to facilitate the integration of the younger generation into the logic of the present system and bring about conformity to it, *or* it becomes 'the practice of freedom', the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world.

Critical theory, first proposed as an all-embracing sociological Freudo-Marxist theory by the Frankfurt School which included such figures as Max Horkheimer, Theodor W. Adorno, Walter Benjamin, Leo Lowenthal, Eric Fromm, Herbert Marcuse, and later Jurgen Habermas, shares with constructivist theories the credo that education is a social and dialogical activity through which knowledge is constructed. However, unlike other constructivist theories, critical theory also offers a political orientation to the critique of knowledge construction in society (McLaren, 1989: 159).

The critical educational theorists, including Peter McLaren (1989; 1995), Michael Apple (1979), Joe L. Kincheloe (2005), Henry Giroux (2006; 2007; 2010; 2011), Antonia Darder (2002; 2003), Douglas Kellner (2003), and Peter Mayo (1999; 2006; 2008), drew or continue to draw from a vast range and variety of radical theoretical positions including Marxism, feminism, and, lately, the 'politics of indignation' (Mayo, 2012). They also drew from the work of theorists such as Habermas and other Frankfurt School sociologists, Michel Foucault, Myles Horton, Donaldo Macedo, Ira Shor, Antonio Gramsci, and above all, the Brazilian Paulo Freire who 'occupies a hallowed position among the founders of critical pedagogy' (Giroux, 2011: 152). Critical theorists insist for a pedagogy 'capable of creating the conditions for producing citizens who are critical, self-reflective, knowledgeable, and willing to make moral judgments and act in a socially responsible way' (ibid: 3). As Hytten (2006: 229-230) puts it, critical pedagogic approaches emphasise

> the importance of disrupting taken-for-granteds, finding spaces for student voice and agency, challenging the reproduction of inequitable practices, and balancing both critique and imagination.

A very important concept in critical pedagogy is that of 'hegemony' as proposed by the Italian thinker Antonio Gramsci (1971; 1992). McLaren (1989: 174) provides this accessible definition

> Hegemony refers to the moral and intellectual leadership of a dominant class over a subordinate class achieved not through coercion (i.e., threat of imprisonment or torture) or the willful (sic) construction of rules and regulations (as in dictatorship or fascist regime), but rather through the general winning of consent of the subordinate class to the authority of the dominant class. The dominant class need not impose force for the manufacture of hegemony since the subordinate class actively subscribes to many of the values and objectives of the dominant class without being aware of the source of those values or the interests which inform them.

Gramsci argued that the institutions that form civil society, including schools and Universities, reinforce this hegemony. However, instead of calling for the 'deschooling of society' as Illich (1971) did many decades later, Gramsci proposed a 'war of position', that is, a 'process of wide-ranging social organization and cultural influence' (Mayo, 1999: 36) in which

schooling played a pivotal role. In this process, teachers organic to the subaltern groups must work within the system in order to effect an 'intellectual and moral reform' (ibid: 41) to eventually, first create a democratic learning group, and eventually an egalitarian society. Paulo Freire also called for educators to engage with the 'oppressive' system by tactically 'working inside of the system' (Horton and Freire, 1990: 202) and being 'strategically outside' (Freire, 1991, quoted in Mayo, 1999: 71; Mayo, 2007). Freire himself set the example by working as Education Secretary in São Paulo (Mayo, 1999: 58) to shape its educational policies through his emancipatory ideas until his death in 1997 (Giroux, 2011: 152). This finds resonance in the research data and the theoretical model proposed: the educators at the University of Malta who want to provide their students with a non-traditional dialogical e-learning experience have to 'work against the grain' (Kellner, 2001: 233) of what is otherwise a traditional educational environment which, like many Universities, does not reward pedagogical innovation (Jones and Lau, 2009: 43; Williams, 2007a: 11).

Giroux (2011: 152) succinctly describes Freire's legacy to critical pedagogy:

> Freire devoted both his passion and his principles to help students develop a consciousness of freedom, connect knowledge to power and agency, and learn to read both the word and world as part of a broader struggle for justice and democracy.

Freire's (1970) 'pedagogy of the oppressed' is rooted in his experience of teaching illiterate and oppressed people in Latin America, however, the critical pedagogists agree, his theoretical and pedagogical insights are more relevant today than they were when they were first published because they give the students the opportunity 'to be able to reflectively frame their own relationship to the ongoing project of an unfinished democracy' (Giroux, 2011: 157).

Dialogue is a very important element in the pedagogy proposed by Paulo Freire. In one of his most celebrated quotes, Freire (1970: 67) argues that:

through dialogue, the teacher-of-the-students and students-of-the-teachers cease to exist and a new term emerges: teacher-student with students-teachers. The teacher is no longer merely the-one-who-teaches, but one who is himself (sic) taught in dialogue with the students, who in turn while being taught also teach. They become jointly responsible for a process in which all grow.

Freire (1985: 177) stresses that educators 'can learn a great deal from the very students (they) teach' and must therefore help develop educational encounters in which they and their students learn from each other through a critical dialogical encounter 'co-investigating the object of knowledge' (Mayo, 1999: 65; Mayo, 2007). In Freire's (1976: 76) words:

> Educator and learners all become learners assuming the same attitude as cognitive subjects discovering knowledge through one another and through the objects they try to know. It is not a situation where one knows and the others do not; it is rather the search, by all, at the same time to discover something by the act of knowing which cannot exhaust all the possibilities in the relation between object and subject.

