University of Strathclyde

Department of Educational Studies

Learning about Breastfeeding in a Baby Friendly Accredited Pre-registration Midwifery Programme

by

Maria Pollard

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CD ROM Transcripts of focus groups, individual interviews and critical incident diaries

Abstract

Poor breastfeeding rates in the United Kingdom are a public health concern. Healthcare professionals' lack of knowledge and skills to support breastfeeding mothers have been identified as a major contributing factor for low rates of initiation and duration of breastfeeding. This has implications for the learning and teaching methods employed in pre-registration midwifery curricula.

This is a single site case study in a university where the UNICEF UK Baby Friendly Initiative best practice standards for higher education were integrated into a pre-registration BSc in Midwifery curriculum with the intention of equipping midwives with the confidence, knowledge and skill to fulfil their role at the point of registration.

The aim of this case study was to explore how student midwives, in a UNICEF UK Baby Friendly accredited university, learn about breastfeeding to prepare them for practice as a registered midwife, using an interpretivist approach. This enabled the phenomenon to be explored through the participants' unique perspectives of their experiences of learning and teaching within this curriculum. Participants included student midwives, previous students and midwife lecturers. Focus groups, individual interviews and critical incident diaries were used as data collection methods.

The key findings of this case study are that although student midwives identified a lack of supervision from mentors in some areas of clinical practice they perceive providing 'hands on' care for a mother and baby as the key influence on their learning about breastfeeding. Student midwives reported feeling theoretically prepared for practice-based placements for their level of education and graduates also reported feeling confident at the point of registration to support and advise breastfeeding mothers. Finally, the main impact of the UNICEF UK Baby Friendly Initiative accreditation on the BSc in Midwifery has been to employ a consistent approach within the spiral curriculum and enhance employability prospects.

Chapter 1

Introduction

The World Health Organisation (2002) recognise breastfeeding as the optimal form of nutrition for human infants, with health benefits for both mother and child. They recommend exclusive breastfeeding until the age of six months and to continue until the age of two years and beyond. However, breastfeeding rates in the United Kingdom (UK) continue to be amongst the lowest in Europe, with the results of the Infant Feeding Survey 2005 (Bolling, Grant, Hamlyn, & Thornton, 2007) demonstrating the breastfeeding initiation rate for the UK was 78%, (70% in Scotland) followed by a rapid decline over the first few weeks.

The infant feeding survey (ibid) is conducted every five years to provide estimates on incidence, prevalence and duration of breastfeeding. Between August and September 2005 a sample of 9,416 mothers from all birth registers in the UK were selected and returned completed questionnaires at three stages of the project. Stage one, when the baby was four to ten weeks old; stage two, four to six months old and stage three, eight to ten months old. The survey identified clear evidence of a relationship between breastfeeding and socioeconomic status and cultural factors.

Bolling et al. (2007) suggested that increased rates of initiation of breastfeeding were associated with mothers who worked in managerial and professional occupations (National Statistic Socioeconomic Classification system), had the highest educational levels and were over the age of 30. In fact those mothers aged 35 years or over were found to be five times more likely to breastfeed than those under 20 years. Mothers from all minority ethnic groups were also found to be more likely to breastfeed than white mothers. For example, between the years 2000-2005 there was an increase in initiating breastfeeding for white mothers from 68% to 74% whereas the increase for Asian mothers was from 87% to 94%. Returning to work was also highlighted as an influencing factor that reduced the duration of breastfeeding compared to those who did not.

This survey also demonstrated that not all mothers received appropriate support and advice from healthcare professionals stating that only 79% received information on the health benefits of breastfeeding; 68% discussed feeding intention in the antenatal period (28% at antenatal classes) and only seven out of ten mothers were shown how to put their baby to the breast in the first few days.

Healthcare professionals' lack of knowledge and skills to support mothers to breastfeed their babies have been identified as a major contributing factor to low rates of initiation and duration of breastfeeding, leading to inconsistent and inaccurate advice (Sikorski, Pindoria, & Wade, 2002; Hall-Moran, Dykes, Edwards, Burt, & Whitmore, 2004; Renfrew, Dyson, & Wallace, 2005). Battersby (2002) suggested that midwives are exposed to similar experiences of breastfeeding, and cultural influences, as the mothers they care for which may therefore effect professional practice in both positive or negative ways.

There have been a number of studies carried out to identify the reasons for midwives lack of knowledge and skill, most of which culminate in recommendations being made to improve post- registration education related to breastfeeding (Cantrill, Creedy, & Cooke, 2003; Renfrew et al., 2005; McFadden et al., 2007). However, it was not until the development of the UNICEF UK Baby Friendly Initiative award for the *Best Practice Standards into Breastfeeding Education for Student Midwives and Health Visitors* (UNICEF, 2002 ; updated 2008), and more recently the Nursing and Midwifery Council (NMC) *Essential Skills Clusters Circular* (Nursing and Midwifery Council, 2007a), that the focus has moved to pre-registration education.

Anecdotal evidence, through discussion with other midwifery educationalists, suggests that quality and quantity of breastfeeding education is variable between higher education institutions. In some universities it is not seen as a priority despite the fact that upon registration midwives are the first points of contact for mothers requiring support and advice regarding breastfeeding. It could be argued that this is due to the competing demands of the curriculum and a lack of perceived time both in

the university setting as well clinical areas, and the varied demographic nature of practice-based placements.

I have over twenty two years experience involved in direct patient care and been a midwife lecturer for ten of these. This personal and professional experience has given me first-hand knowledge of the problems facing students, mentors and midwife lecturers when attempting to facilitate the best possible education, and in turn developed a desire to understand how students can best learn about breastfeeding to enable them to provide the most effective support for women and their families. Many of the barriers I have encountered surround content of the curriculum and balancing this with other competing demands; exposure to clinical experience; appropriate mentoring and personal attitudes, cultures and beliefs of students, lecturers and mentors.

1.1 The Problem Related to Pre-registration Education

The UNICEF UK Baby Friendly Initiative developed the best practice standards for higher education, along with an accreditation procedure, in response to the criticism from employers that not all student midwives or health visitors were qualifying from pre and post-registration programmes with sufficient knowledge and skills to support mothers with breastfeeding (UNICEF, 2002).

Not only did this lack of knowledge and skills have a direct effect on practice but was also an area of concern for employers, particularly from 'Baby Friendly' accredited hospitals who in order to comply with the standards had to provide additional training for all healthcare staff involved with supporting mothers to breastfeed, 18 hours of training within 6 months of employment (UNICEF, 1998). Apart from the financial implications, employers questioned why midwives and health visitors were exiting their educational programmes without the essential knowledge or skills for practice (UNICEF, 2002, 2009).

The midwifery division at the University of the West of Scotland acknowledged this concern and decided to work towards the new UNICEF UK Baby Friendly Initiative award for the *Best Practice Standards into Breastfeeding Education for Student Midwives and Health Visitors* (UNICEF, 2002) with the intention of improving breastfeeding education for student midwives and enhancing their employability skills in line with the Enhancement Framework Themes (Quality Assurance Agency for Higher Education, 2004-2009) and midwifery benchmarks (QAA Scotland, 2002).

1.2 Background to the Baby Friendly Initiative Education Standards

The Baby Friendly Initiative is a worldwide initiative established in 1992 by the World Health Organisation (WHO) and UNICEF to encourage maternity hospitals to adhere to the *International Code of Marketing of Breastmilk Substitutes* (World Health Organisation, 1981) and to implement the *Ten Steps to Successful Breastfeeding*. In 1994 the UNICEF UK Baby Friendly Initiative was introduced to provide support, assessment and accreditation for hospitals who implement the best practice standards in the care of breastfeeding mothers and their babies, using the *Ten Steps to Successful Breastfeeding* (see appendix 1). In 1998 this was further developed to include community facilities who implement the *Seven Point Plan* (see appendix 1). Implementation of the Baby Friendly best practice standards has since been identified as a way to increase breastfeeding rates (Tappin et al., 2001; Britten & Broadfoot, 2002; Broadfoot, Britten, Tappin, & McKenzie, 2005; Merten, Dratva, & Ackermann-Liebrich, 2005). Scotland currently has 41.86% of births in accredited hospitals (UNICEF, 2010).

The best practice standards for higher education institutions were initially published in 2002 and later updated in 2008 (UNICEF, 2002; 2008). The aim of this initiative was to improve breastfeeding education for student midwives and health visitors. Three standards and nineteen outcomes were developed (later consolidated to eighteen outcomes in 2008), based on the *Ten Steps to Successful Breastfeeding* and *Seven Point Plan* (UNICEF, 1998), to be introduced into the curriculum and successfully achieved at the point of registration as a midwife or health visitor. The intention was to

> "equip students to enable and support parents to make informed choices about infant feeding and to deliver effective care for breastfeeding mothers and babies." (UNICEF, 2002, p. 2)

The education standards and outcomes involve fundamental and basic knowledge about normal anatomy of the breasts, the physiology of lactation and the practical skills of breastfeeding incorporating research-based evidence and consideration of

the psycho-social factors that influence successful breastfeeding (UNICEF, 2002) (See appendix 2).

1.3 The Professional Context of Midwifery Education

It is important to place the subject of breastfeeding within the midwifery education context and note that not only does midwifery education have to comply with higher education institution regulations but it is also governed by statute and is regulated by the Nursing and Midwifery Council (NMC). The role of the NMC is to safeguard the health and wellbeing of the public by regulating, reviewing and promoting midwifery standards. This includes setting the standards for pre-registration midwifery education. The NMC is granted this power in legislation through *The Nursing and Midwifery Order 2001*. These standards are guided by the international definition of the midwife and the *European Union Directive Recognition of Professional Qualifications 2005/36/EC Article 40* (Nursing and Midwifery Council, 2009).

In 2007 the NMC published a circular with guidance for the introduction of a set of 'Essential Skills Clusters' for pre-registration midwifery education programmes (Nursing and Midwifery Council, 2007a). Number 4, *Initiation and Continuance of Breastfeeding* (see appendix 3) continually refers to the Baby Friendly Initiative (BFI) education standards (UNICEF, 2002). The skills clusters were developed as an outcome of a *Review of the fitness for practice at the point of registration* (Nursing and Midwifery Council, 2005) to address concerns about skill deficits in particular areas. The NMC stated that all new programmes approved from the 1st September 2008 must be compliant with the standards and demonstrate integration of the skills clusters within curricula, and those approved prior to 1st September 2008 must be compliant by 1st September 2009.

The Peach report *Fitness to Practice* (UKCC, 1999), and the *Review of the fitness for practice at the point of registration* (Nursing and Midwifery Council, 2005) also recommended joint responsibility of both the Higher Education Institutions (HEI) and clinical practitioners for student learning, teaching and assessment to ensure students are fit for purpose. The aim of the strategy was to contextualise theory and reduce the practice- theory gap. This philosophy has since been strengthened as the NMC place great emphasis on the need for practice based learning and stipulate that

midwifery curricula comprise a minimum of 50% practice and a minimum of 40% theory (Nursing and Midwifery Council, 2009).

1.4 The Boundaries and Context of the Study

This is a single site case study based in the midwifery division of the University of the West of Scotland (formerly known as University of Paisley), where I am a midwife lecturer and project leader for implementing the UNICEF UK Baby Friendly Initiative (BFI) standards for higher education. The programme under investigation is a pre-registration (undergraduate) BSc in Midwifery, validated by the National Board for Nursing, Midwifery and Health Visiting for Scotland in 2001. It was the first in the United Kingdom, alongside Kings College, London, to be accredited 'Baby Friendly' in 2007. The BSc in Midwifery programme was developed in light of the Peach report (UKCC, 1999) recommendations and has continually evolved in line with professional and government directives (Nursing and Midwifery Council, 2004, 2005, 2006b, 2007b). It has since been superseded by a BSc Midwifery in 2008, which also received BFI accreditation in 2009. However, this current study is concerned with the 2001 programme only.

The BSc in Midwifery (2001) was a three year, full time programme (45 weeks per year) split into blocks of theory and practice-based placements. The programme flow was predetermined from enrolment to completion. On graduation students exited with a dual qualification: BSc in Midwifery and the professional qualification for registration as a midwife on the professional register.

There were two intakes of students per year, a total intake of approximately 37 students per year. This figure varied as the Scottish Executive/ Government determined the number on a yearly basis. Like other midwifery programmes in Scotland the student population did not fit the typical student demographics. The ages ranged from school leavers, who were in the minority, to women in their 50s. They were often married with families and other responsibilities and many had part-time work outside the programme.

The entry requirements for this programme were a minimum of two Highers and English and Mathematics at standard grade 3 or above or equivalent. The students

had varied backgrounds in studying and achieved the entry criteria through a variety of traditional and non-traditional routes. Therefore students enrolled on this programme with different learning experiences and approaches to learning.

1.4.1 Educational philosophy of the BSc in Midwifery programme

The BSc in Midwifery programme was based on the recommendations from the Peach report (UKCC, 1999) and the UKCC (2000) midwifery competencies with the aim of introducing a competency-based approach to education (University of Paisley, 2001b, p. 5).

Beattie's fourfold model (1987) was used as an approach in planning the curriculum (University of Paisley, 2001b) to ensure it included:

- A map of key subjects: identifying key subjects and integrating them within the curriculum.
- A schedule of basic skills: introducing the psychomotor skills required for practice along with the rationale behind them.
- A portfolio of meaningful experiences: taking a student-centred approach and incorporating experiential techniques.
- An agenda of important cultural issues: including socio-political debate and ethical issues.

The curriculum model (see diagram 1.1) was primarily based on Bruner's (1960) concept of a spiral curriculum enabling the introduction and re-visiting of subjects, including breastfeeding, from different perspectives at different academic levels but also encompassing a range of theories to integrate theory and practice (University of Paisley, 2001b).

The definitive programme document for BSc in Midwifery (University of Paisley, 2001b, p. 12) states that practice was considered core to this curriculum, providing meaningful learning experiences through the integration of theory and experience and the development of cognitive, affective and psychomotor domains of learning

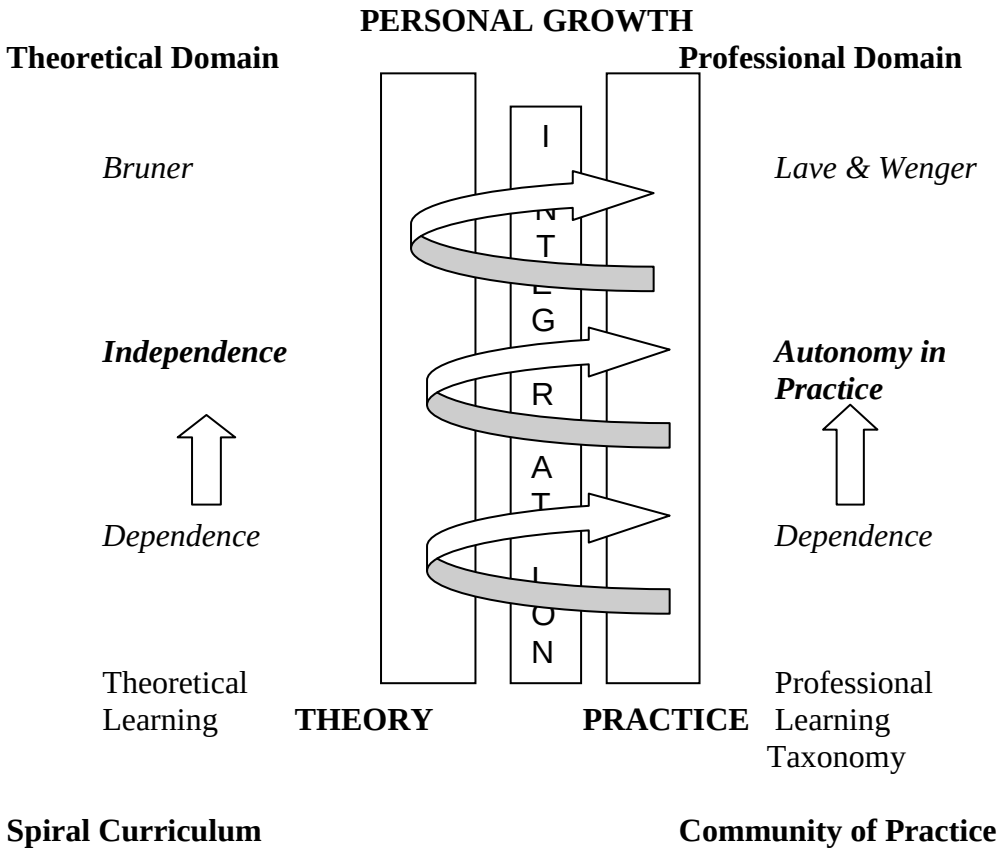
(Bloom, 1956, as cited in Quinn, 2000). Gaining regular clinical experience, with supernumery status, introduces students to a 'community of practice' where they can legitimately participate on the periphery of practice initially and gradually reach a point of full or central participation by the end of the programme (see Diagram 1.1) (Lave & Wenger, 1991). These theories will be explored in greater detail earlier in chapter 2.

The overarching aims of the BSc in Midwifery programme were to

- Prepare a competent, caring, research-minded practitioner who applies a systematic approach to midwifery care, based on the best available evidence.
- Develop in the student an understanding of the holistic and woman-centred approach to care within a variety of settings and multi-disciplinary team contexts.
- Develop a sound knowledge base for caring for the healthy childbearing woman and her family, thereby enabling the midwife to recognise the clinical significance of adverse factors and initiate appropriate management/ action when deviations from the normal occur.
- Encourage the midwife to act as a good communicator orally and in writing; who promotes health, listens to women's needs and empowers the woman towards achieving a safe and satisfying childbirth experience.
- Provide a stimulating environment in which self-awareness, self-development and self-evaluation (in learning and practice) is encouraged.
- Develop an autonomous practitioner who is accountable for one's own actions and committed to continuous professional development.

(University of Paisley, 2001b, p. 8)

Diagram 1.1: Curriculum model



Source: adapted from University of Paisley, 2001, p. 14

1.4.2 Practice-based Placements

As recommended by the NMC (2004) approximately 50% of the programme took place in the clinical setting, hospital or community (see Table 1), within Ayrshire and Arran and Greater Glasgow and Clyde NHS Health Boards (Argyll and Clyde until the boundary changes in 2006). The larger maternity units in these Health Boards are Baby Friendly accredited, others have registered intent. Rural placements were also available in Highland Health Board.

Table 1.1. Summary of BSc in Midwifery programme

Year	Theoretical component			Practice component		
	Theory weeks	**Consolidation/ study leave/ assessment weeks**	**Total % Theory**	**Experiential learning weeks (self-directed)**	**Practice-based Placement weeks**	**Total % Practice**
ONE	17	6	23 weeks 51%	1	21	22 weeks 49%
TWO	11	8	19 weeks 42%	4	22	26 weeks 58%
THREE	10	10	20 weeks 44%	0	25	25 weeks 56%

Source: adapted from University of Paisley, 2001, p 44

The NMC define clinical practice as being

> "part of the midwifery programme of education where the student midwife is under direct or indirect supervision of a midwife when providing care to women and babies. The student is in direct contact with women and babies, planning, providing and assessing the need for and extent of midwifery care on the basis of their acquired knowledge and skills." (NMC, 2009, p16)

The NMC *Standards of proficiency for pre-registration midwifery education* (2004, updated in 2009) also defined the scope of practice experience stating that students must provide care and support throughout the continuum of childbirth, from early pregnancy into the postnatal period in a variety of settings over a 24 hour day and seven day week. As the aim of the programme is to ensure that students are safe and effective in their practice the NMC expects the programme to

> "develop the knowledge and skills of student midwives, so that at the point of registration they are competent and confident in supporting women in normal childbirth." (NMC, 2009, p17)

1.4.3 Mentorship

On average each practice-based placement lasted for a six week period. Students were allocated a named mentor or small team of mentors for this period of time with whom the student was expected to receive a minimum of 40% direct or indirect supervision.

A mentor is a registered midwife who has successfully completed a mentorship preparation programme and meets the NMC *Standards to support learning and assessment in practice* (Nursing and Midwifery Council, 2002, 2006b, 2008b). The mentor provides support, guidance and education and also assesses the student's development of knowledge, skills and attributes required to provide safe and effective care for women and their families (UKCC, 1999; Nursing and Midwifery Council, 2009).

The NMC (2006b, 2008b, p10) developed a framework for mentors to support learning and assessment in practice based on eight domains in which mentors must be competent:

- Knowledge and skill needed to support and assess students.
- Establish effective working relationships.
- Facilitation of learning.
- Assessment and accountability.
- Evaluation of learning.
- Creating an environment for learning.
- Context of practice.
- Leadership.

1.4.4 Theoretical component of the curriculum

The Definitive Programme Document stated that because of the "unique blend of knowledge and experience" (University of Paisley, 2001b, p. 17) of the adult learners enrolled in the programme, student-centred learning strategies were employed. The

intention was to gradually introduce students to the skills required to develop within professional, academic and social contexts. The main aim of the programme was

> "to move [the student] from *dependence* to *independence* as socially aware, autonomous and accountable, reflective practitioners at the point of registration (and beyond)." (University of Paisley, 2001b, p. 17)

1.4.5 Breastfeeding education

There were two discrete areas in the programme where breastfeeding was taught, 'BEST' workshops and a level nine optional module. Otherwise breastfeeding was integrated into most modules throughout the three years.

An agreement was made between the University of the West of Scotland and Argyll and Clyde Health Board (now Clyde division of the Greater Glasgow and Clyde Health Board) for a series of four breastfeeding workshops called 'BEST' workshops to be introduced into year one of the programme. These were the same as those attended by registered midwives and health visitors within six months of employment, to maintain the standards for Baby Friendly accreditation (UNICEF, 2001). This agreement meant that if the health board employed any University of the West of Scotland graduates they would not need to fund them for this introductory study.

In year three of the programme students were also offered a choice from a list of modules which included 'Breastfeeding: Culture, practice and management', this was the only discrete breastfeeding module taught in the programme. The module was taught at level nine and took a holistic approach to breastfeeding education, going beyond the anatomy and physiology of lactation to examine the cultural and social influences on infant feeding practices.

Students were also invited to a series of five tutorials/ workshops on various breastfeeding topics, held in practice-based placements, to discuss clinical experience linked to theory. These were facilitated on a rotational basis, by midwife lecturers, to

ensure that all students had the opportunity to attend each topic at least once at some point in the programme.

Students were also required to complete an experiential workbook throughout the three years. It was used as a revision tool and reflective diary to encourage students to explore their actions, thoughts and feelings.

1.4.6 Assessment

Prior to 2008 clinical practice was assessed but did not contribute to academic credit. The clinical assessment tool was based on Kathleen Bondy's (1983) concepts of clinical development and included specific breastfeeding competencies to be assessed by mentors. This tool provided evidence of progression from dependent, supervised, supported and finally independent practice, supporting Lave and Wenger's (1991) concept of moving from Legitimate Peripheral Participation to central participation (University of Paisley, 2001b) (see chapter 2).

The majority of assessments particularly focused on breastfeeding were formative utilising a wide variety of strategies. The only summative assessment was attached to the module 'Science of Midwifery' where students were assessed using an objective structured clinical examination (OSCE) at the end of year one and if they chose the optional breastfeeding module in year three by means of an essay and seminar presentation. However, breastfeeding was included as part of other assessments throughout the curriculum.

1.5 The UNICEF UK Baby Friendly Initiative Accreditation Process

In 2002 three standards and nineteen outcomes (see appendix 2) were developed by UNICEF UK Baby Friendly Initiative for integration in programmes of higher education for student midwives and health visitors (updated in 2008). The assessment procedure consisted of three phases: 1) submission of documentation; 2) assessment questionnaire for students; 3) face-to-face interviews with students.

1.5.1 Phase 1: Certificate of commitment

The initial step of the process was for the institution to agree, in writing, to meet and adhere to three standards and receive the 'certificate of commitment' (this process has since changed):

1. Make a written commitment to adhere to these standards
2. Ensure all students are equipped with the knowledge and skills to support breastfeeding mothers
3. Provide teaching without involvement, sponsorship or promotional material from the artificial feeding industry (UNICEF, 2002, p.4)

Standard 1 and 3 are self explanatory however, Standard 2 required in-depth written evidence that breastfeeding education and the BFI standards and learning outcomes were included in the curriculum in order that the university could be awarded the 'certificate of commitment'. This involved demonstrating appropriate clinical experience, and mentorship, as well as at least 18 hours of theory on breastfeeding issues (including content, timing and examples of methods of teaching and assessment). Cattaneo and Bennetti (2006) support this recommendation and believe that in order to improve healthcare professionals' knowledge and skills in breastfeeding at least three days should be devoted to undergraduate programmes leading to healthcare degrees. Cantrill, Creedy and Cooke (2003) also recommend breastfeeding education should include practical sessions with an emphasis on counselling and communication skills.

Certificate of commitment was awarded for the BSc in Midwifery programme in 2005 and was the first programme in the United Kingdom to receive it.

1.5.2 Phase two and three: Full accreditation

The final two phases leading to full accreditation were to assess students' knowledge and skills in the final months of the programme. Phase two involved the completion of an assessment questionnaire, similar to a class examination, by a sample of student midwives at the end of their programme. This included a series of short answer questions to complete in forty five minutes relating to anatomy and physiology of lactation and breastfeeding management (phase two has since been discontinued). Phase three involved face- to-face interviews with students to assess practical skills and knowledge in teaching mothers how to position and attach their babies and how to express breast milk by hand. (Phase two and three of the assessment procedure was reviewed and changed to an OSCE in 2009).

The BSc in Midwifery was successfully accredited in 2007 for the development of a curriculum that covered the UNICEF UK Baby Friendly Initiative best practice standards and learning outcomes for breastfeeding education and the new BSc Midwifery programme was accredited in 2009.

