

# Open Research Online

---

The Open University's repository of research publications and other research outputs

## Blended Learning: An Exploration of the Experiences of Lecturers and Students in Post Qualification Nurse Education

Thesis

How to cite:

Gallagher, Alison Lucy (2015). Blended Learning: An Exploration of the Experiences of Lecturers and Students in Post Qualification Nurse Education. EdD thesis The Open University.

For guidance on citations see [FAQs](#).

© 2015 The Author

Version: Version of Record

---

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online's data [policy](#) on reuse of materials please consult the policies page.

---

[oro.open.ac.uk](http://oro.open.ac.uk)



**The Open University**

**Doctorate in Education (EdD)**

**Blended learning: An exploration of the  
experiences of lecturers and students in post  
qualification nurse education**

**Alison Gallagher MA (ed) BSc (Hons)**

**January 2015**

DATE OF SUBMISSION : 27 JAN 2015  
DATE OF AWARD : 15 JUNE 2015

ProQuest Number: 13834794

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 13834794

Published by ProQuest LLC (2019). Copyright of the Dissertation is held by the Author.

All rights reserved.

This work is protected against unauthorized copying under Title 17, United States Code  
Microform Edition © ProQuest LLC.

ProQuest LLC.  
789 East Eisenhower Parkway  
P.O. Box 1346  
Ann Arbor, MI 48106 – 1346

## Contents

|   | <b>Page number</b> |
|---|--------------------|
| <b>List of tables and diagrams</b>                  | 6                  |
| <b>Abstract</b>                                     | 8                  |
| <b>Acknowledgements</b>                             | 10                 |
|   |                    |
| <b>Chapter 1 – Introduction and background</b>      | 11                 |
| 1.1 Introduction                                    | 11                 |
| 1.2 Rationale and background                        | 11                 |
| 1.3 Blended learning in context                     | 15                 |
| 1.4 Developing the research questions               | 21                 |
| 1.5 Thesis structure                                | 22                 |
| 1.6 Summary   | 22                 |
|   |                    |
| <b>Chapter 2- Review of the literature</b>          | 23                 |
| 2.1 Introduction                                    | 23                 |
| 2.2 Search strategy                                 | 23                 |
| 2.3 Selection of studies for the literature review  | 25                 |
| 2.4 Definitions of blended learning                 | 27                 |
| 2.5 Higher Education                                | 31                 |
| 2.6 Medicine  | 36                 |
| 2.7 Allied health professionals                     | 39                 |
| 2.8 Nurse education                                 | 41                 |
| 2.81 Pre-registration student nurses                | 41                 |
| 2.82 Post qualification nurses and blended learning | 43                 |
| 2.9 Summary   | 50                 |

|  |           |
|--|-----------|
|  |           |
| <b>Chapter 3 – Methodology, research design and methods</b>  | <b>52</b> |
| 3.1 Introduction   | 52        |
| 3.2 The methodological perspectives  | 52        |
| 3.3 Ontological and epistemological position   | 54        |
| 3.4 Research design  | 54        |
| 3.41 The research setting  | 55        |
| 3.42 Research sample   | 55        |
| 3.43 Ethical considerations  | 57        |
| 3.44 Insider research  | 59        |
| 3.45 Methods of data collection  | 61        |
| 3.5 Data analysis  | 66        |
| 3.6 Rigour and trustworthiness of the study  | 68        |
| 3.7 Summary  | 69        |
|  |           |
| <b>Chapter 4 – Findings</b>  | <b>71</b> |
| 4.1 Introduction   | 71        |
| 4.2 Participants   | 71        |
| 4.3 The selected modules   | 73        |
| 4.4 Findings from the semi structured interviews   | 75        |
| 4.5 Blended learning: experiences of lecturers   | 76        |
| 4.6 Blended learning: experiences of post qualification undergraduate nursing students                   | 92        |
| 4.7 Emerging similarities and differences between lecturers and students experiences of blended learning | 110       |
| 4.8 Summary  | 113       |

|   |     |
|---|-----|
|   |     |
| <b>Chapter 5 – Discussion</b>   | 116 |
| 5.1 Introduction  | 116 |
| 5.2 The innovative lecturer   | 116 |
| 5.3 The active adult learner  | 120 |
| 5.4 Isolation in the learning process                                   | 125 |
| 5.5 Technology to enhance the learning process                          | 128 |
| 5.6 Blended learning in context   | 132 |
| 5.7 Blended learning as an educational framework                        | 134 |
| 5.8 Summary   | 146 |
|   |     |
| <b>Chapter 6 – Conclusions</b>  | 149 |
| 6.1 Introduction  | 149 |
| 6.2 Reflection on the research process                                  | 151 |
| 6.3 Implications for nurse education                                    | 152 |
| 6.4 Recommendations for nurse education                                 | 155 |
| 6.5 Summary   | 158 |
|   |     |
| <b>References</b>   | 160 |
|   |     |
| <b>Appendices</b>   | 187 |
| Appendix 1 Search terms   | 187 |
| Appendix 2 Interview schedule   | 188 |
| Appendix 3 The participants information sheet                           | 190 |
| Appendix 4 Consent form   | 193 |
| Appendix 5 Questionnaire given to the lecturers and students to collect | 194 |

|                                      |     |
|--------------------------------------|-----|
| demographics prior to the interviews |     |
| Appendix 6 Template analysis         | 197 |

## List of tables and diagrams

| <b>Tables</b>   | <b>Page number</b> |
|---|--------------------|
| <b>Table 1</b> Phases of thematic analysis  | 67                 |
| <b>Table 2</b> Qualitative principles applied to the study  | 68                 |
| <b>Table 3</b> Description of lecturer participants   | 71                 |
| <b>Table 4</b> Description of student participants  | 72                 |
|   |                    |
| <b>Diagrams</b>   | <b>Page number</b> |
| <b>Diagram 1</b> Experiences of teaching and learning: An illustrative representation of area one                           | 81                 |
| <b>Diagram 2</b> Interpretations of blended learning: An illustrative representation of area two                            | 84                 |
| <b>Diagram 3</b> Enhancing the learning experience: An illustrative representation of area three                            | 88                 |
| <b>Diagram 4</b> Factors that affect lecturer engagement with blended learning: An illustrative representation of area four | 92                 |
| <b>Diagram 5</b> The students experiences of learning: An illustrative representation of area one                           | 98                 |
| <b>Diagram 6</b> Understanding and experiences of blended learning: An illustrative representation of area two              | 101                |
| <b>Diagram 7</b> Blended learning as an effective learning tool: An illustrative representation of area three               | 105                |
| <b>Diagram 8</b> Factors affecting student engagement with blended learning: An illustrative representation of area four    | 110                |
| <b>Diagram 9</b> The Conversational Framework   | 136                |



|  |     |
|--|-----|
| <b>Diagram 10</b> The Community of Inquiry   | 137 |
| <b>Diagram 11</b> An Illustrative representation of the BL conceptual framework                | 143 |
| <b>Diagram 12</b> The various components of social presence within the BL conceptual framework | 144 |
| <b>Diagram 13</b> The components of cognitive presence within the BL conceptual framework      | 145 |
| <b>Diagram 14</b> The components of lecturer presence within the BL conceptual framework       | 146 |

## **Abstract**

Blended learning (BL), defined broadly as a mixture of face-to-face teaching and e-learning, is a concept that has been developed across education. Nurse education has relatively recently adopted this learning mode which has largely arisen as resources have been reduced and the purchasers of education, primarily the National Health Service, require their growing workforce to have increased access to wide professional development opportunities. This can lead to problems as BL in nurse education is largely untested. This study considered the experiences of lecturers and students regarding BL in post qualification nurse education. Understanding lecturers' and students' perceptions of this change is important to facilitate a smooth transition and ultimately to ensure that blended learning enhances the learning and teaching experiences.

An interpretive, in-depth, qualitative approach in one nursing school setting was adopted. An initial study, with two focus groups to elicit student and lecturer experiences of blended learning in post-qualification education, informed the conduct of the main study and the interview questions. The main study involved semi-structured interviews with three lecturers and ten students, purposively selected as participants. Data were analysed thematically.

The findings indicated a lack of understanding of BL. Issues raised included problems with accessing information technology. Lecturers viewed blended learning only in terms of the e-learning site and this site was only used by them as a repository for information; thus for them blended learning was not an interactive concept. In contrast students wanted the interaction creating potential discord between students and lecturers. The reduced sense of community and student isolation were concepts that were also raised by several participants.

The study developed a more precise definition of BL and a useful conceptual framework which was informed by the Conversational Framework of Laurillard (2002) and the Community of Inquiry Framework of Garrison and Anderson (2003).

## **Acknowledgements**

I would like to thank my supervisors, Professor Judith Lathlean and Professor Josie Tetley for their help and encouragement throughout the EdD journey.

I am also indebted to my parents and brother for their continued kindness, understanding and support without which I would have been unable to complete this thesis.

## **Chapter 1 Introduction and background**

### **1.1 Introduction**

This thesis presents research into the experiences of Blended Learning (BL) for students and lecturers in post qualification nurse education. Both national and local policy within nurse education has endorsed the enhanced use of technology and advocated the subsequent drive to reduce face-to-face interaction, all of which has seen the growth in the use of BL in nurse education. Chapter One begins with the rationale for choosing BL in nurse education as an area to study. The background to BL is discussed and BL is placed in context, considering it in education in general as well as specifically within nurse education. The research questions and structure of the thesis complete this chapter.

### **1.2 Rationale and background**

There is much debate around the definition and terminology associated with BL, which will be discussed in detail in Chapter Two. In its broadest sense, however, the term BL has been defined as a mixture of face-to-face teaching and computer mediated instruction (Garrison and Kanuka 2004, Bonk and Graham 2006). Computer mediated instruction is a term used to describe e-learning or online learning, which has been recognised through national and local policies as an essential component in higher education (Duhaney 2004, McVeigh 2008, Allan et al. 2013). The current move in education is towards the term technology enhanced learning (TEL) (Kirkwood and Price 2014), replacing the term e-learning/ online learning. While the term technology enhanced learning offers a broader description, this term will be used interchangeably throughout the thesis along with e-learning/ online learning as these terms have been historically used in education literature.

BL has grown in popularity within higher education (Duhaney 2004) and has also been adopted within nurse education (Bloomfield et al. 2008, Allan et al. 2013) despite the

uncertainty about what constitutes BL. BL in nurse education has largely arisen as the National Health Service (NHS) resources have been under pressure (Carroll et al. 2009). As a result the purchasers of education, primarily the NHS, have increased their demand for their growing workforce to have a more flexible access to programmes that contribute to work force development (Iley et al. 2010). While there is enthusiasm from employers for education developments that reduce the need for physical classroom presence, BL in nurse education is largely untested (Iley et al. 2010). Moreover the views of the students and the lecturers have insufficiently been taken into account (Allan et al. 2013).

Recognition of the move towards BL in nurse education was an initial driver for my proposed study.

Post qualifying nurses without degrees are a large diverse population of varying levels of clinical and academic expertise (Carroll et al. 2009). Nurses are now trained to degree level (NMC 2008) and therefore qualified nurses without a degree are under pressure to meet this new academic threshold, particularly if they wish to progress their careers (Cook et al. 2004, Carroll et al. 2009). As a lecturer I primarily work with post qualification nurses accessing higher education to obtain a degree. I became aware that the increased use of technology and the reduction of face-to-face interaction was a challenge to this group of students. These challenges were acknowledged by Lawton et al. (2001) who noted that the initial enthusiasm experienced by nurses as they begin their studies is reduced as they struggle with the increased use of technology. BL can be new to the students and is likely to bring challenges to their learning (McVeigh 2008). Exploring the issues related to the BL experience in post qualification nurse education was therefore deemed relevant. Also having witnessed the students struggle with the change to knowledge delivery I was personally interested in exploring their experiences of BL, and potentially, based on the findings, develop and communicate recommendations to facilitate the smooth development of BL in nurse education.

In order to respond to external drivers that were pushing for a more flexible education offer, changes within my organisation were introduced to accommodate more remote and technology supported learning. In June 2011 the school produced a learning, teaching and assessment strategy, in line with the DoH paper (DoH 2011); this was part of the university drive to reduce face-to-face teaching and provide a more diverse education offer that may more flexibly meet students' needs. However the strategy also acknowledged that to meet this aim there was a need for a high quality technological infrastructure. This is important as the literature suggested (for example Garrison and Vaughan 2013) if the technology does not work well for the students and staff then it is potentially likely to fail. The learning, teaching and assessment strategy had a phased approach that begun in early 2012. However the strategy document did not identify what support lecturers were to have to ensure that e-learning sites were developed, potentially creating conflict between staff and managers as this strategy is developed. The university strategy document also stated that healthcare providers and education providers have a key role to play in ensuring that staff and students have access to high quality education and training that is timely and value for money. It is noted that face-to-face teaching is not always feasible or appropriate and that a mixed methods approach is more suitable to the majority of learners, in the form of BL. The vision of this university is that by 2015 all staff and students will experience the benefits of technology enhanced learning. Ultimately it is hoped that the use of information technology will enhance the face-to-face aspect of teaching. Against this backdrop I was therefore interested in exploring how this change is experienced by students and the academics who support them. The changes to the traditional way of teaching nurse education were not readily accepted by all stakeholders and there appeared to be a potential for conflict between lecturers and students. Lecturers appeared concerned over how best to deliver the learning outcomes and to ensure that student expectations of the module were met whilst employing the BL method. Lack of understanding of BL is evident as no set definition and framework for this method has been developed in nurse education. This

study therefore sought to explore how BL is understood and experienced by lecturers and students and what lessons can be learned to create a framework and environment that can more positively support BL in nurse education.

A requirement of BL is to create a new and challenging learning environment that combines online and face-to-face interaction that potentially moves away from the traditional classroom structure of adult education. Garrison and Anderson (2003) described e-learning as one type of online learning environment but this is often undertaken wholly without any face-to-face interaction. However, for qualified nurses e-learning or online learning is often rejected as it has been argued that they often only feel that they have learnt by attending a classroom based session where a didactic approach to teaching is used (Farrell et al. 2007, Kelly et al. 2009). This is therefore a challenge to lecturers as they strive to change the perspectives of students to university education. BL as an educational framework is allowing lecturers to move from the traditional pedagogy to a more andragogical approach to nurse education (Knowles et al. 2005). This places the onus onto the adult learners to become responsible for their own learning and development. In essence knowledge acquisition is learner driven rather than lecturer driven. Although the lecturer remains the facilitator of the students learning, it is acknowledged that adult learners still require some direction of their learning (Knowles et al. 2005).

Having worked within the school of nursing for nine years I was acutely aware of the potential conflicts and pitfalls emerging with the development of BL. As previously alluded to, working with students demonstrated the difficulty technology could bring to the effectiveness of student learning. Working with my peers also showed a general lack of engagement with, and understanding of, the BL concept. I was also unaware of what the term BL meant and was ambivalent to the changes being directed from the senior management team within the school of nursing about the use of BL as a method of



imparting knowledge. It is within this atmosphere of lack of understanding and reluctance to change from the known to the unknown that I felt it was essential to discover what BL was and how lecturers and students felt about its development and use in post qualification nurse education.

The following section places BL in context. Considering both national and local policies that have been the main drive for the development of BL in higher education as well as nurse education.

### **1.3 Blended Learning in context**

Throughout the last decade higher education institutions have begun to incorporate the use of BL as a method of delivering knowledge. Key policies have led to the increased use of BL in the education system and current practice sees BL almost taken for granted as the norm for both students and lecturers in the higher education setting (Dearing 1997, DoH 2001, DfES 2003). However the form that the BL takes within the teaching establishments can differ widely across institutions and it could be argued that this lack of consistency causes confusion amongst both students and lecturers as to how BL can enhance teaching and learning (Glogowska et al. 2011). The importance of embracing the role of technology in higher education was highlighted by the Dearing Report (1997) which stressed the need to improve delivery and the effectiveness of learning through the use of information technology. As a result of education policy, recommendations and reviews higher education institutions have started to provide technology, as well as equip both staff and students with the appropriate skills to use computers and access to the e-learning platforms such as Moodle or Blackboard. Moodle and Blackboard are among several learning management systems or Virtual Learning Environments that allow educational materials to be provided to the students as well as access to the lecturers, for example via discussion forums. It was anticipated that following the Dearing Report flexibility in learning would

be central in ensuring effective adult learning. The Dearing Report began the shift to critical thinking and self-directed learning both of which prepare students to become lifelong learners. Technology has not just been introduced for the sake of it, there is an educational purpose.

Other pedagogic and access arguments have also been made around the use of technology. The Department of Education and Skills (DfES) suggested that technology will allow a variable approach to learning through the use of mixed modalities, and therefore enable students to learn on a part-time basis (DfES 2003). Potentially this will accommodate their individual needs. This flexibility, arising from the use of e-learning, will allow students to work, possibly at their own pace and have access to course materials anytime and anywhere. The variable approach to learning has also been embraced by the employer. Certainly in business this is an approach that has been used where it has meant that staff do not need to be released to go on a study day but can learn at their desks (Bonk and Graham 2006, Sharma and Barrett 2007). Releasing employees from the work place to learn can be a challenge to employers. E-learning rather than attendance at set class based study days reduces time away from the workplace for employees. The DfES (2003), however, make no mention of the possible benefits that e-learning has the potential to bring to employers.

While there are practical advantages to the use of BL to support learning, impact to student learning also needs careful consideration. It has been suggested that BL has the possibility of improving the quality of the learning experience. Garrison and Anderson (2003) described the delivery of education at university level as in need of development.

Laurillard (2002) also stressed the need to overhaul the traditional ways universities deliver knowledge. This is required to meet the changing needs of students in a technologically driven age. BL encompassing the mixed modalities embraces the use of technologies available and ensures improved quality of learning and teaching. Garrison and Anderson

(2003) claimed that BL is the way forward to ensure good quality educational diversity in higher education. The emphasis from both Laurillard (2002) and Garrison and Anderson (2003) is actively to embrace e-learning as this encourages the learning to become student driven as well as improve the quality of the learning provided.

Enhancing the learning experience and meeting the students learning needs is essential. In 2005 The Higher Education Funding Council for England (HEFCE) published a strategy for e-learning (HEFCE 2005). This document emphasised the need for higher education to focus on technology to enhance e-learning, teaching and assessing (HEFCE 2005). The 2005 strategy was reviewed by HEFCE in 2009 where it was found that universities were adapting to changes in educational delivery through blended learning and that overall this strategy was thought to be enhancing the learning experience. This reiterates the findings of The Universities and Colleges Information Systems Association (UCISA 2008 cited in HEFCE 2009) survey that found that technology and as such e-learning and the blended approach to education can better meet student expectations. Both HEFCE and UCISA stressed the importance of flexibility in learning to allow students to study off campus and also on a part time basis. This is in line with the concept of studying anytime, anywhere.

The use of technology, as part of a BL approach to supporting student learning, is also timely as students now entering higher education are part of the world where the use of the internet is a daily occurrence for work and leisure (Dziuban et al. 2005). The influence that this will have on the approach that students have towards learning is different from the pre internet generation (Dziuban et al. 2005). The challenge this brings to education providers is to override the gap between the learning styles of an information technology generation and the traditional approach conventionally seen in higher education institutions. Laurillard (2002) and Garrison and Anderson (2003) placed great emphasis on the need for organizational change to allow for information technology to sit alongside traditional

methods of teaching. BL allows for a mixed approach to teaching and therefore has the potential to bridge the gap highlighted here.

E-learning, technology enhanced learning and BL have been developed over the past two decades to ensure improved quality and in light of policy changes in higher and nurse education. They have also developed in response to the needs of the student body.

Although quality of the learning experience is part of the policies discussed great emphasis is also placed on the student voice heard through evaluation of their learning. The National Student Survey (NSS), Post Graduate Taught Experience Survey (PTES) and Post Graduate Research Experience Survey (PRES) are examples of national surveys developed and supported by the Higher Education Academy. The students' feedback from these polls is fed back to individual universities and from there to the relevant departments or faculties. The drive from the evaluations as well as from the national and local policies is to see adult learners taking responsibility for developing their own knowledge. The emphasis with the movement towards BL is on promoting students to take responsibility for their own learning. Therefore BL, it could be argued, promotes the thinking of all parties and is potentially in a position to enhance and ensure high quality education.

While the development of BL can bring many benefits to students the impact to academics needs to be considered, for example training regarding the advanced use of technology in the classroom. Garrison and Vaughan (2013) drew attention to the need for organizational change to incorporate BL. They acknowledged that BL is common in higher education but the change required within the institution to accommodate BL has not resulted in wider adoption of innovative ideas in teaching. Arguably an educational system that creates change and diversity will encourage critical thinking and enquiry. The drive thus far has been about enhancing the student experience; however the lecturer experience is of equal importance.

The drive for using technology to enhance the learner's experience has also come from health care. Working together-learning together: a framework for lifelong learning for the National Health Service (NHS) (DoH 2001) acknowledged the need for technology to play a significant role in providing ongoing education to NHS staff. The demands therefore made on those providing nurse education are now to develop flexibility in the way in which modules are delivered. In essence this usually means an increased BL approach to nurse education. The Department of Health (2001) stressed the need for nurse education to collaborate with practitioners to ensure that there is greater use of work-based learning, distance and e-learning. It is also an expectation that nurses will professionally develop to ensure that effective patient care is delivered (Nursing and Midwifery Council (NMC) 2008). Given the demands of working in practice, nurses require adaptable and flexible access to education (Bloomfield et al. 2008).

In November 2011 the Department of Health (DoH) published 'A Framework for Technology Enhanced Learning' (DoH 2011). This document acknowledged the significant role that e-learning has played in the last decade. The emphasis in this document is how technological approaches to learning can improve patient care by addressing the learning needs of the health care workforce. It is argued that e-learning allows healthcare professionals to maintain and develop essential skills and knowledge to ensure safe and effective patient care. The DoH also stressed the need for open access of educational provision that is high quality and value for money. By reducing face-to-face teaching and adopting a BL approach to education this will allow the higher education institutions to meet the aims of the DoH paper (Garrison and Vaughan 2013).

The DoH also recommended that the educational providers become competent in the use of information technology and be fully equipped to provide e-learning (DoH 2011). In light of

this, universities have been encouraged to develop a learning, teaching and assessment strategy. The intention is to enable students to have an excellent and unique experience of learning, thus meeting the basic aims of the DoH which are that:

*'education partners should aspire to educational excellence by encouraging innovation, evaluation... .. dissemination and adoption of evidence-based, good practice' (DoH 2011 p 8)*

The learning, teaching and assessment strategies call for enhanced use of technology, providing a more rounded learning experience for the student. The emphasis in the university strategies is around employability and how engagement with the learning will equip the students of today for the work-place of tomorrow.

In January 2012 the Department of Health published a document called 'Liberating the NHS: Developing the Healthcare Workforce: From Design to Delivery'. This document set out the plan for continuing education and training for healthcare workers in the form of an education outcomes framework. The aim was to ensure that all health care practitioners have the right skills and training to ensure excellent care is provided. A document was later produced in 2013 detailing the educational outcomes (DoH 2013), of which there were five domains: competent and capable staff, flexible workforce receptive to research and innovations, NHS values and behaviours, widening participation and finally excellent education. Although all are applicable to higher education and the delivery of nurse education the last domain stressed that education and training is commissioned and provided to the highest standard. Schools of nursing therefore need to ensure they meet the requirements of the educational outcomes framework. The expectation is that NHS staff will develop their knowledge and skills in conjunction with the higher education institutions. To suit their needs an adaptable approach will be required to accommodate their learning needs. BL, it is anticipated, will meet these needs.

## 1.4 Developing the research questions

The literature reviewed so far has highlighted that there are a number of challenges around the way that BL is understood and used. This led me to see there was a need:

- To review and challenge the current definitions of BL.
- To ascertain whether BL enhances the learning and teaching experience of students and lecturers in post qualification undergraduate nurse education.
- To identify the challenges of BL for the students and lecturers in post qualification undergraduate nurse education and why BL is a challenge to them.

Having considered the need to investigate BL in post qualification nurse education, the research questions were then developed. The research questions informing this study have arisen from personal interest with the importance of understanding BL as well as the gaps in current literature. They lead on from the aims of the research previously highlighted above and will be reconsidered following Chapter Two, the review of the literature.

The key research question:

- What are the experiences of both lecturers and students in post qualification nurse education when a blended learning approach is used?

Sub-questions that have also been considered are as follows:

- How effective is BL as an educational approach, with specific reference to nurse education?
- Does BL enhance the quality of learning/ teaching experience?
- What are the experiences of the students and lecturers of BL?
- Does age, gender, level of clinical experience affect the way students and lecturers perceive BL?

## **1.5 Thesis structure**

This thesis will present findings from a study of the experiences of both lecturers and students in their use of blended learning (BL) in post qualification undergraduate nurse education. Chapter Two critiques the literature around BL, drawing on studies from the wider context as well as from medicine, the allied health professions and nursing. Chapter Three articulates the chosen design and methods of data collection and analysis. Chapter Four describes the findings from the study. Chapter Five discusses the findings and sets them within the context of the existing knowledge as gleaned through the literature review and finally Chapter Six draws conclusions from the research and makes recommendations for practice and further research.

## **1.6 Summary**

The emphasis from policy is the drive to use e-learning to enhance the learning experience of students. National and local educational strategies within universities embrace technology but are not providing support for the lecturers in developing e-learning materials. BL is widely defined as face-to-face plus e-learning but the definition is broad and does not consider the use of technology within the classroom. Post qualification undergraduate nursing students have been identified as a group who will potentially find the BL approach a struggle. Their experiences and that of the lecturers towards BL inform this study.



## **Chapter 2 Review of the literature**

### **2.1 Introduction**

This chapter critiques the literature related to blended learning (BL). The search strategy and selection of studies will be presented. BL has been afforded multiple definitions and this chapter debates these definitions. Thirty studies have been selected for review. The studies discussed are connected to BL in higher education, medicine, the allied health professions and nursing both pre-registration and post qualification and will be explored within each of these areas. The review of the literature has identified the existing knowledge base; it has critiqued its robustness, acknowledged gaps in research and thereby aided the development of the main research question and the sub questions. It has also helped develop an understanding of BL within higher education as a whole as well as its use within nurse education.

### **2.2 Search strategy**

Search terms in the form of key words were identified, for example registered nurse, lecturer, blended learning, e-learning, technology enhanced learning and flexible learning. The full list of search terms is in Appendix 1. A modified PICO was used as it helped clarify thinking. It also allowed exploration of the plethora of search terms that needed to be considered to ensure all areas of BL were reviewed. PICO stands for Population, Intervention, Comparison and Outcome (Cooke et al. 2012). PICO is a tool that was originally used within epidemiological and quantitative research but it has been modified for qualitative questions (Schardt et al. 2007). The modification for this search strategy is in the form of two populations, lecturers and students. The place of learning, for example university and school of nursing, were also added to allow the search to be specific to higher education institutions. The intervention is considered as the approach being

investigated, in this case BL and finally search terms were added that would illustrate the experiences of the two populations. It is important to have a clear search strategy (Greenhalgh 2006) and PICO allowed this.

Three databases were selected for the search. The CINAHL database provides a comprehensive source of literature related to nursing and the allied health professions. The MEDLINE database, a bibliographic database, provides papers from academic journals covering medicine, nursing, pharmacy and veterinary medicine. ERIC was also used as this provides education research and information. The three databases were chosen to ensure that education and health care literature was searched. The Open University 'one stop search' was also utilised, which allowed the terms to be searched within a large resource of e-journals. The 'one stop search' is a multi-disciplinary tool that searches 40 of the largest collections of e-journals. Also as studies were identified their reference lists were scrutinised for potential additional sources of relevant material that could be used within the review of the literature on BL.

In terms of inclusion and exclusion criteria the following areas were considered. The literature reviewed primarily comprised studies undertaken after the year 2000 as the drive to develop and embrace BL in higher education gained momentum after this time period (Guzer and Caner 2014). The papers included are from higher education in general as well as from medicine, the allied health professions and nursing. It was important to select studies relating to different healthcare professionals to illustrate the use of BL in practice and how this approach has, and is, influencing education in healthcare generally and in particular nursing. Looking at studies in higher education has enabled me to see the broad influences of BL and how this has filtered into nurse education. International studies were included provided they were in the English language. BL is not specific to the United Kingdom and as such it was important to incorporate papers from different countries. Any

studies looking *only* at distance learning and e-learning have not been included in this review.

### **2.3 Selection of studies for the literature review**

Papers have been selected that explored student and/ or lecturer experiences of BL.

Students, in the context of my research, were studying to obtain a degree (Level 6) or higher. Using the search terms described in Appendix 1 and the use of Boolean operators, BL studies were discovered. Scrutiny of the abstracts resulted in specific papers being selected for further reading. Using the inclusion and exclusion criteria as a guide, thirty studies were selected for use in this literature review. These papers were deemed pertinent to the phenomena being investigated as they all considered the experiences of students and lecturers of BL in degree level education. Equally the studies selected have helped shape the issues and highlight the key themes that have subsequently informed and supported the research questions.

The studies selected consisted of eight from higher education, four from medicine, three studies from the allied health care professions and 15 from nurse education, the last 15 being divided between pre-registration nurse education (four studies) and post qualification nurse education (11 studies). The majority of studies in the pre-registration field were concerned with e-learning. Also some of the literature is concerned with diploma level nurses rather than degree level. The four studies selected at pre-registration level are representative of the work on BL for this group of nurses. They have helped place BL in the context of nurse education but are limited in their ability to answer the research question. There is a paucity of literature on BL in post qualification nurse education. Again the majority of studies consider e-learning rather than a blended approach to nurse education. The 11 papers were selected for inclusion in this review as they all considered post qualification students views of BL, specifically considering degree level students only. Those also considering lecturers views were scarce and those found have been

included, thus illustrating the need for further exploration of student and lecturers views of BL in post qualification nurse education.

Before considering the definitions and studies related to BL it is important to set the wider context related to the development of information technology and the embedding of the BL concept in higher education.

The Higher Education Academy (HEA) drew attention to the need for greater flexibility in the learning process alongside widening participation and access to higher education (Gulc 2006, Osbourne and Young 2006). Among the recommendations for increasing flexibility in higher education was the use of technology enhanced learning. Using technology is considered an important way of opening access and, as the HEFCE (2009) stated, there is a need to strengthen open learning that reflects 'the real world' needs of the students. It is possible that BL is in a position to meet these aims.

The HEFCE in 2005 developed centres for excellence in teaching and learning (CETLs), among whose purpose was to support innovative teaching practice and widening participation, for students both nationally and internationally, in the higher education sector. Although research in education remains prominent and, of course, essential for teaching practices to develop, the HEA and HEFCE as well as the CETLs place the onus on innovative teaching and their focus is the drive to improve practices.

Support is required by the higher education sector to develop learning technologies. This may come from existing IT departments; however the HEA, CETLs as well as JISC (Joint Information Systems Committee) will provide current IT to enhance and develop both the learning and teaching in higher education. JISC offers leadership in the use of IT to enhance the learners' experiences and thus plays a role in enriching both learning and teaching. At the core of higher education is the need to facilitate a personalised learner

experience and it is possible through the use of technology enhanced learning that this aim will come to fruition (Barnett 2014).

The definitions and multiple interpretations of BL are first considered. Following this the studies of BL will be discussed in terms of professions: medical education, the allied health care professions and nurse education. Higher education is also included to ensure the wider perspective is considered outside the health professions. In the introductory chapter it was identified that BL was a complex concept and difficult to define. Despite this challenge, the literature review provided an insight in to how BL could be defined and understood.

## **2.4 Definitions of blended learning**

Bonk and Graham (2006) suggested that it is difficult to find a universally accepted definition of Blended Learning (BL). Oliver and Trigwell (2005) also claimed that although there are many definitions of BL it remains poorly defined. The following discussion highlights this difficulty. Bonk and Graham (2006) offered a definition of BL as a combination of face-to-face and computer mediated instruction but considered that definitions as a whole remain too broad and as such provide a poor description of the term. They argued that this is not a new concept and is really embedded within current education practices, stating that BL is a corporate ‘buzz word’, a fad and perhaps a fashion in education. However Bonk and Graham (2006) were looking at BL from a business perspective and their work is around its role in the business community. Therefore their definition may not necessarily be transferable to other areas of education.

The majority of definitions of BL emphasise the link between two distinct areas, face-to-face interaction and computer technology. Computer technology itself has many definitions but in general terms is perceived as e-learning or web-based instruction (Garrison and Kanuka 2004). Adams (2004) and Glenn (2005) also both noted the array of terms that have been used to describe the use of computers to aid education in nursing, for

example computer mediated education, web-based learning, online learning and e-learning. E-learning in its turn is described as learning with assisted, interactive, computer based technology (Wilkinson et al. 2004). Moule et al. (2010) further suggested that e-learning allows the use of technology not only to support the learning process but also the teaching. The development of educational material using the internet to provide open access to learning is highlighted by Reime et al. (2008) as the essence of e-learning. In all areas of education, both for adults and children, computer based technology is used to support, or in some instances replace the traditional methods of learning and teaching. Glogowska et al. (2011), in support of this discussion, provided a broad definition of e-learning stating that it is the use of computers and the internet that allow learning.

Within nurse education a combination of e-learning and face-to-face instruction is increasingly the way knowledge is delivered; Glogowska et al. (2011) defined this as BL. Glogowska et al. (2011) have taken this definition from Stacy and Gerbic (2007) who referred to the BL approach as a combination of traditional educational methods with web based education. Moule et al. (2010) provided a brief definition of BL as being of two elements, face-to-face teaching and e-learning. This is a limited definition and does miss the variety of learning that can encompass the blended learning approach to education. Littlejohn and Peglar (2007) provided a much more in-depth description of how they viewed BL. Their emphasis appeared to be around the environment in which learning takes place and they stated that BL can happen anywhere and at any given time. Littlejohn and Peglar (2007) completed their definition by highlighting that BL allows students to learn through a variety of media, but do not specify what they mean by the term 'media'.