This is also reflected in the model presented in Chapter 8. When engaged in dialogue, whether face-to-face or online, the individual student could share his or her lifeworld – that includes his or her knowledge, experiences and oppression (if the case) - with other students and educators and thereby contribute to the collective construction of knowledge [§8.4(i)]. This enabled a more democratic learning environment in which the educators themselves, at times, became learners [§8.4(vii)] as has happened in the BScHS:

```
Apart from being lecturers, they're nurses too. They
learn from us, the course works two ways. I work in a
ward and I'm learning something from that ward, so I
can share it in the forums we have. The lecturers
themselves are also learning from us. (Cecilia,
P5_67:67)
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On the other hand, Freire (1970: 72) argues that mainstream education is characterised by what he calls 'banking education', in which the teaching and learning process is

> an act of depositing, in which the students are the depositories and the teacher is the depositor. Instead of communicating, the teacher issues

communiqués and makes deposits which the students patiently receive, memorise and repeat.

In the theoretical model presented in the previous chapter, these methods, through which the teacher is the only dispenser of knowledge while the learners are its passive recipients, are referred to as 'traditional approaches' [§8.5]. Freire argues that these 'prescriptive' methods encourage submissiveness, stifle creativity and critical thinking and therefore facilitate the reproduction of unequal social relations between students and educators (1970: 31). Under these conditions, even freedom becomes a fearful thing for the students (Mayo, 1991: 20). Thus, 'banking education' serves to 'domesticate' rather than 'liberate' human beings (Freire, 1970: 179) contributing against the democratic project.

All the students involved in this research agreed that their pre-university educational experience in Maltese schools was 'dominated by the teacher' (Mary, P9_56:56) and they learned the knowledge offered by their teachers as set in the primary, secondary and post-secondary curricula. Literature from the local context confirms this reality (see, for example, Baldacchino and Mayo (1997: xxi)). Baldacchino and Mayo (ibid.), argue that banking education is pervasive in Maltese schooling and, in the traditional classroom, 'the content and process of educational activity emanates from the teacher illuminary, while the pupils dutifully interface with the knowledge, values and mores of the formal and hidden curriculum'. This was very recently supported by the former Dean of the Faculty of Education, Professor Carmel Borg, in an interview (Carabott, 2013: 3) which discussed the results of two international studies: the '*Trend in International Mathematics and Science Study*' (TIMSS) (Mullis et al., 2012a; Martin et al., 2012) and the '*Progress in International Reading Literacy Study*' (PIRLS) (Mullis et al., 2012b). In the first study Malta ranked 40[th] out of 50 countries in science skills and 28[th] in mathematics skills, in the other study, Malta ranked 35[th] out of 45 countries. Borg (in Carabott, 2013: 3) argues that these poor results were obtained mainly because 'generations of (Maltese) students have been schooled in lower order cognitive skills …

memory work and regurgitation' rather than being engaged in an education that develops their 'higher cognitive skills … including problem-solving, creative and critical thinking, enquiry-based learning and reasoning' (Carabott, 2013: 3). Moreover, Borg also claims that

> nearly all of his students (at the Faculty of Education) identify themselves with the traditional conservative transmission model, which sees teachers sitting upfront imparting knowledge while students absorb and consume the information passively.

The effect of this model on prospective teachers, even though through their teacher's training programme they would have gained 'awareness about … (its) repercussions' including 'the democratic deficit it produces', is 'a very sad passivity and a phobia of being critical'. He insists that the schooling paradigm is so pervasive in Malta, that when the qualified teachers 'land a teaching job, they generally reproduce the schools' conservative and hierarchical culture' (ibid.).

Borg's observations are confirmed by the teachers' sample in this research who are not only using 'banking education' (Freire, 1970) methods with their school children but want to learn primarily through traditional teaching methods themselves [§8.5].

This situation is not unique to the Maltese context: similar educational scenarios exist in the US (Giroux, 2011) and the UK (Laurillard, 2002a: 24; Williams, 2008: 214) and Williams (2009: 1) notes,

> Generally speaking, national curricula and the educational institutions which transmit their values (and content), are relatively static and have not kept pace with the changing practices and needs of an emerging 21st Century knowledge economy.

Speaking specifically of the UK educational dimension, Williams (2008: 214) also notes that 'school teaching … remains a conservative profession possessed of a massive inertia which has enabled it to remain largely impervious to the reform agendas of successive governments'.

This sort of schooling, the data indicated, moulded the younger and older students involved in this research into passive learners who, once engaged in a university course, preferred traditional over innovative forms of education [§8.5]. The data also showed that these students were fearful of new educational experiences – including dialogic e-learning.

Mayo (1991: 23), drawing upon Freire's philosophical insights, noted that learners 'conditioned by years of exposure' to banking education would not be 'disposed to partake of a dialogical, democratic education'. Moreover, such conditioning might lead learners 'to resist attempts at a dialogical education and bring pressure to bear on their educators to adopt traditional, tried and tested methods of teaching' (ibid.). Mayo's thinking finds convergence in the data which confirm that the students involved in the research knew 'nothing other than passive forms of learning' (Patrick, P20_15:15) before engaging in the dialogical e-learning experiences and felt uncomfortable when involved in any educational approaches in which they needed to take a more active and creative role.

9.3   Higher Education

The data in this study indicate that the 'traditional schooling paradigm' (Patrick, P20_15:15) is pervasive at the University of Malta where most lecturers do 'not have a pedagogic background' (Anna, P23_79:79). Some lecturers, it was reported, sit down in the classroom, with notes in their hands, while delivering their lecture 'using the same approach they experienced as students thirty years ago' (Anna, P23_79:81) while the students took down notes without challenging the knowledge dished out by their teachers [§8.5]. The literature supports the hypothesis that this is a global phenomenon (see, for example, Giroux (2007; 2011) for the North American context, Laurillard (2002b) and Hussey

and Smith (2010) for the UK context). In the UK, Hussey and Smith (ibid.: 130), argue, the 'finest universities (in) … the last half century … have grown (in terms of reputation), but their teaching and research procedures … have undergone only minor alteration' and Laurillard (2002a: 20) notes that,

> the dominant model is still the transmission model, with the dominant learning technologies still being those it has spawned: the lecture, the book, the marked assignment. Academics have been under such pressure to meet research demands and teach larger numbers of students that they have been unable to go beyond the traditional forms of academic teaching.

This is not consonant with the democratic project envisioned by Dewey, and also by Freire, who both looked at education as a 'lifelong education process' (Wain, 1984: 257), which, at all levels of formal education, must liberate not domesticate the student. In this regard, Dewey (1929: 35) noted

> Since life means growth, a living creature lives as truly and positively at one stage as at another, with the same intrinsic fullness and the same absolute claims. Hence education means the enterprise of supplying the conditions which insure growth, or adequacy of life, irrespective of age.

Higher education is thus part of this democratic lifelong educational project. Yet, a large corpus of scholarly work, particularly that dealing with critical education (see, for example, Cooper, Hinkson and Sharp, 2002; Giroux and Searls Giroux, 2004; Giroux, 2007; 2010; 2011; Macrine, McLaren and Hill, 2010; Mayo, 2010; McArthur, 2010) shows that the post-industrial and contemporary university has become 'democracy's nemesis' (Giroux, 2009) because it has been appropriated by the market- and business-based neoliberal logic (Bach, Haynes and Smith, 2007: 13) that exhibits 'disdain for both democracy and publically engaged teaching and scholarship' (Giroux, 2009: 670). According to Giroux (ibid.), in his critique of higher education in the USA, the 'academy is under siege as it aligns itself with corporate power and market values' and is, consequently, abandoning its role as a democratic public sphere. Giroux (ibid.) also contends that

> Instead of being a space of critical dialogue, analysis, and interpretation, it is increasingly defined as a space of consumption where ideas are

validated in instrumental terms and valued for their success in attracting corporate and government funding.

Similar critiques have been made of other higher education systems, including those of Australia (Sanderson and Watters, 2006), the UK (Williams, 2007b) and Europe in general (Enders, Weert and Palgrave, 2009; Enders, de Boer and Westerheijden, 2011), and Malta in particular (Bonanno, 2004; Mayo, 2011). The authors agree that this 'corporatisation of higher education … is seeing the loss of traditional values and practices … such as (innovative) pedagogical practices, research, … community service, collegiality and academic freedom' (Sanderson and Watters, 2006: 317). In this new right-wing scenario John Dewey's democratic vision is either 'willfully (sic) ignored, forgotten, or becomes an object of scorn' (Giroux, 2011: 3).

In this context, higher education should not only produce students who are 'knowledgeable' and 'skilful' in specialised areas of research but individuals who are ready to 'contribute to the quality of public life' (Dewey, 1916: 51) primarily as engaged, thoughtful and responsible citizens. This can be achieved through a critical constructivist pedagogy, a 'pedagogy of the question' (Freire, 1970), where the students do not engage in learning within the diverse disciplines without engaging actively with the knowledge they receive.

The university should therefore fulfil two important roles. Firstly, it must equip people with the knowledge and skills required for participating effectively in the labour market and learning society. Secondly, it must also educate them to reflect and act on any workplace or professional inequalities, 'conscientise' (Freire, 1970) them about democratically just forms of work, and 'identify and challenge those injustices that contradict and undercut the most fundamental principles of freedom, equality, and respect for all people who constitute the global public sphere' (Giroux, 2011: 5). The present investigation and the model presented in Chapter 8 indicate that this objective can be reached within a university, such as the

University of Malta, that is immersed in a hegemonic culture of schooling through a dialogic pedagogy. The BScHS students not only gained workplace knowledge and skills but, as a group, and thinking collaboratively, identified unjust workplace practices, reflected on these injustices and acted upon them [§4.4.7]. Freire (1970) would call this praxis: action upon critical reflection. Thus, as McArthur (2010: 301) notes, critical pedagogic values and practices must be ingrained within the disciplines themselves rather than in purposely designed educational spaces intended to engage students in critical dialogue.

The model presented in the previous chapter suggests that technology, particularly e-learning, with its affordances for critical dialogue and the collaborative construction of knowledge [as will be argued in §9.4, below], can help the contemporary and future University achieve these objectives. A pedagogy aided by technology can help students acquire the necessary cultural capital, knowledge and skills to survive and excel in a post-Fordist economic reality, and also overcome any social and workplace inequalities through the development of an active, critical and democratic consciousness.

9.4   Technology and Education

In the adult literacy programmes he devised in the 1960s for Brazilian peasants, Freire (1973: 50) made use of slide projectors (cheap and imported from Poland) to project 10 film slides designed by the well-known artist Francisco Brenand. The images created by Brenand, on Freire's instructions, were projected on walls in the houses of peasants who were seeking to become literate because they would otherwise be barred from participating in the Brazilian political process as voters. Brenand's images were 'codified pictures' (Freire, 1973: 42) intended to foster a collective learning environment within the programme's 'culture circles' (Freire, 1972:

63) – 'two-month-long literacy programs that were pronouncedly successful by combining training in reading and writing with lessons in self-reflection, cultural identity and political agency' (Kahn and Kellner, 2007: 435). This work was considered to be so 'subversive' that Freire was eventually exiled after the *junta* took power in 1964 (Giroux, 2011: 152).

Freire's relationship with technology has not yet received a lot of attention in the literature. However, as his use of technology in his literacy campaigns indicates, Freire believed strongly in the effectiveness of technology in an emancipatory pedagogy (McShay, 2011: 143). As Education Secretary of São Paolo, Freire 'established the Central Laboratory for Educational Informatics' and invested in 'televisions, video cassettes, sound machines, slide projectors, tape recorders, and 825 microcomputers' (Freire, 1993: 152). Indeed, Giroux (2000: 153) notes, Freire believed strongly in the 'powerful role that electronically mediated culture plays in shaping identities, and the importance of the changing nature of the production of knowledge in the age of computer-based technologies'. This notwithstanding, Freire, always had a 'dialectical view of technology … in which he was always cautious of technology's potential to work as an apparatus of domination and oppression' (Kahn and Kellner, 2007: 435). In his ideas about technology Freire was influenced by Herbert Marcuse's (1964) notion of 'one-dimensionality' which 'offered that modern technology and capitalist instruments organize a society of domination in which any possible opposition becomes rationally foreclosed' (Marcuse, 1972 quoted by Kahn and Kellner, 2007: 438)

Ivan Illich (1971; 1973), like Freire, also saw in technology a valuable tool for education. Selwyn (2011b: 156) notes that although 'some of his examples were decidedly low-tech (such as the connection of rural hamlets with a 'spider web' of trails and communal three-wheeled mechanical donkeys)', other ideas anticipated contemporary digital practices. This can be seen, for example, in Illich's notion of a sophisticated 'read/write'

network of tape recorders. In *Deschooling Society*, his most famous work, he argued for an

> unlimited library of pre-recorded tapes, with outlets even in remote villages, as well as an ample supply of empty tapes. This network of tape recorders, of course, would be radically different from the present network of TV. It would provide opportunity for free expression: literate and illiterate alike could record, preserve, disseminate, and repeat their opinions. (Illich, 1971: 77)

Illich, drawing like Freire on Marcuse (1972), but also on Max Weber's (1958) concept of 'instrumental rationalisation', shared with Freire a dialectical view of technology and considered it as both a dominating and liberatory 'tool' in society and in education. For Weber, the process of instrumental rationalisation resulted in the bureaucratisation and disenchantment of existence – a sort of mechanised nullity brought about by 'specialists without spirit' (Weber, 1958: 182 quoted in Kahn and Kellner, 2007: 438).

Though heavily criticised in the 1970s for his 'deschooling' thesis – even by the critical theorists who, contrary to Illich, believed that schools, though part of the hegemonic apparatus, were also sites of counter-hegemonic practice – his work made a comeback in the last two decades in the educational debate due to the widespread use of technology in the public sphere – including schools, formal and non-formal adult education institutions and universities.

Illich's answer to stop technology into turning into tools of domination 'within the rampant technocracy and the globalization of industrialised culture' were the 'tools for conviviality' (Illich, 1973). These included technologies that enabled networking for 'autonomous and creative intercourse among persons, and the intercourse of persons with their environment' (Illich, 1973: 10) - which 'industrial productivity' negated (ibid.). Illich also placed great emphasis on community building through community-based 'learning webs' (Illich, 1971: 72-104) of 'individuals, resources and tools that may be drawn upon to learn' (Selwyn, 2011b: 155). These ideas anticipated the

Internet's democratic networking possibilities including social networks, blogs and wikis.

Seymour Papert (1980; 1993; 1996) developed *constructionism* out of constructivism. According to Papert, both theories share the concept that learning occurs through the construction of knowledge. Like Piaget, Illich and Freire, Papert considers learners to be 'the builders of their own cognitive tools, as well as of their external realities' (Ackermann, 2001: 7). However, Papert (1991: 1) believes that building knowledge

> happens especially felicitously in a context where the learner is consciously engaged in constructing a public entity, whether it's a sandcastle or a theory of the universe.

Educators must therefore engage learners in the active construction of artefacts, aided by technology, rather than the consumption of knowledge (Papert, 1996: 13). They must avoid 'pipeline models of transmitting knowledge' (1991: 1). Papert's ideas have, in the last decade, gained a lot of currency in the digital domain, particularly because the construction of internet-enabled artefacts, such as blogs and wikis, can serve as educational experiences through which participants are also engaged in the construction of knowledge.

Higher education, aided by technology, and inspired by the educational philosophies of Dewey, Illich, Freire and Papert, must therefore not only provide students with the skills, knowledge and credentials needed to build a workforce that will enable a society to compete in the globalised economy. Higher education must also function as 'a deeply civic and political project that provides the conditions for individual autonomy and takes liberation and the practice of freedom as a collective goal' (Giroux, 2010). Thus, students, through a technology-mediated education must be helped to learn the skills of media and computer literacy to be able to negotiate autonomously in the new social environment and gain employable skills and knowledge. They must also gain the 'symbolic and

cultural capital that empowers (them) to survive and prosper in an increasingly complex and changing world' (Kahn and Kellner, 2007: 400). However, a technology-mediated education must also help students to 'read the world' (Freire and Macedo, 1987), by relating and critically interrogating their 'own narratives, social relations and histories to what was being taught' (Giroux, 2010) thereby contributing in the development of 'a more cooperative, democratic, egalitarian and just society' (Kahn and Kellner, 2007: 400).

The literature and the data of the present study strongly indicate that the use of technology in the modern university does not tally with that advocated in the foregoing. Except for a few enterprising initiatives, it falls 'within the banking vision of education' (Freie and Behuniak, 2007: 55). Indeed, various studies (Laurillard, 2002a: 24; Caladine, 2008: 135; JISC, 2008: 36; Guri-Rosenblit, 2009: 38; Cain, 2010: 108; Hussey and Smith, 2010: 67; Kirkwood and Price, 2012: 13) report that the most pervasive technology used in the University classroom is the PowerPoint presentation (and its associated hardware: the laptop, video projector and, in some cases the interactive whiteboard – which is however used primarily as a projection board). Although PowerPoint has many advantages over the straightforward lecture, including, 'it provides structure to a presentation' (Susskind, 2005: 204), it helps in the educational staff's 'improvement and/or modernisation of their performance in the classroom' (Szabo and Hastings, 2000: 176) and, sometimes, serves as 'the Viagra of the spoken word … [and] a wonder pill for flabby lectures' (Van Jole, 2000 quoted in Craig and Amernic, 2006: 147), it has been denounced in the literature for discouraging 'dialogue, interaction, and thoughtful consideration of ideas' (Cyphert, 2004: 80). More significant is that PowerPoint 'locates control in the hands of the teacher' (Freie and Behuniak, 2007: 55) and 'what is gained in the use of PowerPoint is power, control over the audience through quality [slides] … and an unwavering sequenced flow' (Hlynka and Mason, 1998: 45). In the process, 'opportunities for creating a dialogical environment between and among the students and the teacher are lost as

the focus of the darkened classroom is on the slides' (Freie and Behuniak, 2007: 55).

A quasi-similar argument is also made with respect to the use of Internet-based Learning Management Systems (LMSs) and VLEs in higher education, and interactive whiteboards (IWBs) in schools (Williams. 2008: 220). Freie and Behuniak, (ibid: 56) concur with the perception of students and educators interviewed in this research in that the majority of lecturers in Western universities use online learning resources mainly to enhance their lecturing experience thus 'reinstituting a banking system of education' (ibid.).