1.6 The Thesis Structure

Chapter 1 Introduction: This chapter provides an introduction to the Baby Friendly Initiative and places breastfeeding education in context from both professional and academic perspectives. It introduces the BSc in Midwifery programme and curriculum model involved in the case study highlighting the educational theories that underpin the programme and will be the focus of the literature review in chapter 2. There is also an overview of the Baby Friendly Initiative.

Chapter 2 Literature Review: Presents a review of the literature related to programme development and the issues related to learning and teaching in midwifery curricula.

Chapter 3 Research Design: Defines the methodology and theoretical approach used to answer the research aims. These methods are discussed in detail and justification for the design is presented.

Chapter 4 Findings: Reports the findings from the study.

Chapter 5 Discussion: Provides a detailed analysis of the findings from the study and places them in the context of current knowledge.

Chapter 6 Conclusion and Recommendations: Presents the conclusions, recommendations for improvements in the curriculum based on the findings of this study and recommendations for further research in this area of interest.

Appendices: Provide additional detailed information in relation to issues presented and discussed within the thesis.

Chapter 2

Literature Review

"Education is a risky business, for it fuels the sense of possibility. But a failure to equip the minds with the skills for understanding and feeling and acting in a cultural world is not simply scoring a pedagogical zero. It risks creating, alienation, defiance, and practical incompetence."

(Bruner, 1996, p. 42)

When developing a curriculum there are several aspects that must be considered. The starting point must be to identify the purpose of the curriculum. Once this is established consideration must be given to what experiences will best achieve this, how these experiences should be facilitated and what is the best way to ensure the purpose has been achieved (Mohanna, Wall, & Chambers, 2004).

This chapter will consider the literature related to these issues in six sections. First by examining the educational philosophy of the BSc in Midwifery programme involved in this case study and how student midwives approach learning (section 2.1). Second, consideration will be given to how professionals' 'know' and transfer knowledge to practice (section 2.2). This will be followed by discussion on how this can be achieved through experiential learning (section 2.3) and adequate support through appropriate practice-based placements and mentorship (section 2.4). Student confidence and more importantly competence are key indicators to success and will be explored in relation to clinical assessment (section 2.5).

Finally, as there is limited literature relating to pre-registration breastfeeding education in particular there will be an overview of breastfeeding education in general and the UNICEF UK Baby Friendly Initiative (BFI) education standards (section 2.6).

2.1 The Educational Philosophy of the BSc in Midwifery Programme

The pedagogic framework of a curriculum includes epistemological and philosophical assumptions that refer to the nature of knowledge and what it means to the learner. Epistemological assumptions refers to the nature of knowledge and how it is possible to know (Opie, 2004). Guba and Lincoln described epistemology as "the relationship between the knower and would-be-knower and what can be known" (1998, p. 201).

There are a number of interpretations of the concept 'curriculum' which can cause confusion. It is sometimes referred to as objectives, subject-matter, student experiences or opportunities for students (Quinn, 2000, p. 132). Quinn (ibid, p. 133) believed it to be a combination of these things and defined a curriculum as "a plan or design for education and training that addresses the following questions:"

1. Who is to be taught or learn?
2. What is to be taught and or learned?
3. Why is it to be taught and or learned?
4. How is it to be taught and or learned?
5. Where is it to be taught and or learned?
6. When is it to be taught and or learned?

He went on to break it down further to include the 'official curriculum' (policy), 'actual curriculum' (what is taught) and the 'hidden curriculum' (attitudes and values of teachers).

Quinn's definition was reflected in the Nursing and Midwifery Council (NMC) *Standards of proficiency for pre-registration midwifery education (2004)* and the current *Standards for pre-registration midwifery education* (2009), which set the standards for the structure and nature of midwifery curricula (official curriculum) through legislation. This includes standards for admission to the programme; competencies to be achieved; student support from educationalist and clinical mentors; balance between clinical practice and theory; clinical experience and assessment strategy.

The philosophy of the BSc in Midwifery in 2001 reflected the professional recommendations from the Peach report (UKCC, 1999) and the midwifery competencies (UKCC, 2000) introducing a competency-based curriculum. The aim was the integration of theory and practice to facilitate students to "develop from the known to the unknown and from the concrete to the abstract" (University of Paisley, 2001b, p. 12). The emphasis was on facilitating experiences to develop cognitive, affective and psychomotor domains of learning through Beattie's (1987) Fourfold Curriculum (actual curriculum) based on Bruner's (1960) spiral curriculum and Lave and Wenger's (1991) community of practice.

2.1.1 Beattie's Fourfold Curriculum

Beattie's Fourfold Curriculum (1987) facilitates four different approaches to curriculum development :

- A map of key subjects

This identifies key subjects and integrates them within the curriculum such as biology, psychology and social sciences to form the foundations for practice. This predominantly involves cognitive learning.

- A schedule of basic skills

This introduces the psychomotor skills required for practice along with the rationale behind them. Much of the teaching is based on behavioural theories through simulated practice and social learning.

- A portfolio of meaningful experiences

Teaching takes a student-centred approach, incorporating experiential techniques such as reflection on practice particularly in relation to professional, moral and personal experiences (Beattie, 1987). This involves a humanistic learning approach through personal growth, personal experience and reflection (Benner, 1984; Schön, 1987; Hinchliff, 1992).

- An agenda of important cultural issues

This focuses teaching on socio-political debate, controversies, dilemmas and ethical issues in practice. This includes the teaching of cognitive knowledge and social processes (Hinchliff, 1992).

Quinn (2000, pp. 8-9) described three schools of psychology that are mentioned in Beattie's fourfold curriculum as follows:

- Behaviourism; emphasises the association of stimulus and response developed by Pavlov, Thorndike and Skinner. This was the most influential theory until 1950s.
- Cognitive psychology; emphasises mental processes as opposed to observable behaviour.
- Humanistic psychology; emphasises the human thought processes, feelings and experiences.

The BSc in Midwifery was based on Beattie's 'eclectic curriculum' model (University of Paisley, 2001b, p. 12) where each of the above approaches were used to promote the integration of theory to practice. Beattie (1987, p. 30) described the eclectic curriculum model as a mixture of the four approaches. Quinn (2000) warned that using this method could lead to an over emphasis on traditional approaches rather than a student-centred approach and criticised Beattie's model for not taking in to account the requirements of potential employers. However, it must be noted that the curriculum did evolve between 2001 and 2008 in line with service provision and professional requirements. This included incorporating the Baby Friendly Initiative, and adaptation of the module descriptors to ensure the inclusion of graduate skills (Quality Assurance Agency for Higher Education, 2004-2009). Beattie justified his approach by arguing that because of the complexities of nursing (and midwifery) curriculum planners need to move away from a single model.

2.1.2 The Spiral Curriculum

The definitive programme document (University of Paisley, 2001b) referred to Bruner's (1960) spiral curriculum to facilitate the introduction and revisiting of subject areas at different Scottish Credit Qualification Framework (SCQF) levels over a three year programme supported by relevant clinical experience.

Breastfeeding is incorporated throughout the programme, in most modules, using a variety of learning and teaching strategies and approaches, aimed at promoting a student-centred programme through Beattie's eclectic curriculum model. In line with the NMC recommendations (2004, 2009) there is also great emphasis on experiential learning and clinical experience as part of the curriculum.

Bruner (1960) based his work *The Process of Education* on Piaget's theories and encouraged the idea of discovery orientated learning methods in schools. He maintained that people learned by categorising and interpreting the world in terms of similarities and differences. He believed learning to be an active process where learners constructed their views or ideas based on either current or past knowledge and through cognitive structuring created meaning and organisation to the experiences.

Bruner (ibid) used a constructivist approach to develop the spiral curriculum to facilitate the regular revisiting of basic concepts that are built on as students progress to higher levels. He believed teaching should focus on experience and contexts and suggested teachers should focus on:

- Structure in learning and the most effective sequence to present material to the learner.
- The predisposition to learning (willingness/ readiness) and how a body of knowledge can be organised to be grasped by the learner (spiral organisation).
- Intuitive and analytical thinking.
- Motives for learning.

Bruner later moved his focus in *The Culture of Education* (1996) to wider cultural influences such as custom and practice, religion and language and how they affect learning and shape the mind (Cultural constructivism).

Cultural constructivism is a major issue when considering how student midwives learn about breastfeeding as they are subject to the same cultural influences as the

women in their care and learning cannot take place in a vacuum. Bruner described education "not as an island, but part of the continent of culture" (1996, p. 11).

Jarvis, Holford and Griffin (2003, p. 163) support this view suggesting learning takes place in social contexts through active engagement between the learner and what is being learnt. New knowledge is gained through building upon previous experience to make sense of it. Jarvis et al. (2003) also point out that if the interpretation is in conflict with previous constructs then it may be rejected. This is particularly important when dealing with an emotive subject such as infant feeding where students will bring their previous experiences, values and beliefs with them to the learning experience.

2.1.3 Situated Learning

There is an increasing shift in the literature to socially and culturally situated learning as opposed to cognitive theories alone which pay little attention to the influence of social contexts (Eraut, 1985; Lave & Wenger, 1991; McCormick, 1999).

Eraut believed that higher education institutions need to "enhance the knowledge creation capacity of individuals and professional communities" (1985, pp. 117-118) rather than just rely on the traditional transmission of knowledge through use of text books, which is different from knowledge used in professional life that is "experience-driven know how" (ibid, p. 118).

Lave and Wenger (1991) proposed that for learning to be effective it must be perceived as relevant and transferable to real world situations highlighting the focus of situated learning is learning in context or in a social or practice setting whereby learners engage with others, developing a community of practice.

Situated learning is where students' learning is applied and where social processes and active participation have an impact on learning; Lave and Wenger called it Legitimate Peripheral Participation (LPP) which reflects the underlying principles of adult learning theories.

Knowles (1984) argued that adult learning was based on the need to know; self concept; life experience and readiness and motivation to learn. He believed that proactive adult learners learned more effectively through self-directed learning, where the student takes the initiative, as opposed to reactive learners who required learning to be teacher-led. He asserted that autonomy and enquiry were the main features associated with lifelong learning. This is supported by Jarvis and Gibson (1997, p. 58) who stated that "learning is both a lifelong and life wide phenomenon" and that the methods people adopt change throughout their lifespan.

However, Lave and Wenger were keen to point out (ibid, p.40) that Legitimate Peripheral Participation is not a pedagogical strategy or teaching technique, instead they referred to it as a way of understanding learning. Their intention was to inform educational strategy by highlighting the value of learning experiences.

Lave and Wenger described Legitimate Peripheral Participation as the process whereby newcomers become part of the community of practice which ultimately leads to full participation. It includes the relationships between "newcomers and old-timers", as well as the "activities, identities, artefacts, and communities of knowledge and practice" (ibid, p. 29). Co-participation is seen as key to learning rather than as an individual pursuit. McCormick (1999) supports the idea that practice knowledge is most valuable for learners believing the term transfer of knowledge to be inaccurate and that students should learn to identify principles within practical situations that can then be applied to other situations.

Lave and Wenger explored learning through Legitimate Peripheral Participation in five groups of 'apprentices'; one group being Yucatec midwives. These apprentices "absorb the essence of midwifery practice, as well as specific knowledge about procedures" (Lave & Wenger, 1991, p. 68) through observation and gradually increasing their level of participation in midwifery practice, taking on more of the workload until eventually they deliver the placenta, which in their culture is the most prestigious part of the childbirth process. In all five groups there was little evidence of actual teaching; instead learning through peripheral participation was evident.

However, it must be noted that this process of learning took place over an unspecified period of time rather than a structured three year curriculum with the constraints of timetabling and access to practice-based placements embedded within it.

The strength of situated activity is contextualising knowledge. Lave and Wenger suggested learning was an integral part of the engagement in social situations through analytical questioning and the opportunity to actively participate. Learners are exposed to holistic events rather than fragmented abstract concepts.

They (ibid) also identified story telling as a powerful mechanism to assist with this process, by placing ideas into an understandable situation. Hunter (2008, p. 1) described storytelling as a reflective teaching strategy whereby students are given the opportunity to explore scenarios from a holistic perspective with experts (clinicians or lecturers) who have experienced situations similar to themselves. Using Carper's (1978) patterns of knowing (discussed later in section 2.2.1) as a framework, Hunter (2008) conducted a narrative analysis of personal stories from 25 nursing students at a university in New England. She found that by writing their own stories the students were given the opportunity to connect the 'science' of midwifery to the 'art' of practice with reference to the personal and ethical nature of care.

Field (2004) however expressed concern that implementation of Lave and Wenger's approach to learning may result in perpetuation of 'hidden curricula' in placements whereby students are subject to 'habitual' practice and to mentors' individual attitudes, values and preferences "…… transmitting the values, the beliefs about 'the way nursing is. ' " (Alexander, 1982, p58).

White and Ewan (1997, p. 191) referred to the hidden curriculum as the unacknowledged, socialisation of education in clinical placements that leads to students learning the cultural norms, values and beliefs of that area. Professional socialisation occurs when students develop knowledge, skills, attitudes and

professional behaviour that make them more effective and acceptable participants in a group.

Others agree with Field (2004) suggesting that while professional socialisation can have these positive effects it can also promote negative effects by endorsing the continuance of habitual practice and traditional views that may not be evidence based (Alexander, 1983; Treacy, 1987; Quinn, 2000; Spouse, Cox, & Cook, 2008). Field (2004) suggested that this was the original cause of theory- practice gap.

Alexander (1982) believed the answer to the problem was within the organisation of nursing education, by encouraging a combination of teaching and learning strategies within the clinical and educational setting. This has been reiterated by consecutive government and professional standards and guidelines (Department of Health, 1999; UKCC, 1999; Nursing and Midwifery Council, 2002, 2004, 2005, 2006b, 2007b, 2009) and is a fundamental principle of the UNICEF UK Baby Friendly Initiative (BFI) best practice standards (2002, 2008).

Higher education institutions are tasked with finding the solution to meeting employers' expectations of graduates exiting the programme with the appropriate knowledge and skills for practice whilst ensuring they meet the relevant academic and statutory outcomes. In 2009 the NMC updated and published new *Standards for Pre-registration Education* to guide higher education institutions to develop, deliver and manage midwifery programmes. They provide standards for admission to the programme, and the structure and nature of it, which includes the recommended balance between clinical practice and theory, and assessment strategy. The NMC emphasise active participation in the clinical setting as does Lave and Wenger (1991).

2.1.4 Approaches to learning

The demographics of student midwives are diverse and developing a curriculum to address the different learning approaches and meet the NMC's competencies is challenging.

When searching the literature it was clear that it is widely accepted that students approach their studies using a deep, surface or strategic approach. Deep learners look for meaning in their studies and are able to relate it to previous experiences and are more able to retain the knowledge for a longer period than those using a surface approach (Entwistle & Ramsden, 1983; Mansouri et al., 2006). A deep approach may be enhanced by motivation, curiosity and willingness to understand to enhance performance. It may also be encouraged using teaching strategies that require reflection and problem-solving, for example through the spiral curriculum, whereby subjects are covered in depth from different perspectives, (Biggs, 1999; Prosser & Trigwell, 2002) and through 'real life' clinical practise or scenarios.

On the other hand, some students select a surface learning approach depending on why or what they need the knowledge for. Surface learning is about reproducing material (Prosser & Trigwell, 1999) in a descriptive manner that does not demonstrate understanding. Biggs (1999, p 14) described it as "cutting corners" to pass assignments. Because of this students are less able to apply the knowledge in different situations or contexts. However, using a superficial approach does not necessarily mean that students lack cognitive capability as some students may choose to employ a surface learning strategy as a pragmatic approach to learning (strategic approach) to pass assessments where they know they are not required to demonstrate understanding, such as class tests where they know they will be asked to list answers without having to demonstrate analysis or how they would apply this knowledge in individual scenarios (Prosser & Trigwell, 1999).

Mansouri et al. (2006) conducted an investigation of student nurses and midwives approaches to learning in Iran. A cross-sectional design was used and self-report questionnaires were distributed to a convenience sample of baccalaureate nursing (n = 186) and midwifery (n = 65) students. The study (ibid) identified a similar amount of student nurses and student midwives (64%:63%) adopted a deep learning approach, which was associated with better academic grades and outcomes. They suggested this was influenced by the student's personal motivation, teacher's

enthusiasm and teaching strategies such as group work, problem-based learning and interactive lecturing.

They (ibid) also identified that a higher percentage of nursing students adopted a strategic approach (using both surface and deep approaches) to learning than midwifery students as they progressed through the programme. Mansouri et al. (2006) suggested this was dependent on the occasion and motivation, and could be attributed to competition and requirement to achieve good grades but warned it could also result in inadequate understanding.

Overall, Mansouri et al. (2006) concluded that adoption of a strategic or a deep learning approach was associated with better educational outcome than a superficial approach alone. They recommended the use of teaching methods and strategies that encouraged deep learning such as active learning through problem-based teaching. They also suggested that students' approaches to learning should be considered when designing the curriculum, including methods of assessment. They claimed that not enough attention was given, in most nursing schools, to the impact curriculum design, content and assessment had on the way students learn and the impact this would have on their predicted behaviour in practice.

In summary, the professional regulatory body determines the structure and nature of midwifery curricula. This includes specifying competencies to be achieved at the point of registration as a midwife. The curriculum in this case study employs Bruner's spiral curriculum and Lave and Wenger's theory of 'Legitimate Peripheral Participation' to encourage students to learn through experience, both in the academic and clinical environment, and to engage with others in social settings to contextualise knowledge and develop skills for practice. Midwifery education is based on the theory of adult learning. However, it is recognised that students will approach learning in different ways and this will have an impact on their application of theory to practice. The following section will address the problems of integrating theory in practice and how this can be addressed in curriculum design.

2.2 Transferring Theoretical Knowledge to Practice

The 'theory-practice' gap is frequently discussed in the literature particularly since the Peach report *Fitness to Practice* (UKCC, 1999) identified a skills deficit in nursing and midwifery practice and the difficulty new graduates had in transferring knowledge from one situation to another (Lauder, Sharkey, & Booth, 2003). Allmark (1995) described three views cited to explain this problem:

1. Practice does not live up to theory.
2. Relational problem between higher education institutions and clinical areas.
3. Theory is irrelevant to practice.

In the past theory and practice were considered separate entities despite both being intrinsic to midwifery practice. Theory, providing knowledge that has rules and facts; practice on the other hand as the application of this knowledge in specific situations.

Practical knowledge is developed through experience of practice followed by discussion and reflection. Marks-Maran and Rose (1997, p. 115) warn about the importance of differentiating practical knowledge from habitual (custom and practice) knowledge as the latter is practice without reflection.

Not all clinical problems can be solved with theoretical knowledge alone and practitioners have to find answers from other sources. Schön (1987, p.1) described the different kinds of knowledge as originating from the "high hard ground" where research-based theory may easily be used and "the swampy lowland" of clinical practice where the most important challenges occur.

Theoretical knowledge can be described as 'explicit' and knowledge gained from experience as 'tacit' (Zander, 2007). Tacit knowing is often described as the 'know how' as opposed to the 'know what' or 'know that'. It is the unconscious ability of the competent practitioner to make the right choice or decision without recall to theory, rules or reflection and is most often associated with the proficient or expert practitioner. Due to its subjective nature it is difficult to teach or explain because it is

rooted in personal experience and tied up with personal attitudes, values and beliefs. This however can lead to problems in providing a rationale for professional decisions and as accountable practitioners midwives must be able to provide explicit reasoning to justify their actions or omissions (Price & Price, 1997; Nursing and Midwifery Council, 2008a).

2.2.1 Patterns of Knowing

Barbara Carper's *Fundamental Patterns of Knowing in Nursing* (1978) attempted to explain how nurses 'know'. She developed the taxonomy as part of her Education Doctorate with the aim of clarifying what she saw as the confusion over what should be taught in a nursing curriculum. The paper was written in a period of great change in nursing and midwifery practice and education, when knowledge was moving from description and classification towards more analytical knowledge that was seeking to explain phenomena from a holistic point of view as opposed to a one dimensional perspective of ill health.

Carper (ibid, p 13) believed that in order to successfully teach and learn about nursing it was necessary to understand the 'patterns, forms and structure' of the body of knowledge that informs nursing practice. This taxonomy can be applied to midwifery students studying any subject. She described four fundamental patterns of knowing which when applied collectively would ensure nurses (midwives) were equipped to provide appropriate, acceptable and holistic care for their clients, emphasising that each of the components were interrelated and interdependent on each other.

- Empirics- the science of nursing
- Aesthetics- the art of nursing
- Personal knowing
- Ethics- moral knowing

Empirics- the science of nursing: Acknowledging science in nursing was not as rigorous in 1978 as in other medical disciplines Carper expressed the desire for the profession to develop systematic inquiry that would "describe, explain and predict

phenomena of special concern to the discipline of nursing" (ibid, p.14) in an objective and systematic way. She described this as the first fundamental pattern of knowing in nursing and conceptualised this component as being: "empirical, factual, descriptive and ultimately aimed at developing abstract and theoretical explanations" (ibid, p.15).

Aesthetics- the art of nursing: The need to develop a specific body of empirical knowledge for nursing and midwifery practice has led to dissociation with the concept of 'art' of nursing or midwifery. Instead it is often misinterpreted to describe the psychomotor skills of practice. Carper (1978, p. 16) suggested this was partly due to the shift away from the apprenticeship-style of nursing education to a more scientific approach.

In contrast to empirical knowing, aesthetic knowing refers to knowing that is subjective and unique. Carper believed that the aesthetic meaning broadened the boundaries of the definition of the art of nursing practice to include the expressive and "creative process of discovery" rather than relying on knowledge gained through reason. Aesthetic knowing refers to the nurse or midwife considering the client as a whole rather than an accumulation of separate parts, and being able to interpret and respond appropriately to their behaviour in a particular situation rather than according abstract concepts such as rules, guidelines or protocols. Clements and Averill (2006, p. 270) described it as experiential, non-verbal and shared by the nurse and client. Jacob-Kramer and Chinn (1988) summarised it as being able to engage, interpret and envision through action. Carper referred to Dewey (1958) and Weidenbach (1964) when she discussed the aesthetic process as the difference between recognition and perception. Recognition enables the nurse to classify and label, where as perception involves pulling all the information together to form a whole.

The component of personal knowledge: Carper described personal knowledge as the most essential pattern of knowing whilst being the most difficult to teach. Like aesthetic knowing, personal knowing is subjective and is about learning to know ourselves, and utilising personal meaning gained from experience to develop

effective interpersonal skills. Although it is sometimes confused with factual knowledge used in practice it actually involves understanding ourselves and how we relate to others.

Providing adequate support to mothers who breastfeed relies on personal interaction and the development of a therapeutic relationship which in turn is influenced by how the midwife sees her or himself, as well as how they perceive the mother. Carper ultimately believed that personal knowing was "concerned with a kind of knowing that promotes wholeness and integrity in the personal encounter, the achievement of engagement rather than detachment; and it denies the manipulative, impersonal orientation" (ibid, p.20).

Ethics- moral knowledge: The context of midwifery care is complex and as a consequence can make decision making difficult. Whilst Carper acknowledged the importance of professional codes and standards in helping nurses' understand what is morally right and guiding them in the moral choices they make, she highlighted the difficult nature of decision making in unique, individual clinical situations which are often ambiguous.

Carper suggested this fundamental pattern of knowing goes beyond familiarity with and understanding of nursing codes and guidelines, believing it to include other forms of moral knowing; knowing what is right and wrong in the provision of care.

In 1993 Munhall (2001) added a fifth pattern to Carper's taxonomy, which she labelled 'unknowing'. She proposed that unknowing was related to developing an openness to other ways of doing things and believed that nurses can unwittingly become limited by their own beliefs and stop looking for further explanation in their practice. Munhall explained this pattern citing the poet James Russell Lowell "only by unlearning wisdom comes" (2001, p. 42).

Like Bruner (1996), White (1995) believed the context of learning was missing from this taxonomy and added yet another pattern 'socio-political' knowing which she

believed to be fundamental to all the other patterns. This pattern shifts the focus from the nurse-client relationship and situates it in a wider context, thus encouraging the nurse to examine professional practice and the politics of service provision. White (1995, p. 84) related socio-political knowing with cultural identity and suggested that in order to understand concepts of health, as they pertain to both the nurse and client, the nurse must have a wider knowledge of the social, political and economic influences on service provision.

Although the NMC (2009, pp. 3-5) do not explicitly cite Carper's fundamental patterns of knowing they are reflected in the guiding principles for professional competence and fitness to practice, highlighting seven areas that students must understand and practice competently in:

Provision of women-centred care: The emphasis is on practice being women-centred and responsive to the needs of individual women throughout the provision of holistic care which respects unique situations and experiences applying the principles of equity and fairness.

Ethical and legal obligations: Promotes the ethical framework of respect for the wellbeing of women and their families. The NMC acknowledge that many healthcare dilemmas are complex and midwives must therefore be aware of their moral obligations to know what is right and wrong and take responsibility for their actions (or omissions) in individual situations.

Respect for individuals and communities: Midwives must always demonstrate respect for and provide non-judgemental care for women.

Quality and excellence: It is essential that midwives "promote and facilitate the physiological process of childbirth (includes breastfeeding), identify complications…, communicate and refer in a timely manner to and from appropriate colleagues, and implement emergency measures and transfer of care."

The changing nature and context of midwifery practice: Midwifery care is dynamic and it is essential that midwives keep their knowledge and skills up to date whilst continuously adapting to changes in demographics, systems of service provision and technology.

Lifelong Learning: Midwives must adhere to the rules, standards and codes and continually develop personally and professionally. The NMC highlights the need for programmes of education to include communication skills as well as preparing students to work collaboratively within the multiagency team.

Evidence-based practice and learning: Midwives must ensure their practice is informed by the best evidence and they must therefore develop the skills to critically analyse research and apply it to relevant situations.