Hsu and Hsieh (2011) identified that BL refers to a method of learning that uses two or more approaches that come together to complement each other. However, although the presumption is that one of the approaches uses e-learning, they do not clarify this in their

definition. Similarly Bodie et al. (2006) saw the use of BL as being the combination of class room lectures with other activities, for example discussions and visits. They stated this may be plus or minus web based learning. This demonstrates BL as an all-encompassing term of mixed methods of delivering education. It could be argued that this is something that has always been done but now a term is allocated to it, that of blended learning.

Singh (2003) described BL in terms of optimizing the learning of the student through the use of a mixture of educational delivery mechanisms that complement each other. Again there is no mention of the use of e-learning in this definition. In contrast Miller et al. (2004) stated that the term 'blended' implied combining different learning techniques using both traditional as well as technology based learning. These approaches to blended learning can be considered as contradictory rather than complementary. It appears from the discussion so far that BL is a mixture of elements put together to enhance the students' learning experience. Garrison and Vaughan (2013) believed that ultimately a definition of BL is not important as long as the learning delivers evidence based, current knowledge that meets the requirements of the student body.

The literature on BL has the ability to address the different learning styles of students. The didactic approach has been criticised as many students have been found to learn from reading and finding out information for themselves (Knowles et al. 2005). As a result BL can more meaningfully be understood as the use of multiple methods of education that enhance learning (Garrison and Kanuka 2004). Sharma and Barrett (2007) offered a similar perspective to the BL concept and defined it as the combination of both online and in person classroom learning activities. They emphasised the multiple approaches to teaching and stressed that BL allows the use of diversity in the classroom and online. Sharma and Barrett (2007) are writing from a language school perspective. It is interesting to note that

the nursing literature has not discussed the definition of BL as portrayed by Sharma and Barrett (2007). It is possible that currently nurse education has a narrower view of BL and should now see this concept as a diverse mixture of multiple methods or modalities of teaching that will enhance the student experiences, therefore potentially addressing their different learning styles.

There are many definitions of BL and it appears from the literature that the definitions of BL set the foundations for the studies that explored the use of a BL approach to education. On this basis it is important to begin this literature review with a working meaning of BL. Equally this definition informs my study as a whole. This definition has been identified from considering the literature around BL (see for example Moule et al. 2010, Glogowska et al. 2001). For the purpose of my study BL was understood as:

‘A mixture of approaches to teaching and learning that encompasses face-to-face teaching and e-learning to enhance the student’s educational experience.’

Despite the many definitions drawn on to reach this understanding there is no mention of the importance of enhancing the learning through BL. This has therefore been included in this working definition. Developing a universal definition of BL was important for my study as this was not just explored through the research undertaken but was also revisited and modified as a result of the data collected and through further reading of current literature. The extent to which my study achieved this is revisited in the discussion chapter. This is important as Oliver and Trigwell (2005) highlighted that the definitions of BL are written by the teachers, instructors and facilitators rather than the learners. It is with this in mind that during the interview process participants were encouraged to provide their definitions of BL.



## 2.5 Higher Education

Eight studies were selected under the term of higher education, which in this instance are studies outside of the health care professions, and will be discussed in this section. They all demonstrate the complex nature of developing BL, as well as illustrating the ever changing face of adult education. Of note is the reduced emphasis on a didactic approach to delivering set instructions. This is replaced by an emphasis on enhanced learning through multiple modalities.

The sense of community in a BL course was studied by Rovai and Jordan (2004), who used a quantitative approach to their research. The idea that students do not feel they belong to the university if they are not in a classroom being taught is an interesting concept. Indeed this sense of belonging may result in the students not connecting with each other within the learning environment (McDonald et al. 2005). Equally lecturers have the potential to feel isolated from their students, though no reference to this was made to this in this study. Rovai and Jordan (2004) drew attention to the fact that if students had met and begun friendships this could be carried into the online community. The study participants were 68 teachers studying for a Master's degree in education in the United States of America (USA). A five point Likert scale style questionnaire was used to elicit the perspectives of the students towards BL with particular reference to their sense of community during the learning process. The findings demonstrated a generally positive response to BL as a whole. Students expressed reservations about the strong onus on the use of technology and the apparent difficulties in terms of getting access to the course materials. The face-to-face interaction reported in the study by Rovai and Jordan (2004) allowed students to feel part of the course. In comparison those who studied wholly online, reported a greater sense of isolation (Morgan and Tam 1999).

Overbaugh and Nickel (2011) also studied whether students felt a sense of community when the BL approach was used. Much like Rovai and Jordan (2004) the students were

teachers undertaking a university course in an American university. A survey using a five point Likert scale was employed to find out about student satisfaction of BL and whether they felt a sense of community with their peers. It appears that in both the Overbaugh and Nickel (2011) and Rovai and Jordan (2004) research that an assumption is made that the online component of the BL may inhibit the development of student community and as such create potentially an isolated lonely learner. Both studies report that students felt they missed classroom interaction and discussion. However overall BL was viewed as positive. Overbaugh and Nickel (2011) stated that this positive aspect of BL developed as students enjoyed the mixed approach to learning, as this prevented repetition of the same learning modality. Both studies did not include the lecturers' experiences of BL so no comparison can be made. Although students may feel a degree of isolation through the BL process, it is also possible that lecturers will feel this too. Studying student teachers who may use mixed modalities in their classroom may result in a degree of bias towards the positive aspects of BL. Neither study alluded to this idea. Potentially this results in findings that are not transferable to education as a whole.

The learning environment for both students and lecturers has traditionally been the classroom setting (Garrison and Vaughan 2013). BL challenges this as the learning environment becomes wherever the student is able to work. This concept was investigated by Ginns and Ellis (2006) who looked at BL in relation to the quality of learning. Their study participants were veterinary (vets) students in an Australian university; 127 third and fourth year student vets took part. No lecturers were asked their views about BL. A questionnaire was used and, as in the two previous studies, a five point Likert scale was employed. The majority of students reported negatively towards BL and this was considered to impact on both the quality of learning and the students' learning experience. Particular attention was drawn to the lack of support afforded through BL. In contrast Perreira et al. (2007) reported that students were satisfied with BL and felt supported in

their learning. In Perreira et al's. (2007) research, the students were in their first year of a biology degree in a university in Barcelona, Spain. Their research compared students' perceptions of BL with those who had face-to-face teaching only. A short survey questionnaire was used. Their findings indicated no difference in satisfaction between the two groups. It is possible that students at different points in their studies and perhaps studying differing subjects will have varying perspectives towards the use of BL. Therefore it is not possible to generalise the findings to students in higher education *per se*. Of note is that there are differences between the ways BL will be developed to suit a practice based course compared with a theoretical based course. The studies thus far are indicating that those studying practical courses do not regard BL in a positive way.

Osgerby (2013,) in an exploratory qualitative case study investigated student perspectives of BL. Thirty nine students attending a degree in accountancy and financial management in the UK participated in focus groups. Overall students had a positive experience of BL. Students reported that they did not like the fact that the whole course required them to use IT as they had expected some face-to-face component. The students also mentioned the use of 'amateurish material' on the e-learning site and inconsistencies of the information that was delivered online. Students also chose to meet up outside of the virtual learning environment (VLE) rather than work together online. The author makes no mention that students did not feel a sense of community or that they felt a sense of isolation within the learning process despite students' obvious need to have human contact in the learning process. This study describes BL as mixed media approaches within the VLE for example wikis, discussion boards, and e-learning. Osgerby (2013) does not consider face-to-face in her definition of BL. By dismissing the face-to-face aspect of BL to concentrate on IT this questions whether this was considered during the interviews.

The studies discussed so far have not included the experiences of lecturers as a comparison. However Fillion et al. (2009) looked at the student and lecturers perspective

of BL, using a mixed methods approach. This was a large study consisting of 841 students based in a university of Canada. A total of 313 students completed an online survey. Eighteen lecturers took part in structured one-to-one interviews. The paper does not report what the students were studying or the level of expertise of the lecturers but of note is that the students were in the first year of their studies. The findings from the student survey showed that students were more satisfied with the online learning than the face-to-face component. The paper does not specify what the face-to-face component entailed and it is possible that this may in fact account for the preference for the online learning. These findings are in contrast to the other papers discussed. The authors of the research did not surmise why this might be. The lecturers' interviews indicated that the online component improved their teaching. The improvement came about as they developed their teaching materials for the online learning and subsequently revisited the classroom sessions. Several believed they could do more with the information technology (IT) component and mentioned the need for greater IT support. The lecturers were often online at the same time as the students so able to give any support required by the course attendees. Although this is a large study the results reported are limited as no depth to lecturers' and students' perspectives are discussed. The findings concentrate on the IT/ online component, arguably important, but to afford comparison to other research the face-to-face changes require further discussion.

The lecturers' experiences of BL are of interest as this group facilitate its development and use in education, there is paucity of literature in this area. A study looking at lecturer experiences of BL was conducted by Benson et al. (2011). A small case study approach was used to elicit academic staff perceptions and attitudes towards BL. Sixteen lecturers were interviewed using a semi-structured approach. This study took place in a business school based in a university in the United Kingdom (UK) and it was based around a theoretical business course. BL was viewed as more than just technology to improve

learning and the academics saw BL as a positive experience. An interesting theme emerged from this qualitative study, with lecturers stating that enhanced technology does not make up for or overcome the problem of poor teaching. The benefits of information technology were extolled by those taking part in the study. All lecturers endorsed the use of BL to enhance the quality of learning. The paper reports solely positive aspects of BL and this is questionable as this has not been seen in the other papers in higher education. BL has its origins within the business community (Bonk and Graham 2006) and this may have biased the results.

In a study of students experiences of BL, Moore and Gilmartin (2010) evaluated a new BL module which was part of a geography degree taken in a university in Ireland. A total of 203 students completed a questionnaire of closed and open questions asking about their experiences of BL. Moore and Gilmartin (2010) drew attention to the need to use e-learning more due to the increase in student numbers attending the degree course. This is a similar issue seen in universities within the UK. They believed that BL could be seen as a collaborative approach to learning between lecturers and students. Their findings suggested that students found it important to socially interact with their peers and lecturers; the development of a sense of community was essential for all those involved in the module. The students also found that lecturers moved away from a didactic approach and had become facilitators of learning. BL was deemed as a concept that encouraged student participation unlike lectures in a large auditorium. As with all the studies discussed which used any quantitative data collection methods these are reported heavily and as a consequence the studie's qualitative findings are not discussed in any depth.

Comparing the results from the papers, students and lecturers viewed BL as a positive experience when they were participating in theoretical programmes of study. However in comparison, those participating in courses/ programs of study that were practical in nature were not so positive about the use of a BL approach. Practical learning requires face-to-



face interaction with other students as well as the lecturers and therefore reducing this component resulted in negative responses from those involved. The studies discussed are based in a variety of countries but they are all western countries with similar educational systems to the UK.

The papers discussed within the higher education field have shown three main themes emerging: quality of the learning experience with the use of BL, changes to the sense of community when a BL approach is used, and issues related to the use of information technology.

## **2.6 Medicine**

This section presents four studies that have been undertaken within medical education and consider the experiences of medical students and lecturers towards BL. Lewin et al. (2009), in a USA study of medical students, explored their experiences of using computer assisted learning as part of a BL course. The medical school in America had developed a BL curriculum aimed at standardising the learning experiences of the student. Following completion of a BL course the second year medical students completed a survey where they rated the content and also any issues related to technical problems. Lewin et al. (2009) did not state the number of students completing the survey and no lecturer perspectives were sought. The students on the whole rated the BL highly. This was not explored in any greater depth by the researchers so it is difficult to make a judgement about what is meant by highly rated. The paper comments on the negative aspects of BL; the students highlighted that problems with technology including accessing the internet were major draw-backs of the online aspect of BL.

A similar study of final year medical students in an Australian medical school showed comparable findings to Lewin et al. (2009). Gray and Tobin (2010) used a mixed methods approach to assess the experiences of 43 final year medical students and 13 clinical

educators (the equivalent of lecturers in the UK). Data were collected from a survey evaluating the experiences of the students and clinical educators: however no details of the specific questions were disclosed in the paper. The results with regard to students' perspectives of BL indicated similar feelings to those found by Lewin et al. (2009). The clinical educators however were more reserved in their opinions towards BL, indicating that they viewed face-to-face teaching as more conducive to learning than the use of online discussions. Technology and the difficulty in accessing BL material was highlighted as a problem for the students and lecturers.

It is interesting that both Lewin et al. (2009) and Gray and Tobin (2010) reported results from practical examinations (Observed Structured Clinical Examinations known as an OSCE, traditionally the method of assessment in medical education) following the BL courses. Both studies indicated they found no difference in exam outcomes when comparing BL to face-to-face only learning. Potentially this may demonstrate little difference in the quality of learning in BL and traditional style education. However the modules are practical in nature, so the majority of learning would have taken place in clinical skills centre or in the hospital environment rather than in a VLE. It is possible that BL does not suit practical 'hands on' courses and is perhaps more suited to theoretical based modules. Although Mohanna (2007) particularly made reference to the use of e-learning in medical education as a positive move, drawing attention to the new 'net generation' whose expectations are to be using up-to-date technology as part of their learning. This however has not been supported by the studies discussed so far.

First year medical students attending a radiology course were studied by Shaffer and Small (2004) who wanted to ascertain the views of the students towards BL. This was a small quantitative study which took place in America. The findings revealed that students were unhappy with inconsistencies between lecturers but overall the computer based sessions



were seen in a positive light. Shaffer and Small (2004) concluded that BL made the best use of the lecturers' time and the students benefited from being treated as adult learners.

A similar UK study of BL techniques used with final year medical students was undertaken by Howlett et al. (2011). One hundred and ten medical students studying radiology were surveyed about their opinions of this BL course. The survey used a five-point Likert scale, one being most negative and five as the most positive response. The student responses were generally positive with particular reference being made to the ability to access online material at any time. The flexibility of BL is also reported in the nursing literature. It could be argued that potentially students who are required to study academically whilst working in health care will benefit from the BL approach due to the ability to study at anytime and anywhere. Howlett et al. (2011) also noted that comments were made by the students that the quality of the computer based learning was perhaps not to the same level as the face-to-face sessions. Howlett et al. (2011) did not look at the lecturers' perspectives.

The four pieces of research in this section have concluded that BL may compromise the effectiveness of learning. Issues with IT and possible inconsistencies of information on the e-learning site were discussed. Choules (2007) stated that computer technology allows for reliable and reusable content that is convenient for medical students but adds that caution must be used to ensure that it is used in an appropriate way. The four studies selected do not reach the conclusions that Choules (2007) argued. As with the higher education papers the quality of the learning experience is an emergent theme. The studies did not reveal any anxiety about the isolated learner when using online education. They did not consider the concept that potentially the community of learning may be lost. There also appeared from the four studies to be a lack of depth to the information gained which could be due to the use of Likert scales. To elicit more information about how students and lecturers feel about BL a qualitative approach would be more adventitious.

## **2.7 Allied health professionals (AHPs)**

AHPs provide therapeutic, diagnostic and technical patient care and include physiotherapists, occupational therapists, podiatrists and radiographers. Three studies relating to BL for the AHPs have been included to consider whether and how BL is being used in different health care professions outside of nursing.

Assessing whether student's academic outcomes are different between those attending a face-to-face course and those participating in a BL approach to their studies was the foundation for Strickland's (2009) study. The research by Strickland looked at paediatric respiratory therapy students in a university in the USA. There is no similar role in the UK but it may be considered closer to the role of a physiotherapist. This mixed methods study used quantitative analysis of the students' exam results in each group whilst qualitative methods allowed the students to comment on the use of BL and face-to-face aspects of the course. This is a small study with 14 participants, six of whom were on the face-to-face only group and eight in the blended learning group. The results indicated no difference in academic attainment between the two groups. However the students on the BL course reported less satisfaction than those who had had traditional teaching. They particularly drew attention to the fact that the e-learning aspect increased the amount of work they had to do.

In a UK study Davies et al. (2005) evaluated the use of BL for physiotherapy students. Their year of study is not disclosed in the paper but they were studying towards a BSc in physiotherapy. The course traditionally used lectures to support working with patients. Davies et al. (2005) added in the use of e-learning to support the theoretical and clinical component of the course. Qualitative data were collected from 17 students who attended focus groups. The results indicated that the BL approach added value to the learning experience. The students commented on the flexible approach that BL offered to their learning. However the focus groups highlighted the need for consideration to be taken of



the students' level of IT skills. This was mentioned as an issue as some students found the use of technology difficult to grasp.

A Canadian study looked at interdisciplinary views of a BL course (King et al. 2008). A total of 24 students from a range of disciplines (medicine, nursing, nutrition, physical therapy, pharmacy, dentistry and occupational health) took part in focus groups utilised to gain the perspectives of the development of interdisciplinary team competencies within a BL structure. King et al. (2008) considered this study to be unique in the way it has brought all the disciplines together to elicit their response to BL. Overall BL was viewed positively, the students expressed they had developed their interdisciplinary skills. However a degree of anxiety was disclosed about how the BL approach could improve team development. The study also reported that the physical isolation away from the classroom format encouraged the team to work harder to bond. No comment was made on whether the team bonded and if communication improved with the use of BL. Whilst acknowledging the word limit of the paper this diverse study does not report in detail its findings so it is difficult to comment on the transferability and generalizability of the findings.

The studies have all looked at student experiences of BL. The lecturers have not been asked about their own perspectives of the BL format. Technology has been cited as an issue. Equally isolation on the learning process with reduced face-to-face provision has been alluded to within the research. Of note is that few studies look at BL *per se* the majority address e-learning or computer assisted learning only as a tool for education in the allied health professional field. As with medicine and nursing these are practical courses designed to enhance patient care. It is therefore difficult to see how purely e-learning modules could replace face-to-face practical components. In essence BL with its mixed modalities could be viewed as a better way forward for health care education.



## **2.8 Nurse education**

This section of the review discusses studies on BL within the nursing profession. It is divided into two areas: pre-registration student nurses who are students undertaking a three year course to become a qualified nurse with an academic qualification of a degree and the second area is post qualification nurses, which includes nurses who are qualified nurses and studying to obtain a degree.

### **2.81 Pre-registration student nurses**

The studies selected are discussed in relation to pre-registration student nurses' experiences of BL. An Australian study by Salamonson and Lantz (2004) surveyed 143 students about their satisfaction with BL. They defined BL as a hybrid, a mixture of face-to-face and e-learning. The survey used a 10 point Likert scale. Unlike the studies discussed in the previous sections, demographics (age and gender) were collected. However the paper does not report how different student demographics potentially affect their perspectives of BL. Overall the results are reported as positive towards the BL approach. The paper points out that the students were happier with increased face-to-face time and although e-learning was seen in a positive light, the students would like the time spent on this to be reduced. Salamonson and Lantz (2004) also noted that students who obtained higher marks in their exam for the hybrid course were more likely to express a preference for face-to-face teaching. Unfortunately they do not propose why this may be.

Ireland et al. (2009) studied the views of second year student nurses from a nursing school in Scotland. Demographics were collected on age and gender, but as in Salamonson and Lanz (2004), they were not reported on in the paper. The study was a longitudinal cohort study using a mixed methods approach in three phases. Phase one used a questionnaire where students were asked to rate the usefulness of the various components of BL. A five point Likert scale was used. The results at this point indicated an overall satisfaction with



BL, but comments were made about difficulty in access to the computer based component of the module. Of note is the small return rate of the questionnaire: of a total of 1989 sent out only 36 people responded. Caution is therefore required when considering the generalizability of the questionnaire results. From this group of 36 seven subsequently agreed to take part in phase two, the focus groups. Students expressed enjoyment with the flexibility of BL but, as previously reported in earlier sections, the sense of community was lost. The third phase was a telephone interview but it was not reported on in the paper as only four students took part and they could not be deemed as representative. Equally representativeness is called into question with the results from the focus group.

Using a different way of assessing the effectiveness of BL is seen in the study by Hsu and Hsieh (2011). Two hundred and twenty three second year students in a school of nursing in Taiwan were recruited for this quasi-experimental study. The aim of the study was to assess the effects of BL on the students' ability to learn. As such the students were divided into those receiving face-to-face only and those receiving BL. They all underwent an exam and the researchers analysed the results to see who performed better. There were no differences between the two groups' performance which is the same finding as Lewin et al. (2009) and Gray and Tobin (2010) in their studies of medical students. The nursing students were asked about their satisfaction with BL. The students reported that they felt they were spoon fed information and BL was viewed negatively due to this fact. Hsu (2011), reporting on the findings from a separate paper (Hsu and Hsieh 2011), reiterated that students were generally satisfied with BL. However the questions asked in this study could be seen as leading and this brings into question the findings from the research.

Salamonson and Lantz (2004), Ireland et al. (2009), Hsu and Hsieh (2011) and Hsu (2011) have all discussed BL in relation to pre-registration student nurses. They have not taken account of the experiences of the lecturers to afford a comparison of students' and lecturers' views of BL. There is a paucity of literature around BL in pre-registration nurse



education; the majority of studies are focused on e-learning as a tool for learning rather than BL *per se*. Conclusions drawn from the four studies indicate students experiencing greater benefit from face-to-face contact. This is perhaps not surprising as the students are new to nursing and potentially will be anxious about learning and developing as a nurse. The sense of community was also highlighted as an area that was reduced or lost with the increased use of e-learning.

## **2. 82 Post qualification nurses and blended learning**

Post qualification or registered nurses and the lecturers working with them are the focus of my research and therefore the literature search aimed to identify as many relevant studies as possible. This final section will discuss the eleven studies that were closely related to the use of BL in post qualification nurse education.

Wilkinson et al. (2004) explored four web-based modules that had been set up for post qualification undergraduate nurses in one school of nursing in the UK. The modules had been developed in 2001 and the study evaluated the perspectives of the students towards this type of learning. Of note was that Wilkinson et al. (2004) stressed that this was web-based learning, however further on in the paper it was mentioned that face-to-face sessions were required, this therefore implies this was BL. The perspectives of the students were drawn from pre module and post module questionnaires that asked closed questions using a Likert scale. Also group interviews were performed after completion of the module. The aim of the interview was to explore the learning experience of the students. The numbers of questionnaire respondents was small, 28 in total; the numbers attending the interview was not disclosed. The study also collected demographic data for example age, gender, professional qualifications and also previous experience with computers. The findings from these demographics, although described, do not make links between for example gender and experiences of web-based learning. The discussion of the findings from



Wilkinson et al. (2004) highlighted the need to ensure that the use of web-based education is appropriate to the module. Some of the students had commented that they did not feel that the module warranted web-based learning and would have preferred to be taught in the classroom. Problems with access to the computer also caused issues for the students, a common theme emerging from the previous sections. The discussion commented on the effectiveness of the web-based learning but acknowledged that the study design was not aimed to look at this aspect. However the authors do comment on the findings suggesting that web-based/ BL approaches are well received by post qualification undergraduate nurses. Finally the paper stated that the students had an overall good experience and enjoyed the flexibility to their studies. Unfortunately there is no discussion about the blended approach to the students learning despite the fact that these were blended learning modules. Also the paper does not address how the lecturers perceived this change to educational delivery. There is potentially a degree of bias with this study as the author was leading IT provision within the school of nursing where the study took place. This possibly calls in to question the reliability of the results.

The concept of comparing both students and lecturers experiences of BL was further highlighted in the study by Bradley et al. (2007). This study took place in 2003 over a period of one year in the USA. The post qualification undergraduate nurses had a paediatric nurse qualification as did the lecturers. The study looked at one module only and appeared to be an evaluative tool of the module. The numbers participating were larger than those in Wilkinson et al's. (2004) study: 120 qualified nurses and 16 lecturers participated. The data were gathered from questionnaires that used a Likert scale but the questionnaires also asked for comments, thus allowing qualitative data to be collected. Bradley et al. (2007) did not comment on how the quantitative data were analysed but the comments were analysed by looking for emergent themes. As with Wilkinson et al. (2004), demographics were obtained. There is limited discussion around these findings

commenting only on the duration since qualifying and previous experience of online learning. The findings from the questionnaire showed a positive attitude towards BL from both the students and lecturers. Comments were made about computer problems e.g. access to computers and navigation to web sites. Chen et al. (2009) commented on similar issues in their study. Eighty-six per cent of the students felt that BL improved their knowledge and Bradley et al. (2007) implied that BL is potentially an effective educational method. However there appears that there is generally a mixed view as to whether BL is an effective teaching tool (Wilkinson et al. 2004, Bradley et al. 2007 and Chen et al. 2009). Lecturers' comments centred around the fact that BL allowed them more flexibility and as such the ability to be innovative and creative with their teaching. Fifty-three per cent of the lecturers stated that they felt that BL improved their satisfaction with teaching (Bradley et al. 2007). This is only slightly over half but Bradley et al. (2007) did not comment on this. As with Wilkinson et al. (2004) this study was an evaluation of a module.

The positive attitude around the BL experience from both the students and lecturers in the previous studies is reiterated in the study conducted by Sung et al. (2008). Sung et al. (2008), in a Korean school of nursing used a quasi-experimental design to look at the effects of BL on medicine administration. The 50 newly qualified nurses who participated chose which group to go to: 26 had face-to-face instruction only, 24 had a BL approach. The findings indicate that those in the BL group demonstrated a higher level of knowledge and satisfaction with the module. The study is very specific to one module and therefore it could be suggested that this may not be generalizable to post qualification nurse population as a whole. Arguably the numbers of study participants are small for statistical analysis. The study was undertaken in Korea and potentially the environment and culture are different from that of the UK. However the satisfaction response is the same that has been seen by Bradley et al. (2007) and Wilkinson et al. (2004). Sung et al. (2007) have collected demographics looking at age and gender but as with the previous studies no correlation

between age, gender and experiences of BL were made. Although the authors of this paper make the assumption that BL enhanced the learning experience the students do not appear to have been asked in sufficient depth about their feelings towards BL. The educators were not asked for their opinions.

Evaluating students' experiences of the modules they have completed is essential to ensure that they are satisfied with the learning material and its delivery. Wakefield et al. (2008), in a qualitative study, evaluated a BL approach to a three day patient safety course in the UK. The authors stated that questionnaires were used to gain some quantitative information but did not discuss this further. The paper reported on the findings from individual and group focus groups of which there were 34 participants. Themes emerged and the findings indicated a varied response to BL, some were positive enjoying the e-learning but preferring the face-to-face interaction, supporting the findings from the studies already discussed. For some participants the technology was difficult to access and did not suit their learning needs. Wakefield et al. (2008) reported that some of the students did not access the e-learning at all during the course and this potentially had a detrimental effect on their learning. No comparison was made with perspectives of the lecturers and it appeared that no demographic information was gained from the participants. The study only looked at one three day course; it is possible that the findings are unique to this type of course. It is therefore important perhaps to look at more than one course / module to ensure that the findings are of sufficient breadth and depth. Though small, the findings once again remain similar to those already discussed.

The evaluative method of studying student perceptions of BL continued in the paper presented by Chen et al. (2009). The aim of the study was to evaluate post qualification undergraduate nurses' self-regulatory learning in a BL module in Taiwan. One hundred and sixty three nurses participated in this qualitative study where observation and



evaluation methods were employed. Thematic analysis led to two broad themes emerging, transition of responsibility and peer interaction, with eight sub themes that included areas such as sharing knowledge, enjoying learning, encountering adversity. A common finding from all the studies discussed are the issues with technology for example inability to access certain areas of the e-learning. This was also found by Chen et al. (2009) who drew the conclusion that students self-regulate their learning and although not specified in the findings this possibly implies that BL can offer flexibility to learning.

Research by Jonas and Burns (2010) looked at 13 post qualification undergraduate nurses' perceptions of BL. An open ended questionnaire was used in this qualitative study, and six themes emerged from the thematic analysis. Once again the need for greater computer skills and support was highlighted. Students commented on feelings of isolation as they worked alone, which is interesting as the lack of community and belonging is a theme emerging from the previous papers. At this point the nursing studies have not drawn attention to the need for students to belong to a group and develop the sense of community that develops in the classroom. This sense of community is often challenging to create when modules are online (McDonald et al. 2005). Among the positive findings was the greater flexibility of learning which appears to increase motivation. Despite being a small evaluative study the findings remain remarkably similar to those already discussed. Iley et al. (2010) also conducted an evaluation of 15 qualified nurses' perspectives of BL who had completed a cardiac module in the UK. Focus groups and semi structured interviews were used. The findings indicate that students felt they had developed their knowledge and skills and as has been reported by the other studies discussed overall a positive experience was gained from BL. However it was also reported that students spent a lot of time on the e-learning site and found this area hard to negotiate. The lecturers were not questioned about their views so no comparison is presented also this is a small study only looking at a

specialised module. It is possible that when looking at a wider cohort attending a variety of modules that the findings will be different.

Glogowska et al. (2011) explored students' experiences of BL modules in a UK university. Seventeen qualified undergraduate nurses were interviewed over the telephone. This research was reported as part of a larger evaluation mixed method study of BL; however the findings from the larger study were not reported in this paper. Some demographics such as age, gender and length of time qualified were specified but as with the other studies there appeared to be no apparent link to the perspectives of the lecturers. Three main themes emerged from this study, concerns related to seamlessness of face-to-face and online materials, issues around what material should be completed in a face-to-face setting and finally balancing of all the components in BL.

Although the findings from the studies discussed so far suggest that over all students view BL in a positive way, the studies are limited in the sense that they are mainly based on small numbers and therefore it is possible to question the generalizability of the data collected. Those discussed so far do not draw on demographics and do not compare the lecturer's experiences of BL with the exception of Bradley et al. (2007). Pilcher and Bedford (2011) conducted a study in the USA using a mixed methodology to explore nurses' technological preferences. One hundred and ninety qualified neonatal nurses participated in the quantitative questionnaire, where demographics were also collected. Nine nurses participated in the follow up interviews to obtain qualitative responses. There are some good links made between age and the use of technology. However Pilcher and Bedford do not discuss this in any depth so it is difficult to see how the perceptions of, for example someone born in 1960 towards BL will be different from someone born in 1990. The overall findings suggest a mixed response to BL. Pilcher and Bedford touch on learning styles as having an impact on how BL is perceived this is also potentially linked to



the generation of the student and is potentially an area to explore further. However although BL is at the heart of this study it is not specifically named and therefore the reader has to draw their own conclusions around this. The authors primarily concentrate on the use of technology to enhance learning and ultimately suggest that nurses are willing to use a variety of technological tools to increase their knowledge. This is curious as in previous papers discussed technology has been viewed negatively and issues with access have been seen as a major problem associated with BL. Similarly a link made by So (2009) is between students age and satisfaction level reiterating the later findings of Pilcher and Bedford (2011). So (2009) reported the findings from a study on post graduate students satisfaction of BL in one module in the USA. This was a mixed method approach and as with the findings from the studies discussed so far indicated a positive trend towards BL.

The final study in this review is by Smyth et al. (2011) who used a qualitative interpretative descriptive design to find out the experiences of post graduate qualified nurses taking a BL module. The study took place in Ireland with students from a variety of modules in one school of nursing. Fifty one students took part which constituted a response rate of 35%. This is a low response rate of participation in the interviews and may bring into question the generalizability of the results. Thematic analysis showed two major themes, benefits and challenges of BL. Within these were sub themes. Flexibility of the learning was noted as a benefit; however students commented on the fact they 'could not get away from studying' as they could access the e-learning material anywhere and at any time. This invasiveness into personal time has not been reflected in the findings of the previous studies. No lecturers' perspectives were compared with the students. It is important to have this comparison as the studies have found students have an overall positive experience of BL but is this the case for the lecturer? If there are conflicting opinions then this could create problems with the seamlessness that is required if BL is to be an effective educational method that enhances the learning experience for the students.

Eleven studies have been discussed all looking at the experiences of qualified nurses toward BL and using a variety of methods. Bradley et al. (2007) also included the lecturers' perspectives. However there are some gaps in these studies. A comparison between lecturers' and students' views is not made and also there are no strong links discussed between age, gender and previous experience and the perceptions towards BL. Finally there are potential differences between nursing specialities. Bradley et al. (2007) were looking at paediatric nurses and Pilcher and Bedford (2011) studied neonatal nurses. None of them have looked at mental health nurses experiences. It is perhaps possible that differences in the way BL is perceived will emerge amongst different nursing specialities. Finally although the studies discussed the perspectives they do not take into consideration the students and lecturers expectations towards their area of study.

## **2.9 Summary**

The review of the literature undertaken has helped to identify gaps in knowledge and clarify the research questions which were initially formulated from personal experience, which identified a lack of engagement of nurses studying at degree level with the blended learning (BL) process. There is also potential contrast between students' and lecturers' views of BL. Both the conflicts and similarities amongst these two groups have been investigated in this review.

It is difficult to draw a comparison with the UK from some of the studies as they were conducted in Australia and America. In these countries education has to cover huge distances and so face-to-face interaction is not always possible; therefore their BL may not have the same format as the model used in the UK. Arguably studies from Asia although utilising BL are based in a potentially different education system which may use a different model of BL. Equally the cultural background in the Asian areas is potentially different

from that of the UK. Therefore although a useful definition is drawn from the papers it is essential to consider that nurse education in the UK has its own unique focus on BL.