Many authors argue for the implementation of constructivist online courses in higher education (see, for example, Garrison, Anderson and Archer, 2001; Gold, 2001; Garrison and Anderson, 2003; Goodfellow and Lea, 2007; Donnelly and McSweeney (eds.), 2009; Payne (ed.), 2009; Garrison, 2011). The literature also indicates that there are online courses that are constructivist because they attempt to transform educational encounters from lecturer-oriented to collaborative and dialogical encounters involving all the students and their educator. As will be argued in Chapter 10, when operating from this perspective, teachers become guides who facilitate the development of student interactions with each other and with prior knowledge to create participatory cultures and communities of learning. More specifically, it will be argued that constructivist online courses can create rich learning environments where the democratic disposition of tolerance of diversity is valued, where democratic skills of self-regulation and self-assessment are developed, where students learn the art of collaboration, and where self-motivation is fostered. The constructivist online education effort becomes 'a collective effort to develop critical thinking and mastery of the process of understanding and applying new knowledge' (Hardwick, 2000: 127), objectives, which, at face value, seem consistent with transformative educational aims. Not surprisingly, some authors, including Hardwick (ibid.) and McShay (2011), claim that online

courses inspired by constructivism can fulfill Freire's liberatory educational objectives. This notwithstanding, Freie and Behuniak (2007: 57) note, constructivist online learning without political agency cannot empower the students. Online learning must also be imbued with critical pedagogic values that enable the participants 'to acquire tools for understanding their own social realities and learn ways for re-creating them to reflect the ideals of democracy and social justice' (McShay, 2011: 136). This will enable students to both 'understand how power is exercised with society and to use their democratic rights to change aspects of their society that they consider unjust or discriminatory' (Cummins, Brown and Sayers, 2007: 39).

9.5   Connectivism and connected knowledge

George Siemens (2004) contends that 'behaviourism, cognitivism and constructivism … were developed in a time when learning was not impacted through technology' which 'has reorganized how we live'. According to Siemens (ibid.), in contemporary society technology is 'rapidly diminishing knowledge life', new post-Fordist work requirements are becoming dependent on technology and technology is 'rewiring our brains' – a concept he shares with technophilic commentators like Prensky (2001a; 2001b) and Wegerif (2008; 2013). Moreover, according to Siemens, the 'know-how and know-what are being supplemented with know-where (the understanding of where to find knowledge)'. He therefore proposes 'an alternative theory' (ibid.) he calls 'connectivism'. The basic tenets of this theory are summarised by Siemens (2004) as follows:

- Learning and knowledge rests in diversity of opinions.
- Learning is a process of connecting specialized nodes or information sources.
- Learning may reside in non-human appliances.
- Capacity to know more is more critical than what is currently known.
- Nurturing and maintaining connections is needed to facilitate continual learning.
- Ability to see connections between fields, ideas, and concepts is a core skill.

- Currency (accurate, up-to-date knowledge) is the intent of all connectivist learning activities.
- Decision-making is itself a learning process. Choosing what to learn and the meaning of incoming information is seen through the lens of a shifting reality. While there is a right answer now, it may be wrong tomorrow due to alterations in the information climate affecting the decision.

Downes' (2007) theory of 'connective' or 'distributed knowledge' which is 'created by means of interactions among connected entities' is supported by Siemens (2008: 10) who argues that Downes' 'concept of emergent, connected, and adaptive knowledge provides the epistemological framework for connectivism as a learning theory'. Connectivism thus posits that knowledge is distributed across networks and the act of learning is largely one of forming a diverse network of connections and recognizing attendant patterns (Siemens, 2006). So, in connectivism learning is defined as

> the process that occurs within the nebulous environments of shifting core elements – not entirely under the control of the individual. Learning (defined as actionable knowledge) can reside outside of ourselves (within an organization or a database), is focused on connecting specialised information sets, and the connections that enable us to learn more are more important than our current state of knowing. (Siemens, 2004)

Siemens' and Downes' theoretical accounts have garnered a lot of attention in the educational debate and 'have started a serious discourse … about what learning is in the digital age' (Ravenscroft, 2011: 140). However, these emerging theories have their critics - including Verhagen (2006), Kop and Hill (2008) and Bell (2011) - who note major shortcomings in these theories, including Siemens' (2004) insistence that *only* connectivism holds the notion that knowledge can be non-objective and constructed within a community of learners via technology. The theory is also criticised for the notion that learning can be created by and reside in 'non-human appliances' (Verhagen, 2006; Kop and Hill, 2008). In this regard Verhagen (2006) makes a strong critique against Siemens' idea that objects learn:

> Siemens defines learning as "actionable knowledge" that "can reside outside of ourselves (within an organization or a database)". This is a remarkable definition because learning is not defined as a process but as a

result. If we adopt this definition of learning, then the observation that this knowledge can reside in a database or organisation is trivial.

Above all, presently, connectivism 'is lacking an extensive body of empirical research literature to lend it support' (Kop and Hill, 2008: 7).

Moreover, as Verhagen (2006) notes, connectivism is apolitical and ahistorical and does not address the question of who designs (or has designed) and controls the connective technologies. Indeed, a reading of Suoranta and Vadén's (2010), *Wikiworld,* for example, provides, in this researcher's opinion, a more in-depth critical exploration of networked learning drawing, however, upon critical constructivism. Ravenscroft (2011: 142), echoing Illich (1973), also notes that networked learning did not start with the advent of the Internet and the World Wide Web,

> our social behavior did not begin with social media, but is instead coevolving with these technologies, which arguably provide social opportunities that are more open, and are used more often, than was previously possible with the traditional methods of communication, dialogue, and discourse.

Networked learning can therefore be explained through other theories, notably, critical constructivism. What the connectivists are proposing is therefore not unique. However, as various authors (see, for example, Guder, 2010; Anderson and Dron, 2011; Bell, 2011; Dunaway, 2011; McBride, 2011; Tschofen and Mackness, 2012) have noted, connectivism has given a new impetus in educational debate and practice for collaborative learning, the sharing of knowledge among learners and learning to navigate within the knowledge networks. Moreover, connectivism also puts the onus on the learning process rather than knowledge acquisition – which knowledge often becomes outdated or updated in a short time. As Siemens (2004) puts it, 'the pipe is more important that the content within the pipe.'

In this emerging but contested philosophy proposed by Siemens (2004; 2006) and Downes (2006) there is also convergence with critical

constructivism and the model presented in the previous chapter, in that this philosophy suggests a *pivotal role* for dialogue and dialectic in 'maintaining connections and developing knowledge through them' (Ravenscroft, 2011: 140). Downes' (2006: 1) approach to learning which is based 'on conversation and interaction, on sharing, creation and participation, on learning not as a separate activity, but rather, as embedded in meaningful activity' also finds convergence with the model developed through the present study.

9.6   Concluding comments

Higher education, like most other forms of education, must enable students to read the 'word and world' (Freire and Macedo, 1987). These are two interrelated missions. The university must prepare individuals in diverse disciplines so that they will be able to participate effectively in contemporary and future economies, once they complete their studies. It must also give students the opportunity and ability to reflect and 'frame their own relationship to the ongoing project of an unfinished democracy' (Giroux, 2011: 157), thereby contributing to the democratization process through lifelong education as advocated by Dewey (1916; 1929).

In Dewey's thinking, democracy is 'primarily a mode of associated living of conjoint communicated experience' (1916: 87) and personal experience is the key to his thinking about learning. In his philosophy he therefore places the student at the centre of the educational process and considers dialogue to be an essential element in a pedagogy which seeks the active and 'continuous reconstruction of experience' (1938: 38).   This is the basic tenet of what is regarded, today, as the *zeitgeist* of modern educational theory: constructivism. One of the main derivatives of this philosophy, social constructivism, regards dialogue as the 'vehicle by which ideas are considered, shared and developed' (Pritchard, 2009: 24). A social

constructivist pedagogy therefore sees educators engage less in the transmission of knowledge, 'relinquish some of their power … to allow their students to be actively engaged and take some responsibility of their own learning' (White-Clark, DiCarlo and Gilchriest, 2008: 44) and be 'creators rather than consumers of knowledge' (Papert, 1993: 13).

This active engagement in learning through dialogue, is also important in 'connectivism' (Siemens, 2004) which views learning as occurring within networks of learners connected through digital communication channels, 'constructionism' (Papert, 1993) and 'critical constructivism' (Kincheloe, 2005) or 'critical theory' which acknowledges that education is a 'political, moral, and critical practice' (Giroux, 2006: 31) and is either for domestication or liberation (Friere, 1970). If education is intended to be a 'practice for freedom' (ibid.) from 'hegemonic' (Gramsci, 1971; 1992) and oppressive practices, it must embrace dialogue and move away from the traditional prescriptive modes of knowledge transmission which encourage submissiveness, stifle creativity, and facilitate the reproduction of unequal social relations. Through dialogue educators and students become 'jointly responsible for a process in which all grow' (Freire, 1970: 67). Unfortunately, the hegemonic culture of schooling is pervasive in higher education in Malta, and elsewhere, including the UK and USA, and educators, politically committed to transformative educational practices must work against a system which is very difficult to transform.

Freire (1993) and Illich (1971; 1973), well before the conception of the Internet or e-learning, understood that technology was a powerful medium for a dialogic and emancipatory education. Today, educational institutions including universities have invested in and implemented various technologies aimed to enhance the teaching and learning processes. This technology includes e-learning which, in the universities' traditional educational culture, is mainly used to support traditional teaching methods, namely the lecture, and in many universities, to attract external funding and

tap into the expanding market of students who cannot participate in campus-based courses.

In contemporary and future scenarios, higher education must meet two important objectives: first, it must equip the students with the 'symbolic and cultural capital that empowers (them) to survive and prosper in an increasingly complex and changing world' (Kahn and Kellner, 2007: 440), and second, it must provide them with the critical thinking skills and 'resources to produce a more cooperative, democratic, egalitarian and just society' (ibid.). This is consonant with Dewey's democratic educational project and Freire's credo that education should empower the students with the skills to 'read the word and the world' (1970; Freire and Macedo, 1987). This implicates an ongoing critical dialogical encounter between learners and educators wherein 'critical inquiry, reflection, and negotiation are considered more important than informing about or acquiring static knowledge' (Ravenscroft, 2011). Technology, particularly e-learning, with its affordances for synchronous and asynchronous dialogue and democratic interactions, is very important in higher education for students to achieve both educational objectives.

The literature about e-learning in the context of higher education will be explored in more depth in the next chapter.

Chapter 10

The Literature Review (Part 2) – e-Learning in Higher Education

Perhaps it is time to recast the educational dinosaur and utilize the technologies of e-learning to move away from the transmission modality.
(Garrison and Anderson, 2003: 32)

10.1 Introduction

In the previous chapter the Grounded Theory model developed in Chapter 8 was situated within the wider educational theories debate. This chapter will continue this analytical exploration. However, it will focus on the extant literature about e-learning practice that has emerged, mainly, in the past decade.

The discussion in the previous chapter argued for a move away from the traditional type of higher education - where the educator's main task is to fill learners with his or her thoughts and knowledge through classroom-based lectures - to an emphasis on a critical constructivist approach developed through dialogue, reflection and the collaborative co-construction of knowledge between the participants in the educational process, that may lead to praxis as advocated by Freire (1970). The data of this research indicated that e-learning, with its access to Internet resources, including the social media, and its affordances for synchronous and asynchronous text-based, audio or video enhanced dialogue, collaborative work and

participant democratic interaction, can provide an important space for critical constructivist higher educational efforts.

This chapter is structured as follows: it will first look at the e-learning phenomenon in higher education to establish (i) how online learning is being used in Western universities, (ii) the opportunities and challenges encountered by educators and students in participating in e-learning programmes and (iii) how e-learning can be a catalyst for change in the traditional university. It will then look at the literature about pedagogy in online learning and will critically analyse two main pedagogic models that have been developed in the past decade specifically for online learning, namely, Garrison, Anderson and Archer's (2000) Community of Inquiry (COI) model, and Salmon's five-stage model (2003; 2005). The analysis will try to establish how these models can be integrated and how they can be imbued with critical pedagogic values. The chapter will then also try to analyse the e-educators' and e-students' roles in e-learning and the challenges they face. In the concluding section the researcher will summarise the main issues discussed in the two literature review chapters.

10.2   E-Learning in Higher Education

E-learning has been perceived by the lecturers and students in the present study as that learning which happens mainly through online educational encounters. This finds resonance in the literature. Garrison and Anderson (2003: xi), for example, view e-learning 'as that learning facilitated on-line (sic) through network technologies'. This, Garrison and Anderson (ibid.) contend, 'does not preclude any number of other technologies or approaches, including components of face-to-face educational experiences'. However, for the purposes of this research the discussion will be confined to those learning activities conducted mainly via Internet.

Various claims have been made in the past about the impact of e-learning on higher education. Some authors even predicted that e-learning will be so successful that it will cause the demise of the university campus. Beaudoin (2006: 3), for example, envisioned

> a not too distant future where the geographic hegemony of higher education will be eliminated because students simply won't need to come to a campus to learn, and where the teaching will be less critical to the very raison d'être of higher education.

This has not happened and the literature suggests that, bar a few exceptions (such as the UK's Open University which has a long history of distance education), most higher education institutions are actually struggling with the implementation, development and running of e-learning programmes, particularly the predominantly and fully online ones (Guri-Rosenblit, 2009: 50). Moreover, expensive experiments, most notably the UK eUniversity (UKeU) which, with an initial investment of £62 million (ibid: 112), was intended 'to act as a broker between existing universities in terms of marketing online degrees from British universities' (Conole et al., 2006: 135), failed to attract enough students to function at a profit (Garrett, 2004: 5; Williams, 2007b: 517). Various causes have been identified for e-learning's failure to make the desired, wished-for or expected impact in a market-driven higher education. These include: (i) e-learning initiatives are often not well researched and thereby designed and implemented on the unrealistic expectation 'that if you build it, they (the students) will come' (Darby, 2004: 171); (ii) e-learning initiatives are not planned or implemented cautiously within a traditional institution which resists transformation (Ennew and Fernandez-Young, 2006: 150); (iii) young students who have grown up with technology would take to e-learning 'like ducks to water' (Darby, 2004: 171); (iv) e-learning initiatives lack social interaction (Guri-Rosenblit, 2009: 48); and (iv) in the implementation of e-learning initiatives, greater emphasis is placed on technology and content rather than pedagogy, particularly teaching and learning approaches which seek to develop dialogue and social interaction, often with the presumption that 'e-

learning will force a change in the way (educators) teach' (Darby, 2004: 171).

The literature indicates that e-learning has been introduced into higher education for either, some or all of these three reasons: (i) to increase a university's revenue or to find new funding sources in an increasingly competitive environment (also marked by a general economic crisis) by tapping into regional, national and/or international markets of students who cannot attend campus-based programmes, (ii) to satisfy the needs of contemporary students, who have grown up with computers and digital tools and, therefore, are deemed to learn differently from their predecessors, and (iii) to enhance the teaching and learning process.

Many authors, including Garrison and Anderson (2003), Pittinsky, (2003), Goodfellow and Lea (2007), Crosling and Webb (2005), O'Neil, Singh and O'Donoghue (2004), Williams (2007b), Garrison and Vaughan (2008), Jones and Lau (2009), Hussey and Smith (2010) and Garrison (2011), agree that universities, in the neoliberal and globalized economies, have become 'leaner and meaner' (Biggs and Tang, 2007: 1) due to the ever-shrinking financial support from government and increasing trends towards 'user pays' (Postle and Sturman, 2003: 2). Biggs and Tang (2007: 1) note that

> Twenty years ago, public funding paid for virtually 100% of costs of the tertiary sector, but today that is very far from being the case. Australia, for example, is now heading towards 30% of university funding from the public purse. The bulk of the missing funding comes from student fees. That is having profound effects on both students and on university teaching.

This problem is compounded by another challenge - universities are no longer the sole providers of tertiary education (see, for example, Taylor et al., 2008; Suoranta and Vaden, 2010). As Williams (2007b: 511) notes, in the contemporary knowledge economy, the e-learning technology has 'enabled the infiltration of commercial providers who are cherry-picking the most lucrative subject areas'. Moreover, as Suoranta and Vadén (2010: 2) contend, 'new forms of interaction and knowledge production (via Internet)

are flourishing outside closed education systems' slowly removing from the University its function as the 'sanctuary of knowledge' (ibid: 113). In this context, HE institutions have resorted to e-learning to achieve 'ever-higher levels of performance' to attract more external funding, 'improved value for money' (Jones and Lau, 2009: 40) and larger and more diverse student populations.

E-learning was also introduced into many universities since the 1990s to modernise higher education which functioned within social, economic and cultural realities in which technology was ubiquitous and responsible for tremendous changes in society. Authors such as Anderson (2008: 204) argue that 'educators must not only prepare students for future careers, but also prepare students for the "real world," where state-of-the-art technologies will be encountered on a regular basis'. The introduction of e-learning was also thought to meet what many authors considered to be the new learning needs of the generation of learners (Goodfellow and Lea, 2007: 13) that have grown up with technology, which Tapscott (1999) and Oblinger and Oblinger (2005) referred to as the 'net generation' and Prensky (2001a; 2001b) called 'digital natives'. According to Oblinger and Oblinger (2005: 214) these students have 'multiple media literacies' and are therefore comfortable only in image-rich environments, crave interactivity, and prefer to learn by doing. In a similar deductive vein, Prensky (2001a), citing neurological research, argues that the 'digital native' student's brain is 'wired differently' compared to that of the traditional student. Digital natives, according to Prensky (ibid: 1) are used to the '"twitch speed" of video games and MTV … the instantaneity of hypertext, downloaded music, phones in their pockets, a library on their laptops, beamed messages and instant messaging' and therefore, the university must offer these students educational experiences which mirror their learning style. Educators, according to Prensky (2001a; 2001b), are often 'digital immigrants' and, consequentially, must adapt to this new educational reality. A similar argument is made by a host of other authors, including Long (2005), McNeely (2005), Roberts (2005), Oblinger and Oblinger (2005), Barnes,