In summary, the theory-practice gap continues to be a problem in midwifery practice. Knowledge gained through experience is considered key to curriculum design however caution is required if practitioners are unable to justify their practice. Carper (1978) developed a taxonomy to explain how nurses 'know' and the foundations for what she believed should be taught in the curricula to equip students with the appropriate knowledge and skills for to provide holistic, individualised care. This taxonomy has been built on by other writers to emphasise the need for learning in context and the development of wider socio-political knowledge to inform practice. Experiential learning, in either the academic or clinical setting, is essential in achieving these aims and will be explored in the following section.

2.3 Experiential Learning

The aim of experiential learning is the

> "transfer of learning from the theoretical to the practical…In this way students learn how to apply theories to real clinical situations, they find out how best to learn and they become socialised into the profession."
>
> (Chamberlain, 1997, p. 91)

Preparation and practice before access and exposure to relevant clinical experience with appropriate mentorship are crucial elements in achieving this (Wooley & Jarvis, 2007). Many theorists have discussed and debated the purpose of experiential learning (Rogers, 1983; Schön, 1983; Kolb, 1984). Jarvis and Gibson (1997, p. 75) referred to it as being "about learning from primary experience, that is learning through sense experiences." This experience can either refer to experience in practice or as simulated experience usually in skills laboratories.

Bandura (1977) described social learning as observing others to learn something. He believed that humans were born with no behaviour patterns and developed them through observation or modelling. In midwifery education the model can be either a lecturer or a mentor in practice. Social learning involves more than developing psychomotor skills; it involves developing interpersonal skills and professional attitudes.

Orland-Barak and Wilhelm (2005, p. 462) referred to the "learning to nurse puzzle" when they conducted a phenomenological study in Israel, of the particular meanings students, trained in an apprenticeship model, attributed to their experience of clinical practice through written stories. They acknowledged that the study did not include the most usual constructivist setting for learning but suggested it had value by providing an insight into this traditional form of training which continues to be influential in current programmes. Previous studies of such 'training' programmes focused on knowledge and the character that was thought appropriate for a nurse

whereas this study aimed to view the apprenticeship model using a constructivist-interpretive view to develop a better understanding of the apprenticeship orientation to nursing and the rich content of practice.

They described student learning in the clinical context as

> "complex and multifaceted" and that novices expected to see the "application of theory in practice" and develop the "tools of the trade" however "the acquisition of right/wrong/acceptable or unacceptable behaviours, are often incompatible with the unpredictable and conflicting character of the rich setting of nursing practice." (Orland-Barak & Wilhelm, 2005, p456)

Orland-Barak and Wilhelm found that despite the rich content of clinical practice the students' narratives were technical and medically orientated focusing on facts and outcomes rather than processes and principles applied to individual situations or how they and the clients felt. They suggested this was due to the focus on performance.

They referred to Carper's (1978) fundamental patterns of knowing that detail the essential components of holistic learning and teaching to ensure the depth and breadth of understanding that is crucial for student nurses and midwives to develop the ability to effectively provide care through: empirics, aesthetics, personal knowing and ethics (Carper, 1978 op. cit. section 2.2.1).

Fawcett, Watson, Neuman, Hinton-Walker & Fitzpatrick (2001) also support a holistic approach arguing against exclusive emphasis on one method of acquiring knowledge such as empirical theory and recommend an approach, such as Carper's (1978) and White's (1995), to facilitate different ways of viewing and interpreting evidence to put into practice.

Orland-Barak and Wilhelm believed the students in the study were only able to demonstrate empirical knowledge and recommended that strategies were required to develop the other areas of Carper's four patterns of knowing. This was also

demonstrated in the fact that the novice students did not document care in a holistic fashion but instead used a fragmented approach. They concluded that the rich content of practice alone could not facilitate deep learning and they assumed the apprenticeship model did not encourage the students to reflect on their practice.

Orland-Barak and Wilhelm supported earlier work by Berliner in 1986 and 1991 that novices across disciplines, were rigid in their thinking and unable to apply knowledge in differing contexts and focused on their own needs and performance, their need to pass assessments. They also suggested more attention be paid in the curriculum to teaching methods and strategies to enable the rich content of learning and for students to be able to contextualise it in practice.

2.3.1 Learning through reflecting on experience

Reflection and reflective practice are ubiquitous terms in nursing and midwifery practice and are integrated into all curricula as they are associated with deep learning (Nursing and Midwifery Council, 2009). Schön (1983) highlighted reflection as a defining characteristic of a profession.

Reflective practice is when practitioners learn through experience and through the process of reflection identify how they feel about the situation in light of current knowledge and plans for future action. Boud, Keogh and Walker (1985) claimed that structured reflection is key to learning from experience and described three stages students go through: preparation, engagement and processing, including reflective activity at each stage.

Schön (1983) divided the process of reflection into two categories; reflection-on-action and reflection-in-action. Reflection-on-action referring to the practice of critically thinking about an event after it has occurred; making tacit knowledge explicit. Like tacit knowing, reflection-in-action is usually only evident in the competent practitioner who has the ability to reflect whilst carrying out a procedure or providing care, often without knowing they are doing it, using creative approaches.

Johns (1995) compiled a set of questions based around Carper's four patterns of knowing which aim to encourage the practitioner to be reflexive about their practice and adaptable to new situations. He used Carper's work to demonstrate that his model is a framework designed to challenge practice and in particular to interpret subjective experiences and explore actions. Johns (ibid, p. 226) pointed out that becoming an effective practitioner is not only about developing technical skills but involves personal deconstruction and reconstruction, emphasising that learning through reflection is a process of enlightenment (understand who I am), empowerment (change who I am), and emancipation (liberate who I need to be).

Heath (1998) suggested that where problems are complex reflection may assist nurses and midwives to develop a reasoned argument for change. She also acknowledged the constraints of time to reflect in the clinical setting however reiterated the importance of reflection emphasised by the UKCC (1996) and repeated consistently by the NMC (Nursing and Midwifery Council, 2009).

2.3.2 Moving from novice to expert

Benner (1984; 2001) aimed to provide evidence to support the notion that practice is a legitimate way of knowing through the exploration of experiential learning and skill acquisition. She also believed that nurses could articulate their clinical knowledge through reflection on practice.

Benner (ibid) applied the Dreyfus situational model of skill acquisition (based on chess players and airline pilots) to nursing practice to explore the differences in clinical performance of new and expert nurses. Using a phenomenological approach she separately interviewed forty two paired participants, preceptors and newly qualified nurses, about a critical incident they were both familiar with. She also interviewed or observed another 51 experienced nurses, 11 newly graduated and 5 senior nurses. Through analysis of her findings she was able to describe performance characteristics and identify the learning needs of each level from novice to expert which she believed demonstrated that knowledge was embedded in expertise.

The model is based on the assumption that a nurse moves through five levels of proficiency:

1. *Novice:* rule governed behaviour; situations are considered fragmented parts.
2. *Advanced beginner:* gaining experience of similar situations; developing a sense of the situation as a whole.
3. *Competent:* developing ability to consciously plan care using abstract concepts and analysis.
4. *Proficient:* perceive the situation as a whole based on previous experience acknowledging any differences.
5. *Expert:* perceives situations holistically; actions appear unconscious as deliberate recall to rules and guidelines is not required.

Benner suggested these levels reflect changes in skilled performance. First is moving away from abstract concepts such as rules and guidelines. Secondly, being able to assess the situation as a whole rather than as fragmented parts, and finally moving from detached to involved.

Field (2004) questioned Benner's theory saying that although she advocated that novices work with experts she was vague about methods of teaching and learning in practice and did not include the development of psychomotor skills. Benner also professed that it is through experience in learning situations that knowledge is gained. Field (ibid) however expressed her concern that expert practitioners may not appreciate their role in communicating skills possibly because practice becomes so instinctive that they cannot articulate the steps used in decision making.

Student midwives' knowledge and skill in relation to breastfeeding would be expected to reach level three or four, competent- proficient, by the point of registration. Some authors suggest this has not been evident in the past (Sikorski et al., 2002; Chiu, Gau, Kuo, & Chung, 2003; Hall-Moran et al., 2004; Renfrew et al., 2005) which is one reason for the introduction of the BFI best practice standards for higher education.

In summary, experiential learning is often thought as learning in the clinical area however for the purpose of this study experiential learning strategies in the academic setting will also be considered. Learning through experience facilitates opportunity for students to learn through observation and practise, promoting the development of psychomotor skills as well as professional attributes. Practice-based placements take students a step further in providing real life experiences where they can integrate their knowledge and provide holistic care. Reflection in and on practice is an important tool for students to make sense of these experiences. Appropriate placements and mentorship are crucial in providing these learning opportunities and will be the focus of the next section.

2.4 Supporting Student Midwives in Clinical Practice

As the NMC stipulate that midwifery curricula are comprised of a minimum of 50% practice (Nursing and Midwifery Council, 2007b, 2009) clinical learning and mentorship are an essential component of this current study. Mentorship has been an area of great debate since its introduction following the launch of *Project 2000* (UKCC, 1986) which moved nursing and midwifery education away from the hospital- based apprenticeship model to becoming university- based with clinical placements and mentors. Much of the debate over the last couple of decades has particularly focused on definitions, roles and relationships with mentees (Myall, Levett-Jones, & Lathlean, 2008). Attempts were made to clarify issues surrounding mentorship however it was not until 2006, following extensive consultation, that the NMC produced new standards for mentors in the document *Standards to Support Learning and Assessment in Practice* (Nursing and Midwifery Council, 2006b, updated in 2008).

It is important therefore that lecturers work closely with mentors to ensure they are adequately prepared for their role and orientated to the course outcomes, competencies and assessment procedures, whilst ensuring placement planning is appropriate for experience and student numbers (Dolan, 2003).

Neary (2000) pointed out that some mentors feel unprepared, ill equipped and lack confidence to support and assess students effectively. Likewise Scholes and Albarran (2005) have identified that some mentors struggle to negatively assess students when appropriate. Practice education facilitators were introduced in Scottish hospitals in the last few years to prepare, support and guide mentors in their role, whilst recognising and promoting learning opportunities. However, to date, not all midwifery practice-based placements have a midwifery practice education facilitator.

Nevertheless, despite the quality of mentorship preparation, there will still be discrepancies in amount of time mentors spend with students to ensure they have access to breastfeeding experience possibly considering this an extra burden to their

role as a midwife rather than a fundamental part of it (Neary, 2001; Dolan, 2003) or due to a lack of time to dedicate to the process, lack of motivation or the student-mentor relationship (Bray & Nettleton, 2007; Nettleton & Bray, 2008).

There is also a recognised problem of disparity of exposure to clinical experience (Dolan, 2003), and particularly so for breastfeeding as breastfeeding rates vary vastly from one locality to another. This is exacerbated by the need to balance working with the same mentors for approximately 50% of the placement (Nursing and Midwifery Council, 2006b) to ensure continuity with an ever increasing clinical workload for mentors.

In a longitudinal study Gray and Smith (2000) employed a grounded theory approach to capture changes in students' perspective of their mentor over time. Ten students consented to be interviewed four times throughout their three year nursing programme and to keep a diary of their thoughts and feelings regarding their supernumerary status. On each placement students were allocated a mentor who had responsibility to ensure they had opportunities to put theory into practice and for assessing them.

Using a constant comparative method of analysis the authors found that all students experienced what they felt was a good mentor at least once (concern for the student as an individual; approachable, confident in their own ability, patient and understanding; have a humour; good communicators; organised and enthusiastic). Students felt that good mentors had good teaching skills and were able to guide them through observation to active participation in practice. They felt feedback was important in their development.

Gray and Smith (2000, p. 1548) used Darling's (1985) term 'Toxic mentors' to describe avoiders who have as little to do with students as possible; 'dumpers' who leave students to their own devices; 'blockers' who either refuse to provide learning opportunities, withhold information, or inhibit development by excessive supervision and 'destroyers' who repeatedly undermine the student. Gray and Smith (ibid)

reported that all students in their study had come across toxic mentors reporting that that they coped by keeping a low profile.

Despite this Gray and Smith (ibid, p. 1548) found that all students in this study who had experience of a toxic mentor still valued having a mentor whom one described as the 'linchpin of their learning in practice'.

More recently Nettleton and Bray (2008) conducted a study focusing on the factors that influence the mentor- mentee relationship in either a positive or negative way; what the professional and personal needs of the mentees are and what the training and development needs of mentors are. A postal questionnaire was sent to mentors in five Trusts in North West England. A different questionnaire was sent to mentees. Both questionnaires contained opened and closed questions. The respondents were also invited to participate in a semi structured interview.

When asked if they felt mentorship was an expected part of their job 45% of midwives agreed and 39% felt it was not recognised in their workplace. They felt unsupported to carry out this role due to lack of time and also that the role was not sufficiently recognised in terms of status or remuneration. When asked what would improve the mentoring process time was top of the list closely followed by increased input from the higher education institution, training and updates. This was reiterated by student midwives who also felt the role should be voluntary.

Nettleton and Bray (ibid) argued that with the increasing emphasis on assessment that the true meaning of mentorship is at risk of being diluted. They suggested that if the mentors' role was that of teaching and guidance, and that students could choose their mentor, it would improve relationships and facilitate opportunities for the pastoral aspects to be included in the role. They acknowledged that there is no evidence to support the idea that mentees choose their mentor but identified many respondents in their study felt this should be a voluntary role. In an earlier study Andrews and Chilton (2000) also found mentors felt the role was imposed on them.

Chamberlain (1997) conducted an ethnographic study, using a grounded theory approach, over an eighteen month period to explore how student midwives (n = 25) learn in clinical practice. She (ibid) found most midwives used observation as a teaching strategy however the students reported that they were reticent to ask questions during these episodes. The students and a significant number of midwives believed observation alone was sufficient leading to the expectation that students should be able to replicate the performance without reflection or feedback. However, it was identified that community midwives were more likely to provide feedback (often in the car) than hospital-based midwives who gave little explanation.

The amount and intensity of clinical supervision was found to be varied amongst midwives and clinical areas and students were usually only closely supervised in the initial stages of the programme resulting in students feeling insecure about their skills. Chamberlain (ibid) suggested that time constraints and poor staffing levels may have contributed to the lack of feedback or assessment of performance. Nonetheless a lack of congruence was highlighted between the amount of supervision students felt they needed and what the midwives believed they needed. There was also incongruence between what the students reported as lack of confidence and what the midwives perceived as lack of motivation to perform new skills or tasks.

Another strategy some students in Chamberlain's study (ibid) used was indirect learning; listening to interactions between staff. Chamberlain however noted that at times midwives would withhold information regarding decisions made about the care of women resulting in some newly qualified midwives lacking in confidence in their practice.

Chamberlain reported 'trial and error' to be the main learning strategy used when there was a lack of structured clinical learning in placements. Midwives advocated this was based on the student's need to perform in order to learn. However, this performance was often unsupervised with no time for feedback or reflection once complete. She observed that students were commonly told to call a midwife if there

was a problem. If problems did arise she found there were generally two responses; the first to teach the student whilst resolving the problem but more commonly the midwife would send the student to deal with another task whilst she/he resolved the problem alone.

Anxiety was a major issue reported by the students particularly in relation to lack of supervision. They also felt that there was a lack of midwife teacher presence in the clinical areas and that they were detached from the realities of clinical practice. Chamberlain (ibid) suggested that student midwives felt a sense of loss when they carried out tasks for which they felt unprepared. She believed this contributes to feelings of lack of confidence, competence and increased anxiety and stress. She concluded that 'debriefing' or feedback through reflection was the best way to resolve these feelings and make sense of the experiences.

Students also reported a lack continuity of supervision and that each midwife had a different way of doing things. This also led to mentors being unable to assess students' performance as they were unfamiliar with their progress.

Chamberlain (ibid) also observed good clinical teaching from midwives who generally had good communication skills and were confident in their own abilities. These midwives looked out for learning opportunities for students and adapted their teaching strategies to meet the students' learning styles. They also provided appropriate supervision and feedback. Interestingly the majority of these midwives had undertaken further education since initial registration as midwife.

A lack of visibility of the midwife teachers in clinical areas to support students was noted in this study (ibid) suggesting that this added to the students' sense of loss. This was supported by Hilton and Morris (2001) who conducted an evaluation study of final year physiotherapists (n = 43) who concluded that collaboration between the university and clinical educators in facilitating learning opportunities was essential to success for developing skills conducive to clinical practice.

Mentors are a very influential group for students learning about breastfeeding and after prolonged exposure to the mentor students mirror the attitudes and practices, positive or negative, as in Lave and Wenger's (1991) Yucatec midwives or Alexander's (1982) 'hidden curriculum'.

Hollins-Martin and Bull (2004) suggested that some students conform to the mentors' ideas and practices as they are seen as more credible than the lecturers because they are 'hands on', experiencing real life practice whereas lecturers are seen as removed from practice. They also found that social relationships were more influential on midwives decision making, particularly with those in a position of authority.

It is apparent in this discussion that despite some of the problems associated with practice-based placements and mentorship students highly value the input from clinical mentors. Adequate preparation of mentors and close collaboration with university teachers is essential to support practitioners, as is recognition of the importance of this role within the profession. Eraut (1985, p. 131) argued that "the quality of initial professional education depends to a considerable degree on the quality of practice; and that in turn is influenced by the continuing education of the practitioners". Breastfeeding practices have changed over the last twenty years as new research has emerged which has been a challenge for mentors to keep up to date to both support breastfeeding mothers and student midwives (Furber & Thomson, 2008). Assessment of student confidence and competence is another key component of this role and will be explored in the following section.

2.5 Competency and Confidence

Traditionally nursing and midwifery followed an apprenticeship model of training however the introduction of *Project 2000* (UKCC, 1986) moved nursing and midwifery education from an apprenticeship model to a more theoretical based programme with supernumerary status for students in clinical placements. Unfortunately the greater emphasis on theoretical learning led to concerns about confidence and competency of clinical skills in students and newly qualified nurses and midwives. Some authors believed the reasons for their lack of confidence and competence was due to a lack of clinical experience and practising skills due to the emphasis on theoretical learning and also that the clinical placements were not long enough (While, Roberts, & Fitzpatrick, 1995; Carlisle, Luker, Davies, Stilwell, & Wilson, 1999; Dolan, 2003).

It is claimed that employers also complained that students were not fit for practice, and students themselves felt unprepared at the point of registration to make clinical decisions and provide appropriate care in practice. In response the *Making a Difference* (Department of Health, 1999) and the Peach report *Fitness to Practice* (UKCC, 1999) proposed nursing and midwifery programmes become competency-based and student-centred with equal value placed on practical and theoretical preparation and that assessment include practical performance and evidence-based portfolios of practice. The reports also recommended increased involvement of clinical staff in teaching clinical skills and that students should have a period of rostered service at the end of the programme to consolidate their learning and prepare them for employment.

The concept of developing competence and equipping students with confidence is inherent in curriculum development however high levels of confidence do not necessarily mean high levels of competence. Eraut (1994) described competence as the ability to use knowledge derived from experience, in the holistic sense, to inform actions in the best interest of clients within both familiar and unfamiliar situations. Implicit in this is understanding of the cultural and social context whilst critically

evaluating the possibility of alternatives to increase choice for the client and provide holistic care. As this is unobservable reflective practice is one tool that practitioners can use to assist to explain it (Schön, 1983). Competence is the hallmark of the proficient and expert practitioner and is derived from integration of the attributes knowledge, skill and attitude. Competency is however directly observable and refers to specific capabilities (Eraut, 1994).

Confidence or self-efficacy on the other hand refers to one's sense of agency and ability to exert control over perceptions of self, environment or situation.

> "it is partly on the basis of efficacy beliefs that people choose what challenges to undertake, how much effort to expand in the endeavour, how long to persevere in the face of obstacles and failures and whether failures are motivating or demoralising." (Bandura, 2001, p. 10)

The concept of self-efficacy was developed by Bandura (1977; 1994) who believed that students' perceptions of their self-efficacy depended upon four sources of information: previous experience of a similar situation (mastery experiences); vicarious experience (observation); verbal/ social persuasion (usually someone in authority) and self evaluation of physiological state (mood). Bandura suggested that if a student was unsuccessful this was often due to a lack of self-efficacy in their ability to perform a skill rather than lack of knowledge thus having an impact on learning and skill development as self-efficacy is independent of skill level.

In agreement Pintrich and De Groot (1990) proposed that increasing a student's self-efficacy can improve cognitive learning and ultimately student performance. Saks (1994) suggested that levels of self-efficacy will have a direct effect on levels of stress and performance and therefore those who begin a placement feeling confident in their abilities possibly due to previous experience would be less anxious. Interestingly in a national evaluation of pre-registration education in Scotland, which included both student midwives and nurses, *n=2011,* with a response rate of *n=777.*

Lauder et al. (2008) reported that diminished self-efficacy was not a problem despite their access route to admission on the programme and current social circumstances.

Students tend to be more confident about their competence if the emphasis of learning is on practical skills and high levels of confidence are associated with more effective learning and improved performance (Farrand, McMullan, Jowett, & Humphreys, 2006).

Farrand et al. (2006) conducted a study of two groups of students; the first on the '*Project 2000'* curriculum and the second on (UKCC, 1986) the '*Making a Difference*' (Department of Health, 1999) competency- based programme. They found significantly increased levels of confidence in the competency- based approach in most areas but particularly in clinical skill, decision making and delegation.

Dolan (2003) suggested that longer clinical placements and increasing the emphasis on clinical skills improves self-efficacy. Farrand et al. (2006) support this and reported that this finding is also common to other healthcare professional programmes who have increased the practical components of their programmes. Caution must be applied though as reported confidence does not always equate to increased competence. Morgan and Cleave-Hogg (2002) argued that clinical experience and level of confidence of 144 medical students had no predictive value in performance at simulated scenario assessments.

Donavan (2008, p. 513) highlighted that confidence could be either a personal trait or be situationally specific affected by

- Educational programme
- Quality of learning experiences
- Personality

She conducted a study to explore confidence in students who graduated from three or four year midwifery programmes. Donovan (2008) found that three year graduates scored less than the four year students even though the amount of time allocated for

skill acquisition on both courses was the same. She also referred to work by Currie (1999) who suggested feedback from mentors, and the manner in which it is delivered, could have a profound effect on students' confidence.

The NMC (2009, p. 3) continues to support a competency-based approach highlighting the importance of ensuring pre-registration midwifery education programmes prepare students to "practice safely and effectively so that , on registration, they can assume full responsibility and accountability for their practice as midwives". The NMC provides guiding principles that relate to "competence and fitness to practice, and the promotion and facilitation of the normal physiological processes of childbirth" (childbirth relates to antenatal, intrapartum and postnatal periods and therefore includes breastfeeding), stating that students must demonstrate competence in:

- Sound, evidence-based knowledge of facilitating the physiology of childbirth and the newborn, and be competent in applying this in practice.
- Knowledge of psychological, social, emotional and spiritual factors that may positively or adversely influence normal physiology, and be competent in applying this in practice.
- Appropriate interpersonal skills (as identified in the Essential Skills Cluster-communication) to support women and their families.
- Being autonomous practitioners and lead carers to women experiencing normal childbirth and being able to support women throughout their pregnancy, labour, birth and postnatal period, in all settings including midwife-led units, birthing centres and the home.
- Being able to undertake critical decision- making to support appropriate referral of either the woman or baby to other health professionals or agencies when there is recognition of normal processes being adversely affected and compromised.

(Nursing and Midwifery Council, 2009, p. 4)

When developing the midwifery competencies the NMC (2009) divided them in to four domains already present in previous statutory guidance:

- Effective midwifery practice.
- Professional and ethical practice.
- Developing the individual midwife and others.
- Achieving quality care through evaluation and research.

In the document *Standards for Pre-registration Midwifery Education* (Nursing and Midwifery Council, 2009) examples of the competencies are given and matched against the relevant essential skills cluster (Nursing and Midwifery Council, 2007a) (see appendix 3).

Butler, Fraser and Murphy (2006) conducted a case study to identify essential competencies required of a midwife at the point of registration. Participants included newly registered midwives (*n* = 39), their assessors, midwife lecturers and experienced midwives (*n* = 20). They found the most essential competencies were to practice safely, have the right attitude and good communication skills. To achieve this it was suggested that the midwife must be relatively self-sufficient, use up to date evidence and have both self and professional awareness. Participants highlighted the need for effective communication skills as essential to good practice. Butler et al. (ibid) concluded that midwifery competency models should always include attitude and effective communication skills in addition to those required for safe practice and that they should be explicitly identified in the curriculum content and assessment strategy.

2.5.1 Assessing fitness to practice

Determining competence and confidence is a challenge to midwifery educationalists and mentors because it is often considered to be subjective and inconsistent between assessors. Benner stated that competence is when a practitioner has built up experience and is able to see his/her actions in terms of long range goals and plans and is based on "considerable conscious, abstract, analytic contemplation". She goes on to say that they have "a feeling of mastery and ability to cope" (2001, p. 25).

Many studies and models have been developed to define competence such as Cheetham and Chivers' (1999) model of competence which includes all the facets required for a midwife to be competent in breastfeeding support:

- Metacompetencies of communication (self development, analysis and problem solving).
- Knowledge and cognitive competencies (contextual, practical/ theoretical procedures).
- Functional competencies (occupation specific cognitive and psychomotor skill).
- Behavioural competence (communication skills and team work).
- Ethical competencies (law, professional rules and codes, client- centred).

However, there continues to be criticism of competency assessment tools in both nursing and midwifery in the United Kingdom (UK) (Bradshaw, 1997; Bradshaw & Merriman, 2008). Chapman (1999) suggested that assessment of competency is subjective due to the variety of placements and experience as well as the different numbers of people carrying out the assessments. This situation continues to be of concern as almost ten years later Bradshaw and Merriman (2008) reiterated this suggesting that there was still no 'uniform and mandatory system' in place to ensure nursing practitioners are safe and competent at point of registration. In a qualitative study conducted by Webb and Shakespeare (2008) to explore how mentors make judgements about competence they confirmed research carried out by Scholes et al. (2004) that judgements on a students' competence can be subjective and dependent upon their relationship with the student.