Garrison and Anderson (2003) stated that personal, professional and social interpretations have the potential to both influence and shape the educational system. Learning has been described as a way of experiencing the world by Laurillard (2002). Both these aspects reflect the interpretivist perspective. It is this philosophy that will underpin the research into the experiences of BL. The literature review illustrated that the mixture of modes of teaching in the form of BL has potential opportunities, constraints and challenges when influencing learning. It is therefore essential to gain an insight into what learners and lecturers feel about the use of BL as an educational method. Studies around e-learning are plentiful (Bentley et al. 2012). However the literature identified and reviewed revealed that research that considers the experiences and effectiveness of post qualification student nurses and lecturers using BL are limited. The literature review has highlighted potential gaps that require further investigation into nurse education's use of BL techniques:

- Quality of learning
- Communities of learning/ sense of belonging both for students and lecturers
- Experiences of BL - a comparison between students and lecturers
- Potential relationship between the experiences of BL and age, gender and nursing experience.

Ellis et al. (2006) highlighted that the development of new technologies to enhance learning provided a challenge to both students and lecturers. As BL embeds into university culture further research is required to ascertain both student and lecturer experiences.

Ultimately the findings from this body of evidence will result in an enhanced learning and teaching experience for all those involved.

## **Chapter 3 Methodology, research design and methods**

### **3.1 Introduction**

This chapter discusses the rationale and justification for the choice of methodology that has underpinned this study. It also considers the methodological perspectives, research design and ethical deliberations. The chapter concludes with a discussion of how the data were analysed.

An interpretivist approach using a qualitative methodology was selected as the most appropriate framework for answering the research question which was:

*What are the experiences of both lecturers and students in post qualification nurse education when a blended learning approach is used?*

The study was set within post qualifying nursing and as the rationale for the study and the literature review have indicated it is an area where traditionally participants have had less exposure within research related to BL.

### **3.2 The methodological perspectives**

The aim of the research was to explore the experiences and perceptions of the participants regarding blended learning. A qualitative methodological approach was used, allowing a deeper exploration of the participants' interpretations of the BL experience (Fossey et al. 2002, Mason 2002). The reality of BL for the lecturer and student was sought with an attempt to see the experiences through the participants' eyes (Silverman 2010, Cohen et al. 2011, Bryman 2012).

Qualitative research allows the researcher to explore a wide array of aspects of a phenomenon including the understandings, experiences and perspectives of participants. The richness of qualitative research means that there is the capacity to explore and understand specific concepts. Qualitative methodology will allow for an openness to the

research, for concepts to emerge rather than to confirm what already exists. The relative lack of structure of this methodology means there is flexibility in the way the research is conducted (Bryman 2012).

Commonly associated with the qualitative methodology is the interpretative approach (Mason 2002, Streubert and Carpenter 2011, Cohen et al. 2011, Green and Thorogood 2014). This has been selected as the best way to explore the research question(s) and gain insight regarding the experiences of participants about BL. Williams (2000) suggested that both the terms qualitative research and interpretivism are often used interchangeably as they consider the in-depth knowledge and understanding of individuals towards a specific area. An attempt is made to understand the subjective importance of the person's experiences (Cohen et al. 2011). Mathews and Ross (2010) regarded interpretivism as having an epistemological position that looks at a person's subjective understandings and perspectives of a particular social phenomena. In essence this approach is described as having the following key features:

- Knowledge is gained from people's perceptions and experiences
- The person conducting the research is required to interpret other people's perceptions/ understandings.
- The interpretation of meanings are within a specific context.

(Adapted from Fossey et al. 2002)

Interpretative research provides an understanding of the world from the point of view of the participants and therefore a unique insight into their experiences is seen. It is with this in mind that this paradigm has been selected.

### **3.3 Ontological and epistemological position**

Ontology is defined as the study of being, of what exists in the social world (Burgess et al. 2006, Mathews and Ross 2010, Bryman 2012). In relation to my own study the social reality is built from the perceptions and experiences of the individual (Kelliher 2005). Learning is not independent of the participants but is developed and accomplished by both lecturers and students (Bryman (2012). This is the stance taken in this research.

Epistemology is a term that allows the researcher to consider the basis or theory of knowledge (Mason 2002, Burgess et al. 2006, Mathews and Ross 2010). In relation to this research my epistemological position draws on that of Laurillard (2002) who saw learning as a relationship between the learner and the world which is mediated or facilitated by the lecturer. To add to this position, learning takes place between the student and lecturer where there is potential sharing of knowledge. This is particularly noted between qualified nurses and nurse lecturers. The experiences of students and lecturers towards BL will be influenced by their relationships with learning through higher education systems as well as through their work as qualified nurses. As both a nurse and lecturer I am influenced by both disciplines and these will affect the epistemological stance.

### **3.4 Research design**

The research design was chosen as it was considered the one that would best answer the research question(s). A pragmatic view, as advocated by Mason (2002) and Braun and Clarke (2014), was taken in order to meet the aims of the study and thus an in-depth study with purposively selected participants was adopted to explore the phenomenon of BL in post qualification nurse education. The participants were selected from one school of nursing and were lecturers and students (qualified nurses) teaching and studying at Level 6 (degree level). The study was in two stages, an initial study using focus groups and main study using one-to-one interviews.

### **3.41 The research setting**

The research was conducted in a school of nursing based within a large London university. Access to the school and the participants was granted by the Head of School. Primarily the setting was chosen as it provided a rich source of information that would answer the research question(s). Equally, as a member of the institution in which the study took place I had an insight into the developments of BL in this academic setting and, as a lecturer within the school of nursing, I was able to facilitate access to participants. Hoepfl (1997) suggested that using contacts to gain access helps remove any barriers to entrance to the research site. However selecting a research site through convenience is not a basis for obtaining generalizable data. The aim is to choose a site that typically represents the area being researched. As a school of nursing which provides post qualification nurse education the site could be thought of as typical of schools of nursing in the UK, the majority of which characteristically provide both undergraduate and post registration courses

### **3.42 Research sample**

Qualitative sampling is primarily concerned with the generation of valuable information (Fossey et al. 2002). It is therefore essential to ensure that appropriate people are selected to take part in the study; ultimately individuals are recruited as they are likely to provide rich, in-depth information that will answer the research question. This was a small scale, interpretive, qualitative study targeting a particular group which allowed for in-depth data generation. The most appropriate way to sample in this instance was to use non-probability sampling (Cohen et al. 2011). Cohen et al. (2011) suggested that this is particularly used when no statistical generalization of results can be expected, although theoretical generalization is sought. One type of non-probability sampling is purposive sampling (Fossey et al. 2002). This sampling method enables comparisons to be made between

groups, which was required in this study between lecturers and students. The sample was selected to gain the most appropriate participants for the study.

The sample was based on two distinct groups, post qualification nurses studying at Level 6 (degree level) and lecturers. The lecturers were the module leaders from the same specialist areas as the student group. All participants were from within one school of nursing and from a range of clinical experience, different genders and ages. Thus the sample included participants from the adult, paediatric and mental health programmes. The student participants were also from a variety of NHS Trusts.

Three lecturers were selected, one from each of the three programmes. The aim was to gain the experiences of lecturers working in the three main specialities of nursing. The three lecturers were deliberately targeted as they were module leaders (for Level 6) within the three programmes: adult, mental health and paediatric (degree programmes). All three agreed to participate in the research. From each of the lecturer's selected modules students were recruited for the study. It was hoped that students would volunteer to take part from each of the three selected modules thus providing a variety of experiences of BL.

The lecturers were chosen as they were the module leaders and thus represented the three strands of the post qualification curriculum currently delivered within that school of nursing. Three criteria were considered for selection: first the module needed to be at degree level; second the module was required to be part of a degree programme and third, the students attending required this module as a mandatory component towards their degree.

Recruiting the students was more of a challenge than anticipated. The students were approached, with permission of the module leader, in class following their teaching session. The study was explained, queries answered and volunteers asked for. There was no coercion to participate in the study. As such four students from adult and child



participated and two from mental health. The total number of participants was therefore 13 (three lecturers and ten students). The data from these 13 interviews provided a full and rounded picture of BL with similar issues being raised by all participants. The one-off interviews provided a narrative that really expressed the participants' story of their experiences of BL.

### **3.43 Ethical considerations**

All research has potential ethical implications (Howe and Moses 1999) and it is essential to consider the social and moral concepts involved in the research (Mathews and Ross 2010, Streubert and Carpenter 2011, Silverman 2013). At all times the safety of the participants in the research should be assured. Ensuring that the study upholds the ethical principles and protects the rights of those taking part is essential. This section will discuss the ethical considerations regarding the conduct of this research.

The ethical guidelines for educational research (BERA 2011) as well as those of the Open University helped inform the way the research was conducted. Also the Economic and Social Research Council (ESRC) framework for research was consulted (ESRC 2012). Prior to commencement of the research, ethical approval was sought and gained via the Open University Human Research Ethics Committee. First approval was gained for the initial study (focus groups) and subsequently ethical approval was granted for the main study (interviews). Advice on data protection was also provided by the Open University and this has been adhered to throughout this research. Access to lecturers and students (the participants in the research) in a school of nursing was granted by the Head of that School.

Informed consent is essential (Denscombe 2010, ESCR 2012, Silverman 2013) and ensures that the participants fully understand what the research is about and what they would be required to do; it thus provides them with adequate information to allow them to make an

'informed' decision about participation. The concept of informed consent ensures that the participants are not deceived or coerced into being part of the research which is grounded in the ethical principle developed by Beauchamp and Childress (2001) of autonomy. Autonomy implies that the participant has the ability to make their own decisions and can fully understand their implications (Streubert and Carpenter 2011). The modules for my research were targeted and a group of students and lecturers were invited to take part. I then waited for members of this group to volunteer. This was to allow for open participation and to ensure I did not coerce the person into taking part (ESCR 2012). Each participant was provided with a participant information sheet (Appendix Three) explaining the study (Silverman 2010). Once they had read this and clarified any points then if they still wished to be part of the study the person was required to sign a consent form (Appendix Four), they kept a copy of the consent form.

Confidentiality and anonymity have been preserved. It must be noted that in small scale qualitative research anonymity can be difficult (Cohen et al. 2011, Streubert and Carpenter 2011). To ensure anonymity the names of the participants have been changed. Confidential information from the research is kept securely: the interview transcripts and copy of consent forms are locked in a cabinet in my office. Thus the concept of beneficence, doing good, and non-maleficence, not doing harm is in place here (Beauchamp and Childress 2001).

Students and lecturers were informed that they had the right to withdraw from the study (Silverman 2010, BERA 2011) at any time prior to or even after data collection. This information was provided verbally by me and also in writing in the participant sheet. If they withdrew from the study then all the information gained from them would be destroyed and not used within the findings. No participants expressed a wish to withdraw at any stage.

Finally it is important that participants are informed that the study for which they have contributed has potential benefits of developing and enhancing their learning through a greater understanding of BL. Thus they are aware of the potential positive influence they are making to nurse education.

### **3.44 Insider research**

I currently work within the institution and school that was the setting for this research. The concept of insider research has been considered by a number of authors (e.g. Brannick and Coghlan 2007, Mercer 2007, Dwyer and Buckle 2009). Being an insider has the potential to raise ethical concerns. Bias is one such issue. This was certainly deliberated, as I worked with the lecturers taking part in the study. To avoid bias the same interview questions were asked to all three lecturers, their answers transcribed and accurately reported. Also contemplated was the impact the research may have on the relationships between the researcher and participants as well as the school itself. Being an insider in the organisation had the potential to make the participants feel more relaxed. Alternatively participants may use the interview to discuss issues unrelated to the interview questions (Howe and Moses 1999), for example those to do with module management, their assignment or clinical practice problems. This was an area of concern but in reality did not happen during the interview process. If issues had arisen the participant would have been advised to seek student support from the student union or from the programme leader. Equally if lecturers had raised concerns then they would have been advised to seek support from their managers. Consideration of the view of the participants towards the researcher as an insider were also reflected upon. It was possible that the students, in particular, may have felt that there were hidden motives behind the questions being asked. Although it is difficult to be certain, I felt that the students and lecturers were open in their engagement with the interview process. As an insider interviewing colleagues I felt more relaxed and

they saw themselves as peers and were therefore potentially more open as there was pre-existing rapport (Mercer 2007).

Throughout the research process it is also essential to consider the concept of power. Price (2002) drew attention to the issues of power in the interview process. He suggested that the interviewer is in control of the activity drawing, perhaps, personal or emotive information from the participant. As a lecturer in the school of nursing I am potentially in a position of power in respect of interviewing the students and lecturers participating in the research as I am both module and programme leader. Students who attended my own modules were not included in the study. However of note is the fact that the three lecturers who agreed to be interviewed were colleagues and therefore known to me. This point reiterates the importance of confidentiality throughout the process to ensure that colleagues and students are not recognisable from the description of the findings.

Qualitative interviewing by its very nature is about developing close relationships with the participants, particularly when undertaking in-depth one-to-one interviews. Although potentially not an issue with one-off interviews the researcher needs to be mindful of possible blurring of boundaries. It is possible, also, that boundaries have the potential to be blurred if the interviewer moves from interviewer to teacher. Therefore it is essential to take into account the influence of insider research and the potential power relationship that can be portrayed during the research process (Streubert and Carpenter 2001, Limerick et al. 2006, Mercer 2007, Humphrey 2012).

As well as challenges from being an insider researcher there are advantages. For example as an insider I considered it would be possible to use my findings in a positive way to inform and develop education practice.

### **3.45 Methods of data collection**

There were two methods of data collection, firstly focus groups in the initial study followed by individual interviews in the main study. Focus groups were used to explore the general concept of BL. The selected method of data collection in the main study was one-to-one in depth interviews. This method was deemed well suited to eliciting the participants' experiences and perspectives of BL.

#### **Initial study - Focus groups**

An initial study was undertaken which consisted of focus groups. Focus groups are advocated as a useful method at the beginning of the research journey (Morgan 1998) and often form part of preliminary research (Greenbaum 1998). The purpose of the focus groups was to explore the concept of BL, to exchange ideas and experiences and to draw out key areas to aid the development of the main study of BL (Kitzinger 1995, Greenbaum 1998, Morgan 1998, Puchat and Potter 2006). Two focus groups were conducted. The participants in group one were three lecturers running Level 6 modules (degree level). The second group were two students from a Level 6 module. The original intention was to have six participants in each focus group. However for pragmatic reasons this was not possible and the decision was made to go ahead with the relatively small numbers. In the event I was able to probe the issues more fully with fewer people and as the main aim was to explore and share ideas and experiences in order to inform the main study this worked well.

The initial study allowed exploration of BL as a method in nurse education. The discussion indicated that lecturers and students did not understand the term BL and did not consider the many modalities that make up the BL concept. They felt that e-learning was another way of describing BL. E-learning was viewed as an interactive resource by the students however the lecturers discussed their lack of enthusiasm for e-learning alongside other

technologies to enhance learning, for example the use of interactive white boards and online discussion forums. This early exploration into the views of lecturers and students also demonstrated differences in the way each preferred to teach and learn.

The information obtained from the transcribed focus groups and my own experiences of this method of data collection helped to inform the main study. The initial study findings indicated a need for further exploration of lecturers' and students' experiences of BL, supporting my initial ideas about BL and the literature around BL. Although focus groups were a useful method for collecting data I was concerned that participants may be potentially intimidated by each other and reluctant to answer the questions (Kitzinger 1995, Greenbaum 1998, Morgan 1998, Puchat and Potter 2006). Also gaining access to individuals rather than coordinating a group was deemed more appropriate and pragmatic. This led me to consider that individual interviews would be the most suitable tool for data collection, allowing for one-to-one in-depth exploration of BL that focus groups in this instance would not allow. The small groups in the initial study confirmed the value of being able to talk with each individual and gain their views. Equally the issues arising from the focus groups helped to develop the questions to be asked during the interviews. The focus groups also enabled me to develop the skills of asking questions and remaining objective, and ensuring that my preconceptions of BL were not transmitted to the participants. Developing listening and interpreting skills also formed part of the preliminary study. Thus confidence was increased as I developed and undertook the main study.

The initial study also highlighted the need to explore the modules themselves as the lecturers touched on what their modules delivered. Scrutiny of module documentation and the e-learning sites would demonstrate whether BL as a term was used and to what degree the module was blended, for example, the amount of face-to-face time with students versus

e-learning. I was also interested in the teaching methods used in the classroom as BL is also about the use of mixed modalities in the classroom.

The information gleaned during this early exploration of BL has provided the basis for the main study. It has tested the aims and research questions and found that they are warranted, justifying the need for further study into BL in post qualification nurse education.

### **Main study - Interviews**

In light of the experiences from the focus groups, interviews were selected as the research method. Interviews are often described as ‘professional conversations’ (Kvale 2007) with the aim being to get participants to talk about their experiences in relation to a given topic area. There were three main reasons for selecting the interview method; firstly it provided the ability to discover in depth the experiences of the participants towards BL. Secondly the research question is concerned with exploring the experiences of BL for both lecturers and students and Kvale (2007) suggested that interviews are ideally suited to this type of question. Finally the face-to-face contact afforded by the interview process also personalises the process both for the interviewer and the participants.

Of the three main types of interview, semi-structured interviews were selected. Semi-structured interviews are the most commonly used in qualitative interviewing offering flexibility to the way the questions are asked. It also allows the interviewer to be aware of the issues raised by the participant and therefore potentially open further areas to be considered with regard to the experiences of BL (Fossey et al. 2002). Price (2002) described this process as playing detective, as the researcher searches out the information. Among the strengths of this research method the ability to collect rich and detailed data from a small number of participants was an influencing factor in choosing interviews. Braun and Clarke (2014) also stressed that the researcher has a degree of control and flexibility within the interview process that increases the likelihood of generating useful

data. They also noted that a small number of interviews can generate adequate data for a richness of information to be achieved.

The interviews were conducted in a pre-booked classroom and a 'do not disturb sign' prevented any interruptions. Although deemed a convenient venue for the students and lecturers it is acknowledged that the classroom environment was far from ideal. The layout, the background noise from other classes and the ongoing concern of interruptions from other classes were considered. Also there was the possibility that the classroom denoted a power relationship (Limerick et al. 1996, Elwood and Martin 2000, Huckaby 2011) between the student and lecturer and could therefore inadvertently cause the student participant to be reluctant to disclose information during the interview process. Although traditionally considered in feminist research (Limerick et al. 1996) the concepts of power in interviewing should also be thought about when planning any interview regardless of theoretical approach. It is essential to consider the significance of different interview sites and the variables that can be attributed to that space (Elwood and Martin 2000). It could be argued that there is no ideal place in which to conduct an interview.

To minimise any inconvenience to the participants the time of the interviews was correlated with the time when they were required to be at university. The interviews were conducted after or before the participants' classroom sessions. It was essential to try to overcome the difficulties that could potentially be faced if the participants had to be interviewed in their own time. It was anticipated that students and lecturers would be keener to participate if they did not have to attend the interview in their own time, outside of their normal working day/ study day.

Developing a detailed interview schedule or guide provides the interviewer with a script for the process. It also helps clarify the questions to be asked and to format ordering of the questions. To improve confidence and to test the structure and sequence of the questions



two practice interviews with peers were undertaken. The data gained here does not form part of the analysis.

The research questions have been addressed by the interview process. The demographics of the students were collected prior to the interview. The questionnaire used to collect this information can be seen in Appendix Five.

The interview schedule can be seen in Appendix Two. This shows the sequencing of the questions. The questions flow logically with clear topic areas. The questions have been scheduled to move from the general to the specific. Throughout prompts and probes were considered. Using a structured format such as this helps the interviewer ensure that the interview is conducted clearly and flows well. The interview schedule however can develop throughout the interview process as new issues arise. It is possible that questions may get added in or altered (Silverman 2010, Braun and Clarke 2014). Laurillard (2002) highlighted two interesting concepts regarding the aim of teaching and learning. These were added in as questions to lecturers and students as to what they considered the aim of teaching and learning to be. This drew out some interesting answers that linked well with BL. Each participant was interviewed once and the narratives gained from the participants explored their experiences of BL.

The interviews were audio recorded to allow for a precise and detailed record of the participants' answers; prior permission was sought from them to be recorded. The interviews were then transcribed. Following the interview, field notes were taken. This included details of the environment and the interviewee's body language during the interview process. The concept of creating notes about the observed issues allowed for a holistic picture to be created. For example a closed body language could be associated with a potentially hostile response to a question or reluctance to answer a question. Field notes are of value in the interview process (Silverman 2010, Cohen et al. 2011). The field notes also allowed me to reflect on the interview and consider participants' responses to the



questions as well as to think about any extra questions that should be asked to gain more depth to the data collected.

The module documentation and their e-learning sites were also examined to ascertain how BL was conveyed and delivered to the students. This allowed a comparison to be made between what the documentation stated the module content would be and the reality of what actually happened from the students and lecturers points of view. This information is found in the following chapter.

### **3.5 Data analysis**

This section will describe how the analysis of the interview data was undertaken. The demographics collected have been presented to describe the nature of the sample to see if there are any features that can potentially explain any differences found in the data.

Equally details about each module were also scrutinised to create a full picture of the way BL was being used, if at all.

To organise the plethora of information template analysis has been used. This form of analysis was developed by Nigel King in 1998 (King et al. 2002). It is a template devised by the researcher to encapsulate the data. Template analysis has been selected as it is specifically designed for use with qualitative data, particularly interview transcripts. King (2002) referred to the use of template analysis as a way of thematically organising the data. My rationale for choosing this as a way of organising the data is that it offers a flexible technique that can be tailored to suit my requirements.

Following transcription of the interviews, detailed reading of each interview took place. Key concepts drawn from the transcripts were placed in the template. An example of a template is in Appendix Six. This illustrates the development of themes from both lecturers and students. King et al. (2002) discussed the use of *a priori* themes as main headings for the template. Thematic analysis has been used to interpret the data collected. This type of



analysis typically involves a process of classifying, grouping and refining into themes (Fossey et al. 2002). Thematic analysis offers a flexible, straight forward approach that is deemed to be a useful method when working with interview data as part of analysing qualitative research. The data are coded and themed to fit the specific research question. There are six phases of thematic analysis (Braun and Clarke 2006, Gale et al. 2013). These are illustrated Table 1.

**Table 1 – Phases of thematic analysis** (adapted from Braun and Clarke 2006, Gale et al. 2013)

| <b>Phase</b>                      | <b>The process</b>  |
|-----------------------------------|---|
| Familiarisation with the data     | Transcription of the data, re-reading the data transcribed interviews. Begin to note down any ideas emerging from the transcription   |
| Generation of the initial codes   | Relevant features are coded. This is completed in a systematic fashion.   |
| Searching for the emergent themes | Codes are collated into potential themes  |
| Review the themes                 | Check the themes in relation to the codes. At this point it is possible to generate a thematic map  |
| Defining and naming of the themes | Ongoing analysis to ensure the themes are refined. Ensuring the names for each theme are applicable to the data collected. Extracts from the interviews to support the themes |
| Producing the findings            | Select extracts. Relate back to research questions and the literature on the subject  |

|  |       |
|--|-------|
|  | area. |
|--|-------|

### 3.6 Rigour and trustworthiness of the research

Much has been made of the difficulties in ensuring rigour in qualitative research, primarily as it does not follow the strict quantitative methodology (Mays and Pope 1995, Seale and Silverman 1997, Cohen et al. 2011, Braun and Clarke 2014). Therefore to ensure the quality of qualitative research check lists are used for example Baxter and Jack (2008) whose checklist included the following areas: a clear research question and sub questions, appropriate research design and sampling strategy, the data collected and managed correctly and the data to be analysed suitably. Although this provided guidance I felt it lacked sufficient depth. There is a need for quality criteria when using qualitative methodology which will subsequently meet the required rigour and trustworthiness required for good research (Tracy 2010). Yardley (2008) developed four principles that can be applied to the qualitative research, in essence these principles consider the validity, reliability, generalizability and trustworthiness of qualitative methodology (Yardley 2008, Tracy 2010). The principles offer an open and flexible description that fits with the majority of qualitative methodologies and allows for transparency of the research process. The following table illustrates how these four principles have been used to ensure rigour within this research.

**Table 2 Qualitative principles applied to the study of BL (adapted from Yardley 2008)**

| Quality Criteria   | Link to my research  |
|--|--|
| 1. Sensitivity to context<br>- Placing the research in context | The background and literature review places the research in context. |

|  |   |
|--|---|
| <ul style="list-style-type: none"> <li>- Being sensitive to participants' experiences during the interview process</li> <li>- Ethical guidance adhered to</li> </ul> | <p>The interview guide illustrates the questions and prompts used with the participants.</p> <p>Ethical approval was sought and granted. Throughout the study ethical principles have been adhered to e.g. informed consent</p> |
| <p>2. Commitment and rigour</p> <ul style="list-style-type: none"> <li>- Thorough data collection</li> <li>- Engagement with the subject area</li> </ul>             | <p>Clear discussion of the site and sample selected.</p> <p>Discussion of interview as the method of collection.</p>  |
| <p>3. Transparency and Coherence</p> <ul style="list-style-type: none"> <li>- Presentation of the data analysis</li> </ul>   | <p>Clear discussion of method of analysis.</p> <p>Findings described in detail with examples from the interviews to illustrate the theme</p>  |
| <p>4. Impact and importance</p> <ul style="list-style-type: none"> <li>- Impact of research on a given group of people.</li> </ul>                                   | <p>Students' and lecturers' experiences of BL are demonstrated through this research.</p> <p>Issues identified and recommendations for nurse education provided.</p>  |

### 3.7 Summary

This chapter has discussed the key considerations and rationale for the methodological aspects of this research. The research question(s) about BL are best answered using an in-depth qualitative approach. A pragmatic view has been taken on the research design which has allowed for flexibility within the study framework whilst acknowledging the importance and influence of multiple research design. The methodology chapter has discussed the rationale for decisions made and has made it clear why these have been





made. The use of the initial study in the form of focus groups demonstrated valuable insights which helped shape the main study and its use of interviews. The following chapter will discuss the findings from the research.

## **Chapter 4 Findings**

### **4.1 Introduction**

This chapter presents the findings from the study. The philosophical underpinnings of this research continue into the data analysis stage as the interpretivist perspective suggests that the ultimate goal is to describe the context and to make sense of the situation. The analysis is around making sense of the possible relationships between people, the organisation, and the use of technology and in this study the use of BL (Kelliher 2005). The findings are then presented as textual descriptions (Fossey et al. 2002) with examples from the participants' interviews to illustrate them. The findings are presented under the main areas drawn from the interviews. The data collected are described under two main headings: lecturer and student. To begin the participant sample and the modules that were drawn on as part of the study are described.

### **4.2 Participants**

Thirteen people were interviewed, three lecturers and 10 students. Prior to the interview the participants completed a short questionnaire (see Appendix 5). Tables 3 and 4 show the information gained from the participants. Pseudonyms have been assigned to participants to ensure anonymity.

**Table 3 Description of the lecturer participants**

| <b>Lecturer Identity</b> | <b>Gender</b> | <b>Age range</b> | <b>Speciality</b> | <b>Length of time as lecturer</b> | <b>Where do you access computer</b> | <b>Extent of IT skills</b>     |
|--------------------------|---------------|------------------|-------------------|-----------------------------------|-------------------------------------|--------------------------------|
| <b>LA - John</b>         | Male          | 36-50            | Adult             | 13 years                          | Office ,<br>home                    | Confident/<br>experienced user |
| <b>LC- Simon</b>         | Male          | 20-35            | Child             | 4years                            | Office, home                        | Confident/<br>experienced use  |

|                   |        |       |               |                  |               |                                |
|-------------------|--------|-------|---------------|------------------|---------------|--------------------------------|
| <b>LM - Sarah</b> | Female | 51-60 | Mental health | 1 year 10 months | Work and home | Confident/<br>experienced user |
|-------------------|--------|-------|---------------|------------------|---------------|--------------------------------|

**Table 4 Description of the student participants**

| <b>Student ID</b>   | <b>Gender</b> | <b>Age range</b> | <b>Length of time as qualified nurse</b> | <b>Main speciality</b> | <b>Last time studied at university</b> | <b>Where is your computer access</b> | <b>Extent of IT</b>            |
|---------------------|---------------|------------------|--|------------------------|--|--------------------------------------|--------------------------------|
| <b>AS 1- Louise</b> | Female        | 36-50            | 18 years                                 | Adult                  | 2012                                   | Work and home                        | Some knowledge/ skill          |
| <b>AS 2- Jenny</b>  | Female        | 36-50            | 10 years                                 | Adult                  | 2010                                   | Work and home                        | Some knowledge/ skill          |
| <b>AS 3- Sally</b>  | Female        | 36-50            | 6 years                                  | Adult                  | 2011                                   | Work and home                        | Competent/<br>experienced user |
| <b>AS 4- James</b>  | Male          | 51-60            | 30 years                                 | Adult                  | 2011                                   | Work and home                        | Some knowledge /<br>skill      |
| <b>CN 1- Tracey</b> | Female        | 20 -<br>35       | 5 years                                  | Child                  | 2013                                   | Home                                 | Competent/<br>experienced user |
| <b>CN 2- Maria</b>  | Female        | 20 -<br>35       | 2 years                                  | Child                  | 2011                                   | Work and home                        | Competent/<br>experienced user |
| <b>CN 3- Jean</b>   | Female        | 20 -<br>35       | 9 years                                  | Child                  | 2013                                   | Home                                 | Competent/<br>experienced user |
| <b>CN 4-</b>        | Female        | 20 -             | 7 years                                  | Child                  | 2013                                   | Home                                 | Competent/                     |



|                         |        |       |          |                  |      |      |                                |
|-------------------------|--------|-------|----------|------------------|------|------|--------------------------------|
| <b>Deborah</b>          |        | 35    |          |                  |      |      | experienced user               |
| <b>MH 1-<br/>Oliver</b> | Male   | 36-50 | 12 years | Mental<br>health | 2012 | Work | Competent/<br>experienced user |
| <b>MH 2-<br/>Tina</b>   | Female | 20-35 | 8 years  | Mental<br>health | 2013 | Home | Some knowledge/<br>skill       |

The demographics have provided a description of the participants and thus places them in context within the study. The information gained from the demographics does not inform the findings and are deemed not relevant to the findings of the study as no conclusions can be drawn from the data.

#### **4.3 The selected modules**

Three modules were selected: one each from adult, mental health and paediatrics. These three specialities were selected as they are the major three disciplines catered for in post qualification nurse education within the particular nursing school. The module descriptions in the handbooks and websites were analysed to discover the extent to which BL is mentioned. This provided an insight into what students have been told about their modules. This section illustrates what was found from looking at each of the three modules in depth. It provides the context for the findings from the interviews.

The adult module was a degree level physiology course. This module is a pre-requisite for certain modules on the degree pathway for example the intensive care course or high dependency course. The module is 15 credits towards a 120 credit degree. Students are required to attend college for four days, divided over a 12 week term. There are four days of six hours face-to-face lectures. The classroom component takes the form of a lecturer using a didactic approach to convey the knowledge. The equivalent of approximately 24 hours of e-learning materials are made available to the student. A two-hour short answer

exam is used to assess the module. The module details in the hand book and web-sites make no mention of BL or indeed the different modalities for teaching this module.

The second module selected was a degree level paediatric intensive care (PICU) course. For nurses wishing to work in PICU this module is core. Nurses are not able to seek promotion to senior levels in PICU without this module. As with the physiology module this is a 15 credit course counting towards a 120 credit degree. Again there are four days teaching comprising six hours each. The days offer a variety of teaching styles. Short lectures are used, problem based learning, quizzes and seminars. E-learning is utilised to support the classroom sessions. No hours are specified for this component. The assessment for this module is a written case study of 2000 words, and is submitted online. Also students are required to complete a competency document in the practice setting. This is assessed by an experienced PICU nurse. Again there were no clear references to the BL approach used within this module.

The final module selected was for mental health nurses, looking at drug and alcohol misuse, the screening and interventions available. As with the previous two modules this is a degree level module and is taken by nurses who wish to complete a degree. This is a core module for the degree in mental health nursing; the expectation is that mental health nurses complete this module if they are working in addiction centres/ clinics. Again this module is taught over four days, six hours per day. There is a mixed approach to delivery; the majority is role play and group discussion. Although e-learning is utilised no hours are apportioned to this. Also of note is the emphasis on the practical component in the class and learning in the clinical setting. The details, handbook and website, make not mention of BL as the method of teaching this module

All three modules are advertised on the nursing school's web pages. Although they all use BL, this term is not used when the module delivery is described. Scrutiny of the module handbooks also showed that BL as an approach to teaching the module was not mentioned.

Finally the module's websites were viewed. It was interesting to note that although each module had an e-learning component they were all designed differently. The decision on what content is placed on the web site is at the discretion of the module leaders. However the school of nursing under the direction of the university does specify that there should be certain links placed on the module site for all students. Thus this ensures parity of university information.

#### **4.4 Findings from the semi-structured interviews**

The findings from the three lecturers' interviews are presented followed by the findings from the 10 student interviews. Four key areas have been drawn from the interviews with the lecturers and four key areas from the students' interviews. These key aspects head each section.

##### **The lecturers' four key areas are:**

Experiences of teaching and learning

Interpretations of BL

Enhancing the learning experience

Factors that affect lecturer engagement with BL

##### **The students' four key areas are:**

The students experiences of learning

Understanding and experiences of BL

BL as an effective learning tool

Factors that affect student engagement with BL

Sub areas were drawn from the findings of the interviews and these were then placed together to inform the key aspects of the findings. These subjects have all developed from the experiences talked about during the interview process. An illustrative representation of each area follows each of the eight sections. The detailed template that helped organise the data into the key issues can be viewed in Appendix Six.