Marateo and Ferris (2007), Thompson (2007) and Feiertag and Berge (2008), who insist that 'lecturers' must adapt their teaching methods to this new way of communicating and learning. The traditional approach, according to Prensky (2010: 10)

> is no longer relevant, because students are no longer listening. I often liken this to Federal Express: you can have the best delivery system in the world, but if no one is home to receive the package, it doesn't much matter. Too often, today's students are not there to receive what their teachers are delivering.

Therefore, Prensky (2001a; 2001b), and the authors mentioned previously, argue for a constructivist pedagogy that uses technology as a mediating medium in the educational process. E-learning has been considered, over the past decade, to be one of the best technologies for teaching and learning in higher education, when used with non-traditional pedagogies (see for example, Garrison and Anderson, 2003; Howard, Schenk and Discenza, 2004; Rovai, 2004; Bach, Haynes and Smith, 2007; Cooke, 2008; Guri-Rosenblit, 2009; Inoue, 2010; Njenga and Fourie, 2010; Cahill, 2011; Garrison, 2011; Selwyn, 2011a; 2011b).

Despite the hype that emerged around the assumption made by Tapscott (1998), Prensky (2001a; 2001b) and Oblinger and Oblinger (2005) who were mentioned in the foregoing, and other authors (including, Howe and Strauss, 2000; Monereo, 2004; Carlson, 2005; Dede, 2005; Long, 2005; Barnes, Marateo and Ferris, 2007; Thompson, 2007; Worley, 2011), that the 'technology-savvy' students had new learning needs, other researchers have proved otherwise. For example Martyn (2003), Selwyn (2003), Ali and Elfessi (2004), Heinstorm (2005), Hong (2008) and Guri-Rosenblit (2009) have shown that (i) not all students are confident with technology, and (ii), those who are comfortable with technology may not be automatically comfortable with learning through technology in higher education. These observations are congruent with the data of the present study. Philip (P1_17:17) indeed noted

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The fact that the students, the younger generation are
very competent in using technologies for communication
and entertainment doesn't mean that it is going to
translate to the use of those technologies in learning.
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Moreover, e-learning techniques devoid of or lacking constructivist methodologies were unsuccessful with both young and adult students. Thus, technology does not, by itself, automatically create new pedagogies (Ramsey, 2003: 39).

The literature indicates that, at higher education, e-learning is used for two main pedagogic processes – both intended to enhance teaching and learning: supporting traditional approaches (mainly lecturing) and for dialogical text-based encounters in fully online courses or blended models. The literature however indicates that the use of e-learning to support traditional approaches predominates. Laurillard (2002a: 20), for example, notes that in the UK

> the dominant model is still the transmission model, with the dominant learning technologies still being those it has spawned: the lecture, the book, the marked assignment.

The data obtained in the present study indicate that a similar situation exists at the University of Malta. E-learning resources, including the university's VLE, are mainly being used to support lecturing. Only a few enterprising lecturers are using e-learning for constructivist learning purposes.

10.3 Pedagogy

The model presented in Chapter 8 argued that a successful dialogic e-learning pedagogy consisted of the following: (i) an e-educator who is motivated and trained in both non-traditional and online teaching; (ii) students who are motivated for online learning and who must make a shift in mindset from schooling and (iii) a set of online resources which allows

dialogue between the students and their educator, and between the students themselves, during collaborative learning activities. Moreover, these components must be carefully and creatively integrated in a well-designed course that fosters interactivity and critical thinking through the creation of an active and democratic learning community [§8.7].

The literature was reviewed to situate this element of the model within the extant literature. In this process, two pedagogic models were identified: Garrison, Anderson and Archer's (2000) Community of Inquiry framework and Salmon's (2003; 2005) 5-stage model for e-learning. The relevance and usefulness of these models in relation to the data of this research will be discussed in the following sections.

10.3.1 The Community of Inquiry Model

Morgan (2011) notes that researchers in e-learning have been particularly interested in the pedagogic model developed by Garrison, Anderson and Archer (2000) whose theoretical framework is grounded in Dewey's educational ideas (Swan and Ice, 2010: 1). The Community of Inquiry (COI) framework has gained a lot of currency in the e-learning debate and practice (see, for example, Payne (ed.), 2009, and the Special Issue of *Internet and Higher Education,* Volume 13, 2010) since it was first published, thirteen years ago. In this period the COI framework was 'adopted and adapted by hundreds of scholars throughout the world' (Garrison, Anderson and Archer, 2010). Like the Grounded Theory model presented in Chapter 8, the COI model emerged from the context of computer conferencing in higher education. It also describes learning as occurring within a community of learners democratically engaged in critical inquiry (Rourke et. al., 2001; Rourke and Anderson, 2002; Garrison, Anderson and Archer, 2001; Garrison and Anderson, 2003; Garrison, 2011).

Garrison (2011: 22) explains that, according to the COI model, there are three key interdependent elements or 'presences' that must be considered when planning and delivering an e-learning experience – social presence, cognitive presence and teaching presence. A 'presence', Garrison (ibid.) notes, 'is a sense of being or identity created through interpersonal communication'. Each influences the others and develops progressively over time. Considerable research has confirmed the validity and importance of the framework and an understanding of the role of its constituting elements (Garrison & Arbaugh, 2007). Figure 10.1 shows the relationships of the three elements.
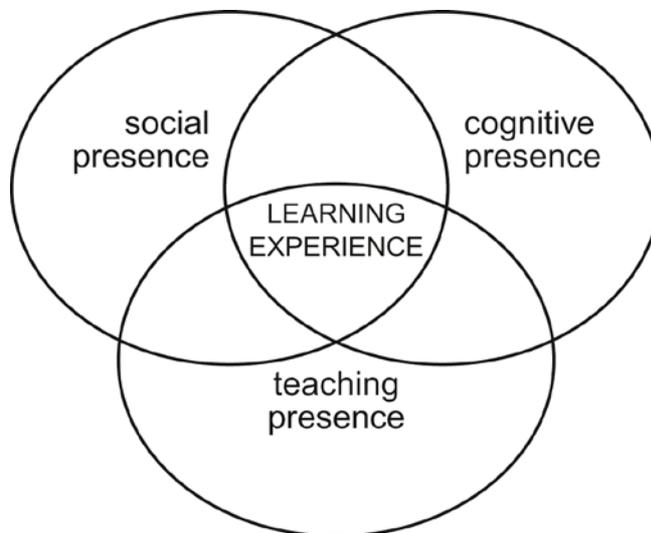
Figure 10.1 - The Community of Inquiry (COI) framework (from Garrison, 2011: 23)

10.3.1.1 Social presence

Social presence is defined as the ability of participants 'to identify with the group or course of study, communicate purposefully in a trusting environment and develop inter-personal relationships progressively by way of projecting their individual personalities' (Garrison, 2009: 352). However, Garrison (2011: 23) notes, online communication provides no visual cues other than words or images and lacks the 'sense of immediacy' of 'real-

time, verbal, face-to-face mode of communication' (ibid: 30) and therefore 'presents a special challenge for establishing social presence' (ibid: 23) as students in the present investigation also noted. Rebecca, like all the DITEL students, preferred face-to-face educational encounters because

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I learn by listening. The more I listen the more I
learn. I panic on my own. I'm not comfortable learning
alone. I want to learn in a group. I feel better.
(P15_23:23)
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Immediacy, argues Garrison (ibid.) 'is important to a supportive and secure learning environment because it reduces personal risk and increases acceptance, particularly during critical discourse that questions ideas and understanding'. This can be addressed by the creation and maintenance of a collaborative experience that nurtures a sense of belonging and acceptance in the learning group. Therefore, as indicated in the Grounded Theory model of this research, the educator must have a central role: she or he must develop and maintain the collaborative experience, for example, by developing initial questions to stimulate group discussions, encouraging camaraderie between students, motivating students to participate actively in the academic inquiry and providing constant feedback without overly interfering in the discussion [§8.8.1].

The social element in the pedagogy inspired by the COI framework, in this regard, finds resonance with Dewey's and Freire's educational theories. This element is also considered as being indispensable in adult education theories - initially developed for face-to-face educational efforts - including the andragogy model proposed by Malcolm Knowles. According to Knowles (1973: 45), an adult has a 'reservoir of knowledge that causes him (sic) to become an increasingly rich resource for learning, and at the same time provides him with a broadening base to which to relate new learning'. It is therefore important for Knowles (ibid.: 46) that adult learners engage in collaborative activities in which every adult's experience is never devalued or ignored, otherwise the adult would not only perceive this as a rejection of his or her experience, but a rejection of him or her as a person. Although

the concept of 'andragogy' has been highly contested for its dubious claims that adults learn differently from children or adolescents and that *all* adults are 'self-directed learners' (Jarvis, 1988: 100) - which contestations this researcher agrees with – Knowles' insistence that each adult should be valued within a community of learning is pedagogically very important and congruent with the COI model and the data of the present study. The learners from the fully online BScHS argued that they felt a stronger sense of belonging within their online learning group when their knowledge and experiences were shared with peers and educators. Cecilia, for example, (P5_67:67) noted that, when her lecturers treated the students `as peers`, she felt more valued as an individual and this helped create a stronger sense of belonging to the learning group. Gilly Salmon's (2003: 28; 2005: 11) five-stage pedagogic model of online learning also places a lot of importance on social presence in the learning process [§9.5.2, below].

Various scientific investigations attest to the importance of establishing social presence in an online community for increased student satisfaction, perceived learning and retention. These include Akyol and Garrison (2008), Caspi and Blau (2008), Garrison (2008), Lowenthal and Dunlap (2010) and Annand (2011). Theoretically, there is agreement in these papers that social presence promotes group identity and cohesion to create a greater sense of perceived and actual learning. Moreover, the recent studies by Boston et al. (2009) and Liu, Gomez and Yen (2009) confirm that there is a significant relationship between social presence and student retention in higher education.

10.3.1.2   Cognitive presence

Garrison, Anderson and Archer (2001: 11) define cognitive presence 'as the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse in a critical community of inquiry'. Garrison (2011: 24) notes that 'reflection is consistent with the ability to

think critically … while discourse relies on trust, communicative relationships, and communication purposefully focused toward understanding a dilemma or problem'. Reflection and discourse, argues Garrison (ibid.), are inseparable in practice. In other words, 'cognitve presence is a condition of higher order thinking and learning' (Garrison, Anderson and Archer, 2001: 11-12) which is vital in higher education.

The concept of cognitive presence was operationalised in terms of the Practical Inquiry (PI) model (see Figure 10.2) developed upon Dewey's (1916) learning theories that emphasise experiential learning. The phases of practical inquiry are defined in terms of triggering event, exploration, integration and resolution. The two axes that structure the model are action–deliberation and perception–conception. The first axis is reflection on practice. Reflection and practice together constitute the shared and personal worlds. The second axis is the assimilation (analysis) of information and the construction (synthesis) of meaning. The quadrants reflect the logical or idealized sequence of practical inquiry (i.e., critical thinking) and correspond to the categories of cognitive presence (Garrison et al, 2000).
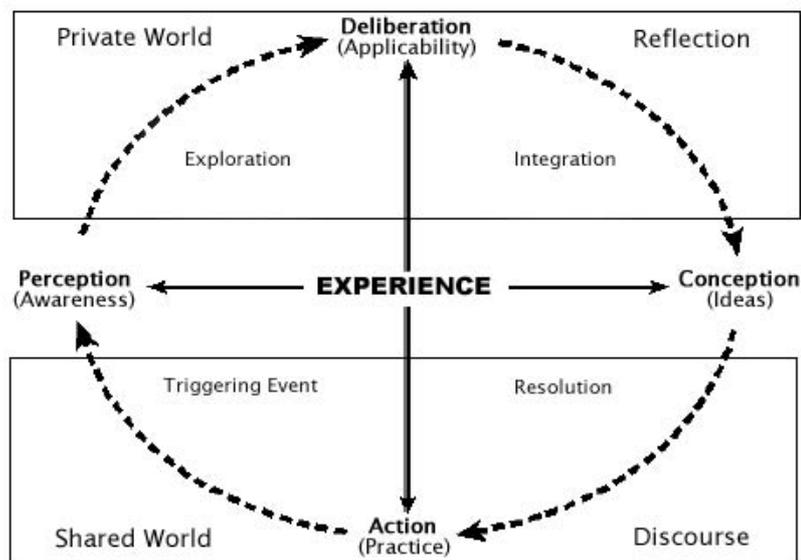

Figure 10.2 - The Practical Inquiry Model (from Garrison, Anderson and Archer, 2001)

The PI model includes four phases in describing cognitive presence in an educational context generally and online learning specifically (Garrison & Anderson, 2003: 46). These four phases are succinctly described in Akyol and Garrison (2011: 236):

1. Triggering event: This phase initiates the inquiry process through a well-thought out activity to ensure full engagement and buy-in from the students. This has several positive outcomes in terms of involving students, assessing the state of knowledge and generating unintended but constructive ideas.

2. Exploration: This phase focuses first on understanding the nature of the problem and then searching for relevant information and possible explanation.

3. Integration: This phase moves into a more focused and structured phase of constructing meaning. Decisions are made about integration of ideas and how order can be created parsimoniously.

4. Resolution: This phase is the resolution of the dilemma or problem, whether that is reducing complexity by constructing a meaningful framework or discovering a contextually specific solution. This confirmation or testing phase may be accomplished by direct or vicarious action.

This literature review found a number of studies that evaluated and confirmed the effectiveness of the PI model on higher-order learning in the online medium (Meyer, 2004; Schrire, 2004; 2006; Cotton & Yorke, 2006; Buraphadeja & Dawson, 2008). Schrire (2004: 491), for example, found the PI model 'to be the most relevant to the analysis of the cognitive dimension and represents a clear picture of the knowledge-building processes occurring in online discussion'. More specifically, synergistic interaction (focused and coherent forms of student–student communication) was found to be significantly associated with higher-order thinking (that is, integration and resolution) as defined by the PI model. She also stated that her findings support the view 'that instructional approaches encouraging collaboration among learners are more effective than instructional approaches based on individual learning ... [and] the findings fit social constructivist theories ...' (ibid.: 494). Schrire (2006: 67) concluded, in another paper, that 'the findings suggest that the achievement of synergistic interaction in computer conferencing leads to deeper learning'.

10.3.1.3   Teaching Presence

In the COI model, teaching presence is considered to be 'a significant determinant of student satisfaction, perceived learning, and a sense of community' (Garrison and Arbaugh, 2007: 163) and is defined as 'the design, facilitation and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes' (Anderson et al., 2001: 5). Garrison (2011: 25) notes that the correct teaching presence in online learning brings together all the elements of a community of inquiry 'in a balanced and functional relationship congruent with the intended outcomes and the needs and capabilities of the learners'. The role of the educator is therefore crucial. This is congruent with the data of this investigation and the proposed model.

Garrison (2011: 54) argues that the COI 'is a learn*ing*-centred rather than a learn*er*-centred approach' and in higher education this distinction 'is more than a subtlety or nuance' because it does not risk marginalising the teacher and the value of creating an educational community of inquiry. He contends that the teacher has a central role in the educational process and explains:

> Education is a unified process where teachers and students have important, complementary responsibilities. The focus is on learning, but not just whatever the learner capriciously decides. An educational experience is intended to focus on learning outcomes that have societal value as well as the ability for the individual to continue learning. (ibid.)

Anderson et al. (2001: 3), Garrison and Anderson (2003: 65) and Garrison (2011: 54) insist that giving full responsibility and control to the learners, as for example, radical constructivists propose, is not conducive to a critical and constructive learning process. Thus, the educator is essential for identifying or guiding the students towards relevant knowledge, designing educational experiences that facilitate reflection and dialogue, and

diagnosing and assessing learning outcomes. This argument closely mirrors data in this project.

This is in agreement also with the pedagogy inspired by Freire's (1970; 1972) theoretical writings. For Freire the teacher's role is central to the learning process although it is non-authoritarian. In this pedagogy, dialogue is essential for the co-investigation of knowledge and the roles of the educator and learner are almost interchangeable, as all learn from each other. However, Freire never intended this to mean that the learner and teacher are on an equal footing. Mayo (2007) explains that, according to Freire (1970), educators must always have a

> certain amount of authority (bestowed on the educator by the learner because of the former's competence in the field of learning and as a pedagogue) which should not be allowed to degenerate into authoritarianism lest the spirit of genuine dialogue be destroyed.'

Garrison (2011: 55) also notes that establishing teaching presence in e-learning is both easier and more difficult:

> It is easier in the sense that the e-learning medium supports sustained and reflective dialogue. It is more difficult, however, in that this medium is inherently different and requires new approaches.

The implication here is that the educators and learners must make a difficult paradigm shift or, as one educator in this study put it, a `'shift in mindset'` (John, P22_21:21), from the traditional transmission forms of education to the more collaborative and dialogical forms of learning suggested by a critical pedagogy inspired COI. This argument is also corroborated by the data of this project.

According to Anderson et al. (2001: 6) the online educator, thus, has three essential roles: (i) instructional design and organisation, (ii) facilitating discourse and (iii) direct instruction. The authors insist that, in most cases in higher education, it is the educator who is responsible for the pedagogic choice and organization of the learning effort, not the students. The

educator must select the course material as well as the appropriate activities – this requires a good 'understanding of the medium of e-learning' (Garrison and Anderson, 2003: 65). With regards to organisational issues, Garrison (2011: 57) notes that the collaborative nature of a community of inquiry and the 'indeterminate nature of the entry and development of knowledge in students will inevitably introduce some uncertainty into the design process' (ibid.).

Garrison (2011: 58 - 59) argues that 'facilitating discourse' involves pedagogical, interpersonal and organisational issues and, the educator needs to be 'more than a "guide on the side" but less than a "sage on the stage"'. That is,

> the teacher must negotiate something more substantial than a rambling conversation yet not just a prescriptive dissemination of information. When students begin to take responsibility to construct collaboratively and confirm understanding, teaching presence has found the appropriate balance. (ibid.)

Garrison (2011: 59) also notes that, despite the constructivist orientation of the COI model, teaching online may often require the educator to adopt authoritative and traditional roles that challenge the 'guide by the side' credo. This role is as important as the other two roles and happens, for example, when the educator needs to diagnose misconceptions, responds to technical concerns or injects knowledge from diverse sources (including pointers to resources). As Freire (1970) notes (although he is never mentioned in scholarly work in the COI debate) the educator's academic and pedagogic expertise can never put him at par with the students, and his authoritative (but not authoritarian) role is as important as his role in creating democratic and critical dialogue.

Various studies confirm the importance of the COI teaching presence construct for perceived learning and satisfaction in online learning. These include Garrison and Arbaugh (2007), Shea and Bidjerano (2009), Garrison, Cleveland-Innes and Fung (2010), Ke (2010) and Morgan (2011).

10.3.2 Salmon's five-stage model

Gilly Salmon (2003; 2005) presents another constructivist model for online teaching and learning. This model is not as comprehensive as the COI model as it focuses specifically upon the developmental progression of learning within computer-mediated conferencing (CMC). This notwithstanding, Mayes and de Freitas (2004: 36) in their review of e-learning models for JISC, note that Salmon's 'model provides a framework for good practice, in engaging learners in online discussion (and) … in its stance on pedagogy … it implies a commitment to constructivist tasks and the greatest possible degree of dialogue'.