Dolan (2003) also found that some of the students in her study felt that the impetus was on getting the competencies 'signed off' which detracted from their experiences of holistic care, describing it as a numbers game. Furthermore Webb and Shakespeare (2008) reported the emotional labour students had to put into the relationships with their mentors to portray themselves as competent and confident and that this could be emotionally draining for the student and could negatively affect the learning experience.

Assessment of competence is an integral part of the educational cycle where students' needs are assessed, objectives are set, teaching methods designed and assessment strategies developed. Assessment also enables universities to demonstrate quality of the programme as a feedback mechanism on student learning through the acquisition of knowledge and skills (Wellard, Bethune, & Heggen, 2007).

However, McCormick (1999) suggests that much of what is taught in the university setting is geared towards academic assignments and passing examinations rather than dealing with 'real life' practical situations as they arise. In an attempt to readdress this situation Webb and Shakespeare (2008) recommend improved mentorship preparation and closer links between educationalists and mentors.

The NMC (2009, p. 18) recommend that both midwife teachers and mentors be involved in the assessment of student midwives and to use a variety of assessment strategies to assess knowledge, practical skills and attitude, including at least one unseen examination under supervised conditions.

A variety of evaluation and assessment methods were employed in the programme in this current study to assess breastfeeding knowledge and skills, both formative and summative in both the academic and clinical setting. These included an objective structured clinical examination (OSCE) at the end of year one to assess psychomotor, cognitive and affective skills in relation to basic breastfeeding management. Brosnan, Evans, Brosnan and Brown (2005) claimed that students felt more prepared for practice and more confident following an OSCE. Jay (2007) agreed adding that students believed OSCEs to be a reliable way of assessing their competence and had increased learning benefits because of its practical nature rather than theoretical. However, successful completion of these assessments may demonstrate knowledge and skill at that time, but given the continuing evidence to suggest poor support for women and the continued poor breastfeeding rates in the UK, it appears that they are not reliable indicators that individual student midwives will be competent to support mothers who breastfeed at the point of registration. This has been reiterated in the

literature where midwives acknowledge that they feel unprepared for practice (Cantrill et al., 2003; Chiu et al., 2003; Renfrew et al., 2005; McFadden et al., 2007).

2.5.2 Assessing competence in practice

The practice assessment tool used to assess student midwives in the BSc in Midwifery programme is based on a combination of Kathleen Bondy's 'criterion-referenced rating scale (1983), a competency- based tool examining standard of procedure; quality of performance; and assistance needed to perform the behaviour, and the Scottish Credit Qualifications Framework 2001 (University of Paisley, 2001a). The assessment tool is a four point rating scale that (Bondy used a five point rating scale), in line with NMC standards, assesses the three domains of learning; knowledge (cognitive), practical skills (psychomotor skills) and attitude (affective).

- **Dependent Year 1** the student is dependent on the mentor for demonstration of practice; acquisition of practical/ social skills; continuous verbal cues; demonstration of behaviour related to professional code of conduct.
- **Supervised Year 2** the student is practising a variety of practical/ social skills; demonstrates appropriate professional behaviour with guidance; requires frequent and occasional behavioural cues from the mentor.
- **Supported Year 3** the student is practising a variety of practical/ social skills without continuous supervision; demonstrates application of theory to practice and appropriate professional behaviour; can demonstrate safe practice and undertake a range of skills with confidence, co-ordination and efficiency.
- **Independent Year 3** (final 2 placements) the student demonstrates the level of proficiency required for registration but receives support where necessary. (University of Paisley, 2001a)

Each of the four points above are assessed using the following criteria, which reflect Carper's fundamental patterns of knowing (1978):

1. *Professional standards and procedures for the skill/ behaviour*. The intention is to develop midwives who have acquired evidence-based knowledge and developed appropriate values, attitudes and interpersonal skills that will promote effective therapeutic relationships. This criterion is interpreted in terms of safety, accuracy, effect and affect.
2. *Qualitative aspects of the performance* which includes the degree of skill development (includes time, space, equipment), confidence, coordination, efficiency and expenditure of energy (Bondy, 1983). The student is assessed on confidence, co-ordination and efficiency.
3. *Assistance needed to perform the skill/ behaviour*. This refers to the type or amount of assistance or cues, which can be directive or supportive, required to demonstrate the skill/ behaviour. (University of Paisley, 2001a)

At the time of the data collection in this case study although clinical practice was assessed and successful achievement at appropriate stages was required for progression; it did not carry any credit towards the final award of degree.

Bondy (1983) believed the benefits of such an assessment tool to be that it could be applied to professional behaviour and enables assessors to provide more accurate feedback for students as well as a fair assessment of performance.

In conclusion, competence is the central tenet of a registered midwife. The NMC define the competencies required of a midwife at the point of registration (purpose of the curriculum) but do not stipulate how they are best assessed. There is however agreement in the literature that assessment of competence must include cognitive and affective as well as psychomotor skills.

2.6 Overview of Breastfeeding Education

There is a dearth of information available on how breastfeeding is specifically taught in midwifery curricula in the UK today which may reflect the lack of value placed on breastfeeding by society (Dykes, 2003). However, the evidence that is available relating to breastfeeding education in the UK focuses on the lack of formal education opportunities and 'chaotic' learning environments (Renfrew et al., 2005; Smale, Renfrew, Marshall, & Spiby, 2006; Jackson, 2007; McFadden et al., 2007).

Over the last decade there have been many studies conducted to examine the issue of healthcare professionals' lack of knowledge and skills in general and the effects on breastfeeding rates. There appears to be a consensus that in order to ensure health professionals provide competent and confident support for mothers who breastfeed their babies, provision of effective education and training is essential in undergraduate programmes as well as continuous professional development (UNICEF, 2001; Cantrill et al., 2003; Department of Health, 2004; Renfrew et al., 2005; Ingram, 2006; National Institute for Health and Clinical Excellence, 2006; Jackson, 2007; McFadden et al., 2007).

Renfrew et al. (2005) conducted a multidisciplinary breastfeeding knowledge and skills assessment which claimed that as well as a deficit in formal breastfeeding education, there was also a lack of infrastructure to support breastfeeding education within the clinical setting. Apart from the UNICEF Baby Friendly Initiative (2001) they found that there were few formal learning opportunities including a lack of provision of breastfeeding education via higher education institutions. Participants in this study expressed concern that this was having a direct effect on care provision as professionals were giving mothers inconsistent advice based on a lack of knowledge.

These findings were similar to comparable multidisciplinary studies in other countries with poor breastfeeding rates that found that health professionals felt they did not have sufficient education and training to support women (Freed, Clark, Cefalo, & Harris, 1995; Cantrill et al., 2003; Al-Nassaj, Al-Ward, & Al-Awqati,

2004). Freed, Clarke, Harris and Lowdermilk (1996) conducted a study of five American nursing programmes and reported that although most students attended lecturers on breastfeeding only a quarter gained instruction through clinical activity. This is supported by Hellings and Howe (2004) who found participants felt their personal experiences of breastfeeding to be the most valuable source of information however they did not have the ability to answer questions on breastfeeding management correctly.

There have been several studies that have demonstrated that structured evidence-based training programmes for healthcare professionals increases confidence, knowledge and skill such as Ingram (2006) who introduced a CD ROM breastfeeding learning package to primary care teams. Using a questionnaire to assess attitudes, knowledge and management of breastfeeding she found an improvement in all areas for each professional group and reported improvements in care. These findings are supported by Kronborg, Vaeth, Olsen and Harder (2007) who suggested that introducing an interactive programme for health visitors improved their knowledge and self-efficacy.

Tappin, Britten, Broadfoot and McInnes (2006) conducted a cross-sectional study in the Glasgow in 2000 to explore health visitors' intervention, activities and attitudes towards breastfeeding. A significant finding of this study was that mothers who were breastfeeding at the first health visitors' visit were more likely to still be breastfeeding at the second routine visit if the health visitor had been trained in supporting breastfeeding mothers within the last two years. They suggested an evidence-based programme similar to the Baby Friendly breastfeeding management course would be appropriate but recognised the need for further research in this area.

The BFI (UNICEF, 2002, 2008) recommend a minimum of 18 hours of breastfeeding education throughout midwifery and health visitors programmes to rectify this problem before students become registered practitioners. This is supported by Dodgson and Tarrant (2007), who conducted a study to determine the effectiveness of an infant feeding educational intervention on student nurses in the USA. The

intervention group received 10 hours of didactic teaching and an eight week clinical placement. They found that the intervention group scored higher on the knowledge survey than the control group and more readily associated breastfeeding with a positive maternal and child outcome. Despite this increase in knowledge the mean score was only 54.3%, comparable to a similar study conducted by Spear (2004) demonstrating that more work needs to be done. Dodgson and Tarrant (ibid) suggest revisiting and integrating infant feeding education in other courses where appropriate. The majority of students in this study reported that they would be more likely to promote breastfeeding using evidence- based knowledge and less likely to practice in ways that could be detrimental to successful breastfeeding.

Renfrew et al. recommend that

> "universities should be fundamental in providing opportunity for pre and post registration education for all health professionals, perhaps adopting the *UNICEF UK Baby Friendly Standards for Pre-registration Education* (UNICEF, 2002) as a framework, and developing self-study approaches and close links with clinical areas to enable supervised practice."
>
> (Renfrew et al., 2005, p. 87)

2.6.1 UNICEF Baby Friendly guidance

Although the BFI (UNICEF, 2002; 2008) do not state how the outcomes should be integrated into curricula they do expect that students will exit their programmes with the knowledge and skills to support breastfeeding mothers in line with the ten steps to successful breastfeeding and seven point plan (UNICEF, 1998). Prior to 2009 written guidance from the BFI was limited however since then they have produced a guidance document that highlights that although practical breastfeeding management skills are essential so are other more generic and transferable skills.

"It is expected that, as for all other parts of the curriculum, certain educational principles will apply. In particular, students would be expected to gain a full understanding of the importance of enabling and supporting parents to make informed choices about infant feeding, the wider social and cultural contexts in which decisions are taken by parents, and the importance of good communication skills in supporting decision making."

(UNICEF, 2009, p. 5)

2.7 The Purpose of the Study

The purpose of the current study is to explore how student midwives, in a UNICEF UK Baby Friendly accredited university, learn about breastfeeding to prepare them for practice as a registered midwife.

The aims of the study are to:

- To identify the key influences which impact on student midwives learning.
- To gauge student midwives self-confidence in their ability to support and advise mothers with breastfeeding as they progress through the programme and on completion as registered midwives.
- To explore the perceived impact of implementing the Baby Friendly standards in the BSc in Midwifery curriculum.

It is hoped the findings of this case study will inform the learning and teaching strategy on the BSc Midwifery programme at the University of the West of Scotland and although not generalisable will also be useful to other higher education institutions when developing curricula, as Merriam (2001) suggests, information gained from case studies can be influential in developing policy and procedures.

Concluding Comments

It is evident from the literature that there are a variety of contributing factors to how student midwives learn such as; curriculum purpose and design, individual learning preferences and exposure to appropriate clinical experience and mentorship (Spear, 2004; Kang, Song, & Im, 2005; Spear, 2006; McFadden et al., 2007). Pre-existing attitudes and personal experience of infant feeding are also important issues as they may have an effect on the way student midwives learn about breastfeeding however due to the restrictions of this doctoral study they are not included within the research aims and questions.

How to assess competence continues to be an area of debate however there is agreement in the literature that in order to provide holistic and individualised care it must include the components of knowing similar to those described by Carper in 1978 (empirics, aesthetics, personal knowing and ethics). Individual competence will not be assessed in this case study however confidence and self-efficacy will be explored.

The BFI breastfeeding education standards initiative is one way of addressing the problem of the lack of healthcare professionals' knowledge and skills to support mothers who breastfeed by providing a structured competency-based framework. This case study aims to explore how student midwives, in a UNICEF UK Baby Friendly accredited programme, learn about breastfeeding to prepare them for practice as a registered midwife.

The following chapter will explore the research design of this study and provide a rationale for the choices made.

Chapter 3

Research Design

Healthcare professionals' lack of knowledge and skills to support breastfeeding mothers have been identified as a major contributing factor for low rates of initiation and duration of breastfeeding. This study aims to examine a unique case where changes were made in a pre-registration BSc in Midwifery curriculum in an attempt to address this situation and equip student midwives with the confidence, knowledge and skills to fulfil their role, by introducing educational outcomes from an external agency -UNICEF UK Baby Friendly Initiative.

Rather than focus on performance and outcome of the students' learning at the point of registration from a positivist point of view, that is quantifiable and measurable, the intention was to explore how student midwives, in a UNICEF UK Baby Friendly accredited university, learn about breastfeeding to prepare them for practice as a registered midwife. This involved taking an ontological stance that education is part of the social world and is given meaning through the interpretation of events by individuals.

This overarching aim was sub divided into three areas for exploration:

- To identify the key influences which impact on student midwives learning.
- To gauge student midwives self-confidence in their ability to support and advise mothers with breastfeeding as they progress through the programme and on completion as registered midwives.
- To explore the perceived impact of implementing the Baby Friendly standards in the BSc in Midwifery curriculum.

The aims of this study have come from my desire to understand how students learn about breastfeeding within a specific curriculum; to identify whether they feel their education has prepared them for practice as a registered midwife and to make improvements to the curriculum based on the findings.

The aims call for an interpretivist approach to find out how those involved in the curriculum think and create meaning from their experiences. This will be discussed in section 3.1. A case study was chosen as the most appropriate design frame in light of this. A rationale will be provided for this in section 3.2 and the data collection methods that were most appropriate to address the aims of this study in section 3.3. The sampling strategy will be explored in section 3.4 followed by discussion surrounding trustworthiness (section 3.5) and the ethical considerations related to this study (section 3.6). Finally the analysis procedures will be discussed and explained in section 3.7.

3.1 Methodology

In any field of inquiry it is important for the researcher to acknowledge how they view the world (paradigm), what they consider truth and reality (ontology) and how they gain that knowledge (epistemology) to design an appropriate study that will best answer the research aims and questions. Gillham (2000, p. 121) believed that in order to answer the research question researchers must use the methods, and underlying philosophy, that are 'best-suited'.

Until recent years the positivist paradigm dominated medical research practice, asserting that scientific study had to be objective, measurable and generalisable requiring evidence be gained through experiments and other observable and verifiable methods. However, educational research is complex in that it includes both individual and social behaviour which is not quantifiable. An interpretivist approach enables phenomena to be examined from individuals' unique perspectives to explore the meaning they attribute to their experiences. A positivist approach would not have unearthed the personal experiences and perceptions of those individuals learning and teaching about breastfeeding in the particular context of this current study.

Interpretivist approaches facilitate the exploration of how individuals relate and the thoughts and ideas they attribute to experiences. When discussing interpretivism Thomas (2009, p. 75) stated that "The key is understanding. What understandings do the people we are talking to have about the world, and how can we in turn understand this?" Central to this process is the researcher using their own knowledge to understand and interpret the views and behaviours of participants.

3.1.1 Insider researcher

It is acknowledged that most research is subject to bias but the important thing is to be explicit about potential areas of bias to mitigate against them (Cohen, Manion, & Morrison, 2000; Robson, 2002). Being both the researcher and a midwife lecturer teaching in the BSc in Midwifery programme could be considered both a strength and a weakness.

Hewitt-Taylor (2002) believed that insider researchers can provide depth and richness to data however she expressed concerns that objectivity may be compromised. Field and Morse (1985) refute this as they have found no evidence to suggest dishonesty by insider research compared to other research. Likewise, Mercer (2007) conducted a study over two sites where she was considered an insider in one and an outsider in the other, and found the research processes different at the two sites. Despite this she reports that her findings were very similar and respondents on each site made similar comments about the rigour of the processes involved.

Darke, Shanks and Broadbent (1998) however warn that data collection and analysis in case studies can be influenced by the researcher's background and interpretation of findings. This could lead to "myopia" (Mercer, 2007, p. 6) where the researcher believes their own views are more widespread than they are in reality and 'obvious' or 'sensitive' information is missed.

Reflexivity is a fundamental aspect of any research where the researcher is part of the social world they are studying (Patton, 2002). This involves continually examining one's understanding and being conscious of one's own values and beliefs from social, political and cultural perspectives. Reflexivity enables the researcher to be open about the path the research has taken and why decisions were made, highlighting the effect of personal bias.

I purposefully attempted to 'put aside' my own personal views and beliefs about the curriculum and avoided making assumptions about issues or making my views known to the participants, encouraging them to speak freely. This was difficult as all the participants were aware of my role as a midwife lecturer and involvement in the accreditation procedure. A personal diary was a useful tool to record feelings and events to enable me to reflect on and identify how they may affect interpretation of findings (see extract in appendix 4).

Mercer (2007) likens conducting research to wielding a double edged sword stating

> "what insider researchers gain in terms of 'their extensive and intimate knowledge of the culture and taken-for-granted understanding of the actors' may be lost in terms of their 'myopia and their inability to make the familiar strange". (Mercer, 2007, p. 7)

The advantage of insider knowledge in this study was that I had easy access to participants as well as greater appreciation of the context in which the curriculum had been developed and subsequently taught. The increased knowledge of the programme gave me the flexibility to follow up any emergent themes or issues that arose in the focus groups and interviews that may otherwise have been missed by an outsider. Mercer (2007, p. 6) however questions "whether or not this heightened familiarity leads to thicker description or greater verisimilitude".

I was concerned that student participants may be influenced by my role as lecturer and therefore a midwife lecturer from the study site assisted in recruiting student midwives. Once identified, potential participants were sent an invitation to participate along with an information leaflet (see appendix 5). In this letter they were assured they could refuse to participate and this was also reiterated when making appointments and at the beginning of each interview. Participants were made aware of the aims of the study and that the information they provided would be used to improve the programme of education and were therefore encouraged to speak freely and openly. Issues of confidentiality were discussed and assured. This issue is further explored in the section 3.6 ethical considerations.

3.2 Design frame

Qualitative methods enable research to be carried out in situations where experiments would not be appropriate or justifiable, particularly in areas where there is little knowledge such as in this study where there is a unique initiative. They examine the processes that lead to the findings by exploring the phenomenon in-depth rather than focusing on the significance of the results (Gillham, 2000). The data collection tools used in qualitative approaches such as interviews and diaries enable the researcher to gain greater personal information and insights in to how people create meaning out of their experiences (Opie, 2004). However, this does not mean quantitative methods are incompatible, it depends on the information the researcher needs to answer the research questions or aims.

The aims of this study did not warrant quantifiable information and so quantitative methods were not employed however several design frames were considered, such as ethnography, phenomenology, grounded theory and case study, because they do not start out with a hypothesis or a theory to test but instead are inductive and observe patterns or trends (Cohen et al., 2000; Robson, 2002; Opie, 2004). They aim to understand phenomena by interpreting participants' experiences.

At the outset of this project ethnography appeared to be an approach that would answer the aims of this study. Ethnography aims to conduct an in-depth study of a culture in context using data collection methods such as observation, field notes and interviews (Cohen et al., 2000). It may have been valuable to observe student midwives learning about breastfeeding in both the clinical and academic contexts however with the constraints of a part-time doctoral study this would have been too time consuming.

Phenomenology was also considered because of the focus on human experience of phenomena. However, because this approach looks in-depth at individuals and the essence of their experience the wider context of the aims of the study, the accredited programme, would not have been addressed. Like-wise grounded theory was deemed

unsuitable as it aims to generate theory that can describe and explain phenomena in an objective manner (Opie, 2004) whereas the aims of this current study are exploratory rather than explanatory.

On the other hand a case study approach offered the opportunity to conduct an in-depth study of this new and unique programme and to explore how students learn about breastfeeding in an enclosed system, within a specific time frame. It enabled a variety of participants to be involved and for data to be collected using a variety of methods to gather rich description of the situation. Section 3.2.1 will explore this approach further.

3.2.1 Case study

Case study is a design frame suitable for both qualitative and quantitative research methods. Stake (2003, p. 134) suggested that " as a form of research, case study is defined by interest in individual cases, not the methods of inquiry " and believed it to be both the process and product of the inquiry.

Hancock and Algozzine (2006, p. 16) highlighted the characteristics that define case studies as follows:

- A case study may focus on individuals but more usually on a phenomenon- an event, situation or programme.
- The phenomenon is studied in its natural context, bound by space and time.
- It is richly descriptive because it is based in a variety of sources of information.
- It explores themes and categories and events rather than confirm relationships or hypotheses.
- The researcher often spends time in the environment being researched.

Stake (1995, p. 4) pointed out that case study research is not sampling research and the aim is to develop in-depth knowledge and understanding of this case. This is achieved by the researcher interacting with the case through observation, data

collection and record keeping. Ultimately this in-depth knowledge of a case may lead to the original research questions being altered to make them more meaningful- progressive focusing (Parlett and Hamilton, 1976 as cited in Stake, 1995). He stated the

> "real business of case study is particularisation, not generalisation. We take a particular case and come to know it well, not primarily as to how it is different from others but what it is, what it does." (Stake, 1995, p. 8)

Wells, Hirshberg, Lipton and Oakes (2002, p. 12) went further to state "the logic of case study research is to demonstrate an argument about how general social forces take shape and produce results in specific settings."

Stake (1995) classified case study design as intrinsic, instrumental or collective. He described intrinsic research as a study design for a particular case of interest. The interest is in that particular case rather than attempting to learn about other cases or to develop theory. Instrumental design aims to develop a greater understanding of the question by studying a particular case. It is the issue that is of interest not the case however the case puts the issue into context. This interest may be expanded to several cases to be a collective case study.

Case study research uses triangulation to ensure accuracy and to assist in the search for alternative explanations (Stake, 1995, p. 107). Triangulation can occur through the data, researcher, theories or methodologies. The aim is to minimise misrepresentations and to corroborate interpretation of events. This will explored in section 3.5 in greater detail.

Case studies have however been criticised and considered an inadequate strategy for research due to lack of rigour. Yin (2003, p. 10) believed this may be due to some studies not following systematic procedures or confusing case study research with case study teaching, which is a common teaching strategy used in nursing and midwifery education. He also believed another reason was that they do not provide

evidence of scientific generalisation. However, he defended case studies stating that they can be

> "generalisable to theoretical propositions and not to populations……..
> [the case study] does not represent a 'sample', and in doing a case study your goal will be to expand and generalise theories (analytic generalisation) and not to enumerate frequencies (statistical generalisation)." (Yin, 2003, p. 10)

3.2.2 The study design

Every case study is different and classification is sometimes difficult. This case study could be classified as both instrumental and intrinsic. Instrumental as the theoretical explanation that underpins how student midwives learn breastfeeding knowledge and skills to better support mothers who breastfeed is of great importance. Intrinsic because it is exploring an innovative programme with which I am involved (Stake, 1995; Hancock & Algozzine, 2006). The design is descriptive in order to illustrate how students learn within the context of the programme of education using a qualitative organising framework.

In designing the study it was first important to ensure that the research aims were relevant and of significance to the professional community (Knight, 2002). A comprehensive literature search was undertaken to obtain a greater understanding of the existing body of knowledge relating to educational theory and breastfeeding education in particular, to position the questions within the context of the literature.

Eisenhardt (2002) reiterated the importance of ensuring the research questions are focused so that the researcher can identify the case and units of analysis to gather the appropriate data. The case can either be an individual, a collection of individuals or a programme rather than a process, "a specific, complex, functioning thing... a bounded system" (Stake, 1995, p. 2). The unit of analysis can be an individual, a group, an organization, an event or a phenomenon (Stake, 1995).

A single case study was adopted in this case study as it was a unique case and the unit of analysis was students learning within a Baby Friendly Initiative (BFI) accredited programme and their lecturers. The research aims informed the selection and scope of the unit of analysis identifying where best to get answers. The unit of analysis facilitated "depth and breadth of data to be collected to allow the research questions to be answered" (Darke et al., 1998, p. 280).

Hanock and Algozzine (2006) highlighted the importance of ensuring that case study is the most suitable organising framework for the research topic. They identified and adapted data collection questions and procedures from Creswell (1998) to assist researchers in ensuring that the research topic is appropriate for in-depth analysis in a natural context using multiple sources of information. This was a useful tool in designing this study and confirming that case study was the most appropriate framework (see Table 3.1).

Table 3.1 Case Study characteristics and data collection questions

Characteristics	Data Collection Question	Answers
A bound 'case' such as a process, activity, event, program, or multiple individuals, is investigated.	What is studied? (define the case)	Breastfeeding education in a UNICEF UK Baby Friendly accredited BSc in Midwifery curriculum. This study is to be carried out at the University of the West of Scotland where the pre-registration programme was accredited by UNICEF UK Baby Friendly. It will be conducted following accreditation in 2007 and before the programme is changed and revalidated in 2008.
A gatekeeper provides access to information and assistance in gaining confidence of participants.	What are any concerns related to access and rapport? (establish access and rapport)	Ethical approval was requested and granted from the University of Strathclyde and access to the case study site, participants and use of documentation from the University of the West of Scotland. The researcher is a lecturer within the programme.
A 'case' or 'cases', an 'atypical' case, or a maximum variation' or 'extreme' cases is defined	What sites or individuals are going to be studied? (sample with purpose)	The site is the University of the West of Scotland, the UNICEF UK BFI accredited programme is BSc in Midwifery and a selection of current and previous student midwives and lecturers will be recruited to participate.
A collection of forms, such as documents and records, interviews, observations, or physical artefacts, is compiled	What type(s) of information will be collected? (delimit data)	UNICEF UK BFI information Curriculum documentation Documentation submitted for scrutiny by UNICEF Records of UNICEF assessment Programme assessment documentation Semi-structured interviews Critical incident diaries
A variety of approaches (e.g. field notes, interviews, and observations) are used to gather data	How is information compiled? (record information)	Tape recorded focus groups and Semi structured interviews. Written critical incident diaries
Concerns may emerge related to intensive data gathering	Is data collection difficult? (address field issues)	Getting lecturers together for a focus group due to work commitments at a particularly busy time. Students took a long time to return critical incident diaries and the content was focused more on the clinical incident rather than on their learning. Organising student interviews when they are on placement.
A large amount of data (e.g. field notes, transcriptions, computer databases) is typically collected	How is information stored? (store data for analysis)	Focus groups and interviews were transcribed and stored in NVIVO 7 ready for analysis. Other documentation was stored on study site. Adhere to principle 7 of Data Protection act 1998

(Source: Hancock & Algozzine, 2006)

In summary, education is a complex subject that involves the social world. The aims of this study can only be answered by using an interpretivist approach as the experiences of those involved are subjective and cannot be quantified or measured and because of this cannot be generalisable. A case study was chosen as the most suitable framework to facilitate the collection of appropriate data to provide a rich, in-depth understanding of this unique phenomenon. The remainder of the chapter will focus on

- The methods used to obtain data that would sufficiently answer the research aims and provide 'rich' information- Data Collection Methods (section 3.3).
- Who and what would best provide the relevant information- Population and Sample (section 3.4).
- Issues of trustworthiness (section 3.5).
- The ethical concerns related to the case study (section 3.6).
- How the data were analysed (3.7).