#### **4.5 Blended learning: experiences of lecturers**

##### **Area One: Experiences of teaching and learning**

The first aspect relates to the experiences of the three lecturers regarding their own learning as well as the way they currently teach. This sets the scene for the impact BL potentially has on learning and teaching. Each participant has their own speciality and has been placed in departments according to this speciality. Frustration was expressed by one lecturer who, despite being an advanced practitioner in critical care, did not actually teach within this speciality. As an adult lecturer, who had several years critical care experience, he stated that:

*'It's very rare that I actually teach my speciality..... it's a shame my experience is not used more' (John, adult lecturer)*

All the participants were currently studying as part of their ongoing professional development. This included a Master's degree, PhD and a Post Graduate Certificate in Teaching. Of note the lecturers were all currently studying within the same institution in which they worked. The preferred way the lecturers learnt highlighted a variety of methods. One lecturer particularly enjoyed learning through practical means:

*'I like to think I am a doer but I think the more that I've done this job I realise I like to churn over things as well... I've learned a lot from the bedside, you know, with the patient and seeing what happens' (Simon, paediatric lecturer)*



Three important points were raised by an experienced mental health lecturer who stressed that she learned best from face-to-face interaction, reading through current literature and she mentioned that the personality of the lecturer affected the way she learnt.

*'I'm very much someone who will remember a story that somebody's told me, or an anecdote...I learn a lot through the personality of the lecturer and through class interactions. I don't do very well on e-learning'* (Sarah, mental health lecturer)

In contrast, learning alone away from the classroom setting was expressed as a preference for the way of learning, illustrated by John's comment:

*'I'm not one for sitting in class.... I like being very independent and going away and learning stuff on my own.... So my learning style tends to be very independent. I try and identify what it is I need to learn, and go away and sort of look it up and read it'* (John, adult lecturer)

They all admitted that their previous and ongoing experiences of learning as well as their personal preferences had influenced the way they designed and delivered their current modules. One lecturer drew attention to the way that his own learning style influenced the way he ran the physiology module:

*'I guess I expect people to be independent... maybe that's wrong. I guess I expect students to identify what it is they need to learn, and to be able to apply themselves, actually think through it critically themselves rather than just turn up, just listen to a lecture'* (John, adult lecturer)

Equally the mental health lecturer acknowledged her preference for teaching in the classroom:

*'I do like getting up with the PowerPoint and face-to-face and, you know I'll say 'what do you think about that?' and I often throw questions out to the class' (Sarah, mental health lecturer)*

Overall the lecturers all felt more comfortable in delivering face-to-face teaching. This mode of teaching took a variety of forms. Power Point presentations are the most common form, delivering a didactic lecture. Seminars and group work were also utilised in the classroom. The use of simulation, based in a clinical skills room, was also used as a method of developing clinical expertise in a given situation e.g. caring for a sick child. The use of simulated practice is a growing area in nurse education and it can take a variety of forms, for example role play to improve communication or scenario based teaching using high fidelity manikins. There are currently a multitude of resources available to the lecturer to support the delivery of knowledge. This all culminates in the changing face of nurse education today. As all three lecturers were currently learners as well, they had also experienced the changing way that knowledge can be delivered. As previously mentioned, whilst experiencing their own learning, this also impacted on the way they would deliver their modules.

Consideration of the aims of teaching revealed a range of concepts. Lecturers deemed the main aim as facilitation of learning through a mixture of methods. The lecturer acts as the resource from whom the students learn. Lecturers commented that the aims of teaching and learning were to stimulate knowledge and develop a questioning practitioner.

*'What I really, really passionately want [for] them at the end of, by the end of the course is that they'll just become questioning practitioners, so they'll question practice' (Simon, paediatric lecturer)*

One lecturer considered the aim of teaching to be:



*'To impart information but also to create a desire for more knowledge and information... just to spark off interest, to develop a passion for something, or to transmit, you know.....to transmit I suppose an ethos of, of wanting to learn.'*

(Sarah, mental health lecturer)

Meeting the lecturers' expectations of the module was important. Consideration is always given to the student evaluations of how a module was delivered. The lecturers reflected on whether their aims for their modules had been achieved and whether the mode of delivery was appropriate.

*'People do learn differently, and there's also certain things which are transmitted better.... through certain methods [rather] than others'* (Sarah, mental health lecturer)

The degree of motivation to learn that students have was highlighted as an area impacting on the learning experiences of the student, also as potentially influencing the teaching of a module. The lecturers commented on the pressure on nurses to obtain a degree and therefore students had to do specific modules as it was a prerequisite for the degree. This in turn created pressure on the lecturers to provide learning that would encourage participation and motivation to learn. This pressure to achieve a pass in a certain module was also noted when students are required to achieve the module to gain promotion at work. One lecturer was particularly aware of this as his module was a prerequisite for the ICU (Intensive Care Unit) course and drew attention to this:

*'There is a degree of pressure and I think if they were honest, and if they were asked whether they'd rather not be doing it they probably would say they would rather just get on to the, you know, exciting bits in the ICU course.....students often express 'well you know I'm here because I have to do this' ... I think if they had a choice they probably wouldn't (attend the module)'* (John, adult lecturer)

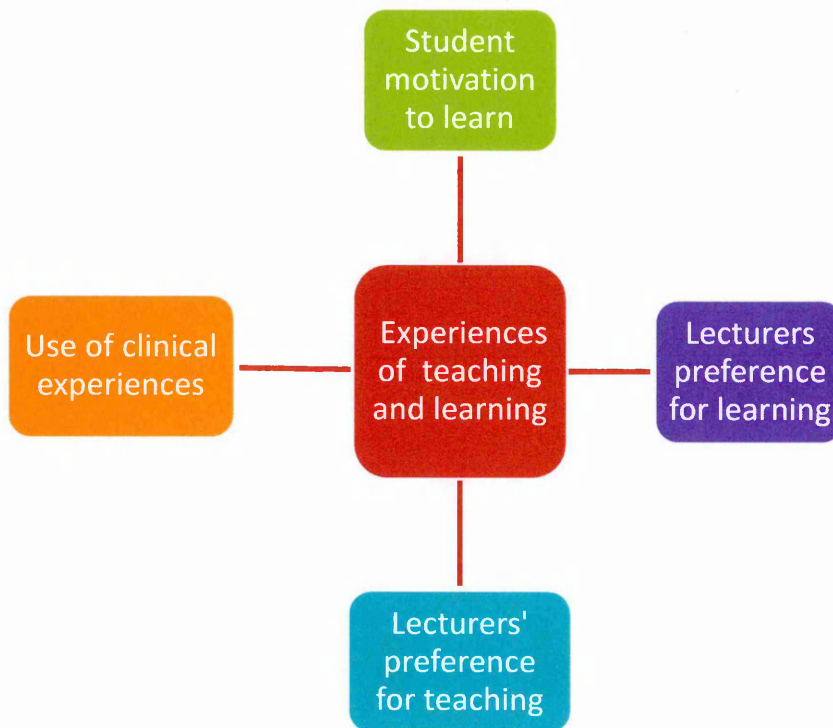
The mental health lecturer stated that post qualification nurses seem reluctant to be doing the module and give the impression they do not want to be there:

*'Perhaps they resent being made to sort of do the upgrade (for the degree) and they find it quite difficult and they find there's a .. I think there's quite a lot to navigate through once you even sort of get into the university web-sites, the whole e-learning, the web-site all this kind of stuff..' ... 'the academic writing skills are very difficult for them' ... .. 'you find out very quickly how de-skilled some of them are in terms of computers' (Sarah, mental health lecturer)*

In summary the lecturers highlighted that their preferences for learning influences their teaching. They also note that student motivation to attend a module is led by many factors such as the need to obtain a specific qualification. The three lecturers all have different ideas about learning and teaching with John liking to be an independent learner and as such assuming his students will want this too. In contrast the other two lecturers enjoy interactive learning and use this method within their modules. The diagram below illustrates the main areas raised by the lecturers with regard to their experiences of both teaching and learning.



**Diagram 1 – Experiences of teaching and learning: An illustrative representation of area one**



## **Area Two: Interpretations of blended learning**

The second issue draws on what the lecturers understood by the term BL. Blended learning has many definitions and is a term often employed to describe the content of a module.

However the interviews illustrated that lecturers did not fully grasp the BL idea. A variety of ideas were put forward as possible suggestions for what constituted BL. To begin it was viewed as traditional learning, described as classroom, or face-to-face teaching. Linking theory and practice was alluded to as well as ensuring that there was application to clinical practice. The following quotes illustrate the diverse definitions that are attached to the term BL:

*'I guess it's using, ...what I would describe as traditional learning kind of classroom..... and being able to consolidate learning in practice settings' (Simon, paediatric lecturer)*

*'It's just really using a mixed approach to teaching and learning... I mean primarily encompassing kind of new electronic ways of teaching, facilitating learning.... broadly blended learning could encompass any sort of range of teaching activities' (John, adult lecturer)*

One lecturer was unsure of the meaning of the term but eventually expressed BL as follows:

*'It's about different methods of learning, so you might have something like e-learning, you might have face-to-face teaching ...' (Sarah, mental health lecturer)*

Essentially the lecturers not only used one type of delivery of information but a mixed approach in the classroom. This was conveyed as the use of role play, simulation, seminars and discussion. Whilst this is undoubtedly BL not all those interviewed deemed it as such.

One lecturer was a strong advocate of the use of simulation:

*'I also use a lot of simulations.... Explore clinical practice in a safer environment.....some of the things that we do in high- fidelity simulations, some things that we teach, I don't know if there's a way to teach them in the classroom setting' (Simon, paediatric lecturer)*

The mental health lecturer endorsed the use of role play to enhance the learning experiences of the student:

*'We have a lot of formative work done through role plays... the student reflects on the role play and observes their videoed role play... reflect on performance and seek advice from lecturer and peers' (Sarah, mental health lecturer)*



The use of BL in module assessment was new. Sarah, the mental health lecturer, drew on a mixed method approach to assess her students with a written assignment plus a video of a family intervention. The other two lecturers did not say they used different methods of assessment. However often modules are assessed using a mixture of assessment methods.

Enhanced learning through the use of technology in the form of e-learning was seen as the largest component of BL. The use of a module website that the students can access anytime and anywhere through the university e-learning platform was a potential area of controversy. One lecturer said:

*'[I have] an ambivalence towards it... it just doesn't suit me... so I haven't explored it'* (Simon, paediatric lecturer)

Each of the three lecturers used the e-learning area in a variety of ways. Generally the sites were used to deliver sets of instruction to the students for example timetables, handbooks, room changes. The presentations were also loaded on the websites. One lecturer described the website as:

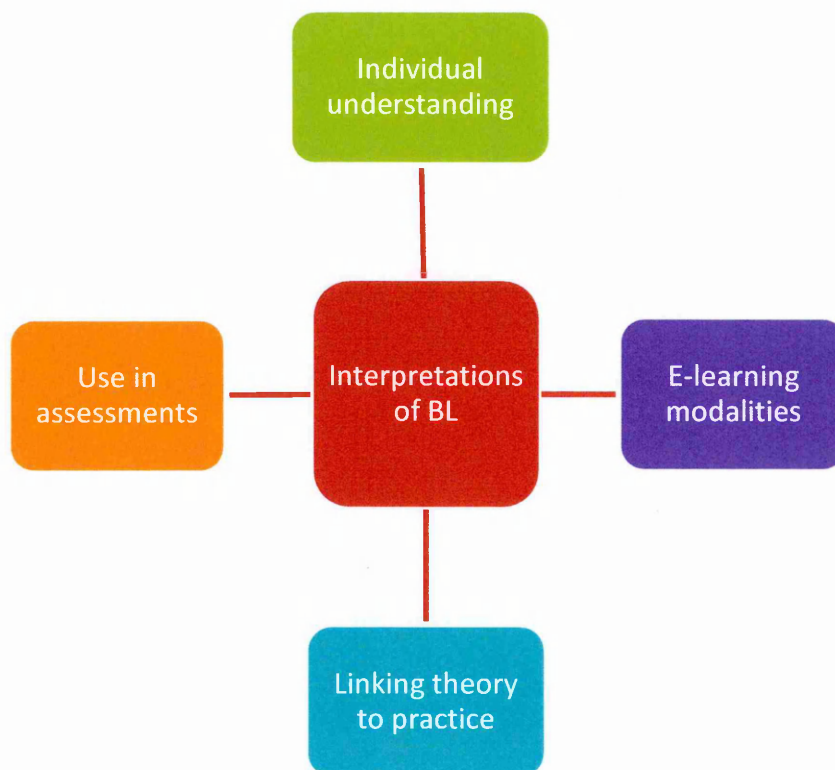
*'For descriptive use only.. no interaction it's all a one way process'* (Sarah, mental health lecturer)

One lecturer (John, adult lecturer) used quizzes and there appeared to be a more interactive approach with the e-learning. He acknowledged that currently he was not using the website as much as he should or could.

In summary the findings in this section have raised a variety of aspects in relation to use of BL in practice, the mixed modalities that form BL and the interpretations that lecturers consider to mean BL. The diagram below shows the main factors raised by the lecturers.



**Diagram 2- Interpretations of blended learning: An illustrative representation of area two**



### **Area three: Enhancing the learning experience**

The third aspect drawn from the lecturers' experiences of BL focuses on the positive outcomes that lecturers suggested emanated from BL. Essentially the interviews indicated that BL is a method of enhancing the learning experience of the students and lecturers. At BL's core, lecturers stressed the importance of ensuring that students had positive learning opportunities. BL has the potential to enhance the learning experiences of the student. Also of note was that the lecturers themselves found that BL helped with developing a creative module using a variety of mixed modalities to deliver their specific content. Quality appeared to be at the heart of BL as a concept. The quality is derived from meeting the

expectations of the lecturer regarding the outcomes of the module. The paediatric lecturer commented on this area:

*'I like the way the module runs, it creates a positive learning experience for the students' (Simon, paediatric lecturer)*

This was also reiterated by the mental health lecturer who commented on the positive outcomes from her BL module:

*'Yes they [the student] did enjoy it [the module], they thought it was great. They thought that they learnt a lot from it... .... They could do some of the work in their own time' (Sarah, mental health lecturer)*

The use of mixed methods was deemed to maintain student interest. This was because throughout a two hour teaching session a variety of modalities was employed. Therefore the lecturers deduced that on the whole this kept the students engaged in the learning process. One of those interviewed drew attention to this:

*'[We are] using e-learning as pre- sessions.. to help evaluate people's learning, so actually you're directing your learning much more to where people's needs are rather than it just being what I think you need to learn.... This way the students feel you are tailor-making the learning to suit them' (Simon, paediatric lecturer)*

John confirmed that this was the case on the physiology module he led:

*'Students like to come to class and learn from the experiences of the lecturer... ask questions and discuss issues at the time , in the class... .... They learn the importance of relating to practice what they have learnt' (John, adult lecturer)*

All students will learn differently and at separate points during a module. BL was viewed as potentially suiting the multiple learning styles of the students. Sarah discussed this aspect:

*'People learn in different ways so I think, you know, one size doesn't fit all..... so I think we need to be offering a range of tools in terms of what we, how we teach.....certain things which are transmitted better through certain methods'*

(Sarah, mental health lecturer)

An example she gave illustrated her point:

*'So for people who aren't confident or perhaps people whose English isn't their first language, I think they might get a lot more opportunity to learn when the pace is slowed down, and when there's a bit of repetition there. For example role plays. Maybe people [are] slightly less confident... feel very embarrassed about putting their hand up in a class, but in a work shop situation might be happy to ask their peers something, or ask the lecturer something'* (Sarah, mental health lecturer)

Although BL was acknowledged as being used within each of the three modules it was noted that perhaps BL was more suited to some subject areas more than others. The examples given by the lecturers were that theoretical modules suited the added use of e-learning. However, it was not clear as to why this would be. One lecturer commented:

*'I think certain courses, certain modules and certain programmes, lend themselves more to it [BL] than others.... Perhaps even certain levels of nurses my pre-reg nurses use it [discussion board/ forums] a lot more, they go on discussing stuff. [In] my post-qual course there's never any discussion'* (John, adult lecturer)

This was reiterated by Sarah when discussing the use of discussion boards:

*'I make use of these notice boards... I tend not to get an awful lot of response, particularly from the post-qual ones; the pre-reg students ... are quite sort of savvy*

*about getting back but the post-qual ones seem to have a bit more ... trouble with it' (Sarah, mental health lecturer)*

E-learning as part of BL was deemed a necessary part of the module, especially as face-to-face time had been reduced. The idea that module information was readily available was endorsed by the lecturers. Their expectation was that students would access the classroom materials, read them and as such come prepared for the time spent in the university. Of equal importance to the lecturers was that the e-learning site enabled them to communicate with the students through the use of discussion forums. Simon had begun to use the e-learning site a bit more:

*'I've been starting to use some of the e-learning much more in my teaching and realising its use in supporting the classroom session... particularly with sort of pre-sessions, use of quizzes to help evaluate their knowledge pre and post session.'*

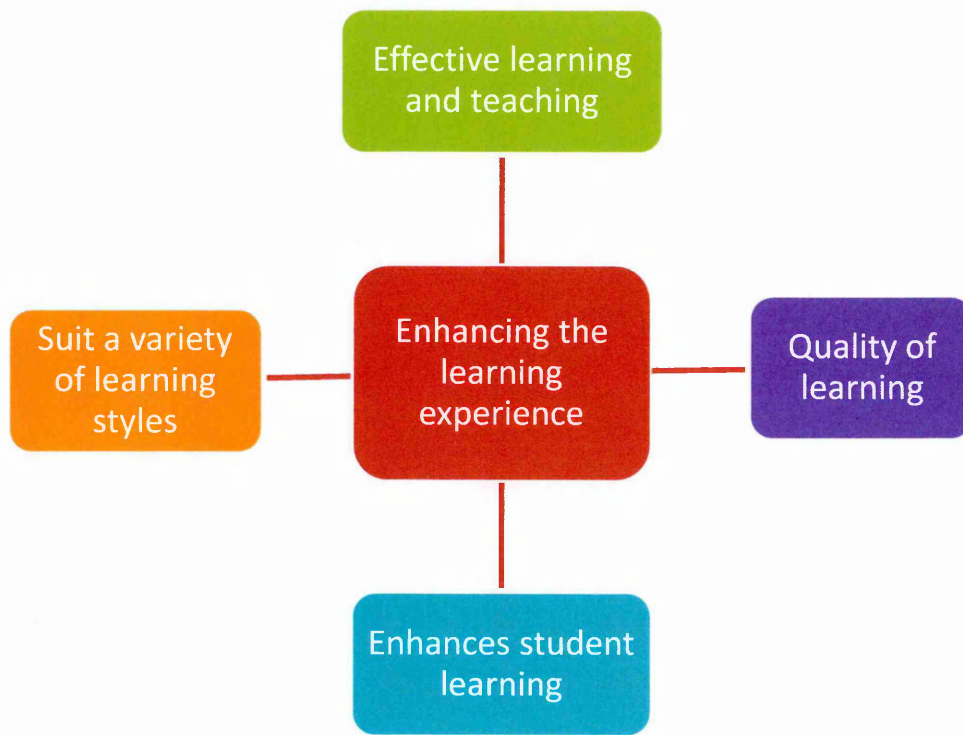
*(Simon, paediatric lecturer)*

Sarah used the e-learning site for a specific part of her course. There was a quiz that students had to take and she explained:

*'I, in the drug and alcohol module part of the assessment, was to complete an e-learning course, and it was, it was one of these ones that they could try and pass as many times as they liked, but they had to actually pass it and hand in the certificate..... the students thought that they learnt a lot from it '* (Sarah, mental health lecturer)

In summary, several key areas have been drawn from the issues raised under component three. The lecturers view BL as an effective learning and teaching method suiting a variety of learning styles due to its mixed modalities. The concept that BL can enhance the learning experience of the students keeping them interested has all been highlighted by the lecturers as positive areas in relation to BL.

**Diagram 3: Enhancing the learning experience: An illustrative representation of area three**



**Area Four: Factors that affect lecturer engagement with blended learning**

The final aspect is an area that emerged from the lecturer’s interviews which considered the factors that affect lecturer engagement with BL. The variety of educational components that have the potential to make up BL were viewed as problematic.

The key limitation of BL was related to issues with information technology (IT). Primarily this was setting up and developing the e-learning site. All three lecturers stressed that they had received minimal tuition on how to use the e-learning site. Also the ongoing IT support was inconsistent and there was a definite lack of support. This transferred into frustration and an eventual reluctance to use technology as part of the teaching process. Of note is that





they all stated they were confident users of computer technology in the pre interview questionnaire. One lecturer expressed her concern:

*'If I do want to develop kind of e-learning packages I am not sure the support is always there... I feel reluctant to set up more e-learning, I mean partly it's because I don't like it particularly as a kind of forum myself...think it just lets people skim over things and not absorb it.'* (Sarah, mental health lecturer)

There were comments about the website being slow, problems with access and it appeared generally not to be working properly. An example illustrating this point is from the paediatric module where a discussion forum had been set up. It was hoped that the students would use this to collaborate with the module leader throughout the twelve week module. In reality this did not transpire as the site never worked. Simon discussed this area:

*'I set up a discussion forum for, you know students to put comments on but there was a problem with the site so no one could use it..... no support to fix it either.... Very frustrating for me and the students'* (Simon, paediatric lecturer)

An area of concern expressed by one lecturer was establishing whether students were using the e-learning and completing the required online work. It was also mentioned:

*'I know for a fact that a lot of people when they've got an e-learning thing to pass one person will do it and they just pass the answers on to everyone'* (Sarah, mental health lecturer)

She went on to state:

*'We might be all very smug and sort of thinking, oh we've given this great e-learning package and they're going to do it, but it's very difficult to assess'* (Sarah, mental health lecturer)

Time to develop the website and e-learning materials was highlighted as a limitation of BL. The pressure to update the teaching materials available online was an example provided by one lecturer illustrating the issue. They explained that no sooner had they learnt one way of delivering the e-learning than an edict from the school indicated that more was required with little or no support provided. There was a feeling of being pressurised to develop e-learning and adhere to the BL drive. The adult lecturer stated:

*'I'm sure there are plenty of people who like it. I feel a lot of pressure to use it, when I don't always think it's necessarily the best way of learning'* (John, adult lecturer)

Whilst widely acknowledging the importance of ensuring that materials are clinically credible and the most recent information on a given subject is available, time to produce these both for the face-to-face sessions as well as for the website was a major problem.

There was concern that e-learning was replacing the face-to-face component. John drew attention to this:

*'I'm doubtful how much we should embrace it, or how much we should lose in order to embrace it; I certainly don't think it should replace traditional teaching until that's what students demand and at the moment I don't really see a lot of evidence that, you know students are demanding it'* (John, adult lecturer)

The adult lecturer stressed the importance of being mindful of the types of student and whether e-learning as part of BL was always suitable:

*'All of them are full time nurses, they have full time jobs and other commitments and whatever, and quite often it's a struggle for them just to get to class, possibly asking them to engage in other activities in between, is challenging....I would say probably there's a lot of people who don't, you know, they just turn up to the*

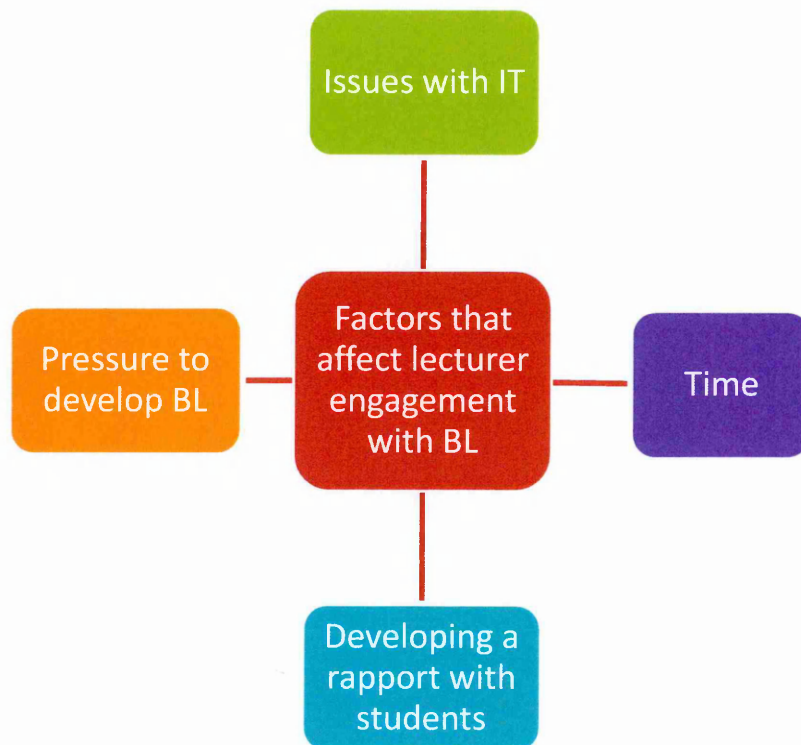
*sessions and feel that, or hope that that's sufficient.. I think it's difficult getting them to engage with e-learning' (John, adult lecturer)*

Finally an area of concern was the problems of developing rapport with the students due to the reduced face-to-face component of the module. Lecturers felt that only seeing students at four points during the duration of the module prevented building a relationship with them. Although not specified, potentially there was sense of the lecturer feeling isolated from the students. Simon described this fact.

*'Technology can be seen as being used when you are on your own.... It's possibly isolating for the student' (Simon, paediatric lecturer)*

In summary the lecturers discussed their perceived limitations of BL. At its heart were issues with IT. This ranged from lack of support to developing e-learning materials, drawing attention to the need for education, training and support. Also lecturers felt they had difficulty in establishing a rapport with their students due to the reduced face-to-face time. Time constraints in developing BL materials and feeling pressurized to moving to a BL module were also cited as major limitations. These issues are depicted in the following diagram.

**Diagram 4: Factors that affect lecturer engagement with BL: An illustrative representation of area four**



The next four sections present the findings from the students' experiences of BL.

#### **4.6 Blended learning: experiences of post qualification undergraduate nursing students**

##### **Area One: The students' experiences of learning**

The first aspect illustrates the students' experiences of learning and has been developed from the findings from both the questionnaire and interviews. The short questionnaire provided before the interviews gleaned some information about previous experiences; however the interviews equally drew out information pertaining to the students' previous



experiences of nurse education. The discussion around this linked to the way this currently influenced their learning.

To begin the students past and current experiences of studying were identified from their answers to the interview questions. There was a general consensus that it felt as though they were always studying. One student, an adult student, had been qualified for thirty years and he suggested that it felt like he had been studying continually stating:

*'If I've not been doing a course I've been reading and staying abreast of new changes and stuff'* (James, adult student)

Equally, a mental health nurse, who qualified in 2000 and had been studying ever since stated:

*'I need to develop my role ... only way is to continually do courses'* (Oliver, mental health student)

An example of the variety of modules qualified nurses are expected to obtain is demonstrated by a paediatric nurse who had been qualified for 5 years:

*'I did my mentorship, and then I did a cardiac course and then I did the PICU course'* (Tracey, paediatric student)

Much of this was in their own time rather than being awarded study time from the clinical area. In addition the majority of students highlighted that they were expected to pay for their modules, some in its entirety and others a proportion of the fees.

Nurses are required, as part of maintaining their registration, to engage in continuing personal and professional development (CPPD). Also there is an expectation that all nurses will obtain a degree. Many of the nurses were seen to be accumulating credits towards the degree. Both these areas were cited as the aims of studying, in essence the purpose of student learning. One student stated:

*'I'm hoping that I can build up because this would give me 45 credits towards a degree, so I'm hoping that I might build if I'm given an opportunity at work to build up towards a degree' (Louise, adult student)*

The ambition of the student was equally important. This drive to succeed was embedded in the need to obtain a speciality module that supported their career choice, for example if working in a speciality area such as paediatric intensive care then the PICU module is essential. Promotion therefore rested with the successful completion of specialist modules. Strongly linked to this is the need for nurses to receive increments within their pay band. These are given if certain areas are achieved, one of which may well be the nurse demonstrating CPPD. The development of their role was also cited as a reason for attending the module and with this development an increase in competence and confidence. A student discussed the aim of learning:

*'It's mostly to develop yourself, and it makes you able to look after your patients independently and [with more experience], and confident, you increase your confidence in your job perspective as well.'* (Jenny, adult student)

Oliver cited the aim of learning as:

*'enriching one's practice in the sense of the kind of learning that I'm doing now or have done in recent years..... to improve satisfaction in my role,[so] that I could have more in my arsenal of therapy to help people'.* (Oliver, mental health student)

At its heart it appeared that the students viewed the overall aim of learning as the acquisition of knowledge and the development of self both personally and professionally. Generally the aim of learning was therefore deemed as the gaining of new knowledge and the reinforcement of old knowledge. There is a certain amount of pressure created by the need to demonstrate CPPD, achieve specialist courses and a degree.

The expectations of the student about what they would gain from the module was discussed. Students noted that they often felt a sense of worry when first beginning a module as they were not clear on how the module was to be run. This was expressed as:

*'I was a little apprehensive, and not knowing, you know... how I was going to cope with that sort of staring at a computer for hours on end... it's been a learning process throughout this'* (James, adult student)

All the modules had clear aims and learning objectives. These were found in the handbook that was available at least four weeks before the start of each module. All the students reiterated that their own objectives had been met by the module.

Several of the students had been studying over many years and therefore commented on the changing face of nurse education. Particular attention was drawn to the differences in the way they are being taught. Reference was made to the past, where teaching was through the lecture and there was very little interaction between the teacher and student. Certainly the use of technology was highlighted as a new concept in nurse education.

*'Typically in a course when I first trained it was all overhead projection and, you know discussion... sort of just people writing with a marker pen on a bit of transparency, and it was all a bit clunky'* (Oliver, mental health student)

*'It was just the lectures, lecturers giving us all the information, sitting in a class taking notes, writing notes and then using those notes to formulate your assignments.....80% of the materials come from the lecturer, not from the student.'*  
(Louise, adult student)

Motivation to learn is essential. To illustrate this the students expressed how they liked to learn. A variety of styles were brought up, which included interaction, the use of simulation, scenario based learning, pictures/ diagrams, face-to-face in a classroom, and learning by doing through practical components. The concept of being a traditional learner



was discussed and the idea that what happens in the classroom has a strong influence on the learning.

*'I quite like interaction with people and this type of thing, and group work and sharing people's experiences and then relating it into practice. I'm much more a practical person than just being talked at.'* (Tracey, paediatric student)

Maria had a similar perspective on how she liked to learn:

*'By a mixture of things... we do e-learning and then we do lectures and we also have our assessment book in practice'* (Maria, paediatric student)

One adult student enjoyed traditional learning which he described as learning in a classroom but equally thought:

*'The best way to learn I think is doing stuff physically which is what this course is all about.. it's about getting on with it practically.'* (James, adult student)

A paediatric nurse disclosed the way she best learnt:

*'In practice ... either working alongside someone or just doing things... by seeing something happening in practice, something I've learned in the classroom probably doesn't sink in until it happens in front of me.'* (Deborah, paediatric student)

Confidence with the use of technology was discussed. All students expressed confidence in the use of computers. Many of the students used social media whereas for others this was a new area. One student stressed:

*'I struggle a bit with the social media thing, though I 'm having a bit of fun with that.... I want to get involved and do that because it's the way the world is now, but it's challenging for me, not having grown up with this kind of thing'*. (James, adult student)

Technology to enhance the learning experience was discussed and how it has influenced the way the students learn. Students used a variety of ways to access the e-learning; these included the use of tablets, phones, laptop and desk top computers, demonstrating 'learning on the go'. Tracey mentioned her use of the e-learning site:

*'I did use the e-learning [site] but I'm not very good at it. You have so many passwords and I always forget. And then I don't really use my laptop very much at home...I don't like learning from the internet, I prefer to talk to somebody and ask questions'* (Tracey, paediatric student)

A mental health student brought attention to the fact that technology does not always enhance the learning experience:

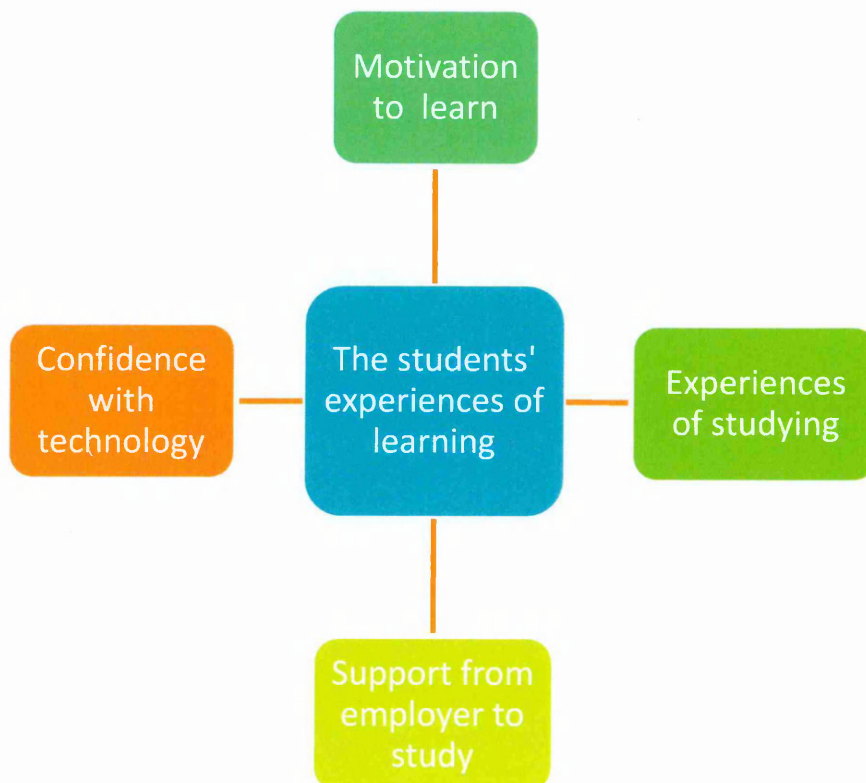
*'You'd think that it would make it easy, that anybody could walk in off the street and with an app they could learn all this stuff, but it doesn't work that way...if you don't know how to use that knowledge it's useless to you.....it can enrich the way that people learn..... I like to minimise my use of technology though because I think it becomes a bit of a crutch to lean on'* (Oliver, mental health student)

One student considered the concept of the mature learner, describing them as someone who had experienced a variety of teaching / learning styles. Equally they stressed that the mature learner was someone who had developed the way they learnt, encompassing reflection on learning and the way it impacts on practice. A mental health nurse discussed this aspect:

*'I think now in terms of learning, my learning maturity has got better, I've got more mature with learning... with experience of work you're able to pick up where you're weak at and, you know, areas where you're more interested in and stuff like that.'* (Tina, mental health student)

In summary students have discussed their motivations to learn including how they like to learn as well as their past and current experiences of studying, noting the changing face of nurse education. Attention was paid to the use of technology in education and finally the support from the employer for their on-going education was raised as an issue especially with regard to both paying for the module and attending the module in their own time. The diagram below illustrates the relationship of these issues to the main theme.