Salmon's model for online teaching and learning is presented as a linear and progressive educational process, however, Salmon (2003; 2005) notes that the model can be non-linear and iterative. The model is also very versatile in that, as students gain experience of online learning, its first stages can be 'ignored' focusing more on a dialogic approach in which students and teachers become engaged in the discovery of the 'word and the world' which can lead to action against unjust democratic practices as well as the critical exploration and creation of knowledge. In Salmon's model, dialogue in text-based, video or audio synchronous and/or asynchronous discussion, is also an essential element for a successful e-learning experience.

Salmon (2005: 4) argues that the model was constructed by combining 'new ideas about computer-mediated technologies and well-loved theories of learning and teaching'. These include: (i) social constructivism which, as has been argued in the previous chapter, 'emphasises collaboration between peers and teachers within supportive frameworks, in this case, the online learning environment' (ibid.: 209); (ii) 'situated learning' theory which 'emphasises learning happening in context and the importance of relevant and authentic tasks that can be applied to the participants' everyday learning, working and cognition' (ibid.: 210); (iii) her own practice; and (iv)

action research (Salmon, 2003: 26). In this model collaboration, camaraderie, an active community of inquiry and scaffolding are essential elements for a successful e-learning experience. This also finds resonance in the model developed through the present investigation.
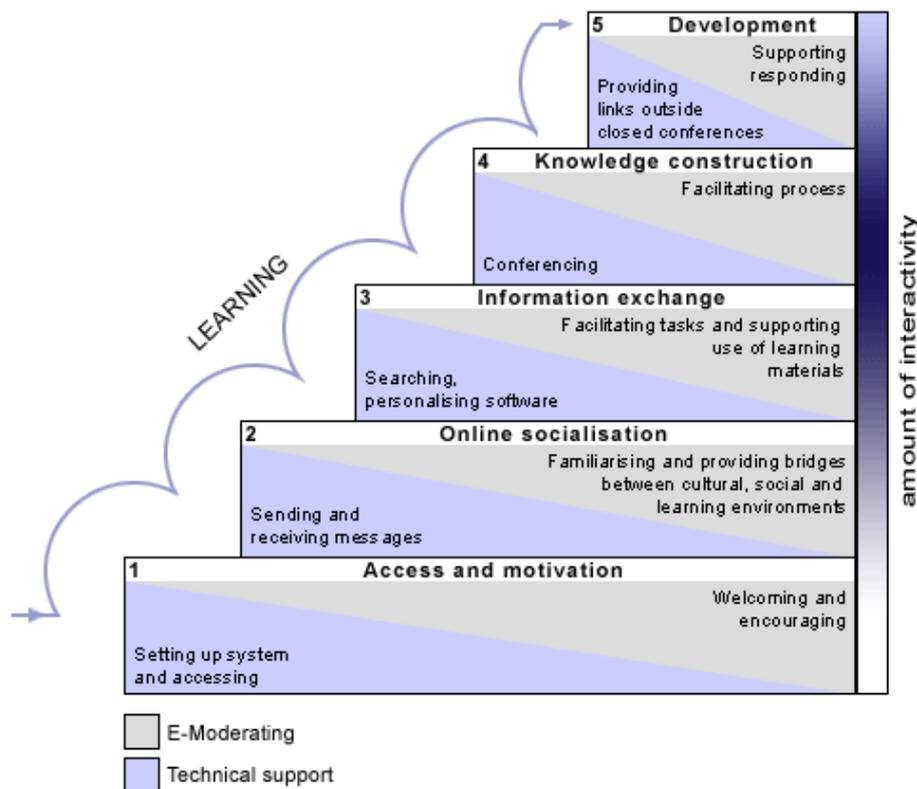
Figure 10.3 - Gilly Salmon's five-stage model of teaching and learning online

Salmon's model consists of five stages. According to Salmon (2003: 29; 2005: 11), in reference to figure 10.3,

> Each stage requires participants to master certain technical skills (shown in the bottom left of each step). Each stage calls for different e-moderating skills (shown on the right top of each step). The 'interactivity bar' running along the right of the flight of steps suggests the intensity of interactivity that you can expect between the participants at each stage. At first, at stage one, they interact only with one or two others. After stage two, the numbers of others with whom they interact, and the frequency, gradually increase, although stage five often results in a return to more individual pursuits. The nature of the interaction and the kind of information and

> messages that participants exchange also change through the steps and stages of the model.

In the first stage the learning community is engaged in educational activities, aptly called 'e-tivities' by Salmon (2005), which facilitate 'individual access and the induction of participants into online learning' (ibid.: 11). Learners are engaged in e-tivities designed by the educator through which they gain technical access skills (for example, how to use a VLE and post a contribution), motivation to participate in online activities and 'the emotional and social capacity to learn with others' at a distance (ibid.: 12). Salmon (2003: 30) explains that this stage also often sees the educators involved in learning - particularly those new to a VLE. She warns that participants should not be trained in this stage and that 'it is not a good idea to offer face-to-face sessions to try to instruct new participants in all the features of the (virtual learning) platform and then to expect (learners) to be able to take part successfully'. This recommendation, at face value, did not tally fully with the observations of this research. Indeed, both the BScHS and DITEL students participated in face-to-face training in the basic functions of the VLE and claimed that this made their introduction to online learning less daunting and, consequently, more pleasurable. However, the lecturers involved in dialogic e-learning claimed that during the introductory sessions only the basic functions of the online medium were taught through traditional approaches. The students were then 'thrown at the deep end' (Anna, P22_183:183). For example, in their Wiki experience, the DITEL students were immediately engaged with the social medium after being given the basic instructions in a face-to-face session (Anthony, P18_162:164). This strategy met with great resentment at first, but developed camaraderie among the students who helped each other out, thereby creating a learning community to solve technical issues, and, as one student claimed, 'we probably would not have learnt as much as discovering on our own through real work' (Thomas, P14_75:75) from the experience in terms of technical skills and learning how to learn from each other and by using Internet sources such as YouTube (Frank, P6_56:56). Thus, in the context of the University of Malta,

where students are fearful of unknown pedagogies, an introductory face-to-face session into the basic functions of the online medium to be used by the learners - serving mainly for initial guidance and to develop motivation in the students - followed by a fuller exposure to the online medium is a better approach than that suggested by Salmon.

Indeed, the model proposed in Chapter 8 suggested that the transition to online learning should be as drastic as possible. The students should be put, as fast as possible, into the deep end, otherwise they would remain stuck in the first stages of the online experience. The students, if offered the safety net of face-to-face teaching, would remain dependent on their educator and would resist higher cognitive and constructivist learning processes as the online programme progressed.

In the second stage of Salmon's model, through active and interactive e-tivities, the educator thrives to develop a community of learning – a process which effectually starts in the first stage. This process 'involves individual participants establishing their online identities and then finding others with whom to interact'. Salmon (2003: 33) notes, as many other researchers do, that although online learning 'offers the affordance of online socialising and networking' it does not, *per se*, that is, without the moderator's intervention, create social interaction and 'social presence' as discussed in section 9.5.1.1 above. Indeed, Salmon (2003; 2005), presents similar arguments to those of the COI framework in favour of social interaction in the online medium. The e-tivities used during this stage should create 'an atmosphere where the participants feel respected and able to gain respect for their views' in order to prevent any student from becoming alienated towards the course. These activities must therefore encourage and develop informal chatting and an increased frequency in the posting of contributions. However, Salmon (2003: 36) observes, as did some educators in this research [§5.3.10], that there are always students who prefer 'lurking' and these should be 'tolerated' because, at this stage, 'it appears to be a natural and normal part of online socialisation'.

By implication, skills-intensive Web 2.0 technologies, such as the wiki or podcasting, should not be used in Salmon's second stage because they would involve the students more in solving technical issues than in socializing. The data in this study corroborate this consideration. Use of less skills-intensive online technologies, such as the 'single simple discussion' [§5.3.7(iii)] forum hosted on Moodle, are more appropriate at this stage than other forms of online interaction [§8.9].

In the third stage, the e-moderator uses activities through which 'participants engage in the mutual exchange of information' (Salmon, 2003: 29; 2005: 11). In this stage, therefore, the e-tivities must encourage two kinds of interaction: interaction with people (as in the previous stages), namely the e-moderator(s) and other participants, and, at higher education, interaction with the academic content. The educator has a stronger teaching presence in this stage: (i) s/he must either identify or produce information to stimulate academic discussion; (ii) the educator must also present this information in a suitable manner (for example, on a website, wiki or blog, in PDF format uploaded on Moodle or in print as in the BScHS course) or provide links to podcasts, videos or scholarly work directly available on the Internet in databases such as EBSCO or via the University's digital library from where participants can retrieve information; (iii) the students are then encouraged to listen to, watch or read this information carefully, reflect upon it and write critical contributions about it; (iv) these contributions are then shared with all the participants in the learning group; and (v) other participants are encouraged to read and comment on the contributions of other participants. Consequently, this develops into an online discussion. This also finds resonance in the data of this research.

Salmon (2003: 38) notes that this stage, compared to traditional teaching and learning situations, is somewhat 'messy' because the learners and moderators may have to deal with a 'potential information overload': participants will be faced with a lot of work to follow and comment on, and,

with regards to the e-moderators, to assess summatively. This requires e-moderators to provide 'good structure, pacing and clear expectations of participants' otherwise the complexity of the online environment at this stage 'can elicit quite uncomfortable, confused reactions from participants and severe anxiety in a few' which might lead to drop outs. The educators can also help the participants develop good time management and organisational skills.

At stage four the focus shifts on course-related group discussions often initiated in stage three. Salmon notes that, 'as conferences unfold and expand, many (but not all) participants engage in some very active learning, especially through widening their own viewpoints and appreciating differing perspectives' (2003: 41) and, at this stage, participants also 'start to become online authors rather than transmitters of information' (Salmon, 2003: 45; 2005: 31). Attempts must therefore be made to 'gradually reduce dependency of the virtual group on the e-moderator' (ibid: 42) and create a less hierarchical relationship between the educator and learners (ibid: 45). The e-moderator at this stage must thereby start to progressively take a '`backstage role`' (Anna, P22_40:40), as one participant in this research put it, to allow students to 'take control of their own knowledge construction' (Salmon, 2005: 29).

This '`backstage role`' implies that the e-educator no longer needs to transmit knowledge or instructions. However, the educator's role is still important: the educator must build and sustain the community of learning and this is done by motivating, challenging, complimenting and encouraging all participants. According to Salmon (2003: 42) educators must

> enable development of ideas through discussion and collaboration. They summarize from time to time, span wide-ranging views and provide new topics when discussions go off track. They stimulate fresh strands of thought, introduce new themes and suggest alternative approaches.

The educator must also be engaged in 'weaving' (ibid.) which involves 'pulling together the participants' contributions by, for example, collecting statements and relating them to concepts and theories from the course'.

At stage five, participants become responsible for their own learning and educators need to take a stronger 'backstage role' (Anna, P22_40:40). E-moderators should only 'set up exercises and online events that promote critical thinking in conference participants, such as commenting on each other's writing' (Salmon, 2005.: 49).

Salmon argues that given the technical support, good human intervention from an e-moderator, and appropriate online activities that promote action and interaction, participants will progress through the five stages of her model. She also notes that stages 3-5 are the more constructive stages for learning and developmental purposes. However, these stages will work better if participants have taken part in the first two stages of the model.

In conclusion, Salmon's model provides a practical strategy for a successful online programme. However, the various stages must also be informed with the social, cognitive and teaching presences as described in the COI framework. Moreover, to become a liberatory and transformative educational practice the model must also be imbued with the elements of critical pedagogy discussed in Chapter 9. The present study, being a Grounded Theory investigation, did not assess the relevance of Salmon's model or the COI framework on online learning at the University of Malta. However, the data find a lot of resonances with these models - as has been highlighted throughout this chapter. It has been noted, for example, that both sets of students were introduced to online learning through short face-to-face induction meetings, dialogue was crucial in online activities and teaching presence was strong until the students learned to work collaboratively.

10.4   Professional pressures on the e-educator

The foregoing suggests that lecturers turned e-educators must (i) have skills in online learning, and (ii) make a `'shift in mindset'` from traditional to dialogic approaches. However, many authors (including Ramsey, 2003: 39) agree that the implementation of technology does not simply change an educator's pedagogic mindset. This problem is compounded by the fact that the university never puts pedagogy as a priority in the lecturers' careers. Stiles (2006: 8), for example, notes that the university's 'priority has always been and continues to be, research and the subject discipline … pedagogy has traditionally barely figured in planning of professional development in higher education'.

Laurillard (2002a: 139 - 140) also argues that, in western universities, 'there are significant opposing pressures … to demonstrate research success on the one hand and to provide for wider participation in higher education on the other'. These two pressures are deleterious to higher education because research and teaching are seen to be in competition with each other, at the institutional level and at the individual level (ibid.). In the United Kingdom, significant government funding comes from the Research Excellence Framework (REF) which allocates block grant funding for research on the basis of output performance whereas funding for teaching is not related to quality ratings. Thus, institutions reward good research more than good teaching. Consequentially, academics have to divide their time between the two activities: the one in which they are professionally qualified and judged by their peers, the other in which they are neither qualified nor judged. Thus, as Williams (2007a: 11) notes, 'for individual academics … there is a great incentive to engage in research, but little to expend time and effort in educational projects'. This research shows that an analogous situation exists at the University of Malta where, the lecturer is also rewarded for research rather than teaching excellence (Patrick, P19_83:83).

Bach, Haynes and Smith (2007: 15) also note that e-learning is often embraced by younger educators, thus things can improve as a younger generation of IT-literate staff moves in. This, however,

> does not fit well with the age profile of higher education, it being a profession where staff are recruited and peak relatively late in their adult life when compared to other professions (ibid.).

Hence, if higher education institutions want to enhance their e-learning programmes they must encourage and support e-educators in their pedagogic formation. This can be achieved through, for example, 'teaching development grants' (Biggs and Tang, 2007: 264) which may come from the university's internal funding or from external resources such as the National Teaching Development Grants scheme in Australia, the Higher Education Academy in the UK and the University Grants Committee in Hong Kong (ibid). Universities must also reward pedagogic excellence.

10.5   Challenges for students

The foregoing, and the data of the present investigation suggest that the transition from face-to-face to fully online or hybrid courses is not easy for either educators or students in higher education, particularly if they were used only to traditional teaching and learning methods. Despite earlier beliefs that students would partake easily to e-learning programmes because of their familiarity with mobile phones, computers and the Internet, this has not often been the case. Various studies confirm what one lecturer noted in the present study (Philip, P1_17:17): even if students grew up with technology and know how to play complicated games on their computers, download music, use the Internet for research and participate in social networking, this does not make them automatically comfortable with or experts in e-learning. Swan (2003), in her review of literature on the learning effectiveness of asynchronous online environments, noted that various studies revealed that students generally felt inadequately trained for

an online course experience and reported lower levels of communication with both their teachers and peers, and most of them attested that they found the online method of delivery less effective and less satisfactory than on-campus courses. Oblinger and Hawkins (2006) also highlight the fact that many students find it hard to adjust to online or blended courses, and require guidance (including, for example, introductory face-to-face courses) and assistance to understand the process of studying in such courses. Utilizing the technologies efficiently requires continuous support of the students and guidance about the pace of instruction and the acculturation to online learning (Martyn, 2003; Selwyn, 2003; Ali and Elfessi 2004; Heinstorm, 2005; Ho and Burniske, 2005; Hong, 2008; Guri-Rosenblit, 2009).

Garrison and Vaughan (2008) and Vaughan (2010) argue that educators and students prefer the hybrid model, mainly because this provides the physical and social interaction they see lacking in the fully online model. The model presented in Chapter 8, however, argues that hybrid models are often used at the University of Malta to support traditional teaching methods and do not allow the students to make a definite change in mindset from prescriptive to dialogic approaches.

10.6   Concluding comments

The literature review, presented in this and the preceding chapter, provided strong evidence to support the idea that dialogue was a key pedagogical element in higher education. This resonated with the theoretical model developed through this research. It also established that e-learning, which has been defined as learning 'mainly facilitated online through network technologies' (Garrison and Anderson, 2003: xi), can provide an important pedagogical space for dialogical education.

The reviewed literature identified two models for e-learning at higher education: the COI framework (Garrison, Anderson and Archer, 2000) and Salmon's (2003; 2005) five-stage model. Both models suggest that deep and meaningful learning occurs when a group of learners are guided towards critical inquiry through purposeful dialogue and reflection. The COI framework represents a process of collaborative and constructivist learning experience through the development of three interdependent elements – social (that is, the ability of participants to identify with the group in a trusting environment), cognitive (that is, the learners' ability to construct and confirm meaning through sustained reflection and discourse) and teaching presence (that is, the educator's pedagogic choices). Salmon's model suggests a pedagogic strategy in five stages (that can be linear or iterative), which leads the students progressively from teacher-guided (for example, to learn basic technical skills) to constructivist (for example, to autonomously contribute to online discussions) learning experiences.

In both models, to engage in dialogue, educators and students must often assume non-traditional roles. However, according to the literature many lecturers engaged in online learning have not yet received training in constructivist pedagogies, let alone dialogic online approaches. Similarly, students who have often been regarded as 'digital natives' (Prensky, 2001a), but have for years been participant in prescriptive schooling practices, will not easily embrace and take part in new pedagogies and educational mediums. Universities who want their e-learning strategies to be successful must support their lecturers and students in this paradigm shift.

Chapter 11

Conclusions

The end of a work such as this should signal neither a conclusion
nor a final word, but rather a punctuation in time that
marks a stop merely to take a breath.
(Lincoln and Denzin, 2005: 1115)

11.1 Introduction

Brick-and-mortar classrooms and lecture halls have, for many centuries, been the main spaces for formal educational efforts on University campuses, in Malta and abroad. This Grounded Theory research shows that, today, the Internet offers another significant educational space: one that can be used to sustain and support many forms of learning, including those intended to enhance the democratic mission of the 21st century University.

This chapter presents the final stage of this grounded theory study. The theoretical model that emerged from this research was presented in Chapter 8. The critical review of the literature about educational theories and e-learning, that is 'learning facilitated on-line (sic) through network technologies' (Garrison and Anderson, 2002: xi), were presented in Chapters 9 and 10, respectively. The process of identifying resonances with the theoretical model had already begun in the previous two chapters. This final chapter of the thesis will go further by presenting the key convergences of the theoretical model and the literature, as well as the areas of originality of the project. In this chapter the researcher will also

describe the limitations of this study, suggest possible areas for future research, and analyse the key strategies used to maintain quality and rigour. Finally, he will present a set of 'fuzzy generalisations' (Bassey, 1998; 1999) which can provide the stimuli for further research.

11.2   Resonances with the literature

11.2.1   Dialogue in education