3.3. Data Collection Methods

Case studies are associated with both qualitative and quantitative methods, depending on the research aims, and what the researcher wants to uncover (Eisenhardt & Bourgeois, 1988; Darke et al., 1998). This study is based on a qualitative approach with the intention of establishing the views and attitudes of the students and lecturers involved in the programme.

Careful planning was essential to ensure that efficient methods of data collection were employed to address the research aims within an appropriate time-frame (Stake, 1995). Consideration was also given to the selection of research methods so that they did not interfere with participants' studies and workload commitments.

Stake (1995) described the different sources of evidence that can be used in case study: documentation, archival records, interviews, direct observation, participant observation and physical artefacts, whilst acknowledging that that not all forms are suitable for all studies. After contemplating this study and exploring the different methods I decided to use focus groups, individual interviews and diaries, using documentation as reference material. Observation of behaviour and actions of the participants involved in the study appeared to be an obvious method to gain an insight in to how students learn, how they are taught and what clinical experience they gain. It would allow for direct observation without the discrepancies of what participants may say they do and what they actually do (Robson, 2002). However, this was not possible due to the time and resource limitations of a doctoral study.

3.3.1 Focus group interviews

The purpose of using focus group interviews in this case study was to gauge a range of views and opinions about the topic, rather than a consensus, in a formal and organised manner whilst maintaining a degree of flexibility to explore unexpected issues that may arise. This is particularly useful in an area that has not been studied before (Robson, 2002).

Focus groups can be used either on their own or together with other methods to provide methodological triangulation (Morgan, 1988). In this study focus groups were used for this purpose and also to generate ideas to be further explored in individual interviews (Vaughn, Schumm, & Sinagub, 1996).

A focus group brings a group of individuals together to discuss the subject of the study from their own personal experience (Powell & Single, 1996).Vaughn et al. (1996, p. 4) stated the goal of the focus group interview was "to create a candid, normal conversation that addresses, in depth, the selected topic". Focus groups follow a dynamic process whereby participants are encouraged to give their personal views of the phenomena rather than make generalisations to a larger population.

Hess (1968 cited in Vaughn et al., 1996) highlighted the advantages of using focus groups as:

- Synergism: Data is generated through interaction with each other.
- Snowballing: When one participant makes a statement others respond, expand or dispute.
- Stimulation: Excitement and enthusiasm is generated.
- Security: The groups appeared to instil confidence in each other to discuss the issues they feel are relevant to them.
- Spontaneity: As questions are not directed at one person and there is no pressure to answer participants should be able to answer at ease and with honesty.

Kitzinger (1995, p. 300) argued that interaction between the participants is critical in focus groups; the language used and how they question each other and then re-evaluate their own perceptions in light of other views. Although their views will be somewhat dependent on the social process and dynamics of the group care must be taken to ensure participants also feel they can express individual views and not be intimidated by other participants within a group.

Morgan (1988) warned that the moderator has less control over proceedings in a focus group than individual interviews as they are 'open ended'. It is the moderator's role to maintain the focus of discussion whilst ensuring everyone has the chance to speak without showing any preference or approval/ disapproval at what is said so as not to influence participants' views or ideas and to encourage participants to talk to each other, express opinions and ask each other questions.

Goss and Leibach (1996) and Johnson (1996) suggested that focus groups also have the benefit of empowering participants making them feel valued by being given the chance to be involved in the research process examining a phenomenon of interest to them.

An interview schedule was developed as a guide that also allowed flexibility to probe and explore interesting comments and areas of discussion. The schedule was developed using Robson's sequence of questions (2002, p. 277); introduction; 'warm up'; main body of the text; 'cool off' and closure. It was devised to encourage the participants to answer openly allowing for prompts when required. Open ended questions were used in a proposed sequence however there was room for flexibility to clear up any misunderstandings or to flow with the participant's line of discussion (Robson, 2002) (see appendix 6). Questions were based around the research aims and developed using theories of learning and competency, as discussed in the literature review, (Carper, 1978; White, 1995; Cheetham & Chivers, 1999) to explore behaviour, opinion, values, and feelings about the curriculum and how it impacted on the students ability to learn and support breastfeeding mothers. The questions were pre-tested in discussion with a colleague familiar with the phenomena under study.

3.3.2 Interviews

The purpose of an interview is to "allow us to enter into the other person's perspective" (Patton, 2002, p. 341). One to one, face to face interviews are a commonly used data collection tool for case studies because they provide the opportunity for participants to describe and discuss their experiences of a phenomenon (Stake, 1995; Gillham, 2000; Yin, 2003; Hancock & Algozzine, 2006)

thus enabling them to express themselves more naturally than in a questionnaire and to articulate their feelings, thoughts and views.

Although interviews do not allow for large numbers to be sampled in a study due to the amount of data generated, they facilitate depth and richness in answers (Opie, 2004) which is fundamental in a case study. Gillham (2000) recommended attempting to control the number of interviews undertaken and the length because of the amount of data and proposed that it is possible to gain in-depth information from a 30 minute interview if well prepared.

Semi-structured interviews also allow flexibility in the line of questions so that the interviewer can pick up on interesting lines of discussion and follow the participants responses and non verbal cues by probing (Robson, 2002).

Again, as with the focus groups, the interview schedule was developed using Robson's sequence of questions (2002, p. 277) and Gillham's (2000, p. 67) elements in organising an interview: identifying the key topics or big ideas generated from the student focus group; framing them and ensuring they were open-ended questions; preparing prompts and tape-recording the interview (see appendix 6). The questionnaire was piloted with a previous student Paula who met the inclusion criteria of the study (see section 3.4.2) and as no problems were highlighted and because the information was so rich the interview data were included in the study.

Opie (2004) highlights the importance of the interviewer having good interpersonal skills and the ability to control the interview, whilst listening and probing where appropriate. A private room was used for the interviews and refreshments offered to encourage a relaxing environment.

3.3.2.1 Recording data

Stake (1995, p. 66) believed that keeping the record of an interview is 'artistry' and that a tape recorder is of little value. He suggested it is the meaning not the exact words that are important and that following an interview the interviewer should write

an account within a few hours. In contrast, Robson (2002), Patton (2002) and Gillham (2000, p. 69) who 'strongly recommends' tape-recording, believed taking notes can stifle the proceedings and useful information can be missed. As a novice researcher I decided to take this advice and tape-record all interviews and focus groups however I made notes following the interview regarding non verbal cues related to specific responses so that I was not distracted during the interview. This also gave me the opportunity at a later date to listen again to each interview several times and ensure the transcription was accurate. The participants were also offered the opportunity to check the transcripts for accuracy. Permission to tape record the interviews was gained from all the participants and tapes were later transcribed for analysis aided by a computer data analysis package, NVivo.

3.3.3 Critical incident diaries

Hunter (2008, p. 3) described story telling as an important way for students to critically reflect on their experiences. She believed that by writing down their stories they were able to connect their experiences with theory. On the other hand Oppenheim (1992) described diaries as a daily record kept by a participant that usually records behaviour rather than emotions or attitudes. A daily record will undoubtedly generate a large amount of data of which not all will be particularly relevant to a study. They can also be very time consuming for the participant. One way of focussing this is through the use of critical incident diaries whereby the participant identifies certain episodes over a determined period of time that are relevant to the study. Cohen et al. (2000, p. 310) advise that although it is usual to collect representative data, critical incidents that are unique can be crucial to understanding the case. With this in mind I requested six student midwives, who were also interviewed individually, to keep a critical incident diary of experiences in clinical practice that had an impact on their learning about breastfeeding. Jasper (2003, p. 13) described clinical incidents as "episodes of experiences that have particular meaning to the observer, practitioner or any other person taking part in them. They may be positive or negative experiences and must be suitable for being described in a concise way".

As well as being part of the methodological triangulation strategy such individual experiences provided an insight into situations that I was unable to access or observe.

It is usual to give a time limit to complete the recordings which may lead to concerns as to whether the behaviour recorded in the diaries was typical and representative of their usual behaviour (Oppenheim, 1992). This was a concern in this study as participants were given three months to complete the critical incident diaries to ensure they would have some time in clinical placement to do this.

Participants were given guidelines for these diaries (see appendix 7) to ensure there was some consistency with regard to format and length without constraining or suggesting what they should include.

3.3.4 Documentary evidence

The use of documentary evidence in educational studies is common either as a single method or to support other methods. Inadvertent documentary sources such as curriculum documentation and lesson plans, university regulations, professional and government documents are an unobtrusive method to gain both 'witting and unwitting' evidence to support the study and provide methodological triangulation (Bell, 1991; Robson, 2002). University documents related to the BFI were used to support my background knowledge of the phenomenon. These included a copy of the evidence sent to UNICEF UK BFI that explained where, when and how the outcomes were included in the curriculum and how they were assessed. Other documents included a summary of how the mentors were informed of the outcomes and what could be expected of them and confirmation of the assessment results (written questionnaire and face-to-face interviews). I also examined programme documentation such as the experiential workbook, structure of the clinically-based workshops/tutorials and any assessments such as previous OSCEs.

3.4 Population and Sample

The focus of the research aims was how student midwives learn about breastfeeding in Scotland's first university to be accredited with the UNICEF UK Baby Friendly Initiative best practice standards for higher education award. This phenomenon occurred in a single site that could be studied in context, bounded by space and time: the context being the University of the West of Scotland, the curriculum and the BFI criteria. The study was conducted once accreditation had been awarded in 2007 and before the programme was changed and revalidated in 2008.

The population involved in the case consisted of three groups: 1) current student midwives, 2) previous student midwives and 3) lecturers. Polit and Hungler (1995, p. 229) defined the population for study as "the entire aggregation of cases that meet a designated set of criteria"

1. The student midwives population group consists of approximately 120 students, only one of whom was male. The age range is from 17 to 50 years, bringing a variety of educational attainment to the programme (the minimum being five standard grades and two Highers to those with degrees). They also enrolled on to the programme with a variety of life experience particularly in relation to infant feeding issues.

2. The previous student midwives were those who graduated after accreditation, 40 in total and had been educated on the BSc in Midwifery programme that had received the BFI accreditation. Again the demographics of this group were similar.

3. There were only eight midwife lecturers who taught on the BSc in Midwifery programme. Teaching experience varied from 2 years to 25 years and again they had a variety of personal and professional experience of breastfeeding.

Each population group was defined by the following criteria:

Student midwives

- Student midwives from first, second and third year of the programme.
- Pre-registration students.
- Enrolled on the BSc in Midwifery programme that was accredited by UNICEF UK Baby Friendly Initiative.

Previous student midwives

- Registered midwives in practice.
- Graduates of the BSc in Midwifery programme that was accredited by UNICEF UK Baby Friendly Initiative.

Lecturers

- Midwife lecturers.
- Teach on the BSc in Midwifery programme that was accredited by UNICEF UK Baby Friendly Initiative.

3.4.1 Sampling strategy

It was not feasible to include all members of the population in this study as the purpose of the study was to gain in-depth information rather than statistical information and therefore a sample of the population were invited to participate- "a subset of the units that compose the population" (Polit & Hungler, 1995, p. 230). The intention was to use a sample that would mirror the criteria of the population. This is often difficult to achieve and it is up to the researcher to ensure they use the most appropriate sampling strategy to ensure the sample is representative whilst finding those participants who will be able to provide useful information to answer the research questions.

The two main sampling strategies are probability sampling and non-probability sampling. In probability sampling the research population has an equal chance of being chosen as part of the sample. Random sampling of the population is most commonly used to reduce the potential of bias, for example every third person on the class register (the sampling frame). In contrast non-probability sampling is less likely

to provide representative samples but is commonly used in qualitative research where in-depth information from the personal perspective is required (Maxwell, 2002). The main methods used to select the non-probability sample are convenience, quota and purposive. Convenience sampling as it suggests relies on people who are conveniently available to participate in the study and therefore may not always be truly representative of the sample. It is often used when there are time constraints on a study. Quota sampling is where the researcher is looking for particular groups or sets of criteria of the wider population to give proportional representation of that criteria reflecting that of the population (Cohen et al., 2000). In purposive sampling participants are chosen by the researcher either because they are typical or atypical of the population or because they are knowledgeable about the study.

Despite concerns about bias through the use of a sampling technique that was not objective I decided non-probability, purposive sampling was the most appropriate strategy to be used in this case study to ensure that appropriate participants from the case site were selected who would be able to impart information that would address the research aims (Hancock & Algozzine, 2006).

3.4.2 The study sample

Time was a constraint in sample selection as it was essential that the data collection was completed prior to September 2008 before a newly validated curriculum was introduced, in case there was any confusion for the participants regarding which programme they were discussing. This gave a time frame of three months starting once ethics approval was gained in June 2008 (see appendix 8). The participating student midwives also needed to have had a clinical placement within this time to complete critical incident diaries.

Sample size is often a concern for researchers and in many studies funding agencies require sample size justification to ensure results are unambiguous (Devane, Begley, & Clarke, 2004). Quantitative researchers aim to produce research that is generalisable and representative of a specific population using strategies that allow inferences to be made about the validity of findings (Cohen et al., 2000; Robson,

2002). Large, fixed sample sizes are employed with participants selected randomly who are statistically representative. In qualitative research, where purposive sampling is used, the concern is selecting cases, at the appropriate time, that are information rich and will be able to answer the research questions, rather than sample size. Sobal (2001) suggested that the concept of sample size may not be as applicable in some qualitative research traditions as others depending on the depth of analysis required from individual cases. Patton (2002, p. 227) described this as a 'trade-off between breadth and depth'. Opie (2004) and Robson (2002) agreed suggesting that in case study research the issue of numbers is irrelevant as the in-depth study could include one person, a group or an organisation and the researcher has to make the judgement on the appropriate sample size to meet the requirements of the study.

> "Case studies (e.g. people, organisations……critical incidences) are selected because they are 'information rich' and illuminative, that is, they offer useful manifestations of the phenomenon of interest; sampling then, is aimed at insight about the phenomenon, not empirical generalisation from a sample to a population." (Patton, 2002, p. 40)

Sample size and strategies are pre-determined by the unit of analysis. In this study there were three units: student midwives, previous students and lecturers. Each group was involved in the BSc in Midwifery programme but at different levels, with different experiences and perspectives.

There is a difference of opinion in the literature regarding the number of participants required for a focus group. Vaughn et al. (1996) recommend between 6 and 12 participants per focus group, who are chosen with predetermined criteria, to ensure there are enough people to generate discussion and not too many to stifle it. Others however use as many as 15 (Goss & Leibach, 1996) and others as low as 4 (Kitzinger, 1995).

For the student focus group it was important to gain the views of participants who had been on the programme for at least one year so that they were able to discuss the

issues from their own experiences of learning. At any time there are only six classes of approximately 15-20 student midwives at different stages of the programme, some in the theory setting and others on placement or annual leave. A class of third year student midwives were in theory at the time of the data collection period and were approached by another lecturer, informed of the purpose of the study and invited to volunteer. Six students from this third year class volunteered to take part. The participants are allocated a number, 1-6, for identification purposes and to maintain anonymity in chapter 4: Findings (see table 3.2).

The lecturers were an even smaller group to choose from as there were only eight lecturers, plus myself, involved in the development and teaching of the curriculum. All eight were invited to join a focus group, five participated. Although below the recommended number for a focus group discussion it proved not to be a problem as each participant had plenty to contribute to the discussion. The participants are allocated a number, 1-5, for identification purposes and to maintain anonymity (see table 3.2).

Two student midwives (see table 3.2) from each year (total of six) of the programme were randomly selected and invited to participate in the study by keeping a critical incident diary followed by an individual interview. They have been given pseudonyms to maintain anonymity (see table 3.2).

Finally, two previous students (see table 3.2) from the programme were invited for an individual interview. The choice of these participants was opportunistic, meaning that they were chosen because they were accessible as they both worked in local maternity units and were available to participate in the study at the time of the data collection. One had been practising as a midwife for almost one year and the other four months. They have been given pseudonyms to maintain anonymity (see table 3.2)

Table 3.2: Participants pseudonyms and designation

Name (pseudonym)	Designation	Proficiency Level	Commenced programme	Individual Interview	Critical Incident Diary	Focus Group
Paula	Previous student 4 months qualified	Registered midwife	Feb 2005	√		
Polly	Previous student 9 months qualified	Registered midwife	Sept 2004	√		
Andrea	Student midwife in year 3	Independent*	Sept 2005	√	√	
Anne	Student midwife in year 3	Supported*	Feb 2006	√	√	
Sally	Student midwife in year 2	Supervised*	Feb 2007	√	√	
Sarah	Student midwife in year 2	Supervised*	Feb 2007	√	√	
Debbie	Student midwife in year 1	Dependent*	Sept 2007	√	√	
Denise	Student midwife in year 1	Dependent*	Sept 2007	√	√	
1-6	Student midwives year 3	Supported*	Feb 2006			√
1-5	Midwife lecturers	Registered midwives/ Registered midwife teachers				√

*Refer to section 2.5.2 for further detail regarding proficiency levels

3.5 Trustworthiness of the Study

The demonstration of validity, reliability and generalisability in qualitative research is closely scrutinised and those who do not value the qualitative paradigm are sceptical it can be achieved, believing it to be subjective and non-rigorous. It is apparent that as quantitative research has a longer history in the field of medical research, qualitative methodologies have adopted the language of the positivist paradigm and tried to make it fit a framework that it may not be suitable for and debate continues regarding the value and use of these terms in an interpretivist paradigm (Robson, 2002; Ritchie & Lewis, 2003).

Robson (2002) attempted to move to Guba and Lincoln's (1989) definition of the term 'trustworthiness'- credibility, transferability, dependability and confirmability-, however felt the arguments against using the terms 'validity' and 'reliability', which are associated to positivist methodologies, did the rigour of qualitative research a disservice.

Robson (ibid) suggested one way to demonstrate trustworthiness, or reliability and validity, is to provide a clear audit trail so that the reader can follow the decision making pathway which includes the use of a reflexive approach as discussed earlier in this chapter. Triangulation is another method used frequently to promote trustworthiness.

Holloway and Wheeler (1996, p. 14) described triangulation as "the use of several methods, theories, data sources or researchers in the study of one phenomenon". There is however some dispute in the literature as to the purpose of triangulation in qualitative research (Begley, 1996; Sim & Sharp, 1998). Originally triangulation was considered as means of confirmation however it is increasingly believed this is not possible and that the existence of objective truth is flawed. Instead triangulation should be an attempt to demonstrate completeness from holistic point of view (Adami, 2005, p. 19). Denzin and Lincoln (2003, p. 8) argue that triangulation is a

means of adding rigour and depth to a study by demonstrating depth of understanding of the phenomena and suggest it is an alternative to validation. Stake (2003) believed triangulation to be a process of clarifying meaning by identifying the many ways the phenomenon is seen. He asserts that in order to minimise misrepresentations and to corroborate interpretation of events, protocols and procedures, or triangulation, are required (Stake, 1995). Stake referred to Denzin (1984) who identified four protocols that could be followed. *Data source triangulation*, when interpretation of the data remains the same in different situations; *Investigator triangulation*, where other observers are used to investigate the phenomena and comment on interpretation; *Theory triangulation*, where interpretation is taken from investigators with different viewpoints; and the most commonly used *Methodological triangulation*, when multiple methods are used within a study to corroborate interpretation.

Methodological triangulation was used in this study in the form of interviews, critical incident diaries and documents in an attempt to achieve completeness through the rich data gathered from different participants with differing perspectives on the phenomenon (data source triangulation).

Knafl and Breitmayer (1991) described unit of analysis triangulation as the incorporation of more than one level of analysis using the example of data analysis from mothers, fathers and an ill child. They suggested each can be analysed at the personal level and also at the family level. Unit analysis triangulation was also used in this case study analysing data from an individual level (different stages of the programme or perspectives) and then together in the context of the programme delivery.

Stake (1995, p. 115) also recommended the process of '*member checking'* as a valuable means of validation to ensure participants are happy and accepting of their words for use in a study as a means of confirmation. Participants were given copies of their transcripts and asked for comments on accuracy and any changes to the

transcript were made. Although considered confirmatory the intention was to increase rigour and truth telling (Begley, 1996).

Discussion also took place with a ‘critical friend’, who is also a work colleague with similar understanding of the issues involved, at all stages in the project. This helped clarify the research aims and to focus on what I wanted to know and how I was going to find out.

3.6 Ethical Considerations

Ethical considerations were important from the outset of the development of this case study as they influenced the design ensuring it was ethically acceptable to the participants and also so that it would get support and agreement from the relevant ethics committees. Polit and Hungler (1995, p. 641) define ethics as

> "a system of moral values that is concerned with the degree to which research procedures adhere to professional, legal and social obligations to the research subjects".

Moral values refer to the social standards relating to right and wrong, good and bad, what should or should not be done (Noble-Adams, 1999). It is important therefore to consider how a research study 'touches' people, with the aim being to prevent harm and promote respect and fairness (Sikes, 2004).

Many ethical guidelines have been developed to address such concerns. *The Belmont Report* (National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research, 1978) provided an ethical framework for research involving human participation and although most disciplines have their own code, which deal with the individual issues pertinent to them, they are all based around the same basic principles: beneficence and non-maleficence, respect for human dignity and justice.

3.6.1 The principle of beneficence and non-maleficence

The principle of beneficence is to good and non-maleficence to do no harm.
In many studies the principle of beneficence may also refer to preventing physical harm (non-maleficence) however psychological harm is also an important aspect to consider when conducting in-depth exploration into people's personal experiences. In this study the majority of the participants were student midwives and I was concerned that they did not feel exploited or coerced into participating. They were assured that any information they imparted would not be used against them or as a

means of assessment. All participants were also informed at the outset of the study of what was expected of them personally in terms of time for interviews and diaries and that this would not change over the period of the study.

Cohen et al. (2000, p. 50) discussed the cost/benefits ratio describing it as a 'fundamental concept' and 'the primary ethical dilemma in social research'. They explain that it is essential at the outset of planning a study that the likely social benefits should be considered against the possible personal costs to the participants. In this study the potential benefits were improvement in pre-registration midwifery breastfeeding education and consequentially for society, in the longer term, that breastfeeding rates may increase and improve health outcomes. I considered the potential costs to the participants in relation to feelings of vulnerability and embarrassment and discussed these with participants to ensure they felt comfortable. All the participants however suggested it to be a positive experience and were keen to participate and, as some commented, to help improve the curriculum. The risk in this study was therefore considered to be minimal, that is that "there are (risks) no greater than those ordinarily encountered in daily life or during routine physical or psychological tests or procedures" (Polit & Hungler, 1995).

3.6.2 The principle of respect for human dignity

The principle of respect includes the right to self- determination and full disclosure (Polit & Hungler, 1995). Self –determination refers to the right of participants to voluntarily choose whether or not to take part in the study and also to withdraw at any point or refuse to provide information.

This was a major concern as I am a lecturer at the study site and often teach the students and work with the lecturers and I did not want them to feel coerced into participation. To try and overcome this I fully described the study to the participants' verbally and provided information sheets to along with the consent form (appendices 5 & 9). This was reiterated during the period of data collection when required.

3.6.3 The principle of justice

The principle of justice includes the right to fair treatment and privacy (confidentiality) (Polit & Hungler, 1995). Non prejudicial and fair treatment applies to those who agree to participate as well as those who choose not to, or withdraw during the study, ensuring respectful treatment for all. All potential participants approached in this case study agreed to participate and all were treated with the same respect and given the same level of information.

Privacy or confidentiality is essential in research and anonymity should be guaranteed where possible. Anonymity was impossible to maintain at all stages in this case study as the interviews were face-to-face however participants were assured that confidentiality would be maintained and that pseudonyms would used in the report and any future publications, as would any persons or places referred to in the collected data for example mentors, lecturers, breastfeeding mothers. They were also assured that anything they disclosed would not be repeated and that all tapes would be destroyed at the end of the study. Participants were also reminded of their need for confidentiality as they were discussing colleagues and women in their care and were encouraged to use pseudonyms where required. The Data Protection Act (1998) was adhered to in relation to the storage and use of personal data collated.

From the planning stage and throughout the study I referred to the BERA (British Education Research Association) (2004) ethical guidelines to ensure that it was

> "conducted within an ethic of respect for:
>
> - The person
> - Knowledge
> - Democratic values
> - The quality of educational research
> - Academic freedom"
>
> (BERA, 2004, p. 5)

3.6.4 Informed consent

BERA (2004) expect all research to be conducted ensuring the principle of respect is maintained, of which voluntary consent is an essential component. Informed consent involves four elements: competence, voluntarism, full information and comprehension (Cohen et al., 2000). This suggests that if participants have been given all the relevant information about the study, and are responsible, mature individuals who are capable of understanding the information then they are able to voluntarily give consent or refuse to take part in the study (Polit & Hungler, 1995).