**Diagram 5: The students' experiences of learning: An illustrative representation of this area**



### **Area two: Understanding and experiences of blended learning**

As with the lecturers an understanding of what BL meant to the students was considered. An interpretation of this term and its broad definition was provided by the students during

the interview, and this informs this section. A range of interpretations of BL were highlighted by the students. These included a mixture of face-to-face combined with e-learning, different types of learning, a mixture of ways of learning within the same module, diverse teaching styles and finding the information for themselves. The following extracts illustrate the range of interpretations of the term BL.

*'You're going to university and you're going to work.... learning from both environments' (Jean, paediatric student)*

*'Learning in lots of different ways. Or being taught in lots of different ways, which I think is much more effective than just one type of learning, because everyone learns differently' (Maria, paediatric student)*

*'The lecturer delivering the information and me going to find out information for myself... going to the internet and searching' (Jenny, adult student)*

*'There is some face-to-face component and lots of e-learning' (James, adult student)*

*'I suppose it's learning with more than one way... more than one type of teaching and access to more than one facility' (Deborah, paediatric student)*

*'Involvement of different types of learning, different ways of learning within the same module' (Sally, adult student)*

One student drew attention to the idea that BL allowed students to share their knowledge:

*'It's not as if you're like a, you know, in a classroom where you're learning you're kind of sharing that learning experience with whoever's around you' (Tina, mental health student)*

Several of the students did not fully understand what the term meant, seeking clarification from the interviewer before providing their impression of BL. Of note is that the students were currently experiencing BL within the module but were not aware that the methods used by the lecturer to aid learning were in fact BL. The following illustrate this point:

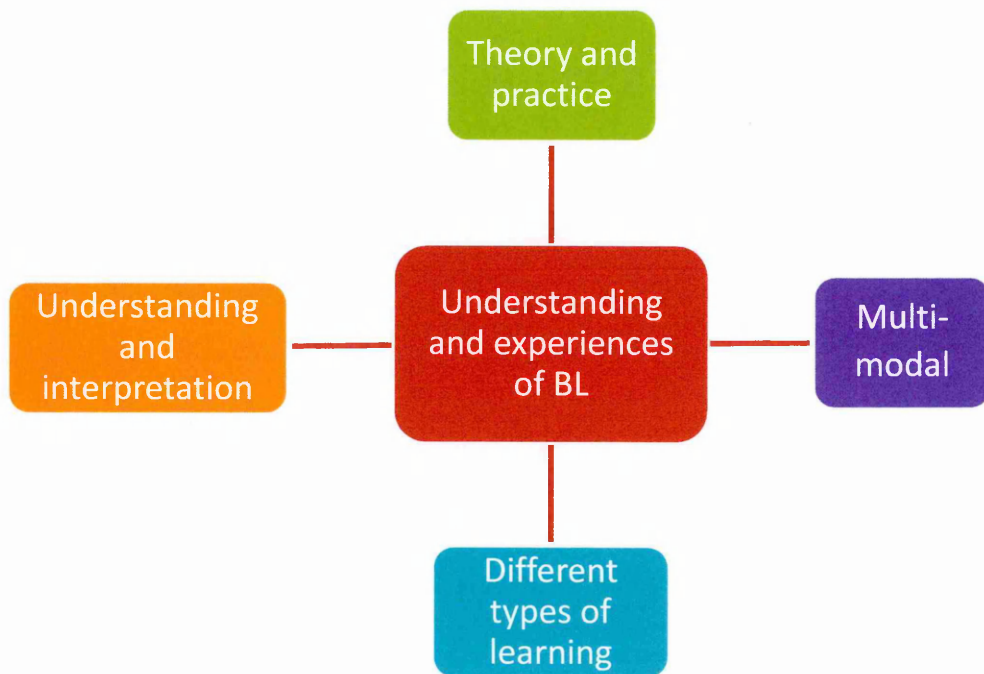
*'My understanding of it is where the student takes on a little bit more responsibility of what they've learnt, or their understanding of what the subject is all about... presenting it to qualified staff'* (Tina, mental health student)

*'I'd be lying if I said that I wouldn't just guess, so I've no idea'* (James, adult student)

*'Er, not that much... sharing ideas, share your research and things'* (Tracey, paediatric student)

In summary students showed a lack of understanding of BL and its use in education. A variety of definitions were provided illustrating the superficial understand of BL. The diagram below illustrates the students understanding of BL.

**Diagram 6: Understanding and experiences of blended learning: An illustrative representation of area two**



### **Area three: Blended learning as an effective learning tool**

The third aspect to emerge from the interviews was around the effectiveness of BL as a learning tool. BL was deemed to have many positive qualities. At the heart of this was that BL was and could be an effective method of learning. One student agreed strongly with this statement:

*'The more ways you learn, I guess the more angles you come at something from and the better you learn it'* (Maria, paediatric student)

A paediatric student enjoyed the different aspects of BL; she felt that she had become more confident as a learner but essentially in her area of practice she felt she had developed her skills and knowledge:



*'I think doing the pre-class work has been really good for boosting people's confidence before going into class' (Deborah, paediatric student)*

One student drew attention to the fact she felt more involved with the learning process through the BL media:

*'I think it sticks more in your head and it gets you more involved, you're actually taking part, you feel part of it rather than just a participant sitting back and listening' (Louise, adult student)*

BL was deemed as a higher level, more up-to-date way of educating nurses. It was viewed as a recent innovation and potentially something that was developing as a teaching tool.

James highlighted this:

*'Strengths?... I think it's quite strong, many years ago it was lots of face-to-face presentations but then that's just kind of lower level education .... You know more advanced education you do it yourself ...I've found that it's much better than I expected' (James, adult student)*

Primarily comments were made on the way the use of the BL approach allowed the student to learn at their own pace and in their own time. This is with reference to the e-learning site and the information that is provided on the modules websites. For many the use of e-learning was a recent development that they had not engaged with previously. All the students had expressed that part of BL was the technology side. An adult student stated that:

*'This is the first time I'm using the e-learning more appropriately, because now before coming to lectures I'll go into the e-learning and see the assessments and presentation and I will read through it before coming to class' (Jenny, adult student)*



E-learning enabled the students to access the module's information at a time convenient for the student. A student made reference to this adding:

*'I find it helpful as I can access the work anytime... it feels like you are in a classroom situation, you've got the information there and you're interacting and it gets you thinking'* (Louise, adult student)

The idea that there is always someone available to help was also discussed. The extension of the classroom to the online venue made the students feel the lecturer would be readily available to answer any queries or concerns.

Quality of the learning experience was expressed by several students. BL was deemed a more advanced way of educating nurses. The quality of the learning was linked to quality of the teaching. The lecturers were seen as experts who appeared motivated to teach.

Tracey discussed the importance of developing, seeing and experiencing links between theory and practice:

*'I think it's helped me more in practice, like doing the learning skills in practice and maybe having the study days and then the following day going into practice and think, oh I learnt that yesterday... you can kind of relate it to practice.. I think that's the best bit'* (Tracey, paediatric student)

The continual updating of the website, the use of technology and the mixed modalities employed within the class all produced effective learning and positive experiences for the students.

This all led to an increased motivation to learn. Ultimately this motivation impacted on the students' desire to complete their degrees. Equally the motivation impacts on the way they work in clinical practice. One student referred to the importance of self-motivation as part of the BL process:

*'The learner has to be motivated to find the information, you know to learn. It has to be an adult thing that you want to learn' (Louise, adult student)*

BL was also highlighted as suiting different learning styles. For example one student expressed preference to learn by reading, another by using e-learning and others by attending class. A mental health student commented on this:

*'I think it suits the modern era's lack of attention span..... people feel they have to be plugged into the matrix all the time..... BL creates a choice of how we learn... it's people's choice how they learn and we're all more advanced learners than we were then' (Oliver, mental health student)*

An adult student discussed a positive aspect of BL as:

*'It's very useful for different learning styles, people with different learning styles because obviously we all learn best in different ways.... Something that you've learned to back it up with a different way of learning' (Sally, adult student)*

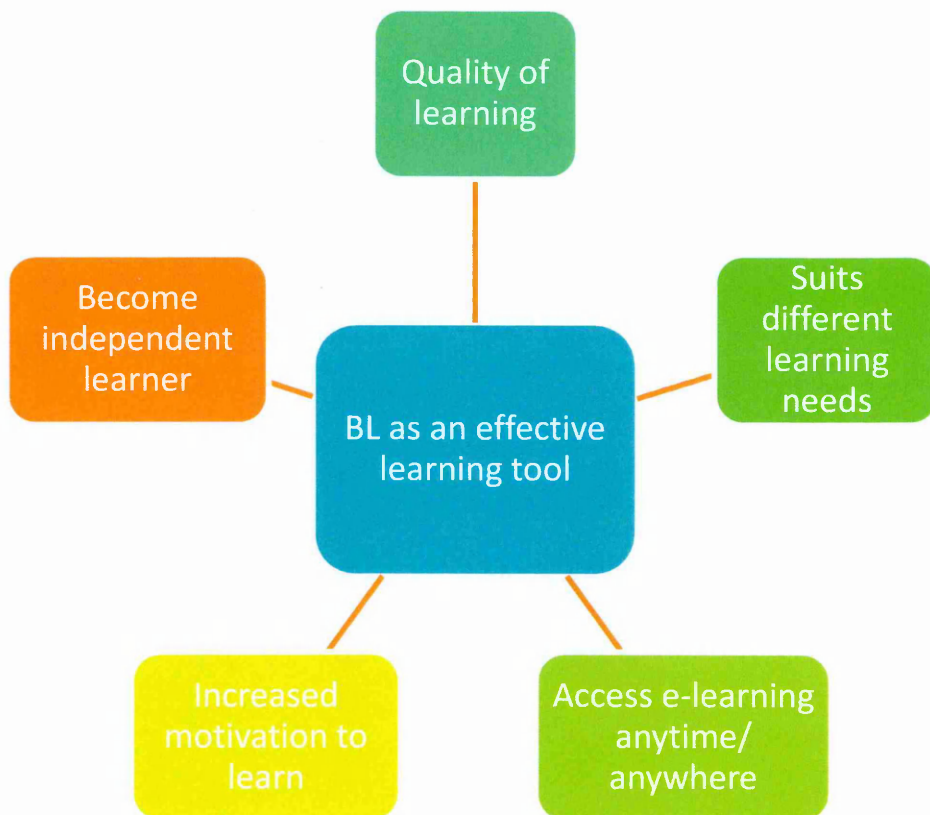
Finally BL was advocated as allowing for students to study independently. It provided the opportunity to learn in the student's own time, to revisit the work at a time convenient to them and to act as resource for learning. Equally BL ensures there is development of the independent learner, the idea that the learner is active rather than a passive participant in the learning process. A student considered this aspect:

*'I find the information myself, it's my work.. I'll keep it in my head longer than dozing off to sleep when the lecturer is delivering all the information' (Louise, adult student)*

In summary students drew attention to the quality of the learning experience and being able to access e-learning at a time and place convenient to them. This in turn led to the idea of

an independent learner. Some students stated that BL as a concept increased their motivation to learn.

**Diagram 7: Blended learning as an effective learning tool: An illustrative representation of area three**



**Area four: Factors that affect student engagement with blended learning**

Despite the student participants highlighting the many positive aspects of BL many also drew attention to the possible limitations of this teaching and learning concept. This is the fourth and final area to be considered in the findings from the student interviews. To begin, the use of technology to enhance the learning experience was criticised. The time spent on



the e-learning was highlighted as an issue. For many too much information was put on the module websites and it felt overwhelming. Time spent completing the work appeared to be far more than anticipated or intimated by the lecturer. One student noted that:

*'I haven't so much time... I haven't' used it as much as I could... I have home issues that stop me getting on the computer'* (Louise, adult student)

An adult student commented that sometimes it was difficult to feel energised to access the information online:

*'Sometimes it's the motivation of the learner.... I need to feel motivated to begin the e-learning... .. it's very, very tiring with the type of job we do, the shift work, when you go home you have in your mind, Oh I'll have a go and sit there and do something, but then the body is so tired'* (Jenny, adult student)

If there were problems with the module's website, no support was apparent to rectify the issue. Support was expected from the lecturer and from the IT department. This was frustrating. An example of this is illustrated in the paediatric module where the discussion forum did not work for twelve weeks, throughout the duration of the module. Maria commented on the lack of use of the forum:

*'We haven't actually used it. I think there were some technical problems with accessing it, like have permissions [passwords] to post'* (Maria, paediatric student)

Equally Deborah pointed out:

*'The forum wasn't used as it should have been because there was a fault in our interface and we couldn't actually access it to create a forum or to repost things'* (Deborah paediatric student)

There was a feeling that as a student you were never really able to be away from learning. This created a pressure to access the website any time, any place. Potentially this meant

that learning encroached in to the student's home life. Many students admitted to studying late at night once their children were in bed or after a busy shift at work. A mental health student drew attention to the changing use of technology:

*'Well technology has definitely taken over really... I did get anxious with that, I just didn't know what to click on, what happens if I click this button? So that does take over the learning process instead of you , you know, concentrating on what you're supposed to be learning you're more concerned about the IT part of it' (Tina, mental health student)*

The anxiety that IT can cause was reiterated by another student:

*'There's a lot of anxiety about actually ... getting down to doing it...the role of anxiety is often underplayed in education' (Oliver, mental health student)*

To ensure that all the e-learning, extra reading etc. was completed, self-motivation was required. For some this was difficult and they commented on the lack of motivation to delve in depth on certain areas required for the module. The need for a more structured approach to their learning was an issue that had developed with the reduction in face-to-face teaching and the greater reliance on e-learning. An adult student discussed the need for a structure to be brought to BL and the way it is possible for work not to be completed if it is all online.

*'It's a structure over a time period you're going to do your course in 3 months in something, if you get behind then you can be really in trouble... if you're turning up every fortnight it keeps the structure going... it's easy to let a month slip by and you're way behind.' (James, adult student)*

Equally Tracey stressed the importance of requiring an obvious structure to the learning process:

*'You have to will yourself on to do it, like ...there's nobody saying 'Oh you must do that now' ... you have to have some motivation to do it yourself' (Tracey, paediatric student)*

Reduced face-to-face contact was deemed a negative aspect to the BL concept. This was seen as an expression of anxiety about what was expected of them as students as there was no direction provided by the lecturers. Generally the lack of, or reduced access to, lecturers was seen as a limitation. The access was not only limited due to a reduction in face-to-face time but also the lecturers were not seen to be accessible via the e-learning platforms. There was a need for what was described as the human contact. The following extract highlights this issue:

*'I think the limitation is that you still need a face-to-face component, I think that sort of human contact... the information that you can gain there and just the ability to speak with a lecturer and have questions answered in a face-to-face fashion is so much easier than sort of e-mailing and put your question precisely in writing'*  
(James, adult student)

A paediatric student also expressed her concern about the lack of face-to-face contact:

*'There isn't the scope to maybe discuss things or to draw on that knowledge that your lecturers have to sort of ... bring it all together, as it were' (Deborah, paediatric student)*

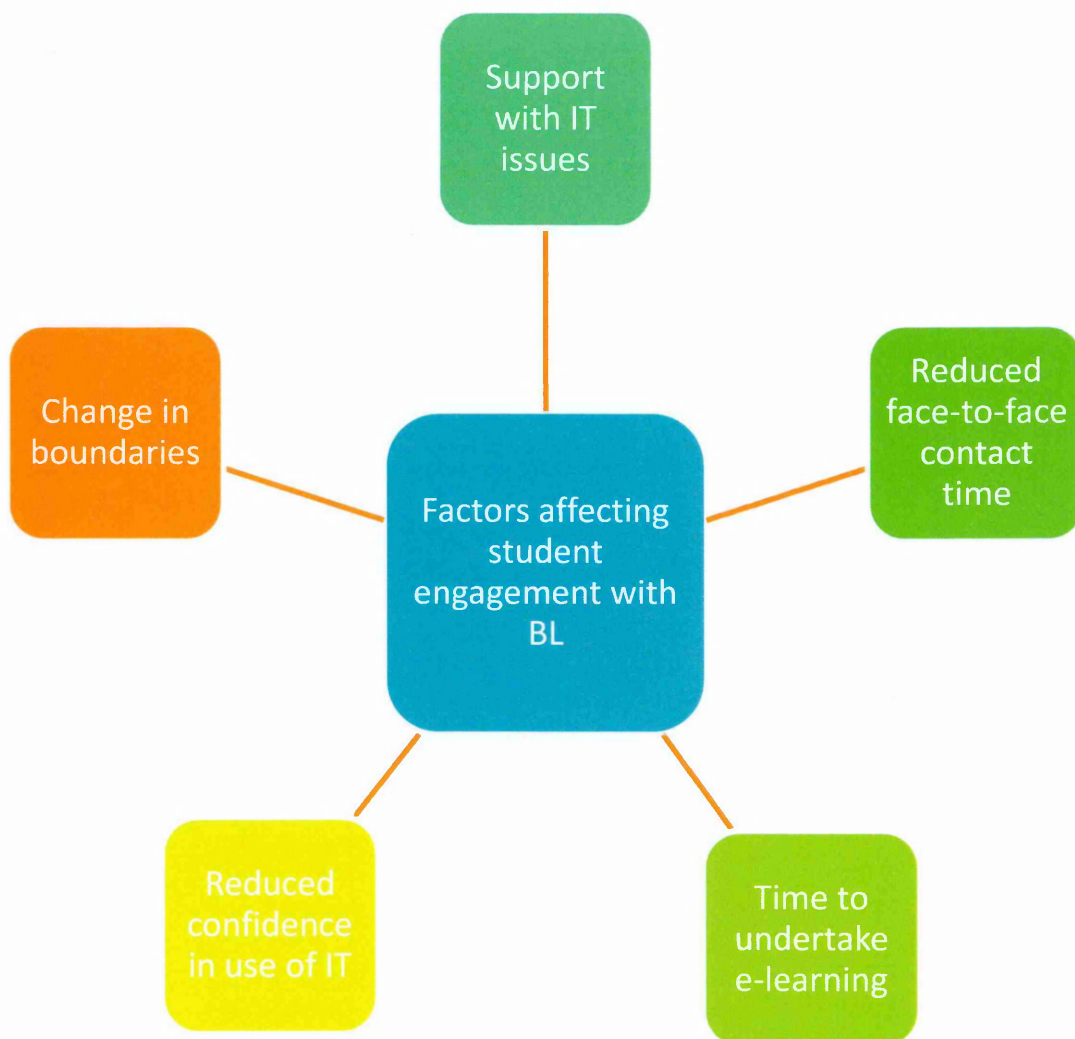
As well as commenting on the reduced time with lecturers the students expressed that they regretted the reduced contact with other students. If a module has only four days face-to-face contact the students had no time to build a rapport with each other. Potentially this led to a sense of isolation throughout the learning process. The development of the sense of community both within the classroom and through the online learning was deemed as missing. This was considered an important factor as is reiterated by the student below:

*'If you're only in, like we had four days, it would affect the way we all sort of got along as students' (Deborah, paediatric student)*

In summary this final section has considered the factors that have affected the students' engagement with BL. Students stressed that the problems with IT were a serious limitation to the use of e-learning as a part of BL. The issues appear to be primarily concerned with support and confidence in the use of IT. Time to access the e-learning site was also raised particularly the feeling of never being able to get away from studying. The students identified that the boundaries have altered in the way education is delivered and accessed. They drew attention to BL spilling over into their personal life in comparison to face-to-face that may not have encroached into their private time. A sense of isolation was raised that developed with the reduced face-to-face contact time with lecturers.



**Diagram 8: Factors affecting student engagement with blended learning: An illustrative representation of area four.**



#### **4.7 Emerging similarities and differences between lecturers and students experiences of BL**

Demographic data were collected (see Tables 3 and 4) to describe the sample but also to allow consideration of potential differences in experiences of BL in relation to age, gender, speciality and IT capabilities. It is difficult to draw conclusions from the sample as it is

small and variables such as type of module and need for the qualification perhaps can influence the experiences of both students and lecturers towards BL.

It was interesting to note that most of the lecturers and the students deemed themselves to be confident or competent users of IT or to have some knowledge of IT and yet one of the largest areas of concerns with issues around BL was problems with IT. All those participating had ready access to a computer whether that was at home or work or in some cases both settings. Although the lecturers and students may be competent using a computer this does not necessarily transfer to confidence and competence with the use of IT in a BL environment. Accessing e-learning materials within the work environment (NHS/ university) can be difficult for those working in the NHS as the security on the computers is extremely high and this prevents outside materials being opened. Ultimately this reduces the time that students can access learning materials and therefore the assumption is made that e-learning is accessed at home. The student group did not comment on issues around accessing e-learning at work.

The findings indicate no obvious differences between how diverse specialities experience BL. The aspects raised are similar in adult, child and mental health specialities. However this is a small sample and so more in-depth studies looking at larger numbers in each speciality may elicit different understandings of BL in each speciality. Equally there is no obvious correlation between gender and the experience of BL.

The lecturers were from different age ranges and their age did appear to impact upon how they viewed BL. The students' age, which also spanned three separate age ranges, did seem to have an influence on the way they perceived the BL experience. However, it is difficult to separate this from length of time out of the educational arena. It appears from the demographic data that those in the two older age ranges regarded BL with suspicion and commented on the changing face of nurse education. They were not as comfortable

with the reduced face-to-face time and the different methods of knowledge delivery. In contrast those in 20-35 age range have had no break in studying, have qualified as nurses recently and are familiar with the BL approach, although perhaps not clear about the term. Consideration must, however, be paid to the potential influences that a person's age and gender will have upon the way they like to learn. Of note are the links to the persons previous experiences and how this will potentially determine the way they perceive and ultimately experience BL.

The findings have demonstrated similarities and differences between how lecturers and students experience BL as a method of delivery and acquisition of knowledge. The main similarity between the two groups is the continued need for face-to-face interaction within the university setting. The use of mixed modalities within the classroom setting is endorsed by all participants, for example the use of role play, simulation and group presentation. The innovations in learning developed by the lecturers are explored in Chapter Five

Issues with technology were highlighted by all participants; the problems raised from student and lecturers unable to access the website, no IT support when needed and for the lecturers no help with setting up e-learning. The use of technology as part of BL and the issues around using technology in learning is a theme that will be discussed in the following chapter.

The lecturers commented on the segregation they feel from their students as face-to-face time is reduced; there is difficulty in getting to know the students and establishing a rapport with them. Similarly the students highlighted the feeling of isolation from the lecturers. This was conveyed in two ways: the lack of support from the module leader (lecturer) and difficulty in engaging with the learning process. The student participants also felt isolated from each other. The sense of belonging and the need to feel part of the

community of learning will be discussed further in the next chapter under the concept of the isolated learner.

Differences did emerge between the experiences of lecturers and students of BL. No consensus was reached as to what the term BL actually meant to the individual or nurse education as a whole. Conflicting definitions emerged and in some cases the participant sought clarification of the term as they had no understanding of BL.

Lecturers had developed and were using a range of e-learning materials that both supported and replaced face-to-face teaching. Students spent a great deal of time accessing these materials. The expectations of the lecturers were different from those of the students towards the work to be completed through the e-learning process, potentially opening up areas of conflict and dissatisfaction with the learning experience. Students are viewed as adult learners by the lecturers and as such are encouraged to be self-directive in their learning. Lecturers perceive themselves as facilitators of learning. Students however require direction and clearer discussion on what will be expected of them. The concept of andragogy as it is applied to BL will be explored further in the following chapter.

#### **4.8 Summary**

This chapter has presented the findings from the interviews undertaken with lecturers and students in one school of nursing. The issues that the participants talked about has shown some key areas that relate to the initial research questions demonstrating the experiences lecturers and students have had of BL.

Generally there were mixed ideas of how BL was used in individual modules and what it meant to lecturers and students. There is a lack of clearly defined meaning of the concept. This then caused confusion for those involved as their expectations of the modules were not clearly met. There is a need for a universal definition to be adopted by the school of nursing to ensure that all lectures and students are fully aware of what a BL module will

entail. This lack of clearly recognising the term BL was also seen in the documentation for the modules where it was not mentioned despite the module being clearly blended.

BL was generally viewed positively by both lecturers and students. The mixed modalities allowed for a variety of learning to take place that suited different learning styles. The way lecturers preferred to learn impacted on the way they delivered the module. Equally it was acknowledged by many of the lecturers and students that different modules suited varying modes of delivery. The lecturers discussed a wide range of innovations in delivery of their modules, all geared to enhance the learning experiences of the students. Overall the students demonstrated a motivation to learn, but were surprised by the differing approaches that the BL approach provided to their learning. The concept of adult learning and the meaning this brings to post qualification nurse education is potentially addressed by the use of BL.

IT and its use was portrayed as a key issue. Lack of support, paucity of training and the e-learning platform not working correctly were all cited as major areas of concern for all participants. The sense of isolation and the need to feel part of a community commented on in the literature review, was also found to be an issue with some students.

The findings from the in-depth interviews have drawn out five key areas. Firstly BL is largely poorly understood and as such developing a key definition of BL appropriate and usable for nurse education requires developing. Next the lecturer's use of innovative practice in the classroom was noted throughout the interviews. Although they do not view the mixed modalities as BL, an exploration of innovative practice that can be endorsed as 'best practice' when BL is developed is essential. Thirdly BL requires active participation of the adult learner. It is important to recognise both the role and needs of the student when they are attending a module. The interviews also highlighted that lecturers and students have the potential to feel isolated in the learning process. This was seen when e-learning was increased and face-to-face classroom time was reduced. Finally both students and

lecturers stressed that issues with IT affected their engagement with BL. Technology to enhance the learning process therefore require further exploration. The following chapter will discuss these five key areas in relation to the findings from the interviews, the studies discussed in the review of the literature in Chapter Two will also be drawn upon to support the findings.

## **Chapter 5 Discussion**

### **5.1 Introduction**

This chapter will focus on the key areas drawn out from the participants' experiences of BL in the interviews: the innovative lecturer, the active adult learner, isolation in the learning process and technology enhanced learning. It will relate the findings to the literature around BL. The way the findings contribute to new knowledge on BL will be highlighted. BL will be put in context in relation to the findings from the study and a key definition explored. The findings will also be related to the Community of Inquiry conceptual framework (Garrison and Anderson 2003).

### **5.2 The innovative lecturer**

The findings from the interviews with the lecturers indicated a variety of mixed modalities employed to meet the learning outcomes of their modules for example role play and simulation. Although not perceived by the lecturers and students as BL, the different approaches used in the classroom to impart knowledge are an exemplar of BL in action and demonstrated innovative practice. Lecturers were clear that they continually considered developing new ways to deliver knowledge that is evidence based to ensure that students remain motivated and enthusiastic to learn. The Francis Report (2013) recommended evidence-based education for health care professionals as part of the on-going concern for patient welfare, therefore ensuring that health care practitioners engage with innovative research led education is essential (Willis Commission 2012). BL as a model for education has the potential to deliver innovative and transformative knowledge. Indeed BL may be deemed innovative itself. Discussion and consideration of the emerging innovations of lecturers within the BL concept was not reflected in the studies debated in the literature review. Equally the aims of teaching and learning had not been discussed. These areas will have an impact on the way lecturers deliver their learning outcomes. Garrison and

Vaughan (2013) asserted that innovative ideas are not seen in higher education. The findings on BL indicate that this is far from the case in nurse education.

Lecturers strive to develop their modules to a high standard to ensure that they meet the expectations of the students. This was evident from the interviews with the lecturers and scrutiny of their modules. Students require high quality, excellent learning opportunities in each module, which was also gleaned from the study. Therefore it is essential that lecturers develop novel ideas in the ways they deliver the modules to not only fit with the drive towards BL but to also encourage students' participation and attendance on the module or programme. There are a variety of definitions employed to describe innovation but at its heart it is about doing something original (Dearnley et al. 2013). It is best described as the introduction of new and appropriate practices or techniques that will create motivation and enthusiasm to learn (Zhu and Engels 2014). Within the BL concept innovation is informed by the development and application of BL both at organizational and individual levels. The learning environment and the changing role of the lecturer will also impact on the development of original and inspiring teaching.

There is a drive to enhance the learning experience of the student. Alongside this is the need to ensure that the lecturer uses new and original methods of teaching within their modules as previously discussed above. Also there is a competitive component as there is a need to attract students to the nursing school and so excellent, value for money modules are key. Lecturers are acknowledging the importance of reconstructing and changing their modules to ensure they meet the expectations of a changing and challenging workforce. There appears to be a top down approach to the changing face of education, especially technology. The changes arise from government policies and lead to the university taking on the required change. Eventually the module leader becomes involved with the implementation of the change (Carbonell et al. 2013). This may appear dictatorial as change is potentially enforced. This may also have a negative impact on teaching and



learning as to be successful educational change requires a supportive environment to nurture new developments (Zhu and Engels 2014). It must also be acknowledged that this change is not always seen in a positive light for example due to a lack of understanding of BL and its perceived enforcement (Zhu and Engels 2014). This is reflected in the issues related to the increased use of technology and reduction of face-to-face contact with students portrayed by the lecturers in this study.

Module leaders need to feel in control over the way they deliver their modules' content. In this way a sense of ownership over content and delivery of the teaching is created. The lecturers interviewed were all using inventive and for some pioneering ways to deliver the knowledge and achieve the module aims. However, at the start of this thesis it was identified that the main drivers for using BL have come from policy and organisational strategic priorities. The evidence suggests academics more commonly engage with BL if the change is driven by them (Carbonell et al. 2013). In itself this can then motivate lecturers to develop innovative ways of teaching and meet the challenges to produce excellent high quality learning (Garrison and Kanuka 2004).

BL results in a potentially ever changing learning environment which is directed by the lecturer for example using the online environment in place of face-to-face interaction. Mixed modalities allow for a variety of learning environments: classrooms, clinical skills centres, virtual learning environments and clinical practice. Those participating in the study highlighted the use of role play, seminars and student presentations as a tool within the classroom. PowerPoint presentations by the lecturer were not to the fore in their list of teaching methods. Classically the virtual learning environment in the form of e-learning is strongly associated with the BL approach (Shaffer and Small 2004, Bradley et al. 2007, Wakefield 2008). However the lecturers in my study did not demonstrate active participation in this and the e-learning site was seen more as a repository for information rather than a dynamic source replacing conventional face-to-face teaching. Wilkinson et al.

(2004) stressed that web-based learning should only be used if appropriate to the module content and not just because it is available. If e-learning is employed it must link with any face-to-face content to ensure flow of ideas and knowledge.

The role of the lecturer is changing and a variety of terms inform this title. These range from facilitator, mentor, teacher, coach and counsellor. The role of lecturer therefore has many layers which can impact on the approach to delivery of knowledge. Contributing to nurse education also means, in general, that the lecturer will come from a clinical background, holding a professional qualification and be registered as a nurse (NMC 2008, Smith and Boyd 2012). In the higher education setting it is the expectation of the lecturer to teach within their own speciality. The adult lecturer interviewed (John) commented that he did not teach within his specialist background. This was an area of contention and frustration. Maintaining clinical credibility and delivering evidence based nurse education is an ongoing challenge (Smith and Boyd 2012). On-going personal and professional development is part of the lecturers' role. It is essential for them to keep up to date and to progress in their own learning. Their continued experiences of learning will therefore impact on the way they deliver their module content. For the three participants in this study this was evident as all of them were studying at some level. All three stated that their own experiences of learning influenced the way they taught their module and therefore the use of different components to enhance both the teaching and learning experience. Overall module content and delivery is, like BL, an evolving process. It is possible that BL allows greater manipulation of content and most importantly the way that content is delivered. Lecturers need to be adaptive to the changing needs of the students, BL allows this to happen.