The BScHS students argued that their course was not only preparing them in their professional development: it was also giving them the possibility to discuss and act against `injustice at work` [§4.4.7]. The students also confirmed that through their discussions and collaborative activities, they had come to view their work `in a different light`. Prior to the course, they were hesitant to voice their opinions. Through the course they gained the motivation and skills to challenge their superiors [§4.4.7].

An educational programme within a traditional institution, that is, the University, is therefore able to equip students not only with the knowledge and skills for effective participation in contemporary and future economies. It can also give students the ability to critically analyse social issues, understand how power is exercised within society and use their democratic rights to change aspects of their society that they consider unjust or discriminatory (Cummins, Brown and Sayers, 2007: 38), thereby contributing to the democratisation process, through lifelong education, as advocated by Dewey (1916; 1929).

The DITEL programme, however, did not achieve comparable transformative educational outcomes. Various factors were identified that contributed to this, including a relatively lower motivation towards the course in the students and lecturers, the predominant use of traditional

pedagogies in a hybrid programme, and the students' resistance to innovative educational practices, namely e-learning. However, the data indicated that the most significant difference between the two programmes was the extent to which students participated in *dialogic* educational experiences: the full online BScHS involved its students and lecturers in comparatively much more dialogic learning experiences (primarily, asynchronous online discussions) than did the blended DITEL programme which relied predominantly on lecturing.

How did the use of dialogue achieve these outcomes? Dialogue allowed `'learners (to) discuss amongst themselves … (to) see each other's difficulties, (to) encourage each other, (to) learn together'` (Lisa, P21_16:16) thereby creating and maintaining a community of learning as proposed by the current study's theoretical model [§8.11], the 'Community of Inquiry framework' (Garrison, Anderson and Archer, 2000) and Salmon's five-stage model (Salmon, 2003; 2005).

Through dialogue, mainly created, developed and maintained within discussions initiated by the e-educator [§11.2.5], knowledge was not imposed from above [§8.4.2(vii)]. This made the educational process different from that created by traditional top-down transmission pedagogies, including lecturing where the educator `'is up there'` while the students are `'sitting down'` (Cecilia, P3_67:67) in class taking notes so that, by the end of the course, they `'would do the assignment'` or `'study for the exam'` (Elaine, P5_85:85). These traditional approaches were prescriptive in nature, and consequently, they encouraged submissiveness, inhibited creativity and critical thinking, and facilitated the reproduction of unequal social relations (Freire, 1970:31). The data also indicated that these methodologies created dependency of the students upon their lecturers, and upon the same methods - making them, in the minds of the students `'safer'` and less `'fearful'` than alternative teaching and learning methodologies.

Unlike traditional forms of communication in education, dialogue is not prescriptive. Knowledge does not come *only* from the lecturer and his/her recommended readings [§11.2.5]. It also comes from the students, who, as adults, carry into the educational process a rich 'reservoir of knowledge' (Knowles, 1973: 46), their values, beliefs, needs, professional and social experiences [§11.2.5]. They also carry into the learning process their reflections upon the scholarly readings suggested by their educator, and when these are shared within the learning group, peers learn from each other: 'others learn from you and you learn from others' (Anthony, P18_120:120). The student, through dialogue, therefore becomes 'an increasingly rich resource for learning' (Knowles, 1973: 46). This sharing of knowledge, reflections and experiences also creates a strong 'social presence' within the learning community (Garrison, 2009: 204), and camaraderie which also helps in the scaffolding of learning (Vygotsky, 1978). This is particularly important in e-learning because text-based online communication provides no visual cues other than words or images and lacks the 'sense of immediacy' of 'real-time, verbal, face-to-face mode of communication' (Garrison, 2011: 30).

Above all, through dialogue, as envisioned by social and critical constructivist theories, as well as constructionism (Papert, 1980) and connectivism (Siemens, 2004), learners can 'construct and confirm meaning through sustained reflection' (Garrison, Anderson and Archer, 2001: 11). Through reflection, learners can also act upon professional and social dilemmas or problems. Thus learning can lead to praxis (Freire, 1970).

Dialogue therefore creates, as Freire (ibid.) contends, a more democratic learning environment where students learn from their educator, learn from each other and, also, where the educator acts 'like a student' (Bernard, P2_86:86) actively learning from his/her own students. Thus, both students and educator become 'jointly responsible for a process in which all grow' (Freire, 1970:67) thereby participating in 'the ongoing

project of an unfinished democracy' (Giroux, 2011: 157) as advocated by critical educational theorists.

11.2.2 Traditional education

Transmission of content pedagogies, mainly called `'traditional'` methods in the respondents' narrative, are pervasive at the University of Malta, as they are in European, American and Australian universities (Baldacchino and Mayo, 1997; Laurillard, 2002a; Williams, 2007a and Jones and Lau, 2009). The dominant model in higher education, the reviewed literature revealed, is what Freire (1970) would call 'banking education' in which the lecturer, who often perceives him/herself as the `'owner'` of that knowledge, engages in an 'act of depositing' of this knowledge unto his/her `'passive learners'` [§7.2.4.2] who assimilate it without questioning it: `'If it's coming from the lecturer it's the right information no?'` (Thomas, P14_16:16)

'Banking education' processes are `'dominated by the teacher'` (Julia, P10_56:56) and involve the `'dishing out (of) information'` (John, P23_29:29). The good students in traditional approaches are 'consumers of knowledge' (Papert, 1993: 13) who `'memorise'` the acquired knowledge, `'imitate their teachers'` and `'follow their instructions to the letter'`. These processes serve to domesticate rather than liberate human beings (Freire, 1970). In contrast to dialogic education, traditional approaches do not encourage democratic social practices and values. Under these conditions, even freedom becomes a fearful thing for the students. Thus, students who have, through their schooling and other tertiary level education programmes, for years been engaged *mainly* in prescriptive pedagogies, are afraid of and will not easily partake in alternative pedagogies (Freire, 1970), including dialogic and collaborative ones.

This notwithstanding, learning through traditional pedagogies is also needed in higher education. For example, in teaching 'photography for web design' it was necessary for the lecturer to talk about the camera and demonstrate photographic skills [§7.2.7.1].   Moreover, the DITEL lecturers pointed out, most students, due to their traditional educational background, were still at the cognitively lower `acquisition phase` of learning and it was `very risky to impose` a predominantly dialogic education on them. More importantly, to learn to use a VLE such as Moodle, or free Web 2.0 social networking applications, like blogs and wikis, both student groups attended face-to-face campus-based sessions in which the lecturer explained the applications' basic functions. Furthermore, as Garrison (2011: 59) notes, despite the constructivist stance that the educator must adopt in e-learning, traditional approaches are often needed when diagnosing misconceptions, responding to technical concerns or injecting new knowledge to stimulate and enhance discussion.

11.2.3   Nesting traditional and dialogic pedagogies

The constructivist goal of enabling students to build knowledge and develop deeper levels of cognition requires dialogue and collaborative inquiry rather than just skills development and knowledge acquisition [§9.3.5]. However, as the data suggest, the development of a discussion, in the face-to-face and online environment, may require the transmission of facts, rules, skills and knowledge, by the teacher. It is therefore not auspicious to present the traditional and dialogic forms as antagonistic and mutually irreconcilable. They are more usefully seen as nested within each other.

In the online medium, for example, a dialogic pedagogy cannot function efficiently before the students gain the basic functions of text-based discussion. The transmission of information and skills becomes problematic *only* when it constitutes the predominant pedagogic focus, as it enhances

the dependency of the students upon their educator. An over-reliance on banking education practices will nurture the `'culture of schooling'` [§11.3(iii)].

11.2.4   e-Learning

The literature and the data of this research indicate that higher education institutions, including the University of Malta, have invested substantially in the introduction and implementation of e-learning. Freie and Behuniak (2007) however claim that the use of technology, including e-learning, in higher education often falls 'within the banking vision of education'. Indeed, the most pervasive technology used in the University classroom is the PowerPoint presentation which discourages 'dialogue, interaction, and thoughtful consideration of ideas' (Cyphert, 2004: 80).

E-learning, on the other hand, gives educators and students access to internet resources, including the social media and academic literature depositories, and possibilities for synchronous and asynchronous dialogue through formal and informal discussions via virtual learning platforms and/or social networking applications, including blogs and wikis. The theoretical model also indicates that a predominantly online course is more conducive to dialogue than face-to-face or blended courses held in university lecture halls or classrooms. There is more sharing of experiences through text-based dialogue than is possible in face-to-face meetings.

E-learning also allows students and educators to engage in the creation of digital artefacts, such as blogs and wikis, through which they can construct meaning (Papert, 1980).

11.2.5   e-Educator's role

The theoretical model and literature agree that technology itself does not, however, lead to independent learning. The presence of the educator is essential in e-learning [§8.1.1; Garrison, Anderson and Archer, 2000; Salmon, 2003; 2005]. Paulo Freire, in his later work, also acknowledged that, although in his *Pedagogy of the Oppressed* he had called for a non-hierarchical student-teacher relationship in which the educator also becomes the student of his/her students, he never intended this to mean that the teacher and learner start the educational process on an equal footing. In the context of online higher education programmes this implies that the e-educator must assume a central role, at least in the initial phases of the programme (Salmon, 2005). This requires the e-educator to fulfil certain tasks. Some are universal tasks and are also important in face-to-face teaching efforts, for example: setting the learning objectives, identifying and providing access to relevant scholarly readings (which are often also used to provide a stimulus for discussion), creating, developing and maintaining motivation for and scaffolding of learning, and encouraging camaraderie within the whole learning group. Other tasks are online-specific, for example: determining which type of web-based application is most suitable for the set learning objectives, following the text-based discussions and providing constant feedback (often through the weaving of students' postings and contributions, but also through direct online communication with students when required). However, the e-educator's intervention stance must never be too invasive [§8.8.1]. Obviously, in the initial stages of a long course (such as a degree programme) the teacher's presence online must be stronger and more frequent, than in later stages.

The e-educator's role should change, gradually but cautiously and consciously, as recommended by Salmon (2003; 2005), as the programme progresses, and students (and inexperienced e-educators) gain the necessary online and collaborative teaching and learning online skills to allow, progressively, greater learner autonomy.   Consequently, in the later

stages of a programme, the e-educator must select 'e-tivities' (Salmon, 2003; 2005), such as creating a skills-intensive wiki, that 'promote critical thinking' within the community of learning. Challenges and argumentations at this stage foster democratic social relationships, deeper thinking and reflection, and empowerment, which may lead the learning community to discuss and act upon social issues and problems. The e-educator, in this context, must assume a '`backstage role`' (Anna, P22_40:40) to allow the community of learners to function as autonomously as possible. This is consonant with the critical pedagogic role of the academic as an 'agent of change' (Caruana, 2012: 34).

To function efficiently as e-educators, lecturers therefore need to make '`a paradigm shift`' (Anna, P23_23:23) from a predominantly content transmission pedagogic orientation to one which *also* enables the participants' co-construction of knowledge. The data indicated that lecturers needed to be strongly motivated to make this shift to e-learning (that was not primarily intended to support face-to-face lecturing). They also needed to be highly motivated to learn to teach online before starting a course. The data also indicated that a lecturing team that worked and learned together created camaraderie amongst the lecturers which maintained this motivation. This was important because lecturers who wanted to make this '`shift in mindset`' (John, P23_21:21) had to 'work against the grain' (Kellner, 2001: 233) of a traditional educational environment. A similar situation exists in other universities where pedagogical innovation is not usually rewarded (Jones and Lau, 2009: 43; Williams, 2007a: 11).

Technology does not automatically convert lecturers into e-educators, even lecturers who are confident with technology – particularly those with no pedagogic training. The university needs to provide lecturers with adequate training in e-learning, and motivate lecturers with professional rewards.

11.2.6 e-Student's role

The students, like their educators, also had to make a 'shift in mindset' [§7.2.5 (i)] from the 'culture of schooling' [§7.2.7.2] in order to participate efficiently and effectively, within a community of learning (Garrison, Anderson and Archer, 2000; Salmon, 2003; 2005). Thus, the students, most of whom were used to years of traditional teaching and learning in which they mainly assumed passive and 'comfortable' [§7.2.7.3] learning roles, had to assume more active and demanding roles [§5.3.3] and 'act like adults … mature adults' (Cecilia, P3_66:66). They needed, for example, to participate regularly in collaborative learning activities including text-based asynchronous discussions, read and comment on scholarly texts identified by the educator, peers or through independent research, post reflections, ideas and conclusions, help each other out [§8.8.2], and not 'procrastinate' (Elaine, P5_137:137) when working with others.

The data of the current research and the literature converge on the fact that the use of technology does not bring an automatic change in the students' attitudes and dispositions towards e-learning, particularly one that is employed in a non-traditional pedagogical way. As argued in section 10.2, it is also wrong to consider that (i) *all* students are confident with technology, and (ii) the students' familiarity with technology will always translate into readiness for academic learning. Moreover, the data also strongly indicate that the relatively older learners of the BScHS programme embraced e-learning more than the younger learners of DITEL. It is therefore inappropriate to consider a student's readiness to engage in e-learning as being dependent on age. Thus, students (whatever their age) need constant support from their educators and peers when engaged in e-learning.

11.3 Research originality

This was the first in depth research about the use of e-learning at the University of Malta. The choice of research methodology was another way in which this research was original. The researcher chose Grounded Theory so that conceptualisations could be generated directly from the voices of students and educators involved in e-learning, rather than preconceived hypotheses. To achieve this, semi-structured interviews, mostly in the native language, were allowed to develop as 'conversations with a purpose' (Burgess, 1984: 102) so that the subjects of this project could talk about any particular aspects of their experience in e-learning.

This research also offered a number of new insights that make this research distinctive. These included, in the context of the University of Malta:

i.   *Despite the fact that e-learning, compared to the university lecture-room, provides no visual cues other than words or images, and lacks the sense of immediacy of real-time, verbal, face-to-face mode of communication, it is more conducive to dialogue and collaborative learning activities.* Indeed, even educators who were trained in adult education and social constructivist practices argued that, in the online medium, they were able to develop and maintain more dialogue.

ii. An effective higher educational effort is one that can achieve *two* interrelated objectives. First, it must equip students with the knowledge and skills for effective participation in contemporary and future economies. Second, it should help students become conscious of, and, possibly act against, underlying social processes that work counter to the democratisation process. *E-learning can be employed in non-traditional pedagogical processes* to achieve these higher educational objectives.

iii. *Critical education theory, which views education as a political process, provides a better 'language of critique' (Giroux, 2011) of this phenomenon* [(ii) above] *than other educational* theories.

iv. *A predominantly online and dialogic e-learning programme (such as the BScHS) can liberate students from the dependency on 'banking education' processes* which mainly involve the delivery of knowledge from the lecturer to the student – a practice which is pervasive in a traditional university. Such a programme freed *motivated* learners and educators from prescriptive learning approaches and their consequences: including the fear of participation in unknown pedagogies, the passive assimilation, memorization and retrieval of knowledge, the dependency on the educator and the hierarchical and undemocratic teacher-learner relationship.

v. The literature reviewed put the onus for effective educational efforts [as in (ii) above] in which e-learning is employed, on the educators, who must make a shift from schooling to alternative learning paradigms. This, this research revealed, does not 'automatically' produce a corresponding shift in mindset in the students, particularly those who have for years been primarily exposed to 'banking education' practices. Such students will find it difficult to partake in alternative pedagogies and may resist non-traditional pedagogies that are imposed on them, including dialogic and collaborative ones. *This research indicates that students, whatever their age, may not be 'digital native learners' who prefer technology-enabled alternative pedagogies. They must, therefore, also make a shift in mindset.* For this to occur, the students must be strongly motivated to participate in a non-traditional online course. They must also receive support from educators and peers, particularly in the early stages of an online programme. If this does not occur, in full-online courses where students do not have the safety net of other non-online courses, the students may drop out. In hybrid courses, the students

will resist (not refute) non-traditional e-learning initiatives and prefer
lecturing.

11.4   Evaluating the quality of this research

Scholars within the qualitative research dimension have proposed
numerous standards of rigour (see, for example, Glaser & Strauss, 1967;
Sandelowski, 1986; Beck, 1993; Chiovitti and Piran, 2003). This research
adopted the most quoted and adopted assessment criterion in constructivist
research studies: *trustworthiness* as proposed by Lincoln and Guba (1985),
Guba and Lincoln (1994; 1998; 2005) and Lincoln, Lynham and Guba
(2011). These authors argued for this assessment criterion because, in
constructivist research, the researcher is not after the discovery of an
absolute truth about the social world. Instead, the researcher is conscious
that there can be more than one and possibly several accounts that can
emerge from the investigation.

11.4.1   Trustworthiness

Guba (1981) argued that trustworthiness is made up of four sub-criteria:
credibility, transferability, dependability and confirmability. Each of these
criteria has a quasi-parallel criterion in quantitative research, as shown in
table 11.1.

Scientific Term	*Naturalistic Term*
Internal Validity	Credibility
External Validity Generalizability	Transferability
Reliability	Dependability
Objectivity	Confirmability

Table 11.1 - Scientific and Naturalistic Criteria of Trustworthiness

11.4.1.1 *Credibility*