Prior to data collection participants were provided with information on all aspects of the study in both written (see appendices 5 & 9) and verbal format and again at the time of the interviews. This information included the potential costs and benefits of the research to them and society, what was expected of them, why they had been chosen and what they could expect from me. Purposeful sampling was used which enabled me to ensure sure that all the participants were competent to give informed consent and they were also given the opportunity to withdraw from the study at any point.

3.6.5 Ethics approval and access

Ethics committees are essential in monitoring and guiding researchers to ensure they have adhered to the relevant ethical frameworks and protocols for their area of research. Ethics approval was requested and granted from the University of Strathclyde as the study involved students and lecturers. Breastfeeding mothers or other patients were not approached and so ethics approval via the Integrated Research Application System (IRAS) was not required. Permission to approach the students and lecturers to participate in the case study and to use relevant university documentation was also requested and granted from the Dean of the School of Health, Nursing and Midwifery at the study site (see appendix 8).

In conclusion, I was cognisant of the fact that I was the ‘project leader’ for the BFI initiative and a lecturer within the department which was the focus of the case study.

Whilst having the advantage of fully understanding the intricacies of the case study it must be acknowledged that there were potential areas that could be problematic such as objectivity, and relationships with the participants and within the organisation. Hewitt-Taylor (2002) warns about the issue of power in relationships and the possibility of this influencing data collection. As I was known to the participants I considered requesting an external person, with breastfeeding education knowledge to conduct the focus group and one to one interviews. Yin (2003) however believed the 'insider' has the advantage of knowing the case very well and the ability to access and probe relevant information more appropriately and so I decided to undertake the interviews myself.

3.7 Data Analysis Procedures

Thorne (2000, pp. 26-34) described the "distinction between explaining how something operates (explanation) and why it operates in the manner that it does (interpretation)" as an effective way of differentiating between quantitative and qualitative analysis strategies.

In qualitative research data collection, analysis and interpretation tend to be an iterative process. Morse (1994, p. 25) describes qualitative data analysis as

> "a process of piecing together data, of making the invisible obvious, of recognising the significant from the insignificant, of linking seemingly unrelated facts logically, of fitting categories one with another, and of attributing consequence to antecedents."

Morse (1994, pp. 26-34) acknowledged that the strategy chosen to do this will be dependent on the research questions/aims, methodology and context of the study however she believed that it is the cognitive approaches involved in qualitative analysis that lead to the development of new knowledge and can be summarised as

- Comprehending – complete understanding of the phenomenon.
- Synthesising – describe typical patterns of behaviour.
- Theorising – linking relationships from the data to established theory.
- Re-contextualising - the new knowledge about the phenomenon into context of established theory.

The strategy used to analyse the data in this case study was based on Glaser and Strauss constant comparative method (cited in Boeije, 2002) to enable student midwives interviews and diaries to be compared against each other within and against each year group. It also facilitated comparison of the students' views with the other two groups with different perspectives (i.e. previous student midwives and lecturers).

Boeije (ibid) used this method of analysis in an empirical research study into the experiences of multiple sclerosis patients and their spouses. She described five steps to constant comparative analysis in this study, although she was careful to point out that the number of steps were not important as they were dependent on the type of material to be analysed.

For this study I identified three stages for the analysis (see table 3.3):

1. Analysis of focus groups
    - i comparison within single focus group
    - ii comparison between focus groups
2. Analysis of student and previous student interviews
    - i comparison within a single interview
    - ii comparison between interviews within the same year group
    - iii comparison of interviews from different year groups and previous students
3. Analysis of student diaries
    - i comparison of individual 'critical events'
    - ii comparison of diaries- year 1, 2, & 3
    - iii comparison of diaries to interviews and focus groups

The aim of constant comparison is to emerge with themes or categories which are the building blocks of the analysis.

Miles and Huberman (1994) described three iterative stages to analysis: data reduction, data display and conclusion drawing and verification. They believed data reduction starts at the beginning of the study when designing the sampling strategy, during and following data collection through coding and making summaries of data. Data display is another way of reducing the data but also a tool for organising and managing the presentation of data. Both lead to conclusion drawing where patterns and structures are noted. Miles and Huberman (ibid) believed this should then be verified using processes that test their validity and reliability.

Miles and Huberman (1994, p. 65) refer to data coding (data reduction) as "data-labelling and data- retrieval devices" and suggested starting a priori list of codes at the outset of the process which were derived from the literature review and documentary evidence. I found this particularly useful to keep a focus on the aims of the research. The initial priori coding was then amended and developed using the data through line by line open coding of each transcript. NVivo (computer package) was a useful tool in keeping the codes to one page and to move them around or change the wording as the analysis progressed. Open coding was the initial stage of the analysis to summarise the core of each transcript and develop categories. In the case of the student focus group this information was also used in preparation for the individual interviews.

Following the initial open coding of all the transcripts the codes were grouped into categories of similar subjects. Through axial coding these were grouped together to form themes. These are presented in chapter 4. Verification of the conclusions is supported by the comparison between the different participants' responses and triangulation using different sources of evidence.

Table 3.3: Different steps of constant comparative method (adapted from Boeije (2002, p. 396))

Types of comparison	Analysis activity	Aim	Questions	Results
Analysis of focus groups				
1. Comparison within focus group.	Open coding: summarise the core of the interview. Finding consensus on interpretation of fragments.	Develop categories understanding.	What is the core message of the interview? How are different fragments related? Is the interview consistent? Do participants contradict or agree with each other? What do the fragments within the same code have in common?	Summary of interviews Provisional codes. Conceptual profile. Extended memos. Preparation of individual interview schedules.
2. Comparison between student focus groups and lecturers.	Triangulating data sources.	Complete the picture.	What themes appear in group 1 and not in group 2 (vice versa)? Why do they see things similarly or differently?	Verification of provisional knowledge from focus groups.
Analysis of student and previous student interviews				
1. Comparison within a single interview.	Open coding: summarise the core of the interview. Finding consensus on interpretation of fragments.	Develop categories understanding.	What is the core message of the interview? How are different fragments related? Is the interview consistent? What do the fragments within the same code have in common?	Summary of interviews Provisional codes. Conceptual profile. Extended memos.

2. Comparison between student interviews and diaries within the same year group.	Axial coding Formulating criteria for comparing interviews and finding patterns.	Conceptualisation of the subject.	Is A talking about the same things as B? What do both interviews reveal about the categories? What combination of concepts occur? What interpretation exists for this? What are the similarities and differences between interviews?	Expansion of codes. Description of concepts. Criteria for comparing interviews. Clusters of interviews.
3. Comparison between student interview groups- year 1, 2, 3 & previous students.	Triangulating data sources.	Complete the picture.	What does group 1 say about certain themes and what does group 2 say about the same themes? What themes appear in group 1 and not in group 2 (vice versa)? Why do they see things similarly or differently? (repeated with group 3 & previous students)	Verification of provisional knowledge from focus groups and each interview group.
Analysis of student diaries				
1. Comparison of individual 'critical events'.	Open coding: summarise the core of the event. Finding consensus on interpretation of fragments.	Develop categories understanding.	What is the core message of the event? How are different fragments related? Is the narrative consistent? What do the fragments within the same code have in common?	Summary of events Provisional codes. Conceptual profile. Extended memos.

2. Comparison of diaries- year 1, 2, & 3.	Axial coding Formulating criteria for comparing events and finding patterns.	Conceptualisation of the subject.	Is A talking about the same things as B? What do events reveal about the categories? What combination of concepts occur? What interpretation exists for this? What are the similarities and differences between events?	Expansion of codes. Description of concepts. Criteria for comparing interviews. Clusters of interviews.
3. Comparison of diaries to the focus groups and interviews.	Triangulating data sources	Complete the picture from a different perspective	What themes appear in the diary and not in the interview (vice versa)? Why are things similar or different?	Verification of provisional knowledge from interviews and focus groups.

Concluding Comments

An interpretivist approach was chosen to gain a deeper understanding of the experiences student midwives and lecturers have when learning and teaching breastfeeding within this unique curriculum. In this chapter I have provided a rationale for the decision to use case study for the design framework of the study. Ethical considerations have been explored and an explanation of the data analysis procedure included.

The following chapter will present the findings of the data collection. The data is organised into themes that are partly emergent and partly influenced by the research aims to demonstrate a common storyline.

Chapter 4

Findings

This chapter will present the findings from this case study. Holliday (2002, p. 3) suggested three ways this could effectively be achieved:

- A thematic approach where raw data is taken holistically and rearranged into themes that emerge.
- Data is presented according to the data collection strategy used.
- A mixed approach whereby data is organised into themes that are partly emergent and partly influenced by the research aims.

I chose to use the final method because after coding the data, and then comparing the data against each other as identified in table 3.3, the themes emerged and a common storyline developed despite the different data collection strategies used.

Focus groups were used to elicit a range of views and opinions about the phenomenon from the perspectives of the student midwives and the midwife lecturers to provide methodological triangulation. The areas discussed in the focus groups were followed up in individual interviews with student midwives who were at different stages of the programme, as well as with two previous students who had graduated, to gain a deeper understanding from a personal point of view.

The student midwives from the individual interviews were also asked to keep a critical incident diary of learning experiences related to breastfeeding. As well as for methodological triangulation, the purpose of this method of data collection was to provide an insight into actual learning situations that I could not observe.

To ensure anonymity the participants in the focus groups have been allocated numbers and pseudonyms given to those who participated in the individual interviews and critical incident diaries (see Table 3.2).

University documents related to the BFI were used to support my background knowledge of the phenomenon. These included a copy of the evidence sent to UNICEF that explained where, when and how the outcomes were included in the curriculum and how they were assessed. Other documents included a summary of how the mentors were informed of the outcomes and what could be expected of them; confirmation of the assessment results; and documentation relating to the experiential workbook, structure of the clinically-based workshops/tutorials and any assessments such previous OSCEs.

This chapter includes three sections each relating to a research aim. A fourth section addresses the issues raised in the critical incident diaries in relation to the findings in section 4.1, 4.2 and 4.3 (see table 4.1 for a summary).

Table 4.1: Summary of the presentation of findings

Title		Research aim	Themes		Sub-themes	Participant & Data Collection strategies
4.1	The key influences on learning	To identify the key influences which impact on student midwives learning.	**4.1.1**	The curriculum: Teaching and learning strategies	**4.1.1.1** Integration of breastfeeding outcomes **4.1.1.2** Revisiting & repetition **4.1.1.3** Experiential learning **4.1.1.4** Psycho-social aspects of breastfeeding **4.1.1.5** Assessment	Midwife lecturers (focus group) Student midwives- focus group (focus group) Student midwives (1st, 2nd & 3rd year)- individual interviews Previous student midwives – individual interviews
			4.1.2	Practical learning '*that's where you kind of learn'*	**4.1.2.1** Placements **4.1.2.2** The difference between rural & community placements **4.1.2.3** Mentorship **4.1.2.4** '*Give me a shout'* is this supervised practice? **4.1.2.5** Mentors' lack of knowledge **4.1.2.6** Continuity of mentor **4.1.2.7** How do students know if they need help? **4.1.2.8** Assessment of competencies	
			4.1.3	Learning through experience	**4.1.3.1** 'Tricks of the trade'- learning through observation **4.1.3.2** Developing skills of personal knowing and art of midwifery **4.1.3.3** Reflective practice	
			4.1.4	Professional issues	**4.1.4.1** Time to mentor or not? **4.1.4.2** Attitudes towards breastfeeding	

4.2	Fitness to practice	To gauge student midwives self-confidence in their ability to support and advise mothers with breastfeeding as they progress through the programme and on completion as registered midwives.	**4.2.1**	Curriculum: UNICEF BFI	**4.2.1.1** Developing knowledge and skills to support breastfeeding mothers	Student midwives- focus group (focus group) Student midwives (1st, 2nd & 3rd year)- individual interviews Previous student midwives – individual interviews Midwife lecturers (focus group)
			4.2.2	Professional practice: feeling confident to practice		
4.3	A consistent approach	To explore the perceived impact of implementing the Baby Friendly standards in the BSc in Midwifery curriculum.	**4.3.1**	Singing from the same hymn sheet	**4.3.1.1** Bridging the theory-practice gap **4.3.1.2** Putting breastfeeding high on the agenda **4.3.1.3** Pieces of a jigsaw puzzle	Midwife lecturers (focus group) Student midwives- focus group (focus group) Student midwives
			4.3.2	Professional issues: UNICEF UK Baby Friendly Initiative	**4.3.2.1** The role of the project leader	

			4.3.3	Professional issue: employability		(1st, 2nd & 3rd year)- individual interviews Previous student midwives – individual interviews
4.4	Critical Incident diaries		**4.4.1**	Influences in learning in practice	**4.4.1.1** Repetition of theoretical learning **4.4.1.2** Displaying the patterns of knowing **4.4.1.3** Learning through observation **4.4.1.4** Supervised practise? **4.4.1.5** Reflective practitioner	Student midwives (diaries)
			4.4.2	Confidence in practice		

4.1 The Key Influences on Learning

Research aim 1 was to identify the key influences which impact on student midwives learning. The semi structured schedules used in both the focus groups and individual interviews included questions on both the academic and clinical aspects related to the curriculum however there was consensus that the key influence on their learning about breastfeeding was clinical experience, whether they perceived this as good or poor.

When the focus groups and individual interviews with student midwives and previous student midwives were compared the themes in diagram 4.1 were identified.

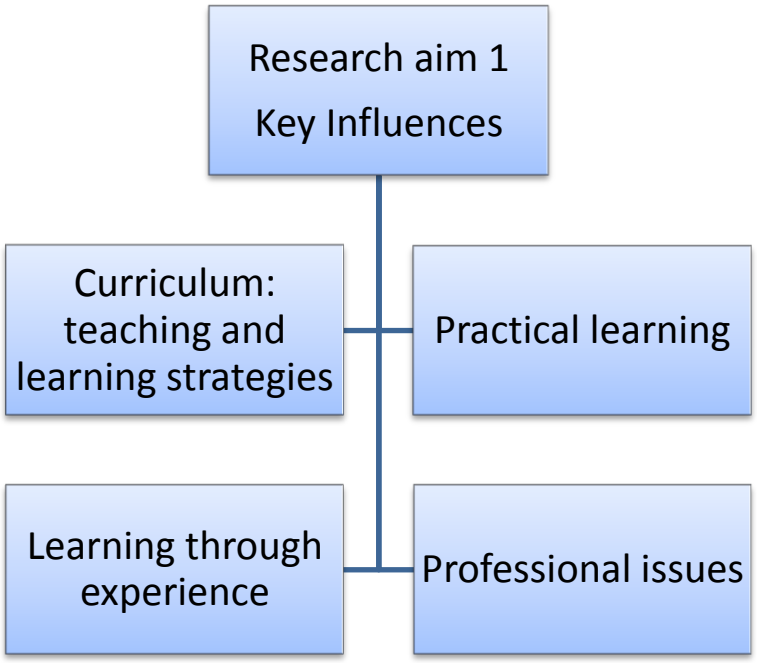


Diagram 4.1: Representation of emergent themes: The key influences on learning

4.1.1 The curriculum: Teaching and learning strategies

An important aspect of the Baby Friendly Initiative (BFI) was to demonstrate how the learning outcomes were integrated into the curriculum and what teaching and learning strategies were used to do this. This lead to a number of new discrete sessions and

tools being introduced such as clinically based tutorials and an experiential workbook. It was evident in the midwife lecturers' accounts that they could see the need for learning and teaching about breastfeeding to be holistic and not just focus on physical aspects. Some of the students however had difficulty in articulating this. Assessment was also considered an important aspect of this process by the lecturers and also some of the students. Formative and summative assessments were introduced in all years of the programme. This ranged from Objective Structured Clinical Examinations (OSCEs), essays and on-line tests to demonstrate achievement of clinical competencies.

4.1.1.1 Integration of the Baby Friendly outcomes into the curriculum

The accreditation programme was based on the introduction of specific outcomes, determined by UNICEF UK BFI, into the curriculum (UNICEF, 2002). The midwife lecturers seemed quite clear about the outcomes and how they fitted into the programme.

> *"…even with the new programme we sat down with all the learning outcomes, eighteen learning outcomes, and worked out which learning outcomes we matched in which module so we are really doing that and they are in the module handbooks so that we are quite clear that these are the ones, they might be in more than one module but they are being looked at from different perspectives…..I think we've got that quite well organised."*
>
> *(Midwife Lecturer 4)*

However, throughout the student interviews there appeared to be some confusion over which outcomes they were to achieve over the three years and they were unable to answer specific questions related to them. When Anne was asked if she was aware of the UNICEF UK BFI outcomes she replied

> *"To be honest I'm not too confident on them. I was trying to find them on the internet then I could only find the ones for health professionals 'cos I was trying to find the ten step one, this is for attachment and positioning?"*
>
> *(Anne, Year 3)*

Using Bruner's (1960; 1996) spiral curriculum it was the intention to integrate the BFI educational outcomes into all modules, where possible, to encourage students to

accept breastfeeding as the norm; as part of the childbearing continuum and to encourage them to think more critically.

> *"... and students come up with ideas from breastfeeding i.e. when you get post partum haemorrhage, one of the key things they come up with is put the baby to the breast to stimulate oxytocin….but if you asked them right out they will not recognise that they are linking …"* *(Midwife Lecturer 3)*

In hindsight the previous students recognised that the outcomes had been integrated as part of the 'norm' into many modules.

> "*Well breastfeeding did come up in a lot of modules, even, yeah uh huh, even if it was just a specific breastfeeding topic, it did come up in different things you know, trying to think like the kind of, the module with the kind of, the newborn, like the ill newborn, so it came up in there as to why breastmilk is important, it would come up even in the labour delivery bits, why putting the baby straight on for skin- to- skin or initiation at breast, to even, for to help placental separation you know, so it did kind of come up in different types of wee bits on reflection, you know when you kind of think about it, uh huh yeah so it did."*
>
> *(Polly, Previous Student)*

> "*I think it's only at the end of the three years that you realise how things have been cut up into little chunks and then, third year for me was like everything just came together, I remembered the students saying you know when I was in first year and they were in third year, it all comes together like a puzzle in the end and you think oh you know it does?"* *(Paula, Previous Student)*

4.1.1.2 Revisiting or repetition?

The spiral curriculum is about revisiting a subject but at a different level and in different contexts (Bruner, 1960). One concern that is sometimes articulated by students is that they see this just as 'repetition'. In the focus group the midwife lecturers were very keen for students to see the difference between 'repetition' and 'revisiting'.

> *"They're still doing it across kind of different modules, there's a need for co-ordination, you know for us all to have good awareness of what I'm doing in my module, what you're doing in your module to make sure that although what we're doing using the spiral curriculum we're not exactly repeating one another to the point where, the students point of view, that's what they feel*

that that is." "... what I'm suggesting is that's quite an important thing probably to have done otherwise we could end up maybe just 'repeating' rather than 'revisiting', something slightly different."(Midwife Lecturer 5)

On the whole 'repetition' was a concept referred to by students rather than revisiting however it appeared to be regarded positively as a valuable tool for learning.

"I think the whole, my whole thing on it is just keep repeating it you know, I think it is a good thing to kind of drum it into people's heads, to keep going over it you know it should be something that's always refreshed."
"I think that's a good thing. Absolutely because as I say it takes you at least seven times reading something or you know hearing something before it actually sinks into your head." (Debbie, Year 1)

4.1.1.3 Experiential Learning

On the whole there was general agreement amongst the midwife lecturers and the students that experiential learning and teaching strategies were most appropriate for the majority of issues relating to breastfeeding rather than lecturers.

"Give them balloons and all sorts of things, make anatomy live."
(Midwife Lecturer 1)

"Yeah that's right, I was thinking about that model and kind of working out the hormones and things, getting them to complete them and we've got the laminated breast and stick the labels on to. I think we might do the odd five or ten minutes of modified lecture but it's not the way to be talking at all."
(Midwife Lecturer 4)

"I'm not a particular fan of sitting in a classroom with a power point presentation. I don't find I learn very much from a power point presentation, but that's me. I would prefer to be given a workbook and also to have discussions but everybody's different as I said." (Paula, Previous Student)

Experiential strategies included of simulation, group work, workshops, workbooks and actual clinical practice. Clinical practice will be discussed in greater detail in section 4.1.2.

"Yes I've used experiential learning strategies where you get them to do positioning and attachment and when they're doing the positioning you get them to go into positions that you would never think about and when you do

that I say to them 'right, how do you feel in that position?' and they will tell you things like 'I don't think it would be productive' or 'excellent' or whatever. So then, with that you can go onto the usual positions and then say to them 'right what is the difference there between what you've done…problematic positions and this one here?' and then I would say again, 'take heed of what you've done here' because now they are able to take current positions and you're there to say for example 'why do you not try this sort of position'." *(Midwife Lecturer 2)*

"And to make sure that it's very practical and that we appreciate the kind of real life difficulties that women might have that might influence their breastfeeding." *(Midwife Lecturer 4)*

Simulation was generally agreed to be a good method of learning amongst the students. This was predominantly done using dolls and breasts and performing role play. The student focus group discussed it as follows.

"*I like the dolls, the position and attachment".* (Student Midwife 6, FG)
<<general agreement and discussion within group>>

So simulation…?" *(Interviewer)*

"*When learning about lactation we actually drew out the breasts"*
(Student Midwife 1, FG)

"*Interactively you mean?"* *(Interviewer)*

"*It was the same with the exam you had [OSCE] too and that's quite useful."*
(Student Midwife 1, FG)

"That's right, I found that easier to learn actually doing something rather than just reading it because then I don't take it in." *(Student Midwife 3, FG)*

"Yeah, you feel like you are doing something rather than just listening, practising hands on and hands off." *(Student Midwife 5, FG)*

The midwife lecturers also appeared to value the clinically based workshops to assist the revisiting of subjects from a clinical perspective using recent examples from the students' experiences. These consisted of five workshops carried out on a rotational

basis in the clinical placement areas (one per month). The topics are set around major breastfeeding issues. The aim is to discuss the topic in relation to the students' clinical experiences on that placement.

> *"I think also what's happening is we are revisiting subjects again and again where before I think we only looked at the topic once or twice but now we are looking at it a number of times and therefore we are reinforcing what we've already taught, particularly when you think of the breastfeeding workshop which is out in the clinical placement and they are seeing situations and they can come back and discuss them in their peer sector group and different grades of students not only in terms of one class, one cohort, one standard. It's now you are having a mixed class of seniors and junior together and therefore they are sharing information as well which is very good I think. It's the only forum where we have got different grades of students learning and discussing a topic."* *(Midwife Lecturer 3)*

One lecturer found the clinically based workshops so valuable that she felt this format would be useful for other subjects.

> *"I think again that's another area I wish we could do with other subjects to be honest. I really would love to be able to, we've talked about before doing clinical teaching sessions on other things, I know I'm going off a bit but I think it's such a good way of keeping emphasis for the students. It also gives them a chance to bring real situations from practice too, because they'll have forgotten by the next time they come into university. They can bring that with them into those workshops because the workshops are exactly like that, they're half a topic and half student-led so that means we can explore them meaningfully at the time or near enough as the episode happened."*
> *(Midwife Lecturer 4)*

This was reiterated by the students and once again the issue of repetition was a strong theme. The following students also identified the value of learning from each other.

> *"Just going through the breastfeeding workshops I found helpful as well and just going through all the signs of positioning and attachment and kind of repetition was good as well…it was good to just talk to other students as well and have that kind of feedback while you're on placement so it's very fresh in your mind saying I was with a woman yesterday and this happened and this happened and you've got a tutor who really knows what they're talking about plus some other people's experiences mixed in and I find that really helpful."*
> *(Denise, Year 1)*

"I think the tutorials are really good, I mean I have ended up going to the same tutorial about three times but you do have to do something several times before it sinks in I think so you know I'd quite happily repeat them all and it's a good thing that we're repeating them I think and I try and get to as many of the breastfeeding tutorials as possible." *(Debbie, Year 1)*

"Then you're in placement and you used to have little sessions where one of the lecturers would come out to the hospital and do one of the aspects of breastfeeding, you know a session on it and a lot of the time I found, going home, doing it myself and then attending one of the sessions, it was, you know you do it yourself ... I found it really beneficial." *(Paula, Previous Student)*

4.1.1.4 Psycho-social aspects to breastfeeding

The student midwives made little reference to the inclusion of the psycho-social aspects of breastfeeding. However, in agreement with White (1995) the lecturers highlighted this as an important aspect of the programme to underpin practice.

"Sociological background. Why have they [mothers] made that choice? Where is that choice coming from? And respecting their choices and .....But be aware of how subtle influences could maybe encouraging them to try something in relation to current evidence." *(Midwife Lecturer 4)*

"I think the psychological and notional as well, psychological from the point of view changing ideas, changing attitudes, changing attitudes about breastfeeding self esteem, I think that's one of the big issues isn't it for out there in the public domain that maybe our students would be able to ensure they promote self esteem and confidence in the breastfeeding population." *(Midwife Lecturer 1)*

4.1.1.5 Assessment

Midwife lecturers reported that they felt assessment was an important component of the initiative to ensure learning was taking place and also that it emphasises the importance of the subject within the curriculum. This took the form of both summative and formative assessment throughout the programme. This included a compulsory OSCE in year one and a number of other methods ranging from discussion, workbooks, on-line tests and observation of simulation to formal essays and assessment in clinical placements.

"I think that people don't like assessment but assessment leads courses and they realise that this topic is important, you know I think that students always focus on assessment as an important part of midwifery training you know we must jump through hoops to get there and we put midwifery topics then they realise this is an important topic for midwifery because they are assessing us on it so I'd better learn it!" *(Midwife Lecturer 3)*

In theory midwife lecturers found the experiential workbook a useful tool for consistent formative assessment throughout the programme. It contained a series of activities to complete in clinical practice placements over the three years of the programme. One aspect of this was collecting the numbers of mothers they cared for in relation to breastfeeding. These activities were signed by the mentor and discussed at meetings with their personal tutor (lecturer). However, some lecturers felt it was time consuming to monitor.