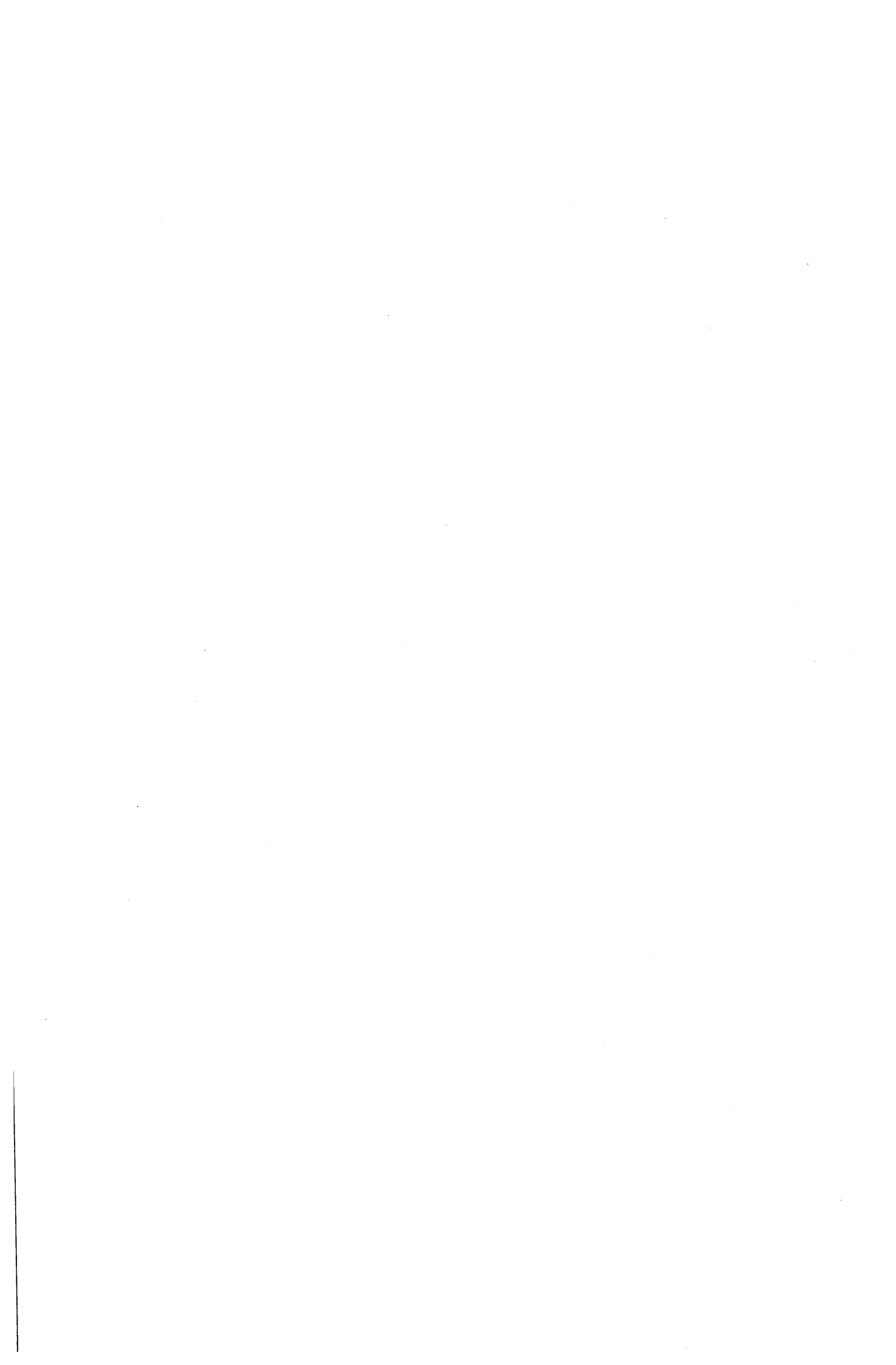
Norton et al. (2005) highlighted that lecturers prefer to teach in the way they find most appealing to them, which may be based on their own educational experiences. This is supported by the findings from this study, where all three lecturers admitted that previous

learning experiences (if positive) informed their own facilitation of learning. If they had experienced negative learning this also impacted on the way they taught, drawing on this as a way not to impart knowledge. Equally there are areas that lecturers enjoy teaching more than others, for example, the mental health lecturer particularly used role play and the paediatric lecturer preferred the use of simulation. Therefore innovative delivery of a module is influenced by both previous experience and enjoyment of the material and delivery method.

The three lecturers in this study, in places, demonstrated original and inventive ways of teaching. This study has highlighted the energy and enthusiasm lecturers have for learning and teaching. In 2003 the DfES proposed that lecturers needed to be supported in order to become dynamic teachers. The emphasis was on developing resources that would offer active and creative ways in which the student would be able to learn. Using a mixed methods approach to healthcare education has the potential to ensure that evidence based clinical knowledge is conveyed and absorbed to ensure high quality care (Dearnley et al. 2013).

### **5.3 The active adult learner**

The findings from the interviews indicated that students are no longer passive instruments in the learning process but are active participants. This was demonstrated through the students' requirement to use e-learning that ensured they prepared for the classroom sessions as well as actively participating during the face-to-face interactions during the module. Equally it is important to acknowledge the adult learner (the concept of andragogy) and how this impacts on the way nurse education is delivered. The study found that post qualification nurses have professional pressures and regulations that will impact on their engagement with education beyond registration. They are therefore required to actively seek out post qualification education. This section will discuss these concepts in relation to the findings from the research.



Historically, it could be argued, students have played a passive role within the education system (Laurillard 2002). The concept of being 'spoon fed' information by the lecturers who stand at the front of the class reinforced over time the passive role of the learner, traditionally the format endorsed in higher education. This concept sits within the pedagogical model (Knowles et al. 2005) where the teacher takes full responsibility for the content of the learning and learners are deemed to play a submissive role. Contemporarily students are required to be active participants in the learning process (Knowles et al. 2005). Learning is actively encouraged in the generation of ideas and the development and sharing of new knowledge (Laurillard 2002). BL using mixed modalities has the potential to challenge the student and draw out the best in them. Students should also have a voice in the way content is delivered and this is now to the fore where learner driven learning is endorsed in higher education (Garrison and Anderson 2003). Feedback from module evaluations helps inform the lecturer where things are going well or where improvements are required. The development of student user groups on some modules allow the lecturer to meet regularly with the students during the modules. This way changes can be made at the time for the benefit of the current cohort.

Nurse education is developing rapidly, responding to the ever changing face of health care. Nurses are required to keep up-dated with current practices and to obtain relevant courses. The participants in the study were all qualified nurses completing modules to obtain a degree. Continuing personal and professional development (CPPD) is a requirement for maintaining nurse registration (NMC 2008). Nurses now have actively to seek out appropriate courses to support CPPD (Hughes 2005, Gallagher 2007, Karaman 2011). Some of the interviewees mentioned that nurses have to pay for the courses themselves and attend them in their own time rather than being given paid time off for study days. Nurses are therefore consumers of nurse education and it is essential that schools of nursing provide high standard quality education. When nurses attend modules they need to have a

voice in how and what they learn to gain ownership over their learning and to place learning in context with their own area of clinical practice. The lecturer is placed in the role of facilitator. The lecturers interviewed did comment on this change of role and this has been discussed in the previous section on innovation.

Knowles et al. (2005) drew attention to the term andragogy, meaning adult learning. This concept was based on six assumptions about adult learners: the need to know, the learners' self-concept, the learners' experiences, readiness to learn, orientation to learning and motivation. These six areas will now be discussed in relation to the findings from the study. Firstly adult learners need to know why they need to learn a specific subject, in essence their motivation to learn. As discussed previously the expectation of CPPD and the need for a degree play a role in why nurses come into the school of nursing. The lecturer (John) in the adult branch of nursing commented on a reluctance of some students to learn and stated that some students feel forced to come on the module. This ultimately affected both their learning satisfaction and motivation with the module. Adult learners as active participants in the learning process therefore need to see what the learning will do for them. Having an awareness of the gaps in their own knowledge will also help active participation. An example was seen from the paediatric students who were aware of their need for new knowledge in caring for children in paediatric intensive care unit (PICU). They attended the module to gain this new knowledge to advance their careers and to meet the requirements for working in PICU. This illustrates the need for the module leaders to produce clear and transparent guidance on what their module entails and how it will be delivered.

The student participants in the study had illustrated that they had taken control over their learning needs by attending relevant modules. Some drew attention to the way nurse education had changed and that they were required to do more self-directed learning.

Knowles et al. (2005) termed this the learner's self-concept. Lecturers are required to move



their students from a position of 'teach me' to one of self-directed learning. Adults by their nature are in a position to take control and responsibility for their learning (Brookfield 1995). This includes searching out resources and reflecting on their progress. It could be argued that BL with its mixed methods is in a position to meet the adult learners' needs in moving them to a more active participation in the learning process.

The students coming into nurse education arrive with a wealth of experiences. This was evident from the interviews in the study. Knowles et al. (2005) considered the prior experiences of adult learners as part of defining them as adults *per se*. Brookfield (1995) stressed the importance that adult teaching should be based on experiences and the idea of experiential learning. In this third concept Knowles et al. (2005) suggested that using students' own experiences will aid learning and this can be done through simulations and discussions. The lecturers teaching mental health and paediatric nursing students as well as their students highlighted these methods of teaching and learning as areas they endorsed and enjoyed, supporting both Brookfield (1995) and Knowles et al's. (2005) claims. There is a need for the adult learner to feel valued and develop their own identity thus acknowledging prior experiences will support this and ensure active participation in the learning process.

One of the concerns raised by the lecturers interviewed was the issue related to students being forced to learn due to the urgent need for a degree. There is pressure to obtain a degree from themselves, the NHS and also from the NMC with the move to a degree only profession. Adults need to be ready to learn so they will engage with the process. Knowles et al. (2005) considered this as the fourth component of adult learning. This is a challenging area; the adult students in particular did not display readiness in contrast to the paediatric students who appeared to be excited about the learning process.

Knowles et al's. (1995) fifth area of andragogy, was that of orientation to learning. Here adults are drawn to learn if they can see the end product, for example, new skills that will



benefit them at work or application to real life situations. The innovations developed by the lecturers participating in this study support Knowles et al's. (2005) discussion. Lecturers endorsed the use of mixed modalities that related to clinical practice. Equally the students enthused over practical learning.

Finally adult learners require motivation to learn (Brookfield 1995, Knowles et al. 2005). This motivation may arise from higher salaries or promotion at work as an external motivator. A learner's internal motivation may arise from their increased satisfaction with work or improved self-esteem, based on the development of new knowledge. It was apparent that the students interviewed were motivated to learn and were driven by both external and internal motivators. However some student participants highlighted that the pressure to succeed, study in their own time and self-fund the module all potentially can lead to demotivation.

The findings illustrate the potential development of the independent adult learner. The findings indicated that qualified nurses are beginning to learn independently away from the classroom base. It is an expectation that in the higher education setting students are independent learners. E-learning allows the student ready access to module content at any time, and depending on availability access to learning can take place anywhere. This allows flexibility of learning for the student. Learning therefore has not become classroom dependent.

Students are required actively to participate in the classroom activities, for example, the use of role play as highlighted in the mental health module. It is essential to recognise that not all students will be suited to active participation in learning. Although unable to draw any set conclusion from the demographic data collected in this study, there was an indication that those who had been qualified a long time and had experienced different ways of learning found it difficult to adapt to the changes in nurse education. The students attending the PICU module certainly demonstrated an example of the active learner. This

group were all female and younger in age than the other participants. They appeared driven in their career route and all stressed that they preferred to learn practically.

This section has discussed the concept of the active, adult learner drawing on the work of Knowles et al. (2005). Both lecturers and their students indicated the need for active participation in the learning process. Finally it must be acknowledged that as adults there is a need to know how to learn in a changing educational environment. Lecturers need to be aware of this and support students in their journey as life-long learners.

#### **5.4 Isolation in the learning process**

The findings from my study indicated students studying using an online environment (e-learning) as part of the BL process often experienced frustration in communicating with peers and the lecturers via the online community. Also the reduced face-to-face contact resulted in a reduced rapport with the other students as well as with the lecturer (module leader). The inability to discuss freely and at a synchronised time has the potential to create feelings of being alone (Ireland et al. 2009, Jonas and Burns 2010). This section will discuss the concept of aloneness or isolation during the learning process addressing not only students but also lecturers. These areas were highlighted as an issue in the study on BL as well as from the literature review (McDonald et al. 2005, Roval and Jordan 2004, Ireland et al. 2009, Jonas and Burns 2010, Overbaugh and Nickel 2011).

The feeling of isolation is not always as a result of geographical distance. For some students simply by undertaking an online course there is a sensation of being alone and separate from the other students on the module (McInnerney and Roberts 2004, McDonald et al. 2005). This experience of being isolated can impact on the satisfaction a student has with the learning process. Daugherty and Funke (1998) stressed that being isolated often comes from the fact that students feel physically separated from the lecturer.

Within the classroom students interact and a sense of community is developed (Baepler et al. 2014). The findings from my study showed that students would often meet after the classroom session both socially and as part of on-going study commitments, for example, working for a presentation. This was particularly noted with those on the PICU module who would meet up in the clinical practice environment to discuss and develop their learning/ knowledge. Learning takes place within social interactions and within a variety of social contexts (Garrison and Anderson 2003). There is a possibility that web-based modules result in the student feeling separated and excluded from the learning process (McDonald et al. 2005). Modules that are primarily online based may lose this sense of community (McInnerney and Roberts 2004). There is an inevitability towards this; however there are strategies that can help alleviate this concept, for example regular online discussions, in real time, with the other students. Essentially there must be regular contact with the lecturer. It is important that lecturers involved in the BL process consider how a sense of community can be developed and maintained throughout a module.

BL can reduce the feelings of isolation as it offers a mixed approach to learning with face-to-face interactions as well as e-learning. It is therefore suggested that any feelings of isolation are reduced or disappear as students are able to build a sense of community.

McDonald et al. (2005) commented on one major area that could improve the sense of closeness. They believed that student choice over what they were learning and the mixed approach to learning improved the sense of community. Unfortunately they do not expand on why this might be which could be an area for further research. Developing friendships within the classroom setting or prior to the online work reduces isolation and are likely to be carried into the online community (Rovai and Jordan 2004, Overbaugh and Nickel 2011). This was demonstrated with the paediatric participants in the study; they worked and studied together and as a result there was a sense of cohesiveness within the module.

This developed despite the fact that the discussion board was not active for the majority of the module due to IT issues.

There seems to be primarily a concern for the students' sense of isolation (Garrison and Anderson 2003, Jokinen and Mikkonen 2013); however it is possible that lecturers will also experience a sense of aloneness. Lecturers have the potential for feeling detached from their learners as they do not have as much face-to-face time. This maybe particularly seen where the module has large numbers as in the adult physiology module. It is possible this sense of isolation happens with the change in role brought about by the increasing use of e-learning and the decline of classroom teaching (Hanson 2009, Smith and Boyd 2012).

Lecturers participating in this research mentioned their changing role but did not consider how the advent of technology enhanced learning would potentially change their role and, as such, impact on their identity as a lecturer. Hanson (2009) drew attention to e-learning displacing the lecturer as knowledge becomes readily available online. This highlights that academics now need to review their role as they are expected to engage in new ways of learning an example of which is BL (Smith and Boyd 2012, Torrisi-Steele and Drew 2013). This change in the way education is delivered can lead the lecturer to feel isolated from the process of educational development. The academic is often in a position of learner themselves as they develop BL resources, especially e-learning.

BL can alter the relationships between student and lecturer. There is the possibility that through the blending of the learning experiences students and teachers will feel more connected not less (Aspden and Helm 2004). Although not evidenced in this research it could be argued that there was a sense of enthusiasm towards new ways of learning and teaching that could eventually contribute to a cohesive connectedness to knowledge acquirement. Ultimately this could reduce any sense of isolation felt by students and lecturers.

## **5.5 Technology to enhance the learning process**

The study's findings illustrated that technology had both positive and negative influences on the learning of the students and the way lecturers developed their modules. The issues raised showed a lack of support and the need for adequate training in the use of IT products. Also there was not enough help given by IT departments when the technology did not work. All these issues led to frustration and ultimately reluctance in the use of IT to support learning. Technology allows the lecturer to develop innovative ways to delivering module content, enhancing the learning experience of the students. Students' and lecturers' experiences of the use of technology are not always seen as positive as is shown both from the findings of this research and the review of the literature (Bradley et al. 2007, Chen et al. 2009). Lecturers have the potential to benefit from educational technology; therefore if they do not accept its use or the technology fails the user then this is considered an important issue (Kiraz and Ozdemir 2006). This section will discuss the positive and negative aspects of technology in the learning process in relation to the students' and lecturers' experiences of BL.

Currently the school of nursing in which the study took place is undergoing CPPD review. This is resulting in a major move towards the BL approach. There will be a reduced face-to-face element and an increasing use of e-learning. In a competitive market between schools of nursing there is a need to ensure a flexible approach to nurse education (Gould et al. 2007). It was evident from the findings of this study that staff are paying for the modules themselves and doing the module in their own time. It is therefore important to change the way education is offered, thus becoming adaptable and accommodating to the students' requirements.

BL is not a one-way process of lecturer to student. By its very definition it lends itself to a multiple approach to the process of learning. Laurillard's (2002) Conversation Framework demonstrated this as can be seen in Diagram 9 (see page 134). Reflection on learning



forms part of this process. Equally feedback is also seen as important. This can all take place outside of the classroom setting. Online discussion forums, seminars and quizzes potentially allow the student to reflect on their learning and to ascertain areas for future development. The lecturer is also in a position to feedback on student progress. The lecturers in the study, however, were not using the website to its full potential.

Technology has a major role in the BL concept. The technology can take a variety of guises outside of the obvious e-learning idea. Technology used in the classroom, for example, ranges from the high-fidelity simulation of practice to the use of an interactive white board. The findings from this study pointed to issues with training and education in the use of technology enhanced learning. The lecturers in particular felt unsupported in the development and use of the e-learning platform. It raises the issue that if problems emerge with the use of IT then lecturers and students may become reluctant to use it.

Venkatesh and Davis (2000) drew attention to the fact that, despite the advances in technological capabilities, there remains poor usage both in the workplace and in the classroom. They reported that the leading factor in the underutilisation of IT is its perceived usefulness. They measured this by using a technology acceptance model (Davis 1989 cited in Venkatesh and Davis 2000). They noted that the usefulness was also linked to ease of use of the technology. Studies discussed in the literature review, especially Moore and Gilmartin (2010), Howlett et al. (2011) and Osgerby (2013) commented on the students' experiences of poorly constructed and inconsistent information via the e-learning sites. This led to frustration and a general reluctance to use the web-sites. Martinez-Torres et al. (2008) stressed that e-learning should be assessed as to its effectiveness and relevance to the student group and to the lecturers using the system. They commented that if students do not see the value of the e-learning package it is unlikely they will gain any increase in their knowledge and skills. Equally lecturers need to ascertain how effective the enhanced technology is in relation to their modules (Price and Kirkwood 2014). Evaluation

therefore appears to be at the heart of successful implementation and sustainability of e-learning. Laurillard (2002) stated that evaluation must be part of the implementation of any new educational intervention. The idea of ongoing evaluation of the e-learning component of BL was not an issue raised by the participants in my study but perhaps should be a consideration for the lecturers to ensure they are meeting the needs of the students.

Venkatesh and Bala (2008) considered ways that would improve user acceptance and perceived usefulness of IT. Whilst their work is not based in nurse education it could be argued that their findings can still be applied to that setting. More importantly their work makes links with the current BL study. Three main areas were deemed instrumental in gaining user engagement: training, organisational support and peer support (Venkatesh and Bala 2008).

Training in the use of the e-learning site was deemed important by all the participants in the BL study. However it appeared that ongoing IT support was not forthcoming. Greater user acceptance and understanding of the importance of using IT can be developed through the use of adequate ongoing training and support (O'Toole and Absalom 2003, Venkatesh and Bala 2008). In many instances new IT is implemented in a top-down approach to educational innovations. The lecturers and students may have little or no involvement in the process. This may possibly lead to negative feelings towards the new system. Often training is not offered early enough and so many feel they are not given any support. The research by Venkatesh and Bala (2008) indicated that this is often the case and in general training usually takes place after implementation of the new technology. Also of note is that the existence of technology does not mean it is actually being used (Kiraz and Ozdemir 2006) as illustrated by the lecturers who referred to their lack of use of technology within the classroom based taught sessions.

To ensure that technology is utilised to its full potential it is essential that the lecturers are involved in the process of implementation. This is the role of the organisation and how it



manages any change. If change is not managed well this can result in the lecturers not using the IT and expressing a reluctance to use it. Venkatesh and Bala (2008) stressed that the organisation has an essential role to play in providing IT support and training to colleagues. They stated that it is for the organisation to provide the appropriate infrastructure for installation and maintenance of the e-learning site. This will ultimately ensure sustainability and improve usability of the website. Peer support when using new IT can help others see the potential of the innovation. Informal teaching of how to use the web-site often takes place between peers rather than using formal instruction (Venkatesh and Bala 2008). Learners will help each other with accessing the materials for the module; however the frustration of not being able to access e-learning materials was to the fore in the findings from my study. Lecturers also commented on the need for greater IT support in writing the e-learning materials and using the e-learning platform (Moodle) correctly.

It is important that lecturers and students see the benefits and added bonuses of IT if BL is to be embraced fully. Zhang et al. (2010) in a study of healthcare workers adoption of IT to support patient care found that if the IT was to benefit patient care it was more readily embraced. It was seen as useful by the health care workers. Of note is that the ease of use could potentially affect its full implementation. It could therefore be argued that it is the organisations role to ensure that the perceived benefits of IT are highlighted at the earliest point of its implementation.

Historically and in the future the use of developments of technology will impact on the way knowledge is delivered in higher education. Inevitably technology will be used and it is essential to consider the effectiveness and efficiency of this medium to ensure that it enhances rather than inhibits learning (Duhaney 2004).

## 5.6 Blended learning in context

BL is an evolving concept that is open to many interpretations, which in its turn has caused confusion over what it actually means both for students and lecturers. This was illustrated in my study through the mixed definitions and understandings of BL by all the participants. BL can be described as both simple and complex (Garrison and Kanuka 2004). Its simplicity is in the integration of face-to-face classroom education and online learning. The complexity of BL is in the limitless possibilities as to how to deliver the knowledge for example, through group work, simulation, lecture or role play as illustrated by the lecturers in my study. The period between 2003 and 2006 has been termed the 'definition period' in relation to BL (Guzer and Caner 2014). Most of the papers published during this period dealt with defining BL (Singh 2003, Adams 2004, Oliver and Trigwell 2005, Bonk and Graham 2006, Glenn 2006). This stresses the importance afforded to obtaining a consensus on the term BL.

For BL to work there needs to be effective mixing of the two components (face-to-face and e-learning). It is essential that one component is not acting as a separate entity but the two are integrated to make a whole. Each component, although separate, has a specific role within the BL process and works together to develop a cohesive approach to teaching and learning. Therefore obtaining a detailed definition and indeed consensus as to what BL actually is remains a challenge (Picciano et al. 2014). The original working definition developed in chapter two has been altered slightly as a result of the findings from my research. E-learning has been replaced by the widely endorsed term 'technology enhanced learning' (Garrison and Vaughan 2013, Phillips et al. 2013, Kirkwood and Price 2014, Picciano et al. 2014). Technology enhanced learning incorporates e-learning but also takes into consideration the use of other technologies such as simulation, interactive white boards and the use of discussion forums online as an example. The term 'students' has been replaced by 'individuals'. The rationale for this alteration is that individual could

encompass both students and lecturers. The educational experience is, of course, primarily about the student. However for excellent educational delivery the lecturer also needs to be part of the enhanced educational experience. This was born out by the discussions with the lecturers during the interview process. It is an inclusive definition that comprises the two major components that inform BL.

*'Blended learning is a mixture of approaches to teaching and learning that encompasses face-to-face teaching and technology enhanced learning to enrich the individual's educational experience'*

This definition has arisen from the literature but primarily from the comments from the lecturers and students involved in the study. The lecturer and student interviews identified several facets that made up BL. Arguably BL has endless possibilities but the components of BL highlighted in this study showed BL to be made up of e-learning, clinical practice, field work, reflection and face-to-face interaction. The face-to-face interaction took a variety of forms: seminars, field work, simulation, discussion boards, group work and lectures. BL is potentially an evolving mode of education as it is possible to add continually to what is included. With the increase in the scope of technological advances it is likely that BL as a phenomenon will alter (Picciano et al. 2014). It is this flexibility that creates the positive and dynamic aspects of BL.

The learning outcomes of the module will enable the lecturer to use a variety of methods within the classroom as well as within the e-learning platform. It is essential the lecturers consider the best way to teach a given subject and then use technology to enhance the learning and teaching experience (Laurillard 2002). The type of module will lend itself to different ways of learning. Rowe et al. (2012) reiterated this and stressed that BL is 'context dependent' and that it remains challenging to generalise ideas across disciplines. Students undertaking a practical module for example the PICU module will require 'hands on' experiences. The use of simulation as part of BL allows the student to 'learn by doing'.

In contrast the physiology module is theoretical in nature, as the lecturer discussed in the findings the BL approach employed consisted of a didactic approach in class and the use of quizzes on line. Both these examples illustrate the diversity of BL. Lean et al. (2013) supported the use of BL in higher education as it allows development of a higher level of understanding. Reflecting critically on learning (Garrison and Kanuka 2004) and clinical experience endorses the fact that students in higher education should be able to reach a higher level of understanding. Nurse education, indeed nursing as a whole, needs the profession to become critical thinkers to reflect on incidents in practice and to learn from them.

Understanding what BL is and what the mixed modalities can do to enhance the learning and teaching experience will encourage adoption and acceptance (Carbonell et al. 2013). There is a need to ensure that all those involved in BL are ready for its adoption. This begins at organisational level and filters down towards the individual (Carbonell et al. 2013, Wong et al. 2013). The person must see the potential need for the change. This is not just at lecturer level but also students must understand what BL is and why it is being endorsed.

### **5.7 BL as an educational framework**

The findings from my study have indicated that within post qualification nurse education BL has no clear structure or framework. For lecturers to be clear about how BL can be used to ensure their teaching and student learning takes place, a framework for BL needs to be developed. This section will consider BL as an educational framework drawing on the work of Laurillard (2002) and Garrison and Anderson (2003) to support this concept. The findings of my study indicated that BL may result in learner isolation and technological issues may prevent its ready adoption by both students and lecturers. Equally my findings highlighted innovations in teaching. The findings also showed that BL fits with Knowles et al's. (2005) concept of the adult learner. It is with these areas in mind that two conceptual

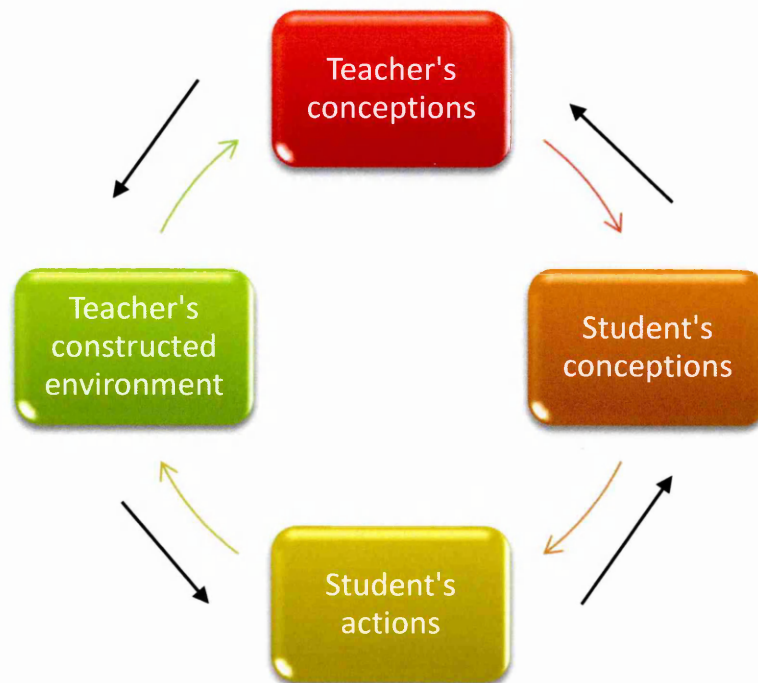


frameworks were considered: the Conversational Framework developed by Laurillard (2002) and the Community of Inquiry constructed by Garrison and Anderson (2003). It is anticipated that the issues raised by the interviewees will inform the development of a BL educational framework. A conceptual framework, often described as capturing the real ideas or principles, offers a written or graphical representation of the organisation of ideas (Miles and Huberman 1994), supporting assumptions and beliefs that can both inform the research or develop as a result of the research (Miles and Huberman 1994, Smyth 2004).

Both frameworks (by Laurillard and Garrison and Anderson) were specifically written with e-learning in mind. However it could be argued that both are applicable to any learning situation. The Conversational Framework (Laurillard 2002) particularly addresses the learning process in higher education, beginning with the idea that learning is lecturer led. However Laurillard makes the important point that learning is a two-way process and students should also play a major role in this learning process. Technology can change the way lecturers and students engage with the learning process as the findings of my study showed. E-learning is fast becoming the most prevalent media for knowledge acquisition. Laurillard (2002) stated that it is essential to understand how students learn. Once this is understood then learning technologies can be used appropriately to support student need. An adaptation of the conversational framework (Laurillard 2002) is seen in Diagram 9. There is a two way processes between student and teacher interactions. It is possible to use this framework to suit all methods of teaching and learning but Laurillard endorsed its use with the use of media in the form of e-learning. A major point that is made in Laurillard's work is the importance of embracing technology to enhance the learning experience of the students in higher education. The diagram demonstrates how the teachers develop the ideas and construct the learning environment. This environment can be both the face-to-face interaction as well as the virtual classroom. Equally the students' ideas are considered

within the model as well as their actions as part of the learning process and therefore will influence the way the teacher delivers the knowledge.

**Diagram 9 The Conversational Framework** (adapted from Laurillard 2002)



Laurillard drew attention to the role of reflection in the learning and teaching process. The two way nature of this framework implies that reflection remains at its heart and that teachers and students can learn from each other. It also encourages the idea of feedback and feed forward.

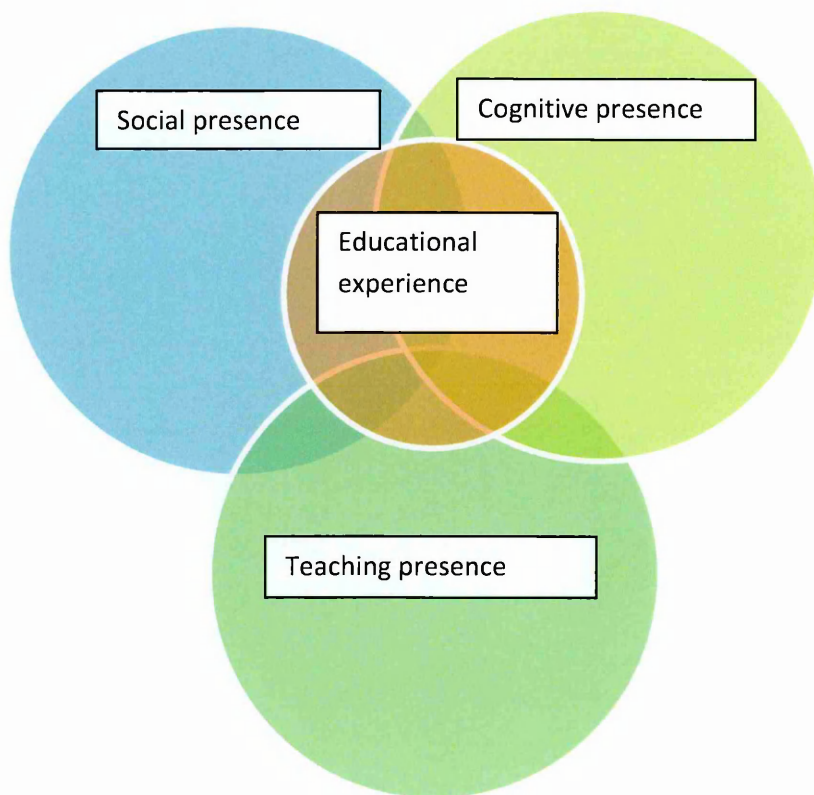
The second conceptual framework considered was the Community of Inquiry as developed by Garrison et al. (2000). This concept, like the Conversational Framework, was developed with e-learning in mind. It is therefore technology inspired. However it is applicable to the concept of BL in that it not only encompasses e-learning but advocates technology use within the classroom setting. The latter was demonstrated by the innovative practices discussed by the lecturers and students in this research. The Community of Inquiry stresses

the importance of students taking responsibility for their own learning. There are three distinct areas of this framework:

- Social presence
- Cognitive presence
- Teaching presence

Diagram 10 illustrates the framework adapted from Garrison and Anderson (2003). All areas overlap with the educational experience at the centre of the framework.

**Diagram 10 Community of Inquiry Framework adapted from Garrison and Anderson (2003)**





These three areas will now be discussed in relation to the findings of my study. To begin, each 'presence' will be described. Finally having considered the Conversational Framework and the Community of Inquiry, BL is discussed in relation to its own conceptual framework. This has been structured within the Community of Inquiry context and is informed by the findings from my study.

### **Social Presence**

Social presence is described as 'the ability of participants in a community of inquiry to project themselves socially and emotionally' (Garrison and Anderson 2003 pg. 49). In essence this is about the ability to convey your own personality irrespective of the medium of communication being utilised by the lecturer. Considered within this dimension is the ability to collaborate and critically reflect as part of the learning experience. Students need to be free to express emotions. Garrison and Anderson (2003) stressed that there is risk-free expression and collaboration between students and these areas should be encouraged.

Social presence is the ability of students to engage with the learning and their own personality is reflected in the process. This is about social interactions and the students' ability to convey themselves as real people (Richardson and Swan 2003). Equally the lecturer needs to ensure they have a voice and their personality is reflected in the learning process. Richardson and Swan (2003) argued that the lecturer is replaced by the enhanced technology. They believed that learning environments are invariably altered when e-learning is developed and used in education. Changing the learning environment will impact both the students' learning experience and the lecturers' teaching experiences. The social presence is based around the students' interaction. The lecturer is not included and is placed outside of this concept. This could potentially lead to feelings of separation from the learners.



Students are encouraged to question and critique both in the classroom setting and in the online environment. Students need to work together to develop the skills to question and critique. The social presence concept advocates the development of communication amongst students. The sense of isolation that online learning can bring sits within this concept too. Garrison and Anderson (2003) argued that if social presence is managed well the sense of isolation and aloneness should be reduced.