As argued in Chapter 2, within the constructivist paradigm, 'realities are taken to exist in the form of multiple mental constructions that are socially and experientially based, local and specific, and dependent for their form and content on the persons who hold them' (Guba, 1990: 27). Thus, there can be more than one account of a phenomenon under study, and the credibility of a constructivist investigation depends on 'how vivid and faithful the description of the phenomenon is' (Beck, 1993: 264). Credibility, according to Beck (ibid.) is demonstrated when 'informants, and also readers who have had the human experience … recognise the researcher's described experiences as their own'. This is consistent with what Glaser and Strauss (1967) argued for: they stated the reader should 'almost literally see and hear the people'. Three methods of research practice for enhancing credibility were used in this research:

1. Triangulation
2. Bracketing the researcher's subjectivity
3. Respondent (or member) validation

The first strategy, triangulation, as explained in section 3.1, was achieved by undertaking interviews with students, lecturers and non-invasive virtual observations of online courses. The second strategy was to 'bracket' the researcher's prior knowledge, experience and beliefs [§3.9.3]. The third strategy was respondent validation, that is, 'the process whereby a researcher provides the people on whom he or she has conducted research

with the account of his or her findings … (with the intention) to seek corroboration or otherwise of the account that the researcher has arrived at' (Bryman, 2008: 377) was achieved as described in section 3.9.5. This included returning to the University of Malta during the final stage of this research project to discuss the findings and the theoretical model with four of the subjects of this research. The researcher talked to a lecturer and student from each course. In these meetings the researcher first explained at length the main findings of the research. Then, together with each subject, he discussed the theoretical model. All the subjects raised issues which have already been presented in this thesis, but all confirmed the validity of the generated theory.

11.4.1.2   Transferability

Guba (1981: 80) argues that, within the rationalistic paradigm, external validity or generalisability:

> requires that the inquiry be conducted in ways that make chronological and situational variations irrelevant to the findings. If that condition can be met, the findings obviously will have relevance in any context. Generalisations are taken as enduring; that is, unchanging over time, truth statements that are context-free – that hold in *any* context.

In the naturalistic paradigm, argue Lincoln and Guba (1985: 316), knowledge is context specific, and the 'generalisations of the rationalistic variety are not possible' (Guba, 1981: 80). Qualitative researchers are therefore encouraged to produce what Geertz (1973 quoted in Guba, 1981: 81 and Bryman, 2008: 379) calls 'thick description', that is, a rich account of the phenomenon under study. Guba and Lincoln (1994: 114) note that, in the constructivist research paradigm, it is more meaningful to talk of transferability (or fittingness), which Guba (1981: 81) defined in the following manner:

> If the thick descriptions demonstrate an essential similarity between two contexts, then it is reasonable to suppose that tentative findings of Context

A are also likely to hold in Context B (although, to be safe, an empirical test of that presumption should be made). For the naturalist, then, the concept analogous to generalizability (or external validity) is transferability, which is itself dependent upon the degree of similarity (fittingness) between two contexts.

This research project had two challenges with regards to transferability: (i) Did the theoretical elaborations that evolved from the context of one university course fit within the context of the other course? (ii) Could the theoretical model that emerged from the context of the University of Malta be transferred to the context of other universities?

Although both courses were selected because their prospectuses claimed that they used non-traditional e-learning methodologies, they were different in terms of (i) **motivation**: the students' and lecturers' enthusiasm towards the course, and e-learning; (ii) **objectives of the courses and student cohorts**: one was a Bachelor's 'top-up' degree for practising health professionals, the other a post-graduate diploma for qualified teachers aspiring to 'upgrade' the same diploma to a master's degree and (iii) **use of the online medium**: one was a fully-online degree, the other was a hybrid programme in which, however, it was later revealed, lecturing was the pedagogy used in most of its courses. Therefore, the experiences of the students and lecturers differed, according to the context of each programme.

The theory was consequently generated through the data gathered from both programmes. The researcher looked for convergences, and divergences, within the data. Sometimes he had to consider seemingly conflicting issues such as: *Why did students in one course embrace e-learning, while students in the other course resisted it?* Generating theory in this way was, according to the researcher, a stronger and more rigorous approach than developing theory from a single case.

This theory was however generated in the context of the University of Malta, which has many distinct features when compared to, for example,

UK and North American universities. The main differences include: it is a state-sponsored university where undergraduates, rather than paying for their course, enjoy a salary for studying; most Maltese students (except the Gozitans) live with their parents; and, most students own a car and drive short distances between the University and home. Thus, e-learning is mainly needed for supporting campus-based teaching activities, not for expanding the university's coffers. *Therefore, could the theory developed at the University of Malta fit elsewhere*? The literature review indicated that most universities, do, in fact, share many characteristics with the University of Malta, for example, most are still traditional institutions where lecturing prevails over other teaching and learning methodologies. Thus, a series of tentative or 'fuzzy generalisations' will be offered at the end of this chapter.

11.4.1.3   Dependability

Guba (1981: 81) argued that, for the qualitative researcher 'consistency is a trickier concept' than for the rationalist. The latter, Guba (ibid.) explains, believes 'in a single reality upon which inquiry converges' and 'can treat all instrumental shifts as error'. However,

> The naturalist, believing in a multiple reality and using humans as instruments – instruments that change not only because of 'error' (e.g., fatigue) but because of evolving insights and sensitivities – must entertain the possibility that some portion of observed instability is 'real'. Thus, for the naturalist, the concept of consistency implies not invariance (except by chance) but trackable variance.

This 'trackability' is achieved through an 'audit trail' (Guba and Lincoln, 1989) which entails, according to Bryman (2008: 378), 'ensuring that complete records are kept of all phases of the research process'. In this project, as suggested by Denscombe (2008: 298) and Birks, Chapman and Francis (2008: 70), memos were used to record all methodological and analytical decisions, in the process of reflexivity. Detailed accounts of these decisions were presented in every chapter of this thesis.

11.4.1.4 Confirmability

Guba (1981: 81) argues that 'neutrality' or 'objectivity' is difficult to achieve for the qualitative researcher. He therefore suggests that 'naturalists shift the burden of neutrality from the investigator to the data, requiring evidence not of the certifiability of the investigator or his or her methods but of the confirmability of the data produced' (ibid.). Confirmability, according to Guba and Lincoln (1989: 243), is the degree to which:

> …data, interpretations, and outcomes of inquiries are rooted in contexts and persons apart from the [researcher] and are not simply figments of the imagination… data (constructions, assertions, facts, and so on) can be tracked to their sources,…the logic used to assemble the interpretations into structurally coherent and corroborating wholes is both explicit and implicit in the narrative of a case.

Guba (1981: 87) suggests two steps that researchers must take to ensure confirmability: triangulation and reflexivity. Both have already been explained in sections 3.1 and 3.10, respectively.

11.5   Limitations of this research

The researcher attempted to study the use of e-learning at the University of Malta. However, in the initial phase of the research it soon became apparent that the technology was mainly being used to support lecturing. The researcher did not want this thesis to develop into an investigation of how e-learning was supporting a traditional teaching methodology. For this reason, two programmes, whose prospectuses indicated that non-traditional e-learning approaches were being used, were chosen. Therefore, one clear weakness of this thesis was that it was not representative of the University as a whole and 'unique system' (Cohen, Manion and Morrison, 2008: 53) [§3.4]. Another weakness was the uniqueness of the research setting which set the University of Malta apart from other 'continental' universities which, with regards to e-learning, often

resorted to this technology to attract more students. Indeed, as argued in section 11.4.1.2, transferability was a challenging issue in this project.

Another limitation was the sampling of students. From the BScHS only nine students accepted to be interviewed. The whole DITEL cohort was made up of seven students and all but one student offered to participate in the project. Theoretical sampling could thus not be used with the student cohorts. This notwithstanding, in interviews ranging from one to two hours, each student provided very detailed accounts of the e-learning experience s/he was involved in. Through constant comparison, the researcher became aware that the information provided often converged. However, it could not be ascertained that theoretical saturation was reached through the students' interviews.

Three other potential weaknesses were identified. First, the use of Grounded Theory - the researcher was new to this methodology (and its vast array of post-positivist and post-modern adaptations) and went through a steep learning curve to learn its research principles. Second, the researcher was also new to Atlas.ti and mastering its basic principles (even after reading specialised texts, such as Freise, 2012) proved to be a daunting task. Third, using a constructivist orientation to the Grounded Theory Method meant that the story told in this thesis was not the only truth. Paradoxically, these three apparent weaknesses gave considerable strength to this thesis.

11.6 Fuzzy generalizations and implications for further research

The challenge of *transferability* [§11.4.1.2] in a qualitative case study is not unique to this research (see, for example, Stake, 1995; Yin, 2009). Bassey (2001: 6) notes that such research cannot make any 'scientific

generalisations' that are 'expressed in the form: *particular events **do lead** to particular consequences*'. Qualitative educational research can only make 'fuzzy generalisations' (Bassey, 1998; 1999; 2001) that are 'expressed in the form: *particular events **may lead** to particular consequences*' (Bassey, 2001: 6). This is due to the fact that educational researchers, like other social scientists, have many variables to contend with during research - despite the rich description of the phenomenon, and the rigour used. Bassey (2001: 6-7) gives this example to reinforce his argument:

> The teacher may give what appears to be the same lesson in exactly the same way in a second classroom, but the outcome of the second lesson may be quite different because some un-noted variables of the setting, or the class, or individuals within the class, are sufficiently different to affect the outcomes.

The researcher thus made ten fuzzy generalisations, in the context of higher education:

1. A *predominantly dialogic education* (integrated with traditional pedagogy) *is likely to engage* students in two interrelated higher educational objectives: the gaining of (i) specialised academic knowledge and skills which they require to function efficiently in their community and, (ii) awareness of, and possibly the ability to act against, professional and social processes that undermine democracy;

2. A *predominantly traditional educational process*, namely lecturing, *may increase* the students' dependency upon 'banking education' processes, thereby increasing the students' resistance towards alternative and transformative pedagogies;

3. *E-learning*, in the form of Internet-enabled teaching and learning, *is likely to be more conducive* to dialogical education than face-to-face classroom educational encounters;

4. *A fully online programme* - which uses a predominantly dialogic pedagogy - *may reduce* the students' dependency on 'banking education' more than a hybrid programme - where lecturing is mainly used in its face-to-face component;

5. Educators *may need to be trained* in both traditional and non-traditional pedagogies (including critical constructivist approaches) to engage in dialogic education (in the face-to-face and/or online mediums);

6. Educators *may also need to be trained* in e-learning methodologies, particularly those needed to create 'a community of inquiry' (Garrison, Anderson and Archer, 2001) and/or Salmon's (2003) 5-stage model;

7. Those educators who *make a shift in mindset from lecturing to constructivist approaches* are likely to function better in e-learning;

8. Students and educators, who for many years have been immersed in a culture of schooling, *may need to make a drastic* transition from 'banking education' to constructivist e-learning practices;

9. An e-learning community *is likely to be* engaged in more active learning through collaborative activities intended to share the participants knowledge and reflection, create dialogue and the co-construction of knowledge;

10. Universities *may need* to motivate their educators to use dialogic e-learning practices through professional and academic incentives.

Bassey (1998) argues that a 'fuzzy generalisation invites replication and this, by leading to augmentation and modification of the generalisation, contributes powerfully to the edifice of educational theory'. These 'fuzzy

generalisations' can therefore be used as hypotheses for further research about e-learning in higher education.

11.7   Final comment

Richard Hil (2012: 222), in *Whackademia* argued:

> If the tertiary system was transformed to meet the needs of civil society rather than just the economy, if it was concerned more with what it means to be a 'rounded', active, democratic citizen rather than a consumer, and if it truly allowed for academic autonomy and freedom, then more enlightened engaged and civically relevant work would surely ensue. We might even produce more prominent and passionate public intellectuals speaking their minds about issues like (the) treatment of refugees, the Palestine-Israel question, climate change, animal rights, war and peace, global poverty, hunger, corporate greed, economic growth, the steady state – even the corporatisation of universities!

This thesis which investigated, through constructivist Grounded Theory, the use of e-learning at the University of Malta, has indicated that e-learning may indeed be used to help universities achieve the transformational objectives that Hil speaks about.

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Appendix 1: Faculties, Institutes, Centres and Schools (University of Malta)

Faculties	Institutes	Centres	School
1. Faculty of Arts 2. Faculty for the Built Environment 3. Faculty of Dental Surgery 4. Faculty of Economics, Management & Accountancy 5. Faculty of Education 6. Faculty of Engineering 7. Faculty of Health Sciences 8. Faculty of Information & Communication Technology 9. Faculty of Laws 10. Faculty of Media & Knowledge Sciences 11. Faculty of Medicine & Surgery 12. Faculty of Science 13. Faculty for Social Wellbeing 14. Faculty of Theology	1. Institute of Anglo-Italian Studies 2. International Institute for Baroque Studies 3. Confucius Institute 4. Institute of Digital Games 5. The Edward De Bono Institute for the Design & Development of Thinking 6. Institute of Earth Systems 7. Institute for European Studies 8. Islands & Small States Institute 9. Institute of Linguistics 10. Institute of Maltese Studies 11. Mediterranean Institute 12. Mediterranean Academy of Diplomatic Studies 13. Institute for Physical Education & Sport 14. Institute for Public Administration & Management 15. Institute for Climate Change & Sustainable Development 16. Institute for Sustainable Energy 17. Institute for Tourism, Travel & Culture	1. Centre for Biomedical Cybernetics 2. Centre for English-Language Proficiency 3. Centre for Entrepreneurship & Business Incubation 4. Centre for Environmental Education & Research 5. Centre for Labour Studies 6. Centre for Literacy 7. Euro-Mediterranean Centre for Educational Research 8. Centre for Resilience & Socio-Emotional Health 9. European Centre for Gerontology 10. International Ocean Institute – Malta Operational Centre	1. School of Performing Arts

Appendix 2: The BScHS and DITEL courses – a brief overview

Course Title	Bachelor of Science (Honours) Health Science
Abbreviation in the current research	BScHS
Duration	2 to 4 years
Total ECTS Credits	80
Mode of attendance	Part-time Distance Learning • **All** courses (see below) are held **online** through the University of Malta virtual learning platform (Moodle), blogs or wikis. • Introductory sessions to online learning are held on a face-to-face basis. These sessions are not assessed and do not form part of the 80 ECTS course. • The dissertation supervision is carried out online (or face-to-face if there is a specific student demand).
% of Online study units in the course	100%
Course overview	The scope of this e-learning programme is to enable qualified health care professionals to develop critical thinking, reading and writing skills through questioning their practice and ultimately becoming more effective in their work. In so doing, they will upgrade their traditional or diploma level professional qualification to a bachelor's level academic qualification. The programme consists of 80 ECTS divided into seven study units and a dissertation carrying a weight of 10 ECTS each. Students must register for not less than 10 credits and not more than 40 credits per year.
Study Units	Students need to complete 3 compulsory study units (including a dissertation) and 5 elective study units in order to successfully complete this programme. **Compulsory study units** IHC3004 - Evidence Based Health Care IHC3005 - Research Methods in Health Care IHC3600 - Dissertation **Elective study units** IHC3006 - The Expert Practitioner IHC3007 - Mentorship & Clinical Supervision IHC3010 - Innovations in Practice IHC3011 - Developing Leadership in Health Care IHC3014 - Learning in Practice IHC3015 - Empowering Patients and Carers through an Understanding of Illness Perceptions IHC3016 - Death, Dying and Care HSC3017 - Practice Development: Trends, Issues and Hurdles HSC3018 - Becoming a Reflective Practitioner HSC3019 - Working with Medical Device Technology and ICT in Practice HSC3020 - Dealing with Ethical Dilemmas in Health Care Practice
Course intended for	All registered health care professionals, including traditionally trained and diploma trained professionals, from Malta and overseas, who wish to improve their academic qualifications.

Course Title	Post-Graduate Diploma in Technology-Enhanced Learning
Abbreviation in the current research	DITEL
Duration	2 years
Total ECTS Credits	60
Mode of attendance	Part-time Evening • The majority of study units are held through face-to-face teaching sessions, primarily as lectures but also as seminars and blended learning experiences, **on campus,** at the University of Malta. • **One Study Unit,** *Learning through Instruction 2,* is a predominantly online course. • **Sections of some study units** (see below) are held through the University of Malta virtual learning platform (Moodle), blogs or wikis.
% of Online study units in the course	

	Online component
EDU5640	40%
EDU5641	0%
EDU5642	0%
EDU5643	80%
EDU5644	0%
EDU5645	0%
EDU5646	0%
EDU5647	20%
EDU5648	0%
EDU5649	0%
EDU5650	0%
EDU5651	40%
Overall	**15%**

Refer below for the course titles.

Course overview	The Postgraduate Diploma in Technology-Enhanced Learning provides participants - teachers employed in the Maltese Primary and Secondary school system - with an opportunity to explore different modes of learning through technology. To achieve this objective the diploma introduces the participants to various theories of learning, different digital technologies and the potential use of these technologies in formal and informal educational contexts. The course also aims at developing a range of life-long learning skills, mainly, autonomous learning, technology-enhanced domain expertise, technology-related and technology-mediated critical thinking, pedagogical innovation through research and design, oral, written and digital communication, technology-mediated team skills and networking.

Study units	The study units are of 5 ECTS credits each. All the units are compulsory.
	Year 1 - Semester 1 EDU5640 - Introduction to Technology-Enhanced Learning EDU5641 - Managing Technology-Enhanced Learning EDU5642 - Learning through Instruction 1: Technology-Enhanced Teaching **Year 1 - Semester 2** EDU5643 - Learning through Instruction 2: Innovative Instructional Scenarios EDU5644 - Learning through Designing 1: Designing Learning Experiences and Resources EDU5645 - Learning through Designing 2: Media Processes, Robotics, Web Design **Year 2 - Semester 1** EDU5646 - Learning through Gaming EDU5647 - Learning through Collaboration and Sharing 1: Models, Skills and Tools EDU5648 - Learning through Collaboration and Sharing 2: Technology-Mediated Social Contexts **Year 2 - Semester 2** EDU5649 - Learning through Reflection 1: Pedagogical Approaches and Tools EDU5650 - Learning through Reflection 2: Design and Evaluation EDU5651 - Final Project: Designing and Developing a Course using a Blended Learning Approach
Course intended for	Teachers holding a professional teaching qualification and basic certification in ICT.

Appendix 3: Proforma for ethical approval (Institute of Learning, University of Hull)

A PROFORMA FOR

STAFF AND STUDENTS BEGINNING A RESEARCH PROJECT