"The themes of the workbooks as well as to facilitate the teaching, you know, part of learning, encourages them to bring their workbooks in a lot more and you say 'right from your workbook' and it might let them see the relevance of the material is there. Sometimes I think it's a bit of an add-on for some of the students. I must admit I'm always saying 'how are you getting on with your workbook' without reading it all that much you know, as if we were seen to be using it a lot more it would be better." *(Midwife Lecturer 4)*

The student midwives in the focus group agreed with this finding it, at times, too much additional work.

"I think parts of it were quite good, but it is, along with everything else there's quite a lot of work in it and to collect ten case studies and get mentors to sign them off that kind of thing can be quite difficult particularly in first year I didn't do much, much more so in third year where in first year I didn't so I think, I think that was quite a difficult one to do, really good justice to." *(Student Midwife 1, FG)*

In contrast, with the exception of Polly who also found it was too much additional work, the participants who were interviewed individually found the workbook to be a useful tool.

"I think it was good because it wasn't, you know, your experiences you had to write and you didn't have to write masses and masses and masses but you just

wrote what you felt about it which was and it had to be in your own words which was good." *(Debbie, Year 1)*

"I think it does kind of put the responsibility on yourself to be getting out there to these breastfeeding support classes to be learning more because you could just sit and just get like what you were taught in the lectures but really that's just the kind of start, you need to, you're not going to learn from there how to assist a woman with breastfeeding because every woman's different, every situation's different so you've really got to be going out there and adding to what you're getting and through the experiential workbook you're getting the chance to do that." *(Sarah, Year 2)*

"I thought that was quite good as a reflective, because I was looking out for women that had brought in, I thought instead of just helping a woman breastfeed and I was taking in everything and I thought right what's she like, what's her emotions like, how am I going to cope round this and I thought I wouldn't have done that beforehand which was quite good." (Anne, Year 3)

"The one thing that I found that really helped me in first year was the workbook that we were given by yourself, … it covered every aspect of breastfeeding and it was, you knew you had to fill in your book so you knew you had to observe so many breastfeeders, you knew you had to observe and do case studies and in a way just, you spend more time on it so you learned more and I really enjoyed it." *(Paula, Previous Student)*

Students were also continuously assessed by their mentors in clinical placements through achievement of competencies from supervised to independent level (Bondy, 1983; University of Paisley, 2001a).

4.1.2 Practical learning "that's where you kind of learn"

Overall the student participants in this case study valued clinical experience as the key influence in their learning above theory. Students in the focus group believed that what they were taught in university reflected clinical practice however they valued the clinical experience as being more important.

"Unless you practise you very quickly lose it so you definitely, you have the grounding but you definitely need the practical..."
(Student Midwife 2, FG)

"I think that what we've had academically has been a really sort of good starting point but you need to be out there and developing your own skills as well and that's when your communication skills come into it and things so I think that sending us out there even in our first year in our first placement like in our first ward placement at the end of first year, it has given us enough knowledge that we could go out there and be confident." (Sally, Year 2)

"I know all about hormones and how breastmilk comes and all the educational part but I found the practicalities it's more on placement that it all fell together, when I was in the clinical areas, that's where I found my confidence, how I learned from that for myself." (Anne, Year 3)

Practice was considered core to this curriculum (University of Paisley, 2001b), with the aim of providing meaningful learning experiences through the integration of theory and experience and the development of cognitive, affective and psychomotor domains of learning (Bloom, 1956). The aim was for students to gain regular clinical experience, with supernumery status, to introduce them to a 'community of practice' where they could legitimately participate on the periphery of practice initially and gradually reach a point of full or central participation by the end of the programme (Lave & Wenger, 1991).

A significant challenge in all nursing and midwifery curricula is accessing an appropriate community of practice with appropriately prepared mentors. All the practice-based placements for this programme are Baby Friendly accredited and therefore all the mentors have undergone a programme of breastfeeding education which lasts a minimum of 18 hours and should consequently have had regular updates to maintain their accreditation status.

There are approximately 400 mentors between both Clyde division (Greater Glasgow and Clyde Health Board) and Ayrshire and Arran Health Board where students studying on this programme access practice-based placements. As part of the BFI education standards each mentor was informed individually about the BFI education standards and outcomes and what was expected of them by a news letter and the information was also disseminated through management meetings, supervisor of midwives meetings and on an ad hoc basis as lecturers visited the placement areas.

The theory–practice gap is of concern to most higher education institutions and the midwife lecturers expressed a degree of concern about the teaching and supervision in the clinical areas compared to that provided in the academic setting prior to the introduction of the Baby Friendly Initiative.

> *"The significant problem has always been students kind-of getting a certain amount of teaching in the classroom and then going out into the clinical area and there being a theory practice gap, quite a major one, and then students picking up, sort of conflicting ideas and conflicting advice about how to advise women and certainly I think probably one of the more significant bits is that this initiative has definitely corrected all of that and it was very important that that was used*." *(Midwife Lecturer 5)*

A consistent approach will be explored in greater detail in section 4.3.

4.1.2.1 Placements

Concern was also expressed by students regarding the effect the flow of placements in the programme had on providing the appropriate experiences for learning about breastfeeding in practice (see table 4.2). Year two of the programme flow did not have a community or ward placement (except for two weeks which was a continuation of the final first year placement). Instead, the focus was on 'high risk' placements; gynaecological and medical placements followed by neonatal unit and labour ward where learning opportunities related to breastfeeding were limited. This was evident in the difficulties the second year participants had in completing their critical incident diaries in the time allocated (see section 4.4).

Students in all three years felt the time span without a 'normal' midwifery placement was too long. Even the first year students were worried about the approaching gap in their training

> *"... I think you're going to worry that your knowledge base is going to get a bit rusty because you're not actually using real people." (Debbie, Year 1)*

However, although Sally said she had worried about this she did in fact feel her confidence had increased by the end of year 2. The issue of confidence is discussed further in section 4.2.

> *"... but going back even almost a year later you realise there are, things like positioning and attachment, things like that do stay with you so you just kind of go in and get on with it so I definitely feel that my confidence has increased."* *(Sally, Year 2)*

Table 4.2: BSc in Midwifery programme flow

Year	Flow of practice, theory and other components of the programme (weeks)									
Year 1	Theory 8 CA 1	P 3 community	EL 1 V 2 SL 1 Theory 5 CA 1	P 5 Labour ward/ community or ward	V1	P 5 Labour ward/ community or ward	SL 1 V 1 Theory 4	P 5 Labour ward/ community or ward	CA 1 A 1 V3	P 3 Labour ward/ community or ward
Year 2	P 2 Ward or community	V 1 T 6	P 5 Surgical or Gynae.	V 1 CA 1 SL 1	P 5 Surgical or Gynae.	SL 1 T 5	P 5 Medical or Neonatal	CA 1	P 5 Medical or Neonatal	CA 1 A 1 V 3 CA 1 A 1 EL 2 (psych.) EL 1 V 2
Year 3	T 5	P 4 Labour ward/ community or ward	SL 1 A 1 SL 1 A 1 V 2 T 1 SL 1 A 1	P 5 Labour ward/ community or ward	V2	P 5 Labour ward/ community or ward	SL 1 A 1 T 2	P 6 Labour ward/ community or ward	SL 1 V1	P 4 Labour ward/ community or ward
Cont.	A1	P 4 Labour ward/ community or ward	Admin 1 V 1							

SL: Study leave P: practice
V: vacation EL: experiential learning

Source: University of Paisley, 2001, pp. 24, 26, 30, 36, 39, 40

4.1.2.2 The difference between rural and community placements

There was general consensus from participants that they had more learning opportunities in rural and community placements. Time was identified as an influencing factor in this (discussed in greater depth later in this section). The students felt more time was given for breastfeeding in these areas than in the urban hospital placements. Sally believed this was due to emphasis on promoting normality in these areas of practice; others believed available time to be the greater factor.

> *"I felt that I learned more up there [rural placement] about breastfeeding than I ever have in placement [urban], maybe it's because we spend the time with the women and we were in the house ……we would actually wait and have a conversation with the women and see how she was doing and then obviously when we were ready, we could actually spend more time with the women...*" *(Sally, Year 2)*

Chamberlain (1997) found that community midwives were more likely to provide feedback to students on their performance and used the time travelling in the car as time to teach. Denise supports these findings reporting that she felt driving in the car with the community midwife was a useful learning opportunity.

> "*When we were driving between places, asking the midwife about certain situations, you know that lady had this or that or what would happen there and you know a woman with mastitis and you know talking about it so you know that was always quite a good learning opportunity in the car, you know going between places."*
>
> *(Denise, Year 1)*

Paula, a previous student who had been predominantly based at a community maternity unit, described how she had access to a wide variety of learning opportunities related to breastfeeding from support groups to baby massage sessions. She also suggested she had a greater partnership with her mentor and a sharing of ideas between them.

> *"It helped me feel more confident. It helped me think gosh she's a qualified midwife and I'm just a third year student and she's asking me that, maybe I do know more than I give myself credit for and whether it was just her way of, I don't know what her reason behind it was but it was very helpful... It helped me feel more confident."*
>
> *(Paula, Previous Student)*

The first year students agreed with this. They said the labour suite environment did not particularly provide learning opportunities for them whereas community provided a more relaxed atmosphere and more time. Anne, a third year student, also described the continuity of seeing a woman in her own home over a few days facilitated her learning.

4.1.2.3 Mentorship

The EC Directive article 27- Part B 89/595/EC requires that clinical areas will support the student to gain the appropriate experience required for registration as a midwife (University of Paisley, 2001a, 2001b). In line with the NMC guidelines (UKCC, 1999, 2000; Nursing and Midwifery Council, 2006b) the *Clinical Competency Profile* (University of Paisley, 2001a) clearly identified the mentors role as a first level practitioner who

> "assumes responsibility for guiding, teaching, supporting and evaluating the student's performance. This enables the student to experience day-to-day practice using the mentor as a role model and resource within the clinical setting."
>
> (University of Paisley, 2001a, p. 5)

When discussing the role of the mentors with the student midwives on the whole most felt they had limited structured teaching about breastfeeding in the clinical areas and often a lack of supervision.

> *"I think maybe it would be helpful if we had some sessions from the clinical mentors given that they help people breastfeed every single day you know I think that would be a really good thing*." *(Debbie, Year 1)*

However, some participants in the student midwives focus group felt they gained better information and support from non-midwifery members of staff.

> *"I just find to be honest I haven't really learned a lot from the midwives, it's been the auxiliaries that tend to assist them because we've got no time to spend with the women, I would actually, I learned more from them from what they're saying and what they're doing. The midwife is very busy and just don't have enough time to spend." (Student Midwife 4, FG)*

This was supported by Denise who when asked if she felt she learned from observing midwives practice she answered

> *"Yes, yes I think observing, certainly when I was in the ward area I would go, often from the auxiliaries, you know, I find would be very helpful and would have a bit more time to spend you know with the women and then I would go with them."*
>
> *(Denise, Year 1)*

When asked if these auxiliaries had been trained she went on to say

> *"I don't know, I don't know. But you did find a lot of time it was auxiliaries that were helping the breastfeeding and sometimes I felt it was awful conflicting, one person does something and another person and I felt it was a bit hands on as well always kind of grabbing at the women's breast and I just…"*
>
> *(Denise, Year 1)*

Debbie also found what she was observing being practised by the auxiliaries was different to the theory she had been taught in first year at university but when she broached this with her mentor was advised

> "*...it's kind of different in practice to what it is in theory."* *(Debbie, Year 1)*

Auxiliaries are not first level practitioners and do not have the training to support student midwives in practice however despite this it appears some student midwives are using them as their role models and learning through observing their practice whether it is evidence-based or not.

In contrast, Debbie did acknowledge that her mentor took her for tutorials using a doll and breast. Despite her comments above, and although she said she enjoyed the academic theory, she said she felt clinical practice was more valuable. This was a common theme from the student midwives that despite the problems with clinical supervision and teaching they still valued clinical experience above learning in the university setting.

> *"I felt that I learned as much as I could have really without being out in practice. I think that's where you kind of learn, you kind of build it all up then and I don't think I*

got enough practice really out in placement and certainly not really supervised practice." *(Denise, Year 1)*

4.1.2.4 'Give me a shout'- is this supervised practice?

There was concern from all student participants about a lack of supervised practice with breastfeeding compared to other skills they were being taught in the clinical areas such as antenatal examination and postnatal examination.

The focus group had quite a heated discussion and felt strongly about the need for supervised practice to assess them to ensure they are giving correct support and advice.

"I was just going to say that comparing breastfeeding with other skills, well in my personal experience, the mentors spend a lot more time with postnatal examination…..antenatal examination, they do everything with you but breastfeeding you're kind of left 'oh you need the experience'…" *(Student Midwife 3, FG)*

"*I think if they spent more time with the woman and just have a special attachment with the woman more but because they say 'oh you're supposed to be learning so on you go and see how you get on' but they're not in the room with you."*
(Student Midwife 4, FG)

"If I were going to seek help and I'd done as much as I could and I hadn't achieved, to get the baby to sustain, you know to sustain sucking,… well you know they would come and say 'well you know I'm not telling you anything different to what you're doing already', and well you don't know what I'm doing because you're not there with me and I might not be doing it right."
(Student Midwife 1, FG)

"*I think somebody mentioned earlier on that it's not always easy with breastfeeding because you do get caught up, I think you do very much get caught up in-' am I helping this woman correctly, this baby's not feeding, what's going to happen next, are we going down the road of hypoglycaemia, am I responsible for this, this is not good, how can I make it better' and nobody seems to have that finite answer and I'm not saying they aren't professional but just as a student you need that support but I think mentors are aware but that it's not maybe the way you find at the end of the day …"* *(Student Midwife 1, FG)*

One student accepted that in third year, when they should be practising at independent level, this lack of supervision may be reasonable but not in first year (Bondy, 1983; University of

Paisley, 2001b). In first year students should be working at dependent level. Both first year students agreed that they had been subject to a lack of supervised practice.

> "*I find that in the clinical areas it's not always the most helpful, you know there's not an awful lot of input like what you get here [university], you know there's not the same kind of support I don't feel anyway."* (*Denise, Year 1)*

And when asked

> **"***And what about support for you to assist the women? Did they teach you*?"
> *(Interviewer)*
>
> *"I didn't really get any of it no, none."* *(Denise, Year 1)*
>
> **"***No?"* (*Interviewer)*
>
> *"And no real opportunities to be honest."*
> *"I think that a bit more input from mentors, you know, maybe because they will be saying you've got your paperwork and we make sure that you're very meticulous with your paperwork and with taking blood and with all your different practice, but I felt that breastfeeding, not really.*" *(Denise, Year 1)*

Denise did however add that her mentor on the ward placement sat down with her to do theoretical teaching but again had no direct supervision when caring for breastfeeding mothers.

> *"I just felt that maybe the mentors should maybe give us a bit more breastfeeding education given that they teach you other stuff when you're out there."*
> *(Debbie, Year 1)*

When asked how she knew then if she was doing it right or wrong Denise replied

> "*I just assessed it from what I learned in Uni and I would go through the different points, looking at the woman as well you know, if she'd had an operative delivery or not and, you know, how comfortable she was, what she would prefer, would she prefer sitting. I would ask the woman basically and get guided in that way and then use the knowledge that I had from you know basically text book knowledge I was using*." *(Denise, Year 1)*

Despite this the students showed obvious signs of difficulty in their body language when saying anything negative about their mentors. Debbie added that she said she had a very good mentor on one placement who in her mind supervised her appropriately.

> *"I did say to her I want to get lots of breastfeeding practice while I'm here and so she would leave me to it because she said there's nothing worse than somebody breathing down your neck' but she'd pop in every five minutes and say to me are you ok and say to the mum you know is everything going alright and she would stay for a couple of minutes and chat to us and then sort of leave us alone so she was good that way but she did keep coming* in and *checking that it was all ok."* (Debbie, Year 1)

I interpreted these comments to mean that the mentors were not always using Bondy's 'criterion- referenced rating scale' (1983), to provide appropriate breastfeeding learning and assessment opportunities. The Bondy assessment tool also clearly indicates that students should follow the following four point rating scale that reflects the three domains of learning; knowledge (cognitive), practical skills (psychomotor skills) and attitude (affective) and their practice should be:

- Dependent in Year 1
- Supervised in Year 2
- Supported in Year 3 and Independent for the final 2 placements

4.1.2.5 Mentors' lack of knowledge

Looking back at her time as a student midwife Polly reported that she was left to her own devices in third year however recalled fair supervision as a junior student. However, she did comment

> "*Obviously in first year, you don't know it all and you need to ask, you need to have the confidence to ask instead of I don't know, can you come and help me, can you come and show me and fortunately the mentors that I had were very supportive*."
> *(Polly, Previous Student)*

The concern is that the students are accepting of their need to be confident to ask for supervision rather that getting appropriate supervision as part of their education.

When discussing the lack of supervised practice one student in the focus group verbalised her concern that in some mentors it could be due to their lack of confidence.

> *"I don't know if perhaps all midwives are that confident with actually promoting and supporting women breastfeeding, that would be my kind of concern slightly."*
> *(Student Midwife 1, FG)*

There was agreement within the focus group as another student said

> *"I sometimes feel that a lot of the reasons because you get pushed into, right you go and do it and you can practically finish the sentence ……. 'Because you probably know more than I do'."* *(Student Midwife 2, FG)*

It could be speculated that if midwives in the placement areas were acknowledging that the students were having more breastfeeding education in their programme than they received, they may find it threatening. Some students suggested this led to inconsistent practice.

> *"I think they're a little bit wary about doing it while we're there because we're sort of like going 'oh you know, you do it that way, well we've been taught' you know that and I think that's going through their head you know 'if I'm not doing it right my student's going to be watching what I'm doing' but I think a lot of it is that they're not totally confident themselves, they do it their way, but their way might not be the right way therefore they send us off to do it and we're not doing what they're doing."*
> *(Student Midwife 2, FG)*

Some students suggested the mentor's negative attitudes towards breastfeeding attributed to their lack of knowledge and confidence.

> "*The mentors, some of the mentors, don't think about it the same as what the lecturers do, most of the lecturers, all of them are very proactive and you think this is great and then you go out to the clinical areas and you're just deflated again because they're just not that interested so you don't get the practical experience that makes you lose your confidence and then the next time you go back out you don't know what advice to give because you haven't been told before."* *(Student Midwife 5, FG)*

Attitudes will be further explored in section 4.1.4.2.

4.1.2.6 Continuity of mentor

Paula (previous student) felt quite strongly that the continuity of mentor and supervised practice was of great benefit but also recognised the value of working with other mentors and observing how they worked to develop into her own skill base enhancing her feelings of confidence.

> *"…your mentor's not always there, it's good to find out, it's good to have little discussions and find out what did you do or just the changeover of staff, if there's another midwife looking after a woman she might have used a different method of helping a woman breastfeed you know with a difficult breastfeeder, she might have tried something different that I've never heard of and it's good, yeah you do, and I think so. And you become more confident as the years go on."*
>
> *(Paula, Previous Student)*

She also described her mentor asking her advice as she progressed in the programme on breastfeeding matters. This contributed to her feelings of confidence.

> *"It helped me feel more confident. It helped me think gosh she's a qualified midwife and I'm just a third year student and she's asking me, that maybe I do know more than I give myself credit for and whether it was just her way of, I don't know what her reason behind it was but it was very helpful."* *(Paula. Previous Student)*

Issues of confidence will be further discussed in Section 4.2

In all clinical areas there are breastfeeding advisors (titles may be different) who either support women with particular problems or as more recently introduced in Greater Glasgow and Clyde, to support midwives to support mothers who breastfeed. Some students felt it would have been beneficial to have had the opportunity to work with the breastfeeding specialists who had a dedicated post to support breastfeeding mothers and would possibly provide them with greater opportunities to observe their practice and in turn receive adequate supervision and feedback on their own performance.

Anne (year 3), Sally and Sarah (year 2) commented that in second year they felt supported by mentors who would check to see if they were okay and they also felt there was someone to call on if they required help but again this begs the question whether this is supervised/ supported practice if they have to seek it out. Most participants gave examples of being sent

to assist mothers who needed help with breastfeeding and were told to '*give them a shout*' if required.

4.1.2.7 How do students know if they needed help?

A lack of supervision also leads to the question how do the student's know if they require help or if they giving the correct information to mothers.

> *"I used to find when I was, it was more go and help that woman to breastfeed or she's buzzing to breastfeed go and help her and I used to think well what can I do to help her and I would sort of hold the baby and help her try, I'd put it in the right position and I'd try and sometimes I felt well if it's not actually on well what do I do and then finally I would just go and get the midwife and say I can't get it to do it."*
>
> *(Anne, Year 3)*

Several of the students gave similar examples and also similar responses in that either their mentor would come and help if asked or they would reply

> *"... 'if you've done everything that I would have done, what else can you do', some of them are just like 'oh just tell her to go on the breast pump'."* *(Anne, Year 3)*

As well as a lack of supervision in these instances students are not given the opportunity to learn through observation of the mentors or by receiving adequate feedback on their own performance.

4.1.2.8 Assessment of competencies

When discussing the mentor's role with Anne (third year student) I asked her if the mentors were assessing her practice to 'sign off' her competencies in relation to breastfeeding. She replied

> *"I don't think they are. A lot of the times I've went and done it, a lot of people ourselves, we've went and done it ourselves, closed the curtain round and it's just us, the students and that's why I never know am I saying the right thing because I try and stick to the facts, to what I know but then I think am I being, maybe I'm wording it differently and the woman might think, I've said something and she thinks that's how it should be done, whereas somebody, my mentor might correct me and say no, where you went wrong there was you should have said to the woman such and such and showed her different ways."* *(Anne, Year 3)*

Students have a competency profile to be completed whilst on clinical practice that includes competencies specific to breastfeeding and is to be signed off by mentors at the end of their placements in each year to enable them to progress to the following year (University of Paisley, 2001a). Again this comment suggests that some mentors are signing that the competencies have been achieved at the appropriate level without observing the students practice.

4.1.3 Learning through experience

Learning through experience in clinical practice was continuously referred to by student participants as the main area for developing the knowledge and skills required to support breastfeeding mothers.

4.1.3.1 "Tricks of the trade"- Learning through observation

Learning through observation was a theme that was threaded throughout the data and as discussed above fraught with difficulty. However, when students had the opportunity to observe, be it a midwife or other person, they valued the experience.

> *"I think we pick up the more we watch, you know we get the general basis of it at university and then you go out to, you know, working in practice and we pick up more skills out there that you can pick up in your basic training and take up and see what somebody's doing and say 'oh yes that's why that's happening', and things like that, and I think you do pick up a lot with them and you also look at different people and think I like the way that she does that or I like the way that she talks to somebody, I like the way she explains something so then you take on those in your own working with women."* *(Student Midwife 2, FG)*

> *"And I think when you're out in the clinical areas, that's when you pick up all the kind of tricks and tips and things like that, that you maybe use in the future."* *(Sarah, Year 2)*

> *"Yes and I think that's just through experience and observation like it just seems all a bit footery you know."* *(Denise, Year 1)*

Debbie (year 1) also valued observation of real life situations as a learning tool.

"I think because you're actually dealing with real people, real babies and you know they don't always play by the rule books the babies, you know they don't always do it like it's done in the posters, you know it is more of a learning experience."

(Debbie, Year 1)

Some students commented that another problem for them when working with different mentors was conflicting advice as they witnessed mentors practising in different ways. Andrea had experience of observing a variety of midwives with their own 'tricks of the trade' and felt that this was still valuable however she was left to work out what was the right way to do it or not, 'trial and error' (Chamberlain, 1997).

"*Yes well what the other midwives say or if you see anybody doing it. Things like how to stimulate a baby if it is sleepy but what one does doesn't necessarily mean another will…. So it's just trying to work out what you're doing that's right*."

(Andrea, Year 3)

Denise often felt confused by the differences between what she had been taught in university and what she observed in practice.

"*I thought it was different from what I had been taught in the Uni setting … I felt like I was learning all kind of new again … ..I witnessed a lot of just straight away touching women's breasts and I still don't know the answer to that because I don't know really enough because I've not had enough breastfeeding experience to know if that is the practical way."* *(Denise, Year 1)*

I interpreted this to suggest that although the lecturers believe everyone is providing consistent information because placements and university are UNICEF UK BFI accredited. However, it appears this is not always the case as practice does not always live up to theory.

4.1.3.2 Developing skills of personal knowing and the art of midwifery

When asked how she learned from her clinical experience Sarah (year 2) said

"*I suppose the experience that the mother gains from it, whether that kind of episode of care is successful or not in the mum's eyes and whether it's got a sort of good outcome at the end of it. On some occasions I've had mothers that are really quite distraught because they can't get their baby latched on, all that sort of stuff and it just takes a bit of time and a bit of patience with them and eventually they can go on to feeding their baby really successfully after that. So I suppose the things I've been*

learning is just to take time with the mother and things like that and have some patience." *(Sarah, Year 2)*

In this comment I believe Sarah is demonstrating that she developing her skills of the art of midwifery and personal knowing (Carper, 1978) where she describes that she is learning from mother's experience of the episode of care, taking cognisance of her body language, learning non-verbal cues *" in the mum's eyes"*.

4.1.3.3 Reflective Practice

One midwife lecturer believed the students learned through reflection however thought that at times they were not aware of this in themselves and needed prompting.

"*I think sometimes we are aware of it but the students might not be and we can see the reflection, how the students are reflecting but they might not think that they are reflecting*." *(Midwife Lecturer 3)*

There was however consensus amongst the student focus group that they did learn through reflection, were able to apply their new knowledge to new situations and able to describe the process. On the other hand Polly a previous student, whilst recognising that as students they were required to reflect on practice, suggested it was not until she was a qualified midwife that it became automatic.