Whilst acknowledging that students and lecturers highlighted a degree of isolation and as such detachment in the learning process with BL, the isolation developed from the use of e-learning and the reduced face-to-face component. However it could be argued that social presence within the BL concept evolves in the classroom setting and is then reflected into the online community. It is therefore important to establish relationships and a sense of belonging within the module context. Students attending the modules were from many different backgrounds with a variety of experiences with the expectation that they would work together. Therefore establishing social presence within the classroom setting was seen as essential by the lecturers. Garrison and Anderson (2003) considered the practical implications of establishing social presence in the online community. They stressed the importance of developing a learning environment that was effective and productive that stimulated learner engagement. It can be argued that this is just as applicable for the BL mixed modalities approach to nurse education.

The findings from the study illustrated that BL has the potential to lead to a lack of social presence for both students and lecturers. As already highlighted this was portrayed as a sense of isolation during the learning process. The access to lecturers was a concern and some students felt unsupported during their learning due to the lack of face-to-face teaching. Equally students had difficulty in establishing a rapport both with each other and with the lecturer when they were only in class for a short period of the course. The issues highlighted that both students and lectures have struggled to convey their personality

within BL and therefore it could be argued that a structured approach to BL incorporating the concept of social presence should be developed. This will be discussed later in this chapter.

### **Cognitive Presence**

Cognitive presence is the second component of the Community of Inquiry conceptual framework. Garrison and Anderson (2003 pg. 55) described this as ‘facilitating the analysis, construction and confirmation of meaning and understanding within a community of learners’. Reflection is a large part of this area as learners construct meanings to their learning. Learners will develop and as such confirm their understanding of what they have learnt. They are able to connect ideas and will apply them to practice situations. The cognitive presence is described as the intellectual environment that ultimately supports the acquisition of knowledge. Within this area learning takes place in a community of learners. This learning can take a variety of forms. It could be argued that the cognitive presence is open to individual interpretation, but at its heart is learning through communication and reflection to become a critical thinker. Garrison and Anderson (2003) saw this taking place within the e-learning environment, although arguably this is equally applicable for BL.

Qualified nurses studying at Level 6 (degree level) are expected to develop themselves as critical thinkers, able to challenge clinical practice with up to date evidence based knowledge. The study revealed that this is their main aim of attending university and obtaining a degree. Lecturers on behalf of the institution therefore need to ensure that this aim is met. The concept of learning evidence-based care is at the heart of nurse education and the cognitive presence would allow this to remain so. Garrison and Anderson (2003) argued that the cognitive presence is the intellectual environment. In this environment critical conversation takes place and knowledge is acquired and applied to practice. These aspects can take place in the classroom as well as on-line. The multimodal approach to

learning shown by the lecturers, using role play, debate, discussion, seminars and simulation, illustrate the way cognitive presence can be used within BL.

### **Teaching Presence**

The final component of this framework is the teaching presence. Garrison and Anderson (2003 pg. 29) defined the teaching presence as ‘the design, facilitation and direction of cognitive and social processes for the purpose of realising personally meaningful and educationally worthwhile learning outcomes’. The teaching presence provides the structure to the learning experience. For example the teacher sets the curriculum and methods of learning as well as focusing discussion and learning. The lecturer is seen as a facilitator of the students’ learning.

Teaching or lecturer presence ensures their module is designed to suit the needs of the students. Through this final component the lecturer remains at the heart of students’ educational experience. Effective teaching can take a variety of forms. The lecturers participating in the study stated that their own learning experiences impacted on the way they now taught. As previously discussed lecturers are charged with producing innovative learning materials. Technology plays a major role in this drive. Technology enhanced learning may be liberating for the lecturers as they engage in innovations to enhance the learning experience (Garrison and Anderson 2003). There is a need for greater IT support so that lecturers can develop e-learning materials. This was highlighted by the participants who admitted to using the websites as a repository for materials rather than as an interactive site.

The findings have been related to all three concepts of the Community of Inquiry framework. There is an overlap between areas and some of the findings do not fit into one or other of the concepts. By placing the findings from this study within an existing

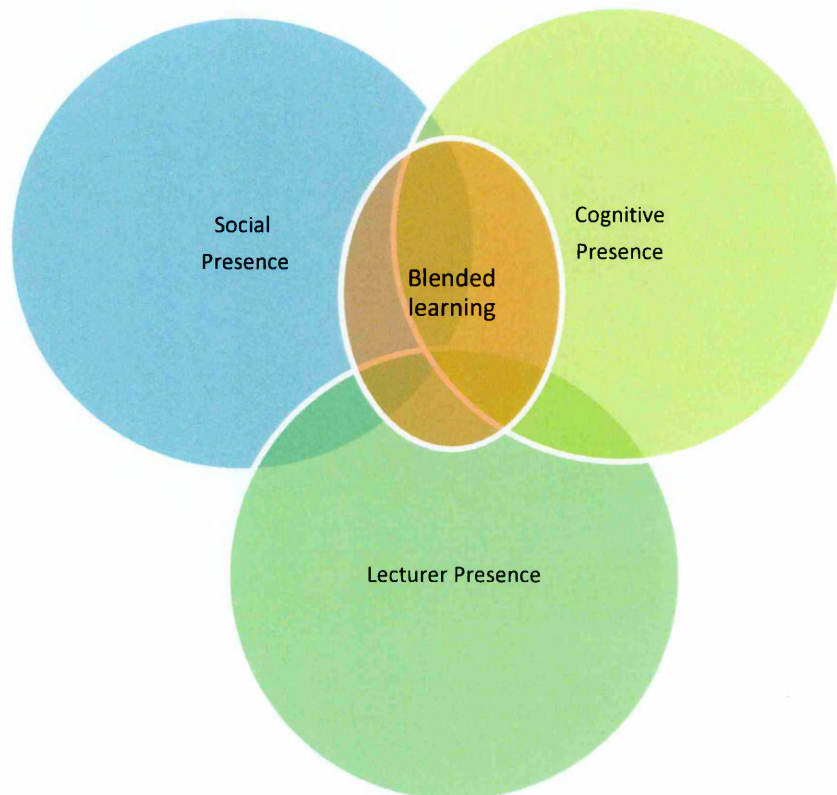
conceptual framework has then clarified the areas required to ensure BL is successful in practice. The following section places BL within its own conceptual framework.

### **BL as a conceptual framework**

Both conceptual frameworks (Conversational Framework and the Community of Inquiry) have at their heart the idea of reflection and feedback. Communication is also at their core and this is essential. To create a BL conceptual framework the findings from the study have informed its development. Equally both the Conversational Framework and Community of Inquiry frameworks have been instrumental in guiding its construction. Of the two frameworks it is Garrison and Anderson's (2003) Community of Inquiry that has the greatest impact and the previous sections have made links with this framework and the findings. The importance of actively motivating the students to learn cannot be over emphasised. Gagne (1977) stressed this is an essential component of the learning process. He also considered other aspects as fundamental for learning, amongst them being clear learning objectives and providing support and guidance through the use of feedback. Gagne's work has underpinned both the Conversational Framework (Laurillard 2002) and Community of Inquiry Framework (Garrison and Anderson 2003). Therefore these aspects are also a fundamental component within the BL conceptual framework. Additionally the framework is developed as a teaching strategy for nurse education. Like Laurillard it can be adapted to apply to each area of teaching whether that be, for example, a lecture, e-learning or simulation. The social, cognitive and lecturer presence all remain unchanged but at the centre joining all three aspects is BL, replacing educational experience.

Within each aspect of the BL framework there are specific components that must be considered. At the heart of all three areas is reflection on learning, clinical practice and teaching. This encourages both students and lecturers to consider the aims of teaching and learning and to continue to develop innovative ways in which to gain knowledge that will benefit patient care. The diagram below depicts the BL conceptual framework.

Diagram 11 An illustrative representation of the blended learning conceptual framework



### **Social Presence in the BL conceptual framework**

This area is concerned with establishing the sense of community and reducing the feelings of isolation experienced by students with reduced face-to-face classroom time.

Acknowledging the students as adult learners and encouraging them to actively develop a sense of community is the core of this aspect of the framework. Communication with each other both outside and within the classroom activities is key. Students are required to actively use the discussion boards, Wikis and seminar forums so that they engage fully with the learning. Lecturers need to establish these areas of contact in the first instance, as

post qualification nurses are largely new to this component of learning, as has already been established. Garrison and Anderson (2003) described the social presence as the nonverbal community in BL and there is an aspect of this through the e-learning discussion boards. However the classroom activities reduce this nonverbal existence. Therefore encouraging active participation in for example the discussion forums may help reduce feelings of isolation for both students and lecturers.

**Diagram 12 The various components of social presence within the BL conceptual framework**

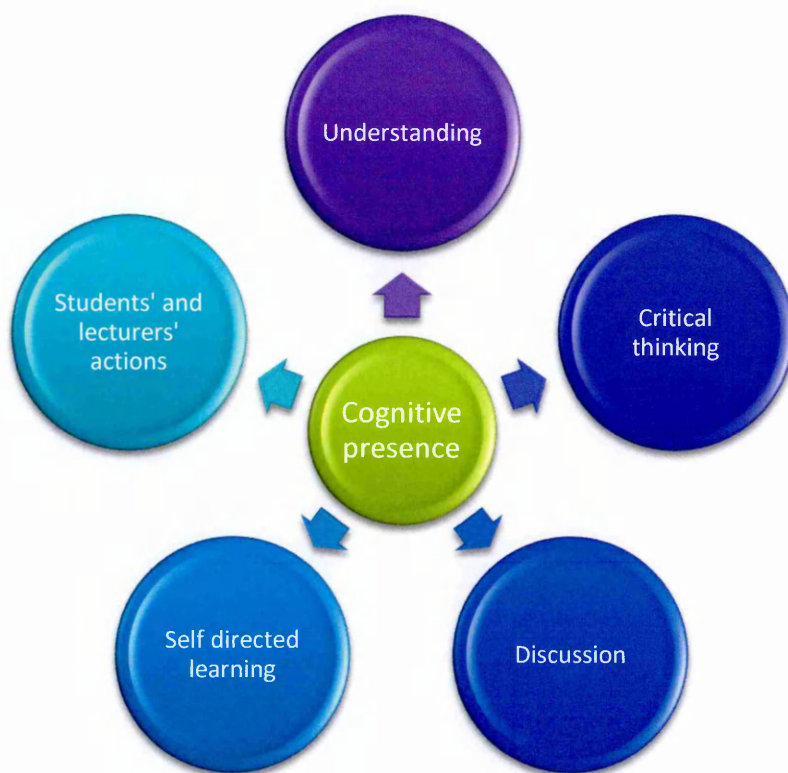




### **Cognitive Presence in the BL conceptual framework**

Understanding new knowledge and reinforcing old knowledge through development of critical thinking skills is the essence of the cognitive presence in BL. Students are not passive participants but actively seek out new information through a variety of media. Learning may be self-directed and discussion led. The essential aspect is to ensure students are working together and not entirely alone if there is a strong e-learning component.

**Diagram 13 The components of cognitive presence in the BL conceptual framework**

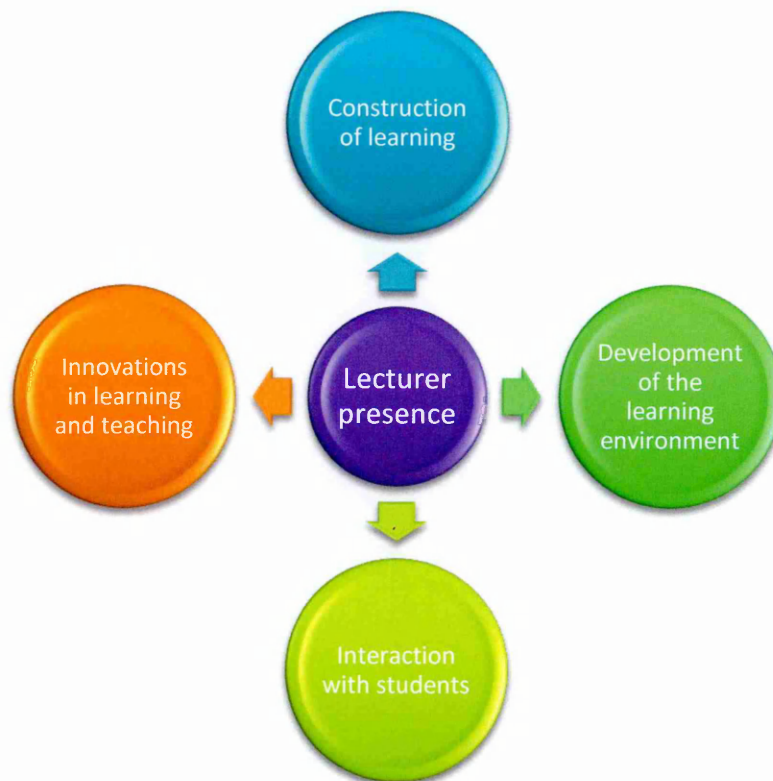


### **Lecturer Presence in the BL conceptual framework**

The innovative practices of lecturers have already been highlighted. The lecturers' presence is about developing excellence in teaching and facilitation of learning. The

practice of mixed modalities to create a variable learning environment is seen with BL. Lecturers need to be active and progressive in establishing their presence in this framework. The use of technology to enhance learning is to the fore and with support lecturers can embrace it use. To establish a sense of community in the BL environment lecturers should facilitate student interaction and communication using for example discussion boards.

**Diagram 14 The components of lecturer presence in the BL conceptual framework**



## 5.8 Summary

Nurse education is changing and BL can take learning away from the lecture hall to provide students with a stimulating learning experience. Lecturers and students need to understand what BL can do for them. Therefore placing BL in context and constructing a

definition will allow for the use of a universally accepted definition on which to base a BL curriculum.

The mixed modalities making up BL have been seen from the participants' interviews. The innovative ways the lecturers facilitate the face-to-face time with the students shows that nurse education is ever changing. Although using technology was seen as an issue the lecturers have indicated that it is gradually being used. Arguably this is dependent on the form the technology takes. E-learning remains a contentious area whereas the use of simulation is fast becoming regular practice within some modules. Developing IT skills for both lecturers and students was highlighted as an area requiring development as lack of IT support and skills with technology hinders the progression into a fully blended module.

The BL conceptual framework seeks to reduce the isolation learners felt and develop a community of learning. Technology enhanced learning supports the learning through a variety of media, blending the teaching methods used by the lecturers. Students are adult learners and as such should have a voice regarding how they learn. Reflection and critical thinking is essential in nurse education to ensure that nurses use the best evidence and are encouraged to critically appraise the care they provide. Whilst acknowledging that there is no 'one size fits all' method of nurse education BL allows flexibility in how the knowledge is delivered and as such can easily develop as technologies change. This framework reflects the variability and mixed modal approach required in post qualification nurse education.

Face-to-face classroom interaction allows students to develop and improve their communication skills. This will enable them to create a therapeutic relationship with patients. If this is reduced, potentially this could impact on a nurse's ability to communicate effectively. In light of recent reports on the poor communication skills of nurses (for example the Francis Report 2013) it is essential that education providers consider the impact of changes to the delivery of education and how this will potentially

effect patient care. It could be argued that as post-qualification nurse education moves away from the classroom setting potentially this could impact on the learned ability to communicate with patients. There is a need therefore to consider e-learning not as a replacement but as an addition to learning. BL is an education strategy that will accommodate a mixed method approach to learning and teaching.

## **Chapter 6 Conclusion and recommendations**

### **6.1 Introduction**

This thesis has presented a qualitative study exploring the experiences of students and lecturers towards BL in post qualification nurse education. This chapter will draw conclusions from my study and reflect on the process of undertaking the research. Implications of this research for nurse education will be discussed and finally the recommendations for nurse education in relation to how to ensure BL is developed to its full potential will be considered.

It is clearly evident that adult learning is based on different principles, those of andragogy as opposed to pedagogy, and this has implications for university education (Laurillard 2002). Equally technology especially that of e-learning is transforming education and learning in higher education (Garrison and Anderson 2003). The use of technology is apparently being adopted before it has been fully developed or understood, and before the foundation of support is in place to ensure technology is used to its full potential. This results in the changing role of lecturers in higher education. The changing role of the lecturers in nurse education is evident from the study. The way university education is delivered is also changing. Knowles et al. (2005) drew attention to the andragogical lecturer and their role, stating it as one of facilitator and agent for change.

BL has shown itself to be a useful way of delivering knowledge. Equally it is seen as a flexible approach to learning and teaching that can be enjoyable and motivating (Guzer and Caner 2014). On their own these components are not enough to enhance the learning of the students. The role of the lecturer is to facilitate student participation within the learning environment, ultimately ensuring social interaction. Successful blending of modules is an area that lecturers require further support in developing (Torrissi-Steele and Drew 2013). As

technology changes and further innovations become available different ways of blending the learning will emerge.

BL is an approach to teaching and as such should be based on an understanding of learning. Learners' and lecturers' experiences of past and present learning and teaching influences this understanding as has been seen from the findings of the study. Education is more than just delivery of knowledge. It must incorporate critical, quality learning that is meaningful for the students. Students are provided with the ability to manage the wealth of information provided through the learning process in a supportive environment and not in isolation (Garrison and Anderson 2003). The BL conceptual framework as a teaching and learning strategy addresses these areas. At its heart is ensuring that the students have a positive learning experience. Feedback/ feedforward and reflection as well as the encouragement of active participation in the learning process form part of the framework. BL is not repackaging the existing teaching into a new format but requires a module redesign such as new activities and assessment strategies (Garrison and Kanuka 2004, Torrisi-Steele and Drew 2013). Time in which to create these changes is essential (Ilias and Crosbie 2013) but not apparently forthcoming as is evidenced from the findings of this study.

There is a strong movement in teaching in higher education to make learning as positive as possible. The methods employed to do this are variable and BL has emerged as a strategy to encompass the mixed modalities employed within courses. With regards to nurse education application of knowledge is essential, with an overt relationship to clinical practice. Ideas are grounded in practice and experience, the use of problem based learning, simulation and practice based teaching are examples of how this is now delivered. This demonstrates the blending of theoretical components with practice, aimed at closing the theory and practice gap.

## **6.2 Reflection on the research process**

This section will discuss my research journey as I reflect on the research progression from idea to data and beyond.

Initially the desire to look at BL emerged from changes in nurse education particularly in my own professional setting and also in light of a study I conducted on e-learning as part of a master's in education degree. It arose more specifically from the changing nature of the module I currently run as e-learning replaced face-to-face teaching. I wondered how this change affected nurses coming back to learning after qualifying. Generating a working title subsequently developed from this initial idea. The title has changed throughout the process, not radically, but it has been refined as the research progressed and the findings emerged. Silverman (2010) stressed the importance of a title being an area that is often neglected. He considered that a title for a thesis needs to be clear and informative. As well as forming a title to the thesis the research questions developed early from the background and my own interest in the experiences of BL, later to be substantiated by the review of the literature.

Colleagues were supportive of the research and interested in the concept of BL and they readily came forward to participate in it. However, in contrast obtaining student participants was a challenge. Reflecting on the sampling process several areas were identified. There is need to consider time: the time it takes to identify the module leaders and student participants was underestimated. There was also a need to think about the concept of over researched students. The school of nursing is an active research school and as such many requests come to the students to ask for participation in a number of studies. Therefore there was an unanticipated reluctance to be involved especially from the mental health students and only two were recruited. This was admittedly disappointing as it had been hoped to have an equal number of students from each speciality.





The interview process was a challenge. The focus groups from the preliminary study had improved my confidence in the area of asking questions and organising a group of participants. However I still had a degree of apprehension as I approached the first interviews. The interview schedule was a useful tool that I adhered to throughout the process to ensure parity in all the interviews. The interview schedule boosted my confidence but it was also constraining. While the participant was providing detailed answers to the BL conundrum I found myself thinking about the next question on the schedule. Although not aware of this at the time whilst listening to the recorded interviews I realised that I had missed the occasional opportunity to explore an area raised in more depth. Linked to this was the time constraints placed on the interview process. Being mindful that the study recruits had given up their time to participate in the research ensured that I adhered to a specified time for each interview. Keeping to time was important but could potentially hinder further dialogue outside of the boundaries of the interview questions. Nevertheless my reflection on the interviews indicated that they did provide a wealth of valuable information to answer the research questions.

The whole process from title to completion of the research has developed my knowledge and skills regarding how to undertake a qualitative study. Becoming immersed in the research findings and the subsequent key areas explored in the discussion has demonstrated that the issues the participants talked about were pertinent to BL and will change the way I view BL as a nurse educator.

### **6.3 Implications for nurse education**

This section discusses the implications of the study for nurse education. The research was concerned with exploring the experiences of qualified nurses and lecturers towards BL and both supports and builds on the existing literature around BL. The studies around BL are biased towards student perspectives and experiences. Equally the majority of studies look at pre-registration nurses and many are specifically about e-learning. From the lecturers'

point of view there is a paucity of research on their experiences of BL. Generating an understanding of both students' and lecturers' perspectives of BL, in an in-depth qualitative study, has added to the body of knowledge about experiences of BL. Traditional learning allows students to acquire knowledge based largely on the lecturers' perspectives of the phenomenon (Laurillard 2002). Therefore students are experiencing only a given area through the eyes of someone else. It is time to change this way of addressing learning in nurse education and BL as a teaching strategy can be the framework for this change.

The term BL has been embraced by nurse education as policy and BL theory drives its adoption; however the practicalities of using a mixed approach with technology at its heart have not been considered. The study has revealed a lack of understanding of the term BL, identifying a need for a recognised definition in nurse education which is currently not the case. Although previous studies have discussed definitions they have not drawn attention to the potential confusion that a lack of understanding of BL can bring. The differences between how the lecturers perceived BL and how the students did illustrates the need for a widely accepted definition.

The change from traditional face-to-face teaching which was largely seen in nurse education to one of reduced contact and reliability on the use of technology in the form of e-learning will create challenges for all those involved. It comprises developing a change in culture within schools of nursing, stressing the importance of lecturers' feelings of ownership about the change. Lecturers use many innovative ways to impart knowledge. This should be praised and embraced by organisations and utilised as part of the BL developments. Previous studies have not alluded to the innovative practices as part of BL. This research was interested in what innovations took place in the classroom. BL is about mixing modalities during face-to-face classroom sessions.

Technology now supports learning and is a component of BL. To ensure that BL and its mixed modalities can be sustained practically, technological support is required. For

example investment is required both in a technological support team but also in the type of technology used. Consideration must be applied to the compatibility of systems between university and nursing practice. Organisations must think about the financial requirements to ensure that effective training on the use of the many technologies is available (for example simulation dummies, white boards, e-learning sites).

A BL conceptual framework informed by a universal definition of BL has not been developed for nurse education. Therefore drawing on two existing conceptual frameworks designed for e-learning, a BL conceptual framework was developed. This is the result of the findings from this research. Endorsing a framework for BL will provide a context to this educational method. It will also allow for BL to be evaluated against the areas in the framework; to an extent this provides a measurable tool for future research in BL.

Further research is required in this field. A larger study could consider whether gender, age and learning styles influences the experiences of lecturers and students towards BL. If changes are made in the school of nursing and BL is redefined and the framework used then an evaluative study should be undertaken to see if the experiences of students and lecturers have improved. One of the research questions was asking about the effectiveness of BL. While this question was asked and the response was largely that BL was effective, essentially this requires further exploration. To assess the effectiveness of BL a study looking at students' assessed results before and after BL's inception would perhaps identify whether students learn more from BL than from other teaching strategies, for example e-learning or face-to-face only.

Nurse education also needs to be mindful of the requirements of the purchasers of their modules and programmes. Largely this is the NHS, but also individual health care professionals may be financing their own degree. For the large institutions the reduced time away from clinical practice with the rise of e-learning may be of benefit but should still offer value for money. However for the individual reduced contact time with both

lecturers and other students may create a reduced sense of belonging to the learning community. Therefore there is a need to be aware of the conflicting needs of these two groups. The NHS is reducing the amount it spends on CPPD and so individuals are paying for their degrees themselves. The purchasers of nurse education are changing and this will impact on module and programme selection as healthcare professionals look for value for money in their choices of education provider. Reduced face-to-face learning within a module should only be undertaken if this will improve the delivery of the module, considering the use of other media if it is equal to or better than what is available in a classroom.

Both national and local education policies are advocating the rise of e-learning and reduced face-to-face contact. In contrast the individual, both student and lecturer, is calling for an increase in face-to-face time. There is therefore a pull in two different directions and potential conflicts are emerging. It could be argued that the use of BL affords a middle ground that offers flexibility in learning and endorsement of technology to enhance this experience.

#### **6.4 Recommendations for nurse education and the higher education sector**

The research findings and discussion portrayed in Chapters 4 and 5 illustrate that there are several areas that should be considered by nurse education if BL is to be used successfully as a teaching concept. Equally, although not specific to higher education as a whole, the study's recommendations could be considered for the higher education sector too. The following points illustrate the recommendations from this study:

##### **1. Training in the use of e-learning platforms.**

The findings illustrated gaps in the training provision for staff and students on how to use e-learning platforms. It is widely acknowledged that using technology requires the development of more skills (HEFCE 2009, DoH 2011) with



recognition that training is required in IT for those using e-learning. For lecturers regular training and updates on the use of the e-learning site should be instigated. This should include how to develop innovative ways of using the e-learning site thus improving the lecturing team's confidence with the use of IT as an essential element. Students on their induction to a module should have training on how to access and use the e-learning site for their module. This will encourage active participation with the learning process.

## **2. IT support for staff and students.**

Ensuring adequate IT support for all those involved with e-learning is important. This support should be available outside of the normal working day to accommodate nurses/ health care workers shift patterns. IT support should be easily accessible and provided in a clear and easy way to understand. IT staff providing support to students and lecturers should be schooled on the most appropriate way to provide IT advice.

## **3. Training in the use of technology within the classroom setting for the teaching team.**

Using technology during the face-to-face sessions is part of the innovations employed within the classroom setting, for example the simulation of clinical practice events. Therefore staff need to be made aware of what technology is available and how to use it. Ongoing updates on new technology should be provided. An evaluation of the utilisation of technology in the classroom should be undertaken once a year. This would allow staff to identify what they are using and whether further training is required. Lecturers should be appraised of new developments in technology that will enhance the learning experience of the students and they should be placed in a position to recommend the purchasing of new equipment, thus establishing lecturer's ownership over the technological advancements within the classroom setting.

#### **4. Supporting lecturers to produce innovative learning materials**

The findings indicated that lecturers are using innovative methods within the classroom. Support is required to allow lecturers to develop not only their classroom materials but also e-learning. One of the issues that prevents this development is time. Time should be provided in the working week for module development. Currently the school of nursing has a workload model where lecturers are allocated a certain amount of hours for teaching, research and administrative activities. Module development and training should also be incorporated into the workload model, to ensure this is recognised as important. The workload model is not unique to nursing and so it is suggested that throughout the higher education sector time is built into the working week to allow module development.

#### **5. A clear definition of BL.**

A lack of understanding of BL was highlighted throughout this study. A definition of BL should be developed, based on the study findings, and adopted within the school of nursing. Arguably this definition could be used for nurse education in general and widened to include higher education as a whole. Having a universally accepted definition of BL would allow parity across both nurse education and the higher education sector. Developing an agreed definition will also allow for the evaluation of BL against one accepted definition.

#### **6. Greater understanding of BL**

Dissemination of the findings from this study is important. Therefore presentation at local nursing school forums and research groups, as well as at education conferences, alongside publishing the findings in an educational/ nursing journal will enable a wider understanding of how BL can be of benefit in nurse education and potentially to higher education as a whole.

## **7. Blended learning in action – the correct module information**

Ensuring that all module information conveys the term BL will let post qualification nursing students know that the module is using a BL approach.

Transparency of information is essential so that students can make an informed choice of module / programme selection; this is the case across all higher education institutions. Information about BL should be included in the handbooks for the module/ programme and should be clearly stated on the ‘search for a module’ web pages.

## **8. Robust evaluation of the students’ and lecturers’ BL experience**

Gaining feedback from both the lecturers and students on the BL experience will ensure their voices inform any future developments.

## **6.5 Summary**

To conclude, simulation, e-learning and the many technologies available to a lecturer should not be used in isolation but integrated into a BL approach (DoH 2011), thus addressing a specific learning need. BL has the potential to improve student retention in modules due to the flexibility of this approach. Modules can possibly increase in size if classroom time is no longer required to the same extent. Communication is enhanced between students and lecturers and students currently appear satisfied with the modules as they are meeting their expectations. These areas were found by Nielson (2008) who commented that BL is better than traditional face-to-face only instruction stating that interaction and overall satisfaction with modules was improved and more effective with BL.



BL as a concept has great potential to address the challenges of learning and teaching in higher education institutions. The requirement to engage students in more active critical learning is growing (Garrison and Vaughan 2013). Ultimately BL suits a variety of learning styles due to the mixed approaches to learning (Harding et al. 2005.) This has been reflected in the positive response to BL, drawn from this research.

## References

Adams A (2004) Pedagogical underpinnings of computer based learning. Issues and innovations in nursing practice. *Journal of Advanced Nursing*. Vol. 46 No. 1 pp.5-12

Akyol Z and Garrison R (2011) Understanding cognitive presence in an online and blended community of inquiry: Assessing outcomes and processes for deep approaches to learning. *British Journal of Educational Technology*. Vol. 42 No. 2 pp. 233-250

Allan H, O'Driscoll M, Simpson V and Shawe J (2013) Teachers' views of using e-learning for non-traditional students in higher education across three disciplines (nursing, chemistry and management) at a time of massification and increased diversity in higher education. *Nurse Education Today*. Doi:10.1016/j.nedt.2012.04.003 (accessed 12.7 2013)

Aspden L and Helm P (2004) Making the connection in a blended learning environment. *Educational Media International*. Vol. 41 No. 3 pp. 245-252

Baepler P, Walker J D and Driessen M (2014) It's not about seat time: Blending, flipping and efficiency in active learning classrooms. *Computers and Education*. Vol. 78 pp. 227-236

Barnett R (2014) *Conditions of Flexibility*. A report for the Higher Education Academy.  
Higher Education Academy.

Baxter P and Jack S (2008) Qualitative case study methodology: study design and implementation for novice researchers. *The Qualitative Report*. Vol. 13 No. 4 pp. 544-559

Beauchamp T and Childress J (2001) *Principles of Biomedical Ethics*. 5<sup>th</sup> Ed. Oxford.  
Oxford University Press.

Benson V, Anderson D and Ooms A (2011) Educators' perceptions, attitudes and practices: blended learning in business and management education. *Research in Learning Technology*. Vol. 19 No. 2 pp.143-154

Bentley Y, Selassie H, and Parkin E (2012) Evaluation of a global blended learning MBA programme. *The International Journal of Management Education*. Vol. 10 pp. 75-87

BERA (2011) *Ethical Guidelines for Educational Research*. London BERA

Bloomfield J, While A and Roberts J (2008) Using computer assisted learning for clinical skills education in nursing: integrative review. *Journal of Advanced Nursing*. Vol. 63 No. 3 pp. 222-235

Bodie G, Fitch- Hauser M and Powers W (2006) Chunking, priming and active learning: toward an innovative and blended approach to teaching communication related skills.

*Interactive Learning Environments*. Vol. 14 pp. 119-135

Bonk C and Graham C (2006) *The Handbook of Blended Learning: global perspectives, local designs*. San Francisco. Pfeiffer

Bradley C, Erice M, Halfer D, Jordan K, Lebaugh, Opperman C, Owen K and Stephan J (2007) The impact of a blended learning approach on instructor and learner satisfaction with preceptor education. *Journal for Nurses in Staff Development*. Vol. 23 No 4. pp.164-170

Brannick T and Coghlan D (2007) In defence of being ‘ Native’: The case for insider academic research. *Organizational Research Methods*. Vol. 10 No. 1 pp.59-74

Braun V and Clarke V (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology*. Vol. 3 No. 2 pp. 77 – 101

Braun V and Clarke V (2014) *Successful Qualitative Research: a practical guide for beginners*. London. Sage.



Brookfield S (1995) Adult learning: An Overview. In A Tuinjmman(ed) *International Encyclopaedia of Education*. Oxford. Pergamon Press.

Bryman A (2012) *Social Research Methods 4<sup>th</sup> Ed*. Oxford. Oxford University Press.

Burgess H, Sieminski S and Arthur L (2006) *Achieving Your Doctorate in Education*. London.

Button D, Harrington A and Belan I (2013) E-learning and information communication technology (ICT) in nursing education: A review of the literature. *Nurse Education Today* (2013), <http://dx.doi.org/10.1016/j.nedt.2012.05.002>

Carbonell K, Dailey–Herbert A and Gijsselaers W (2013) Unleashing the creative potential of faculty to create blended learning. *Internet and Higher Education*. Vol. 18 pp. 29-37

Carroll C, Booth A, Papaioannou D, Sutton A and Wong R (2009) UK health care professionals' experience of on line learning techniques: a systematic review of qualitative data. *Journal of Continuing Education in the Health Care Professions*. Vol. 29 No. 4 pp. 235–241

Cassell C and Symon G (2004) *Essential Guide to Qualitative Methods in Organizational Research*. London. Sage.

Chen S, Stocker J, Wang R, Chung Y and Chen M (2009) Evaluation of self- regulatory on line learning in a blended course for post registration nursing students in Taiwan. *Nurse Education Today*. Vol. 29 pp. 704-709

Choules A P (2007) The use of e-learning in medical education: A review of the current situation. *Post Graduate Medical Journal*. Vol. 83 pp. 212-217

Cohen L, Manion L and Morrison K (2011) *Research Methods in Education 7th ed.* London. Routledge.