Institute for Learning

Research Proposer(s): Joseph Vancell

Programme of Study: PhD

Research (Working Dissertation/Thesis) Title: E-learning as a transformative agent in Higher Education: a study of online courses at the University of Malta

Description of research (please include (a) aims of the research; (b)principal research question(s) (c) methodology or methodologies to be used (d) who are the participants in this research.

The study intends to investigate, through a virtual ethnography within the online learning environment of the University of Malta, whether or not e-learning can truly become a transformative agent for higher education. The central research question will be supported by a number of sub-questions which include:

1. What is the current use of e-learning environments at the University of Malta?
2. How is e-learning used (in terms of structure, resources and pedagogy)?
3. What awareness do lecturers have of the potentials of e-learning?
4. What is the opinion of lecturers about e-learning environments in general and particularly in higher education?
5. What is the opinion of students participating in e-learning efforts?
6. How do students participate in learning processes and knowledge construction?
7. What are the advantages and challenges of learning and teaching through technology?
8. Is the e-learning structure efficient? If not, how can a stronger e-learning strategy be implemented at the University of Malta

The study will mainly adopt a virtual educational ethnography approach. The subjects – lecturers and students of the University of Malta - will mainly be observed in their online context and data will be gathered primarily through online semi-structured interviews, focus groups and participant observation in the virtual dimension through text-based computer-mediated communication. The research will also adopt the Glaser and Strauss (1968) grounded theory approach, whereby theory is generated and developed as the research progresses. The researcher is therefore conscious that the research questions can change and further questions added to the research project as it develops.

Proforma Completion Date: 9th September 2010

This proforma should be read in conjunction with the IfL research principles, and the IfL flow chart of ethical considerations. It should be completed by the, researchers. If it raises problems, it should be sent on completion, together with a brief (maximum one page) summary of the problems in the research, or in the module preparation, for approval to the Chair of the IfL Ethics Committee prior to the beginning of any research.

Part A

1.   Does your research/teaching involve animal experimentation?   NO

     If the answer is 'YES' then the research/teaching proposal should be sent direct to the University Ethics Committee to be assessed.

2.   Does your research involve human participants?   YES

     If the answer is 'NO', there is no need to proceed further with this proforma, and research may proceed now. If the answer is 'YES' please answer all further relevant questions in part B.

Part B

3.   Is the research population under 18 years of age?   NO
     If yes, are you taking the following or similar measures to deal with this issue?
          (i) Informed the participants of the research?
          (ii) Ensured their understanding?
          (iii) Gained the non-coerced consent of their parents/guardians?

4.   Will you obtain written informed consent from the participants?   YES
     If yes, please include a copy of the information letter requesting consent
     If no, what measures will you take to deal with obtaining consent?

5.   Has there been any withholding of disclosure of information
     regarding the research to the participants?   NO
     If yes, please describe the measures you have taken to deal with this.

6.   Issues for participants. *Please answer the following and state how you will manage perceived risks:*

     a)   Do any aspects of the study pose a possible risk to
     participants' physical well-being (e.g. use of substances such as   NO
     alcohol or extreme situations such as sleep deprivation)?

     b)   Are there any aspects of the study that participants might find
     humiliating, embarrassing, ego-threatening, in conflict with their   NO
     values, or be otherwise emotionally upsetting?*

     c)   Are there any aspects of the study that might threaten   NO
     participants' privacy (e.g. questions of a very personal nature;
     observation of individuals in situations which are not obviously
     'public')?*

     d)   Does the study require access to confidential sources of
     information (e.g. medical records)?   NO

e   Could the intended participants for the study be expected to be more than usually emotionally vulnerable (e.g. medical patients, bereaved individuals)?   **NO**

f   Will the study take place in a setting other than the University campus or residential buildings?   **YES**

The study will take place at the <u>University of Malta</u>.

g   Will the intended participants of the study be individuals who are not members of the University community?   **NO**

*Note: if the intended participants are of a different social, racial, cultural, age or sex group to the researcher(s) and there is <u>**any**</u> doubt about the possible impact of the planned procedures, then opinion should be sought from members of the relevant group.

7.   Might conducting the study expose the researcher to any risks (e.g. collecting data in potentially dangerous environments)?   **NO**

8.   Is the research being conducted on a group culturally different from the researcher/student/supervisors?   **NO**
If yes, are sensitivities and problems likely to arise?
If yes, please describe how you have addressed/will address them.

9.   Does the research/teaching conflict with any of the IfL's research principles? (please see attached list).   **NO**
If yes, describe what action you have taken to address this?

10.   Are you conducting research in the organisation within which you work?   **YES**

11.   If yes, are there any issues arising from this .e.g. ones of confidentiality, anonymity or power, because of your role in the organisation   **NO**
If there are, what actions have you taken to address these?

I will be conducting research within Faculties in which I am not involved.

12.   If the research/teaching requires the consent of any organisation, have you obtained it?   **YES**
If no, describe what action you have taken to overcome this problem.

13.   Have you needed to discuss the likelihood of ethical problems with this research, with an informed colleague?   **NO**
If yes, please name the colleague, and provide the date and results of the discussion.

If you've now completed the proforma, before sending it in, just check:

a. Have I included a letter to participants for gaining informed consent? ✓

b. If I needed any organisational consent for this research, have I included evidence of this with the proforma?

   The Ethics Committee of the University of Malta (site of research) will give its consensus for research after permission to commence research is given by the Ethics Committee of the Institute for Learning, University of Hull.

c. If I needed consent from the participants, have I included evidence for the different kinds that were required? ✓

Lack of proof of consent attached to proformas has been the major reason why proformas have been returned to their authors.

This form must be signed by your supervisor and the IfL Ethics Committee representative for your area. Once signed, copies of this form, and your proposal must be sent to Mrs Jackie Lison, Centre for Educational Studies (see flow chart), including where possible examples of letters describing the purposes and implications of the research, and any Consent Forms (see appendices).

Name of Student/Researcher: Joseph Vancell

Signature ⟨signature⟩   Date: 9 September 2010

Name of Supervisor/Colleague: Professor Derek Colquhoun

Signature .... Date ....

Name of Ethics Committee member ....

Signature ....

Appendix 4: Ethical approval (Faculty of Education, University of Hull)

UNIVERSITY OF Hull

Centre for Educational Studies
T 01482 465988
E j.lison@hull.ac.uk

ETHICAL PROCEDURES FOR RESEARCH AND TEACHING
IN THE
FACULTY OF EDUCATION

PERMISSION TO PROCEED WITH RESEARCH: ETHICAL APPROVAL

Reference Number: 10/001

Name: Joseph Vancell

Programme of Study: PhD

Research Area/Title: E-learning as a transformative agent in Higher Education: a virtual ethnography of online courses of the University of Malta

Image Permission Form Received (or N/A if no images)

Name of Supervisor: Professor Derek Colquhoun

Date Approved by Supervisor: 14 September 2010

Date Approved by Ethics Committee: 17 September 2010

University of Hull
Hull, HU6 7RX
United Kingdom
+44 (0) 1482 346311
www.hull.ac.uk

Appendix 5: Proposal form for ethical approval (University of Malta)

UNIVERSITY OF MALTA

UNIVERSITY RESEARCH ETHICS COMMITTEE

Check list to be included with UREC proposal form

Please make sure to tick **ALL** the items. Incomplete forms will not be accepted.

		YES	NOT APP.
1a.	Recruitment letter / Information sheet for subjects, in English	✓	
1b.	Recruitment letter / Information sheet for subjects, in Maltese		✓
2a	Consent form, in English, signed by supervisor, and including your contact details	✓	
2b	Consent form, in Maltese, signed by supervisor, and including your contact details		✓
3a	In the case of children or other vulnerable groups, consent forms for parents/ guardians, in English		✓
3b	In the case of children or other vulnerable groups, consent forms for parents/ guardians, in Maltese		✓
4a	Tests, questionnaires, interview or focus group questions, etc, in English	✓	
4b	Tests, questionnaires, interview or focus group questions, etc, in Maltese		✓
5a	Other institutional approval *for access to subjects*: Health Division, Directorate for Quality and Standards in Education, Department of Public Health, Curia...		✓
5b	Other institutional approval *for access to data*: Registrar, Data Protection Officer Health Division/Hospital, Directorate for Quality and Standards in Education, Department of Public Health...		✓
5c	Approval from person *directly responsible for subjects*: Medical Consultants, Nursing Officers, Head of School...		✓

Received by Faculty office on	
Discussed by Faculty Research Ethics Committee on	
Discussed by university Research Ethics Committee on	

UNIVERSITY OF MALTA

Request for Approval of Human Subjects Research
Please type. Handwritten forms will not be accepted
You may follow this format on separate sheets or use additional pages if necessary.

FROM: *(name, address for correspondence)*	PROJECT TITLE:
Joseph Vancell, 5, La Vallee, High Ridge Residence, Triq il-Pedidalwett, Madliena, Swieqi SWQ 1327	E-learning as a transformative agent in Higher Education: a study of online courses at the University of Malta
TELEPHONE: 21375870/79000071	
E-MAIL joseph.vancell@um.edu.mt	
COURSE AND YEAR: PhD, Institute for Learning, University of Hull (UK)	
DURATION OF ENTIRE PROJECT: from October to July 2010	FACULTY SUPERVISOR'S NAME: Professor Derek Colquhoun (University of Hull)

ANTICIPATED FUNDING SOURCE: University of Malta Staff Scholarship
(include grant or contract number if known)

1. Please give a brief summary of the purpose of the research, in non-technical language.

This study intends to investigate the online learning environment of the University of Malta to establish whether or not e-learning can truly become a transformative agent for higher education. The study will mainly adopt a virtual educational ethnography approach. The subjects – lecturers and students of the University of Malta - will mainly be observed in their online context and data will be gathered primarily through online semi-structured interviews, focus group sessions and participant observation in the virtual dimension through text-based computer-mediated communication. The research will adopt the Glaser and Strauss (1968) grounded theory approach, whereby theory is generated and developed as the research progresses.

2. Give details of procedures that relate to subjects' participation
(a) How are subjects recruited? What inducement is offered? *(Append copy of letter or advertisement or poster, if any.)*

Subjects will participate mainly in virtual focus group discussions and semi-structured interviews and they will be recruited by invitation through e-mail, Facebook and other internet-based social networks. No financial inducement will be offered. Vide attached Document 1: copy of advertisement and Document 2: letter of invitation for participation in the study.

(b) Salient characteristics of subjects—number who will participate, age range, sex, institutional affiliation, other special criteria:

All the subjects participating in this study will be 18 years or over. Since the study intends to investigate the potentiality and possibilities of online learning in Higher Education, all the subjects - lecturers and students of the university of Malta - will be recruited from online learning groups from various Faculties and Institutes of the University of Malta during the 2011-2012 academic year.

(c) Describe how permission has been obtained from cooperating institution(s)—school, hospital, organization, prison, or other relevant organization. *(Append letters.)* Is the approval of another Research Ethics Committee required?

This study is part of my PhD research programme. I have also requested the approval of the Ethics Committee of the Institute for Learning, University of Hull (UK).

(d) What do subjects do, or what is done to them, or what information is gathered? (Append copies of instructions or tests or questionnaires.) How many times will observations, tests, etc., be conducted? How long will their participation take?

Subjects - lecturers and students involved in online learning courses - will participate in online semi-structured interviews and focus group discussions. They will answer and/or discuss questions such as:

1. What is the current use of e-learning environments at the University of Malta?
2. How is e-learning used (in terms of structure, resources and pedagogy)?
3. What awareness do lecturers have of the potentials of e-learning?
4. What is the opinion of lecturers about e-learning environments in general and particularly in higher education?
5. What is the opinion of students participating in e-learning efforts?
6. How do students participate in learning processes and knowledge construction?
7. What are the advantages and challenges of learning and teaching through technology?
8. Is the e-learning structure efficient? If not, how can a stronger e-learning strategy be implemented at the University of Malta.
9. Do lecturers and/or students prefer face-to-face over online learning? Why?

Ten learning groups (from different Faculties and Institutes) will be involved in this study. Each learning group will participate in two focus group sessions - one at the start and another at the end of the online learning course. Each focus group discussion is expected to last about one hour and will be facilitated by the undersigned.

(e) Which of the following data categories are collected?

Data that reveals – race or ethnic origin	Y̶E̶S̶ / NO
political opinions	Y̶E̶S̶ / NO
religious or philosophical beliefs	Y̶E̶S̶ / NO
trade union memberships	Y̶E̶S̶ / NO
health	Y̶E̶S̶ / NO
sex life	Y̶E̶S̶ / NO
genetic information	Y̶E̶S̶ / NO

3. How do you explain the research to subjects and obtain their informed consent to participate? (If in writing, append a copy of consent form.) If subjects are minors, mentally infirm, or otherwise not legally competent to consent to participation, how is their assent obtained and from whom is proxy consent obtained? How is it made clear to subjects that they can quit the study at any time?

No minors nor persons who are not legally competent to consent to participation will be involved in this research. All potential subjects will receive a letter of invitation (vide attached Document 2) to participate in the study and will be asked to return a signed consent form (vide Document 3).

4 .Do subjects risk *any* harm—physical, psychological, legal, social—by participating in the research? Are the risks necessary? What safeguards do you take to minimize the risks?

There are no anticipated harms or risks to participation in the study. Moreover, to safeguard the integrity of all participants anonymity and confidentiality will be maintained during data gathering and publishing of any scientific work. The subjects also have the right to withdraw from the research at any time, without any negative consequences. (vide attached Documents 2 and 3)

5. Are subjects deliberately deceived in *any* way? If so, what is the nature of the deception? Is it likely to be significant to subjects? Is there any other way to conduct the research that would not involve deception, and, if so, why have you not chosen that alternative? What explanation for the deception do you give to subjects following their participation?

No deception is involved in this study.

6. How will participation in this research benefit subjects? If subjects will be "debriefed" or receive information about the research project following its conclusion, how do you ensure the educational value of the process? *(Include copies of any debriefing or educational materials)*

The research project is imbued with the Advocacy and Participatory Research Worldview (Creswell 2009: 9) wherein the participants are considered the subjects rather than the objects of the investigation, and therefore, as potential beneficiaries of the same research. I am also partial to critical pedagogies which foster the individual and collaborative creation of new knowledge and the critical appreciation of old knowledge. These pedagogies must be supported by technology which enhances communication and dialogue and aids the use of innovative teaching and learning techniques that value each student's ability and life experiences. Similarly, the advocacy/participatory research dimension considers research as an educational experience wherein the subjects' voices are valued within a democratic encounter with the researcher.

The project will thus use the focus group as the main data gathering technique. This technique brings the subjects and the researcher in a democratic dialogical encounter wherein all contributions are valued and where subjects and researcher learn together.

The conclusions reached will be communicated to all the participating subjects through scientific publication/s related to the investigation.

Reference: Creswell, J. W. (2009) Research design : qualitative, quantitative, and mixed methods approaches, Thousand Oaks, CA ; London, Sage Publications.


TERMS AND CONDITIONS FOR APPROVAL IN TERMS OF THE DATA PROTECTION ACT

- Personal data shall only be collected and processed for the specific research purpose.
- The data shall be adequate, relevant and not excessive in relation to the processing purpose.
- All reasonable measures shall be taken to ensure the correctness of personal data.
- Personal data shall not be disclosed to third parties and may only be required by the University or the supervisor for verification purposes. All necessary measures shall be implemented to ensure confidentiality and, where possible, data shall be anonymised.
- Unless otherwise authorised by the University Research Ethics Committee, the researcher shall obtain the consent from the data subject (respondent) and provide him with the following information: The researcher's identity and habitual residence, the purpose of processing and the recipients to whom personal data may be disclosed. The data subject shall also be informed about his rights to access, rectify, and where applicable erase the data concerning him.

I, the undersigned hereby undertake to abide by the terms and conditions for approval as attached to this application.

I, the undersigned, also give my consent to the University of Malta's Research Ethics Committee to process my personal data for the purpose of evaluating my request and other matters related to this application. I also understand that, I can request in writing a copy of my personal information. I shall also request rectification, blocking or erasure of such personal data that has not been processed in accordance with the Act.

Signature:
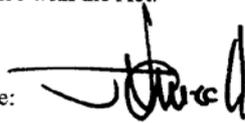
APPLICANT'S SIGNATURE:	FACULTY SUPERVISOR'S SIGNATURE
I hereby declare that I will not start my research on human subjects before UREC approval	I have reviewed this completed application and I am satisfied with the adequacy of the proposed research design and the measures proposed for the protection of human subjects.
DATE 20/9/2010	DATE

Return the completed application to your faculty Research Ethics Committee

Appendix 6: Ethical approval (University of Malta)

To be completed by Faculty Research Ethics Committee

We have examined the above proposal and advise

Acceptance   **Refusal**   **Conditional acceptance**

For the following reason/s:

[handwritten] of Doc 7 from University of Hull

Signature   Date

To be completed by University Research Ethics Committee

We have examined the above proposal and grant

Acceptance   **Refusal**   **Conditional acceptance**

For the following reason/s:

Signature *[signature]*   Date *28/9/10*

Appendix 7: Letter of consent

E-learning as a transformative agent in Higher Education

CONSENT FORM

I,   of

Hereby agree to be a participant in this study to be undertaken

by **Joseph Vancell**

I understand that

1.   the aims, methods, and anticipated benefits, and possible risks/hazards of the research study, have been explained to me.

2.   I voluntarily and freely give my consent to my participation in such research study.

3.   I understand that aggregated results will be used for research purposes and may be reported in scientific and academic journals.

4.   Individual results will not be released to any person except at my request and on my authorisation.

5.   I am free to withdraw my consent at any time during the study, in which event my participation in the research study will immediately cease and any information obtained from me will not be used.

Signature: Date:

The contact details of the secretary to the IfL Ethics Committee are Mrs. J.Lison, Centre for Educational Studies, University of Hull, Cottingham Road, Hull, HU6 7RX. Email: J.Lison@hull.ac.uk tel. 01482-465988.