Cook G, Thynne E, Weatherhead E, Glenn S, Mitchell A and Bailey P (2004) Distance learning in post qualifying nurse education. *Nurse Education Today*. Vol. 24 pp. 269-276

Cooke A, Smith D and Booth A (2012) Beyond PICO: The SPIDER tool for qualitative evidence synthesis. *Qualitative Health Research*. Vol.22 No. 10 pp. 1435-1443

Crotty M (2003) *The Foundations of Social Research; meaning and perspectives in the research process*. London. Sage





Daugherty M and Funke B (1998) University faculty and student perceptions of web based instruction. *Journal of Distance Education*. Vol. 13 No. 1 pp. 21-39

Davies A, Ramsey J, Lindfield H and Couperthwaite J (2005) A blended approach to learning: added value and lessons learnt from students' use of computer-based materials for neurological analysis. *British Journal of Educational Technology*. Vol. 36 No. 5 pp. 839-849

Dearing R (1997) *Higher Education in the Learning Society*. Report of the National Committee of Inquiry into Higher Education. London. HMSO

Dearnley C, McClelland G and Irving D (2013) *Innovation in Teaching and Learning in Health Higher Education*. Higher Education Academy. UK

Denscombe M (2010) *Ground Rules for Social Research*. 2<sup>nd</sup> Ed. UK. Open University Press.

Department for Education and Skills (DfES) (2003) *Towards a Unified E-learning Strategy*. London. DfES.

Department of Health (DoH) (2001) *Working Together-Learning Together: A Framework for Lifelong Learning for the NHS*. DoH publications ref 25725

Department of Health (DoH) (2011) *A Framework for Technology Enhanced Learning*.

DoH publications

Department of Health (DoH) (2012) *Liberating the NHS: Developing the Healthcare*

*Workforce: From Design to Delivery*. DoH publication

Department of Health (DoH) (2013) *The Education Outcomes Framework*. DoH

publications.

Duhaney D (2004) Blended learning in education, training and development. *Performance Improvement*. Vol. 43 No. 8 pp. 35-38

Dwyer S and Buckle J (2009) The space between: On being an insider-outsider in

Qualitative research. *International Journal of Qualitative Methods* Vol. 8 No. 1 pp54-63

Dziuban C, Moskai P and Hartman J (2005) Higher education, blended learning, and the generations: Knowledge is power - No more. *Elements of Quality Online Education*.

Ellis R, Goodyear P, Prosser M and O'Hara A (2006) How and what university students learn through online and faced to face discussion: conceptions, intentions and approaches. *Journal of Computer Assisted Learning*. Vol. 22 pp.244-250

Elwood S and Martin D (2000) 'Placing' interviews: Location and scales of power in qualitative research. *Professional Geographer*. Vol. 52 No. 4 pp.649-657

ESCR (2012) *The Framework for Research Ethics*. UK.ESCR

Farrell G, Cubit K, Bobrowski C and Salmon P (2007) Using the WWW to teach undergraduate nurses clinical communication. *Nurse Education Today*. Vol. 27 No..5 pp. 427-435

Fillion G, Limayem M, Laferriere T and Mantha R (2009) Integrating ICT into higher education: Investigating onsite and online professors points of view. *International Journal on E-Learning*. Vol. 8 No. 1 pp.17-55

Fossey E, Harvey C, McDermott F and Davidson L (2002) Understanding and evaluating qualitative research. *Australian and New Zealand Journal of Psychiatry*. Vol. 36 pp. 717-732

Francis R (2013) *Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry*. London. Stationery Office Ltd.



Gagne R (1977) *The Conditions of Learning*. Holt, Rinehart and Winston. New York.

Gale N, Heath G, Cameron E, Rashid S and Redwood S ( 2013) Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Medical Research Methodology*. Vol. 13 pp 117-124

Gallagher L (2007) Continuing education in nursing: A concept analysis. *Nurse Education Today*. Vol. 27 pp. 466-473

Garrison D, Anderson T and Archer W (2000) The first decade of the community of inquiry framework: A retrospective. *Internet and Higher Education*. Vol. 13 pp.5-9

Garrison D and Anderson T (2003) *E-learning in the 21<sup>st</sup> Century*. London. Routledge Falmer.

Garrison D and Kanuka H (2004) Blended learning: uncovering its transformative potential in higher education. *Internet and Higher education*. Vol. 7 pp.95-105

Garrison R and Vaughan N (2013) Institutional change and leadership associated with blended learning innovation: Two case studies. *Internet and Higher Education*. Vol. 18 pp. 24-28

Ginns P and Ellis R (2006) Quality in blended learning: exploring the relationships between online and face-to-face teaching and learning. *Internet and Higher Education*. Vol. 10 pp. 53 -64

Glenn S (2005) E-learning in nursing education: Lessons learnt? *Nurse Education Today*. Vol. 25 pp. 415-417

Glogowska M, Young P, Lockyer L and Moule P ( 2011) How blended is blended learning?: students' perceptions of issues around the integration of online and face to face learning in a continuing professional development (CPD) health care context. *Nurse Education Today*. Vol. 31 No. 8 pp.887-891

Gould D, Berridge E and Kelly D (2007) The national health service knowledge and skills framework and its implications for continuing professional development in nursing. *Nurse Education Today*. Vol. 27 pp. 26-34

Gray K and Tobin J (2010) Introducing online community into a clinical education setting: a pilot study of student and staff engagement and outcomes using blended leaning. *BMC Medical Education*. Published on line doi:10.1186/1472-6920-10-6. (Accessed 6.7.11)



Green J and Thorogood N (2014) *Qualitative Methods for Health Research*. 3<sup>rd</sup> Ed. London. Sage

Greenbaum T (1998) *The Handbook of Focus Group Research*. 2<sup>nd</sup> Ed. London. Sage.

Greenhalgh T (2006) *How to Read a Paper: The basics of evidence based medicine*. 3<sup>rd</sup> Ed. Oxford. Blackwell Publishing.

Gulc E (2006) *Using blended learning to accommodate different learning styles*. Report for the Higher Education Academy.

Guzer B and Caner H (2014) The past, present and future of blended learning: an in depth analysis of literature. *Social and Behavioural Sciences*. Vol. 116 pp. 4596-4603

Hakim C (2000) *Research Design*. 2<sup>nd</sup> Ed. London. Routledge

Hammersley M (1992) *What's Wrong with Ethnography?* London. Routledge

Hanson J (2009) Displaced but not replaced: the impact of e-learning on academic identities in higher education. *Teaching on Higher Education*. Vol. 14 No. 5 pp. 553-564





Harding A, Kaczynski D and Wood L (2005) Evaluation of blended learning: analysis of qualitative data. *Uniserve Science Blended Learning Symposium Proceedings*. pp. 56-62

Higher Education Funding Council for England (2005) *HEFCE Strategy for E-learning*. Higher Education Academy. Reading. UK

Higher Education Funding Council for England (2009) *Enhancing Learning and Teaching Through the Use of Technology: A revised approach to HEFCE's strategy for e-learning*. Higher Education Academy. Reading. UK.

Hoepfl M (1997) Choosing qualitative research: a primer for technology education researchers. *Journal of Technology Education*. Vol. 9 No. 1 pp.47-63

Howe K and Moses M (1999) Ethics in educational research. *Review of Research in Education*. Vol. 24 pp. 21- 60

Howlett D, Vincent T, Watson G, Owens E, Webb R, Gainsborough N, Fairclough J, Taylor N, Miles K, Cohen J and Vincent R ( 2011) Blending online techniques with traditional face to face teaching methods to deliver final year undergraduate radiology learning content. *European Journal of Radiology* Vol. 78 pp.334-341

Hsu L (2011) Blended learning in ethics education: A survey of nursing students. *Nursing Ethics*. Vol. 18 No. 3 pp. 418-430

Hsu L and Hsieh S (2011) Effects of a blended learning module on self-reported learning performances in baccalaureate nursing students. *Journal of Advanced Nursing*. Vol. 67 No. 11 pp. 2435-2444

Huckaby F (2011) Researcher/Researched: relations of vulnerability/ relations of power. *International Journal of Qualitative Studies in Education*. Vol. 24 No. 2 pp. 165-183

Hughes E (2005) Nurses' perceptions of continuing professional development. *Nursing Standard*. Vol. 19 No. 43 pp. 41-49

Humphrey C (2012) Dilemmas in doing insider research in professional education. *Qualitative Social Work*. Vol. 12 No. 5 pp. 572-586

Iley K, McNulty L, Jones I, Yorke J and Johnson M (2010) Developing competence in cardiac care through the use of blended learning: Course members and mentors accounts. *Nurse Education Today*. Vol. 31 No. 4 pp.323-327

Ilias K and Crosbie P (2013) Reflections on the teaching and learning online approach: a contemporary challenge? Or a threat? *European Scientific Journal*. Vol. 1 pp. 342- 346

Ireland J, Martindale S, Johnson N, Adams D, Eboh W and Mowatt E (2009) Blended learning in education: effects on knowledge and attitude. *British Journal of Nursing*. Vol. 18 No. 2 pp.124-130

Jokinen P and Mikkonen I (2013) Teachers experiences of teaching in a blended learning environment. *Nurse Education in Practice*. Vol. 13 pp. 524-528

Jonas D and Burns B (2010) The transition to blended e learning. Changing the focus of educational delivery in children's pain management. *Nurse Education in Practice*. Vol. 10 pp. 1-7

Karaman S (2011) Nurses' perceptions of online continuing education. *BMC Medical Education*. Vol. 11 pp.86-91

Kelliher F (2005) Interpretivism and the pursuit of research legitimisation: An integrated approach to single case design. *The electronic Journal of Business Research Methodology*. Vol. 3 No. 2 pp. 123-132

Kelly M, Lyng C, McGrath M and Cannon G (2009) A multi method study to determine the effectiveness of, and student attitudes to, online instructional videos for teaching clinical skills. *Nurse Education Today*. Vol. 29 No. 3 pp. 292-300

King N Carroll C, Newton P and Dornan T (2002) You can't cure it so you have to endure it. The experience of adaptation to diabetic renal disease. *Qualitative Health Research*. Vol. 12 No. 3 pp. 329-346

King S, Taylor E, Satzinger F, Carbonaro M and Greidanus E (2008) Developing interdisciplinary team competencies in a blended learning course: Impact on student learning. *The Internet Journal of Allied Health Sciences and Practice*. Vol 6 No 1

Kiraz E and Ozdemir D (2006) The relationship between educational ideologies and technology acceptance in pre service teachers. *Educational Technology and Society*. Vol. 9 No. 2 pp. 152-165

Kirkwood A and Price L (2014) Technology-enhanced learning and teaching in higher education: what is 'enhanced' and how do we know? A critical review. *Learning, Media and Technology*. Vol. 39 No. 1 pp. 6-36

Kitzinger J (1995) Qualitative research: introducing focus groups. *BMJ*. Vol. 311 pp. 299

Knowles M, Holton E and Swanson R (2005) *The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development*. 6<sup>th</sup> Ed. Elsevier. London.



Kop R, Fournier H and Fai J (2011) A pedagogy of abundance or a pedagogy to support human beings? Participant support on massive open on line courses. *International Review of Research in Open and Distance Learning*. Vol. 7 pp. 74- 93

Kvale S (2007) *Doing Interviews*. London Sage

Laurillard D (2002) *Rethinking University Teaching*. 2<sup>nd</sup> Ed. Routledge. London

Lawton S, Montgomery L and Farmer J (2001) Survey and workshop initiative on community nurses' knowledge of the internet. *Computers in Nursing* Vol 19 No 3 pp.118-121

Lean J, Moizer J and Newbey R (2013) Enhancing the impact of online simulations through blended learning: A critical incident approach. *Education and Training*. Vol. 56 No. 2/3 pp. 208-218

Lewin L, Singh M, Bateman B and Glover P (2009) Improving education in primary care: development of an online curriculum using the blended learning model. *BMC Medical Education*. Available at <http://www.biomedcentral.com/1472-6920/9/33> ( accessed May 2014)

Limerick B, Burgess – Limerick T and Grace M (1996) The politics of interviewing: power relations and accepting the gift. *International Journal of Qualitative Studies in Education*. Vol. 9 No. 4 pp. 449-460

Littlejohn A and Pegler C (2007) *Preparing for Blended E-learning*. Abingdon. Routledge

Martinez – Torres M, Toral Martin S, Barrero Garcia F, Gallardo Vazquez S, Arias Oliva M and Torres T (2008) A technological acceptance of e-learning tools used in practical and laboratory teaching, according to the European higher education area. *Behaviour and Information Technology*. Vol. 27 No. 6 pp. 495-505

Mason J (2002) *Qualitative Research*. 2<sup>nd</sup> Ed. London. Sage.

Mathews B and Ross L (2010) *Research Methods: a practical guide for the social sciences*. Pearson. England

Mays N and Pope C (1995) Rigour and qualitative research. *BMJ*. Vol. 311 pp. 109-112

McDonald B, Noakes N, Stuckey B and Nyrop S (2005) Breaking down learner isolation: How social network analysis informs design and facilitation for online learning. *Network Analyzers*. pp 1 - 30

McInnerney J and Roberts T (2004) Online learning: Social interaction and the creation of a sense of community. *Educational Technology and Society*. Vol. 7 No. 3 pp. 73-81



McVeigh H (2008) Factors influencing the utilisation of e-learning in post registration nursing students. *Nurse Education Today*. Vol 29 No 1 pp.91-99

Mercer J (2007) The challenges of insider research in educational institutions: wielding a double edged sword and resolving delicate dilemmas. *Oxford Review of Education*. Vol.33 No. 1 pp. 1-17

Miles M and Huberman M (1994) *Qualitative Data Analysis: An expanded sourcebook*. 2<sup>nd</sup> Ed. USA. Sage

Miller WR, Yahne M, Moyers T, Martinez J and Pirritano M (2004) A randomized trial of methods to help clinicians learn motivational interviewing. *Journal of Consulting and Clinical Psychology*. Vol 72 pp. 1050- 1062

Mohanna K (2007) The use of e-learning in medical education. *Postgraduate Medical Journal*. Vol. 83 pp. 211

Moore N and Gilmartin M (2010) Teaching for better learning: A blended learning pilot project with first year geography undergraduates. *Journal of Geography in Higher Education*. Vol. 34 No. 3 pp.327 -344

Morgan C and Tam M (1999) Unravelling the complexities of distance education student attrition. *Distance Education*. Vol. 20 No. 1 pp. 6-23

Morgan D (1998) *The Focus Group Guide Book*. London. Sage

Moule P, Ward R and Lockyear L (2010) Nursing and healthcare students' experiences and use of e-learning in higher education. *Journal of Advanced Nursing*. Vol. 66 No. 12  
pp..2785-2795

Nielson S (2008) 'Half bricks and half clicks': Is blended onsite and online teaching and learning the best of both worlds. *Proceedings of the Seventh Annual College of Education Research Conference*. pp. 105-110

Norton L, Richardson J, Hartley J, Newstead S and Mayes J ( 2005) Teachers' beliefs and intentions concerning teaching in higher education. *Higher Education*. Vol. 50 pp. 537 - 571

Nursing and Midwifery Council (2008) *The Code*. London. NMC.

Oliver M and Trigwell K (2005) Can blended learning be redeemed? *E-learning*. Vol. 2  
No. 1 pp. 17-26

Osbourne M and Young D (2006) *Flexibility and Widening Participation*. ESCalate Discussion Paper. The Higher Education Academy.

Osgerby J (2013) Students' perceptions of the introduction of a blended learning environment: An exploratory case study. *Accounting Education: An International Journal*. Vol. 22 No. 1 pp.85-99

O'Toole M and Absalom D (2003) The impact of blended learning on student outcomes: is there room on the horse for two? *Journal of Educational Media*. Vol. 28 No. 2 pp. 179-190

Overbaugh R and Nickel C (2011) A comparison of student satisfaction and value of academic community between blended and online sections of a university level educational foundations course. *Internet and Higher Education*. Vol. 14 pp. 164-174

Perreira J, Pleguezuelos E, Meri A, Molina – Ros A, Molina – Tomas C and Masdue C (2007) Effectiveness of using blended learning strategies for teaching and learning human anatomy. *Medical Education*. Vol. 41 pp. 189-195

Phillimore J and Goodson L (2004) *Qualitative Research in Tourism: ontologies, epistemologies and methodologies*. UK. Psychology Press.

Phillips D, Forbes H and Duke M (2013) Teaching and learning innovations for postgraduate education in nursing. *Collegian*. Vol. 20 pp. 145-151

Picciano A, Dziuban C and Graham C (2014) *Blended Learning Research Perspectives*. Volume 2. London. Routledge

Pilcher J and Bedford L (2011) Willingness and preferences of nurses related to learning with technology. *Journal for Nurses in Staff Development*. Vol. 27 No. 3 pp. 10-16

Polit D and Hungler B (1999) *Nursing research: principles and methods*. Lippincott. London

Price B (2002) Laddered questions and qualitative data research interviews. *Journal of Advanced Nursing* Vol 37 No3 pp 273-281

Price L and Kirkwood A (2014) Using technology for teaching and learning in higher education: a critical review of the role of evidence in informing practice. *Higher Education Research and Development*. Vol. 33 No. 3 pp. 549-564

Puchat C and Potter J (2006) *Focus Group Practice*. London. Sage Publications.



Reime M, Harris A, Aksnes J and Mikkelsen J (2008) The most successful method in teaching nursing students infection control – E-learning or lecture? *Nurse Education Today* Vol. 28 pp. 798-806

Richardson J and Swan K (2003) Examining social presence in online courses in relation to students' perceived learning and satisfaction. *JALN*. Vol. 7 No. 1 pp.68-88

Rovai A and Jordan H (2004) Blended learning and sense of community: A comparative analysis with traditional and fully online graduate courses. *The International Review of Research in Open and Distance Learning*. Vol 5 No 2

Rowe M, Frantz J and Bozalek V (2012) The role of blended learning in the clinical education of healthcare students: A systematic review. *Medical Teacher*. Vol. 34 pp. 216 - 221

Salamonson Y and Lantz J (2004) Factors influencing nursing students' preference for hybrid format delivery in a pathophysiology course. *Nurse Education Today*. Vol. 25 pp.9-16

Schardt C, Adams M, Owens T, Keitz S and Fontelo P (2007) Utilization of the PICO framework to improve searching PubMed for clinical questions. *BMC Medical Informatics and Decision Making*. Vol. 7 No. 16. Available at <http://www.biomedcentral.com/1472-6947/7/16> (accessed May 2014)

Seale C and Silverman D (1997) Ensuring rigour in qualitative research. *European Journal of Public Health*. Vol. 7 pp. 379 -384

Seedhouse D (2008) *Ethics: The Heart of Health Care*. 3 rd Ed. Wiley. UK

Shaffer K and Small J (2004) Blended learning in medical education: Use of an integrated approach with web based small group modules and didactic instruction for teaching radiologic anatomy. *Academic Radiology*. Vol. 11 No. 9 pp.1059-1070

Sharma P and Barrett B (2007) *Blended Learning: Using technology in and beyond the language classroom*. Oxford. McMillan

Silverman D (2010) *Doing Qualitative Research* 3rd ed. Sage. London

Silverman D (2013) *Doing Qualitative Research*. 4<sup>th</sup> Ed. Sage. London.

Singh H (2003) Building effective blended learning programmes. *Educational Technology*. Vol. 43 No. 6 pp. 51-54

Smith C and Boyd P (2012) Becoming and academic: the reconstruction of identity by recently appointed lecturers in nursing, midwifery and the allied health professions.

*Innovations in Education and Teaching International*. Vol. 49 No. 1 pp. 63-72

Smyth R (2004) Exploring the usefulness of a conceptual framework as a research tool: A researcher's reflections. *Issues in Educational Research*. Vol. 14 No. 2 pp. 167-180

Smyth S, Houghton C, Cooney A and Casey D (2011) Students' experiences of blended learning across a range of postgraduate programmes. *Nurse Education Today*. Vol. 32 No. 4 pp.464-468

So H (2009) Is blended learning a viable option in public health education? A case study of student satisfaction with a blended graduate course. *Journal of Public Health Management*. Vol. 15 No. 1 pp.59-66

Stacey E and Gerbic P (2007) Teaching for blended learning- research perspectives from campus and distance students. *Education and Information Technologies* Vol. 12 pp.165 – 174

Streubert H and Carpenter D (2011) *Qualitative Research in Nursing*. 5th Ed. London. Lippincott Williams and Wilkins.



Strickland S (2009) The effectiveness of blended learning environments for the delivery of respiratory care education. *Journal of Allied Health*. Vol 38 No 1 pp.11 - 16

Sung Y, Kwon I and Ryu E (2008) Blended learning on medication administration for new nurses: Integration of e learning and face to face instruction in the classroom. *Nurse Education Today*. Vol. 28 pp.943-952

Torrissi- Steele G and Drew S (2013) The literature landscape of blended learning in higher education: The need for better understanding of academic blended practice. *International Journal for Academic Development*. DOI:10.1080/1360144X.2013.786720 (accessed August 2013)

Tracy S (2010) Qualitative quality: eight 'big-tent' criteria for excellent qualitative research. *Qualitative Inquiry*. Vol. 16 No.10 pp. 837-851

Venkatesh V and Davis F (2000) A theoretical extension of the technology acceptance model: Four longitudinal field notes. *Management Science*. Vol. 46 No. 2 pp. 186-204

Venkatesh V and Bala H (2008) Technology acceptance model 3 and a research agenda on interventions. *Decision Sciences*. Vol. 39 No. 2 pp.273-315

Wakefield A, Carlisle C, Hall A and Attree M (2008) The expectations and experiences of blended learning approaches to patient safety education. *Nurse Education in Practice*. Vol. 8 pp. 54-61

Wilkinson A, Forbes A, Bloomfield J and Fincham C (2004) An exploration of four web-based open and flexible learning modules in post- registration nurse education.

*International Journal of Nursing Studies*. No. 41 pp. 411-424

Williams M (2000) Interpretivism and Generalisation. *Sociology*. Vol. 34 No. 2 pp. 209-224

Willis Commission (2012) *Quality of Compassion: the future of nursing education: Report of the Willis Commission*. London. Royal College of Nursing.

Wong L, Tatnall A and Burgess S (2013) A framework for investigating blended learning effectiveness. *Education and Training*. Vol. 56 No. 2/3 pp. 233-251

Yardley L (2008) *Qualitative Psychology: A Practical Guide to Research Methods*. London. Sage

Yin RK (1994) *Case Study Research: design and methods*. 2nd Ed. London. Sage

Zhang H, Cocosila M and Archer N (2010) Factors of adoption of mobile information technology by homecare nurses. *CIN: Computers, Informatics, Nursing*. Vol. 28 No. 1 pp. 49-56

Zhu C and Engels N (2014) Organizational culture and instructional innovations in higher education: Perceptions and reactions of teachers and students. *Educational Management and Leadership*. Vol. 42 No. 1 pp.136-158

## Appendix 1

### Search terms – Using modified PICO

| Population 1 =<br>Who                   | Population 2 =<br>Who | Where                                       | Intervention =<br>what             | = what I want<br>to find out |
|---|-----------------------|---|------------------------------------|------------------------------|
| Nurs\$/ ?                               | Teacher               | University                                  | Blended<br>learning                | Perspectives                 |
| Qualified nurses                        | Tutor                 | School of<br>nursing<br>(nursing<br>school) | E learning                         | Attitudes                    |
| Post registration<br>nurse              | Lecturer              | Higher<br>education                         | On line learning                   | Feelings                     |
| Post qualification                      | Educator              | Further<br>education                        | Online<br>education/<br>learning   | Emotions                     |
| Registered nurse                        | Facilitator           | College                                     | Distance<br>learning               | Experiences                  |
| Staff nurse                             | Professor             | School                                      | Flexible<br>learning               | Views                        |
| Charge Nurse                            | Faculty               | Institution                                 | Web based<br>learning              | Ideas                        |
| Sister                                  | Instructor            |   | Computer<br>assisted learning      | Concepts                     |
| Adult learner                           | Trainer               |   | Virtual learning                   | Opinions                     |
| Undergraduate<br>Learner                | Coach                 |   | Hybrid learning                    | Judgements                   |
|   |                       |   | Distance<br>education              | Beliefs                      |
| Pre<br>registration(nurse)              |                       |   | Technology<br>enhanced<br>learning |                              |
| Pre qualification<br>(nurse)            |                       |   | Self directed<br>learning          |                              |
| Post graduate<br>(nurse)                |                       |   | Open learning                      |                              |
| Health care<br>students                 |                       |   | Higher<br>Education                |                              |
| Diploma students<br>(nurses)            |                       |   | HE                                 |                              |
| Degree students<br>(nurses)             |                       |   |                                    |                              |
| Medicine/<br>medical students           |                       |   |                                    |                              |
| Allied health<br>professionals /<br>AHP |                       |   |                                    |                              |

## Appendix 2

### The interview schedule

|  |  |
|--|--|
| <p>The beginning</p> <p>Introduction to me/ topic</p> <p>Demographics collected using short questionnaire.</p> | <p>Ask as a questionnaire prior to the interview</p> <p>Age</p> <p>Gender</p> <p>Length of time qualified</p> <p>Access to computer/ home/ work</p>  |
| <p>Opening questions / warm up ( broadly related to topic)/ introductory questions</p>                         | <p>Where do you currently work?</p> <p>Prompts – how long have you worked there/ previous experience( clinical experience)</p> <p>What are you studying and why? ( students only)</p> <p>What is the aim of learning?</p> <p>What is the aim of teaching? Lecturers only – do you feel you meet these aims?</p> <p>How do you best learn?</p> <p>What do you understand by the term BL?</p> <p>Prompts – explore how they would define BL</p> <p>Prompts – have they experienced BL, if so when/how</p> <p>Have your expectations of the module been met. If yes how? If no why?</p> |
| <p>Key questions/ main interview questions or essential questions</p>  | <p>For the module you are attending/ teaching is a BL approach being used?</p>   |

|                          |  |
|--------------------------|--|
|                          | <p>What do you think about the use of BL in nurse education?/ Module taking</p> <p>Prompts – strengths/ limitations/ weaknesses of BL</p> <p>How do you like to deliver module content – Is this BL would you say?</p> <p>Do you consider BL as an effective learning method/ an effective teaching method?</p> <p>Do you think that BL enhances the quality of your learning/ teaching?</p> |
| <p>Closing questions</p> | <p>Of all the things we have discussed which do you consider are the most important to you?</p> <p>Prompts – anything else you want to add?</p>  |

## **Appendix 3**

### **The participant information sheet**

#### **Participant information sheet**

**Please read this carefully. If you have any questions about this study or your participation in it then please contact me.**

I would like to invite you to participate in this research project. I am doing this project as part of a doctorate in education (EdD). You should only participate if you want to; choosing not to take part will not disadvantage you in any way. It is important that before you participate you understand why the research is being conducted. Please take time to read this information sheet which provides details of the study and ask me if there is anything you don't understand.

#### **Study Title**

An exploration of the perspectives and experiences of students and lecturers in the use of blended learning in post qualification nurse education.

#### **What is the purpose of the study?**

The purpose of this study is to explore what students and lecturers in post qualification undergraduate nurse education feel about the use of blended learning in their modules.

#### **Why have you been selected to participate?**

You have been purposefully selected (deliberately chosen) as you are currently a student / lecturer participating in a blended learning module within this school of nursing. You are studying at or teaching level 6 (degree level), and the study is concerned with exploring the use of blended learning at this stage of academic studies.





**Do I have to take part?**

Taking part is entirely voluntary. You do not have to take part and can leave at any point during the interview. A reason for withdrawing or not taking part is not required. The information you have given at the point of withdrawal will not be used in the study and will be destroyed.

**What will happen if I take part in the study?**

If you agree to take part, you will need to sign two copies of the consent form; one to return to me and the other is for you to keep.

You will be asked to attend an individual interview where I will ask several set questions and you will be able to discuss your feelings/ answers to these questions. The interview will be audio recorded and will take no more than one hour.

**Will taking part in this study be kept confidential?**

Any information that you give will be kept confidential and will only be seen by myself and my two supervisors, Professor Judith Lathlean and Dr Josie Tetley following anonymisation. Your name will not appear on any written work. The study will be stored in a locked filing cabinet accessible only by me. Data will be handled, stored and destroyed in accordance with the Data Protection Act (1998).

**Who has reviewed this study?**

The Open University Ethics Committee (Ref HREC/2011/#1126/2) have approved this study.

Permission for access has been granted by the Head of School (name removed to ensure confidentiality).

**Who can I contact if I have any complaints or concerns?**

Please contact Kieron Sheehy, EdD programme Leader at the following email address

[REDACTED]

Thank you for taking the time to read this information

Alison Gallagher

Lecturer, (details of the school of nursing removed to ensure confidentiality)

EdD student, Open University

Contact details

Phone Number – (removed to ensure confidentiality)

Email – (removed to ensure confidentiality)

## Appendix 4

### The consent form

Consent form

\*Study - An exploration of the perspectives and experiences of students and lecturers in the use of blended learning in post qualification nurse education

1. I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and I have had these answered satisfactorily.
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my studies, work or legal rights being affected. I understand that Information collected up to the point I withdraw from the study will not be used and will be destroyed.
3. I understand that personal information collected in this study will be confidential, anonymous and protected.
4. I give permission for information, including the use of quotations, collected in the audio of group meetings to be used for educational or research purposes, including publications with the understanding that my anonymity will be assured, unless I waive my anonymity in writing.
5. I agree to take part in the above study

-----  
Name of participant                      Date                      Signature

-----  
Name of person taking consent      Date                      Signature

## **Appendix 5**

### **Questionnaires given to the lecturers and students prior to the interview to collect demographics**

#### **Lecturers**

##### **Lecturer questionnaire**

1. Gender: Please circle the one indicating whether you are:

Male

Female

2. Age: Please circle the one indicating your age range:

20 – 35

36- 50

51- 59

60 +

3. Which is your main speciality (qualification)? Please circle

Adult

Paediatrics

Mental health

4. What are your primary professional/academic qualifications and how long have you been a qualified e.g. registered nurse/midwife?

5. How many years have you been a lecturer in a higher education institution?

6. Where do you have access to a computer?

7. How do you rank your IT skills? Please circle the one that best describes you.

Poor knowledge/ skills    Some knowledge/skill

Confident/ experienced user

## **STUDENTS**

### **Student questionnaire**

1. Gender. Please circle indicating whether you are:

Male

Female

2. Age. Please circle indicating your age range:

20 – 35

36- 50

51- 59

60+

3. How long have you been a qualified nurse?

4. What is your main speciality? Please circle.

Adult

Paediatrics

Mental Health

5. What is your current level of education? E.g. diploma or degree.

6. When did you last study at a university?

7. Where do you have access to your a computer? If so are you the primary user?

8. How do you rank your IT skills? Please circle the one that best describes you.

Poor knowledge/skill

Some knowledge/skill

Competent/ experienced user

## Appendix 6

### Template analysis

Template, illustrating the development of themes and sub themes

#### Lecturers

| Pre-defined themes   | Level 2  | Level 3   |
|--|--|---|
| Previous experience and its potential influence on learning and teaching | Clinical areas/<br>qualifications<br>Experience of studying<br>Confidence with<br>technology | Link between clinical<br>speciality and area that<br>teaching<br>The way the lecturers<br>like to learn- potential<br>influence on the way<br>delver their modules. |
| Considerations of the aims of teaching and learning                      | Are the aims met<br>Meeting the lecturers<br>expectations of the<br>module                   | Details of the content of<br>the module<br>View of the lecturer<br>about the type of student<br>and their motivation to<br>attend the module                        |
| Lecturers understanding of the concept of BL                             | Definitions of BL  | Enhanced learning<br>through technology<br>Use of BL in the<br>modules  |
| Considerations of the positive aspects of BL                             | Quality of learning<br>Effective learning tool<br>Effective method of<br>imparting knowledge | Concept of creativity to<br>enhance the learning<br>experience<br>Use of mixed modalities<br>utilised in delivery of a<br>module                                    |
| Potential draw backs to BL   | Issue with technology<br>Time to develop learning<br>materials/ e-learning                   | Suitability of BL for all<br>modules<br>The need for<br>technological support   |

#### Students

| Pre-defined codes/ themes                 | Level 2  | Level 3   |
|---|--|---|
| Students previous experiences of learning | Current educational<br>level/ qualifications<br>Experiences of learning/<br>studying<br>Confidence with<br>technology<br>Module meeting the<br>students expectations | Need to achieve a degree<br>Changing face of nurse<br>education<br>Attending college in<br>your own time<br>Having to pay for<br>modules your self<br>Use of social media |
| Considerations of the way students learn  | How students best learn<br>Aims of learning<br>Use of technology to<br>enhance learning  | Motivation to learn<br>Gaining knowledge<br>Development of clinical<br>role   |

|  |   |   |
|--|---|---|
|  |   | <p>Face-to-face contact<br/>perceived preferential<br/>way to learn<br/>Working and meeting<br/>other students</p>  |
| <p>Understanding of the<br/>concept of BL in nurse<br/>education</p> | <p>Definitions of BL<br/>The use of BL<br/>Students experiences of<br/>BL</p> | <p>Lack of understanding of<br/>the term BL<br/>E-learning<br/>Mixed methods<br/>Use of mixed media</p>   |
| <p>Students positive<br/>experiences of BL</p>                       | <p>Quality of teaching and<br/>learning<br/>Effective way to learn</p>        | <p>Increased motivation to<br/>learn<br/>Suits different learning<br/>styles</p>  |
| <p>Possible negative<br/>experiences of BL</p>                       | <p>Use of technology</p>  | <p>Time spent completing<br/>the e-learning<br/>Paucity of IT support<br/>Problems accessing e<br/>learning<br/>Reduced face-to-face<br/>contact with lecturer<br/>Reduced time with other<br/>students</p> |