"Uh huh yeah because we're encouraged, as students we were always encouraged to be reflective practitioners and now as a qualified midwife you're always encouraged to reflect on your practice. I think that's a big thing and again you do reflect on your practice as a student but I think when you qualify you reflect a lot more. I don't know why. It's maybe just a thing that comes with qualifying." *(Polly, Previous Student)*

Paula (previous student) agreed with Polly believing that she learned to provide individualised care from reflection on past experiences however she also pointed out that it tended to be the situations where things did not go well rather than positive situations.

"*It's the difficult scenarios that you remember. And yes I always think back, what did I do then, what did that one do or when I asked so and so for advice, what did she tell me, will I try that or you know it's not always the same person you're asking for advice, so there's always different advice and it's sometimes good to try different things and be open minded about it as long as you're sticking within the rules you*

know the ways, the Baby Friendly ways then there's nothing wrong with trying different ways." *(Paula, Previous Student)*

Denise (year 1) found observation and reflection the most important ways to learn in first year. She said

"*A lot from observation and then reflection, thinking about it. Or I would, when we were driving between places, asking the midwife about certain situations, you know that lady had this or that or what would happen there and you know a woman with mastitis and you know talking about it.*"….. *"I can think back on the theory and try and bring that in if I find a situation where I think 'oh that's not working right what do I do next' so you're thinking about your checklists in your head*."
(Denise, Year 1)

Denise also believed having reflective discussions with the lecturers, who are separate from practice, would be helpful. She was concerned about some of the negative attitudes towards breastfeeding expressed by the midwives in the clinical areas and believed this could be perpetuated by the students. She felt more reflective sessions would possibly help prevent this.

Attitudes to breastfeeding will be discussed further in section 4.1.4.2.

"*It would be nice to have the sort of session that would say 'so how's breastfeeding been going'? and for all us to get together with a tutor and saying well what was your experience so you can have discussion about it and if a lot of negative things come you know like well we are kind of future midwives and I think then to, so you don't go down the same road."* *(Denise, Year 1)*

Sarah (year 2) also believed reflection to be a valuable learning tool and something that helped her develop her breastfeeding knowledge and skills. It was also a skill in itself that she developed as she was progressing through the programme. She described it as follows

"…you might have a situation which is similar so you think I remember what happened last time so I may use that this time… "there's kind of small bits of everything that you take away and think to use in future."… "you might have a situation which is very similar so you think I remember what happened the last time so I maybe use that this time. Things like even certain environments and things like that. The trouble in the earlier days was I didn't take much into account but now I would I think more so." *(Sarah, Year 2)*

Andrea described how she used reflective practice.

> *"It just kind of makes you think back to what you did and how you would change it if you were doing it again because obviously not everything is good, there are wee bits that are good but there would be the bits you think you would do differently*" …"*It makes you kind of look at what you've done and it makes you question why. It's the same with everything. You have to look at it to see how you kind of feel. There's always something that you could do better next time or just do it differently next time."* *(Andrea, Year 3)*

> "*… sometimes like if I knew I was going back to something I had tried earlier on in the day, I'd be like' oh that didn't work so I'll do this kind of thing' so, more if I knew what the problem was but one of the things was I kind of realised it was important to ask the mentors why but they don't actually tell you why so that was one of my reflections to explain to the women why so they're not going to turn round in a weeks time and say well nobody actually told me*." *(Andrea, Year 3)*

Paula referred to intuitive practice by describing having 'feelings' about things to know whether it is right or wrong.

> *"I think again maybe it's just me but I've got a good sort of feeling about things and if I do something once and it's not working, generally you know in your head whether you're going to be able to get, well I certainly do, I sort of think am I going to be able to do this or have I forgotten, if I feel that you know to try and try again is going to solve the problem, then I'll do that, but if I feel I'm missing something you know there's, I've maybe forgotten something that we did at Uni or then I would go and ask for help.* " *(Paula, Previous Student)*

This could be interpreted as the move from 'reflection on action' to 'reflection in action' where some practitioners find it difficult to articulate why they are or are not doing something and instead refer to it as feelings about something, gut instinct or intuition.

4.1.4 Professional issues

Some issues are difficult to address from the higher education institute and require to be explored by the service provider such as a lack of time for mentoring and negative attitudes towards breastfeeding.

4.1.4.1 Time to mentor or not?

Students are often concerned at the outset of their training that women will not want them to look after them. Debbie (year 1) had this concern but soon found that women said they often preferred a student. When asked why this may be the case she replied

> *"I think because they see midwives as incredibly busy and having an awful lot on and the students are the ones that will stop and take time to listen to them and help them out."* *(Debbie, Year 1)*

Mentors lack of time to devote to both mothers and students, particularly in the hospital environment, was a consistent theme throughout the student midwife focus group and individual interviews. The students felt this contributed to poor practice for women, as well as a lack of learning opportunities and supervised practice for them.

The student midwives in the focus group had a variety of experiences. One student felt the mentor she worked with had the skills to support breastfeeding mothers but not the time; this was reiterated when another student described an antenatal class where the midwives were allocated two hours to devote to women.

> "*Their knowledge and what they were saying and everything at the group was great but they just don't do it in clinical practice."* *(Student Midwife 4, FG)*

Paula (previous student) commented

> "*Time maybe is a big factor. Wherever you go, whether you're a student or a qualified member of staff, I think time is always an issue with breastfeeding and unfortunately between time and continuity I feel are the two crucial things with breastfeeding. You need continuity of care, you need continuity of information, you don't want conflicting advice."* *(Paula, Previous Student)*

Polly (previous student) agreed with this highlighting that some women may need the midwife to spend up to an hour with them and this is not possible if they are looking after several breastfeeding mothers on a busy ward. This may be one reason why students are sent to support these women on their own and supervised from a distance.

The second year students acknowledged the time constraints on the midwives however Sally commented

> "*I think the students are in a fortunate position because we've often got more time than the midwives so we can go in and we can spend longer with them and sometimes it can be quite frustrating and sometimes you're thinking 'oh I'm never going to get this baby to the breast' but if we're lucky enough that we have got that time to sit and spend with them I think the women appreciate that as well and they're just that little bit more confident when it comes to the next feed."* *(Sally, Year 2)*

> *"I think sometimes I do feel quite bad for the women that when it's busy and they're not getting the time, the assistance that they need. Because I do worry that they are going to be the ones that decide that they can't cope with it and they think if they just had a wee bit more assistance for another few days and hopefully it would be established and they would start to really reap the benefits of it*." *(Sally, Year 2)*

Sarah described the midwives on night shift having more time to spend with mothers and supporting students in their learning, increasing her confidence.

> *"But I also find that as students, on nightshifts for example on the wards, it's us that do quite a lot of the, helping mothers to breastfeed and express and that sort of stuff. So I suppose that helps us because we're getting a lot of hands on experience. And you do get a lot of the midwives that come along and make sure, they overlook you and make sure you're doing everything ok. Some of the more negative things I would say is just the midwives don't have time sometimes to spend with the women."* *(Sarah, Year 2)*

Because students are of aware the time constraints on their mentors some described feeling pressurised into undertaking unsupervised practice. Denise explained her point of view.

> *"You maybe answer a buzzer and a woman needs help with feeding so you would be on your own and I would call for somebody if we were still having problems attaching the baby then I would say' look I'll go and get somebody to come in you know we can try together' because I didn't want to get the women kind of disheartened if it was anything to do with my lack of knowledge you know or experience so I would go but like if everything was fine then it was fine so a lot of times it was fine so you were kind of unsupervised."* *(Denise, Year 1)*

> "*I think it was just right 'ok feed' and they didn't sort of say 'D… do you want to' but maybe that's where I could use my initiative more and say 'listen can I get a bit more experience in helping women for the first time with breastfeeding' so I think on reflection that's what I'll do when I go back out into the labour ward say can I assist*

and then they'll be there observing which I think more observed practice would be more beneficial for me as well whereas a lot of times in the ward you were on your own helping the feeding". *(Denise, Year 1)*

4.1.4.2 Attitudes towards breastfeeding

Attitude towards breastfeeding was mentioned throughout the data collected as a factor that influenced learning and has been mentioned earlier in this chapter. It appears that students and lecturers believe this has an impact on learning.

Throughout the interviews student participants highlighted the positive attitudes towards breastfeeding of the lecturers and some of their mentors. However, the main focus of the interviews was on the negative attitudes of the mentors. The lecturers supported this and agreed that negative attitudes from the clinical areas were an issue and one that had to be continually addressed with students.

"*Relating it to their clinical practice, the longer they're out in clinical practice sometimes the more negativity you have to address because there is a lot of negativity out in the clinical areas isn't there? and the students absorb that sometimes.....we need to motivate them and bring out the positive. I don't mean to put down the clinical areas but I do sometimes think that once they get out there a while they become disillusioned by some things they see."* *(Midwife Lecturer, 4)*

Anne agreed with this saying

"I think a lot of people take on, a lot of the hospital staff's attitudes because I've seen people, if I'm in the labour ward and I go down to the ward and I go how's things going, I hear them say stuff and I thought you would never have said that, this is an environment thing, I've heard them say 'that's another breastfeeder' and I'm like oh no and I'm thinking I wonder if it's this or if it's that or if it's they've maybe heard the midwife say it and it's just you know a way of the time you know picking up bad habits." *(Anne, Year 3)*

Students in the focus group made similar comments about negative attitudes in the clinical areas compared to the academic setting identifying the obstacles it posed for learning.

"I don't know how many midwives have turned round and said to me I can't be bothered, give that wean a bottle. And I just think that's not the answer, alright we might be a Baby Friendly hospital but I just think a lot of midwives pay lip service to it, they don't actually promote it fully to be quite honest." *(Student Midwife 3, FG)*

"I just think attitude's got a lot to do with it. It's got a lot to do with the attitude of the people you're working with. If they're not really that interested and just pay lip service then you don't devote the time so you can't see what they're doing and you maybe don't think it's as important as it should be but I mean I really notice the difference, I've been with people that are not interested and I've been with people who have been and the difference is the complete opposite, it's amazing."

(Student Midwife 2, FG)

"*And does that affect the opportunities you get to learn then? (Interviewer)*

"Yes definitely, because people that aren't interested, they don't devote the time or they'll push you into the room and I mean I was with someone who said 'well you tried everything' but they've not been with you, they don't know what I've tried and they don't know what I've did and I might have been doing it wrong in the first place and 'you've tried everything so we'll just give her a bottle' whereas somebody else that I've been with in the community as I say, sat with her and went through all the problems, just gave her support and advice and she kept breastfeeding."

(Student Midwife 5, FG)

Debbie described her feelings of disappointment when she heard negative attitudes articulated by the mentors.

"I think it can be a bit disappointing sometimes when you go onto the wards and you know you hear some of the midwives going 'oh I've got a full room of breastfeeders there and they're all having problems, she's got tiny nipples, she's not going to do it' and you think well lets be a little bit more positive you know and there are certain midwives who really don't like it when there's a whole bunch of mums all breastfeeding and need a lot of help." *(Debbie, Year 1)*

Sarah compared the positive attitude of her mentor in community to others and how she felt she learned from these situations.

"My community mentor was fantastic. She's very passionate about breastfeeding. She never tires talking about it and she's got her own lovely way. She's quite, she's very down to earth and she'll go in and just kind of chat with the woman and she takes everything right down to the basic terms ... I just try and sort of listen as much as her, as she's talking I try and take in as much as what she's saying ...I've never met anybody that hasn't responded really well to her so I think her enthusiasm as well because I have heard other midwives that are just not been as keen and if they go into a house and it's not going very well the woman goes 'oh I'm kind of thinking about just giving the baby a bottle' and they'll go 'oh well that's your choice' but they don't

really say 'oh well come on let's not think about that yet, let's see what else we can do', so I feel I've learned loads from her." *(Sarah, Year 2)*

In summary, although there was discussion surrounding some of the teaching and learning strategies employed in the curriculum the main focus was around learning in clinical practice-based placements. The emphasis was on the role of the mentors and their attitude towards mentorship and breastfeeding. Learning through observation of mentors' practise and personal reflection were key issues raised throughout the focus groups and interviews.

4.2 Fitness to Practice

Research aim 2 was to gauge student midwives self-confidence in their ability to support and advise mothers with breastfeeding as they progress through the programme and on completion as registered midwives.

The themes in diagram 4.2 were identified from the participants' accounts.

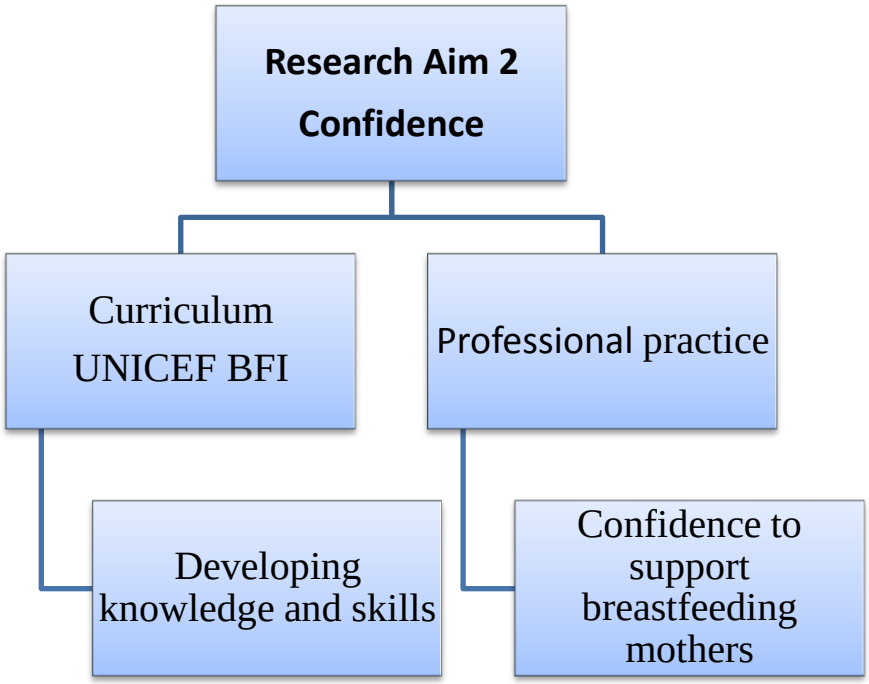


Diagram 4.3: Representation of emergent themes: Fitness to practice

4.2.1 The curriculum: UNICEF Baby Friendly Initiative

One of the aims of pre-registration curricula is to develop confidence in students throughout the programme so that they will become safe and effective practitioners. The BFI education standards provide a framework for the development of knowledge and skills to assist in this process.

4.2.1.1 Developing knowledge and skills to support breastfeeding mothers

Throughout the focus group discussion the midwife lecturers highlighted the following as the most important aspects of the knowledge and skills required support breastfeeding mothers

- Communication skills
- Reflection and reflective practice
- Change management
- Leadership skills
- Decision making

They reflect the generic graduate skills suggested by the QAA for Higher Education (2004-2009). On the other hand the students (individual interviews and focus group) only identified the first three when they discussed the required skills. None referred to leadership or decision-making as influencing their practice. However, Paula, who had recently completed the BSc in Midwifery, was able to identify that many skills she had learned and developed throughout the programme were transferable to breastfeeding, particularly from the affective domain of learning and gave the following example.

> *"Yeah, I mean you could, if you were talking to a lady that's got postnatal depression and she's not breastfeeding and you're advising and supporting her and then you come across a lady who's tearful because her baby's not going to breastfeed, you're going to use the same sort of empathy and, well I certainly would, I think you do deal with things, well I do, you use the same style of talking to them."*
>
> *(Paula, Previous Student)*

By the end of first year Denise felt quite confident with the theory but felt she needed to develop her skills through observation and clinical experience.

> "*Yeah I feel, I do feel quite confident in the theory. I think it's just the practise now, bringing that all in*." *(Denise, Year 1)*

When Sally who was half way through year two was asked what knowledge and skills she needed to further develop before registration, to be fit for practice she said

> *"You need to know your theory. You need to be able to identify problems where there's a baby that's just a bit unsure about what it's doing or a bit reluctant or a*

baby that's actually having feeding problems and a need to be able to just provide the support to women. So you need to be able to sort of know her well enough to understand if she is having problems or if she's the type that will ask if she's having problems or if she's somebody that will sort of, I don't know it depends how keen she is as well. I've seen people that have said they want to breastfeed but they're kind of looking for any excuse not to and you think, do they feel like a sense of pressure to say that they want to but their hearts not in it or is it just that they never expected it would be as difficult as it was to get it established so I don't think you can, like the whole of midwifery has got to be individualised care. You've got to be taking people not at face value. You've got to know a little bit more about them and assessing them a little bit and that would sort of dictate the type of assistance and type of support that you would give them. So I think it's just really getting lots of experience of it so that you're completely confident that you can go and deal with the most difficult of breastfeeders and know that you are going to be able to provide them with the assistance that they need... which can be quite daunting at times." (Sally, Year 2)

In describing the knowledge and skills she needs to be fit for practice Sally is identifying Carper's (1978) patterns of knowing. She recognises that as well as knowing the theory (empirical) she needs to develop effective interpersonal skills to provide adequate, individualised support to mothers, developing a therapeutic relationship (personal knowing). She demonstrates skills of perception, taking a holistic view of the situation to help mothers get what they really want from the individual situations (aesthetics) to enable her to provide care that is right for them (ethics).

In section 4.1.2 it was suggested that a lack of supervised practise from the mentors could be in part due to a lack of knowledge. When asked whether she felt her knowledge and skills as a student equated to that of the mentors Polly answered

"Yeah I think, no I think, I think as time progressed, I would say as a student I knew just as much as my mentor definitely yeah. I can quite confidently say I knew just as much as them, if not more sometimes, so yeah." (Polly, Previous Student)

4.2.2 Professional practice: Feeling confident to practice

Both the previous student midwives agreed that upon graduation from the programme they felt confident to support mothers with breastfeeding. Paula (previous student) believed continuity in mentorship and observing other midwives helped her learn and ultimately increase her confidence.

"*At the end of my training I felt very confident to go out there and give advice*."
(Paula, Previous Student)

"I feel, yeah definitely from qualifying I feel more confident."
(Polly, Previous Student)

A major reason for introducing the Baby Friendly standards was to ensure consistency of approach in practice and to avoid conflicting advice (UNICEF, 2002). Polly felt this was evident in her own practice.

"*I think it's been a very positive impact because now that I'm qualified I have the ability to demonstrate, like, a good knowledge and understanding, I personally feel, to women who want to breastfeed and I think it's important that we all have the same kind of training and education on breastfeeding so we can all give the same support and information to women so they're not getting like contradicting information from people, you know different health professionals so we're all kind of singing from the same hymn sheet and all having the same training and education, so uh huh, I think, I think I'm quite good at promoting and supporting women on breastfeeding*."
(Polly, Previous Student)

"*I can honestly say that I think the programme, the modules and the way the breastfeeding was laid out within the programme and the training and the education I got within the programme prepared me immensely for going out to be a qualified midwife. And I don't think personally that there's anything you could have done much more to improve the way I have benefited from it to be honest*."
(Polly, Previous Student)

It was interesting to find out how confident students felt to support mothers at each stage of their programme. Debbie (year 1) sounded confident and felt she had the knowledge to tackle her mentors if care was not appropriate.

"I did say to my mentor about it, I said to her because I thought anyone should be voicing this it should be her because she's the one that's really in charge of the patients." *(Debbie, Year 1)*

However Denise (year 2) reported

"I'm thinking that I don't feel as confident as I thought I would because you know I did have some difficulties with my own experience but not hugely you know so I don't really have that to you know... that experience so I kind of thought it was all going to be a lot easier more easier for women so…" *(Denise, Year 1)*

Sally (year 2) expressed concern that for a long period in year two they were away from placements that would provide breastfeeding experience (see table 4.2) however she could also see her confidence building as time passed.

> *"I felt I was quite removed from it so it was nice to go back and have that experience in the labour ward of helping with the first feeds and you kind of forget how much you do actually know, so I've noticed that my confidence, if you'd said at the beginning of the year, I would have thought I don't know how confident I am but going back even almost a year later you realise there are things like positioning and attachment, things like that do stay with you so you just kind of go in and get on with it so I definitely feel that my confidence has increased and probably being on the wards right at the end of first year helped with that because you were seeing lots of breastfeeding mothers so you were getting lots of experience and some of them were struggling so you would be spending on a shift, you would maybe be going in two or three times and you could see them starting to, their confidence starting to grow which in turn you would think well I've helped them get to this point so I must be doing something right and you're confidence starts to grow, so." (Sally, Year 2)*

Sarah also reported feeling confident for her stage of training.

> *"I feel as confident as I could be I suppose. I feel quite confident."*
>
> *(Sarah, Year 2)*

Both third year students recognised their confidence increasing over the three years.

> *"I do now but because I've not been in hospital for a while, …but yeah by third year I was quite happy discussing it with the mum on why they were doing it and things especially when they were at the stage where they were just going to give up …"*
>
> *(Andrea, Year 3)*

> *"Well I found I really struggled with breastfeeding the first and second year and then I had my ward placement in the summer there and that was half way through my third year and it wasn't till then when I'm just doing it myself that I found a wee bit more confidence."* *(Anne, Year 3)*

The midwife lecturers agreed that they found the students were more confident with breastfeeding issues since the introduction of the Baby Friendly Initiative.

"... you believe that they [students] are exiting the programme more confident than in previous programmes regarding breastfeeding?" *(Interviewer)*

"Exactly" *(Midwife Lecturer 3)*

"Oh yes" *(Midwife Lecturer 2)*

"I would think so yes some of them are much more likely to be proactive than in the past ... but now because of the initiative it has developed them...."
(Midwife Lecturer 1)
(General agreement of the group)

Another added

"Because they know what are the good strategies for breastfeeding, environment and what would encourage women to breastfeed. They're taking it into clinical practice and have the confidence to turn around and say 'no do this if you want to increase your breastfeeding'." *(Midwife Lecturer 3)*

In summary, research aim 2 was to gauge student midwives confidence in their ability to support mothers with breastfeeding. The participants who had been previous students educated in this curriculum felt confident in their knowledge and skills to support mothers. On the whole the second and third year students who participated in this study also felt confident for their stage of the programme. The first year students however were a little more ambiguous about confidence with mothers but did feel confident in their knowledge.

4.3 A Consistent Approach

Research aim 3 was to explore the perceived impact of implementing the Baby Friendly standards in the BSc in Midwifery curriculum.

As the project leader for the introduction of the Baby Friendly Initiative standards into the curriculum I believed it was important explore the impact it had on the curriculum from the perspective of those involved. The midwife lecturers had most to contribute on this issue. The student midwives suggested that as they had not known a different curriculum they had difficulty commenting.

When the data collected from the variety of routes were compared the themes in diagram 4.3 were identified.

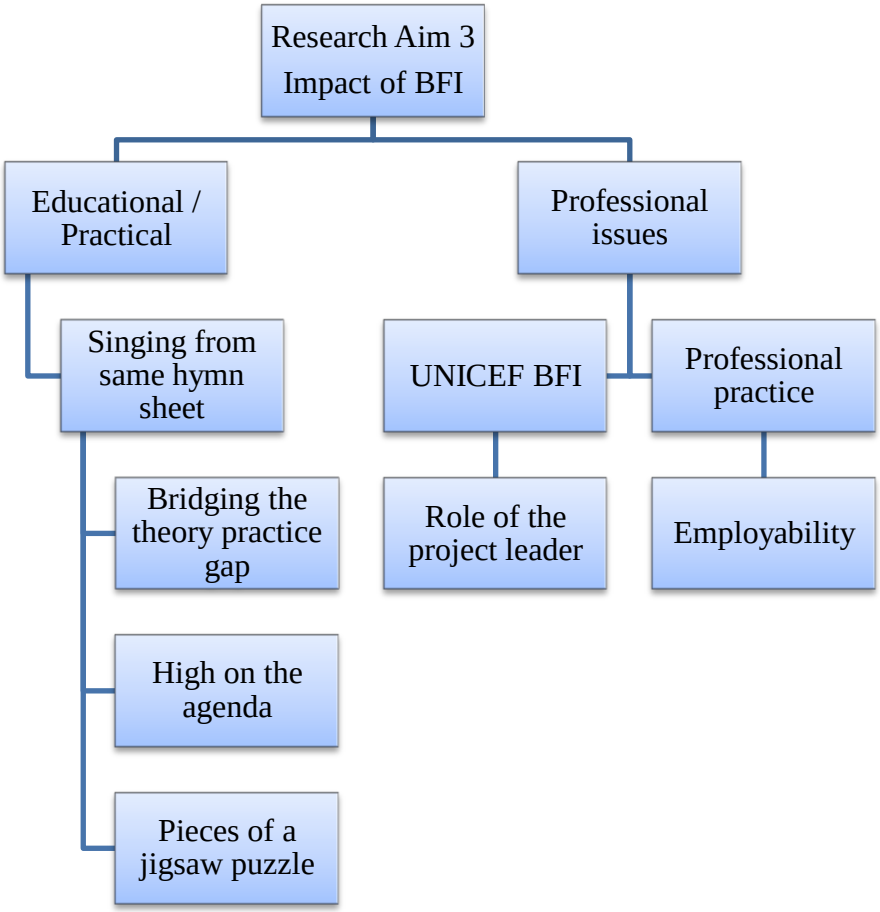


Diagram 4.3: Representation of emergent themes: Consistent approach

4.3.1 Singing from the same hymn sheet

The aim the UNICEF Baby Friendly Initiative is to ensure that health care professionals are equipped with the knowledge and skills to support mothers with breastfeeding using a consistent and evidence-based approach (UNICEF, 1998). By introducing the standards for education into the curriculum the aim was to ensure this consistent approach to learning would begin during student midwives pre-registration education to avoid them participating in the cycle of conflicting advice as registered midwives.

4.3.1.1 Bridging the theory- practice gap

The midwife lecturers in the focus groups believed it was important for the curriculum to be accredited to ensure that the theory students were being taught in the university setting was relevant to practice and in turn that the students were exposed to evidence-based practice rather than the 'hidden curriculum' (Alexander, 1983; Quinn, 2000; Field, 2004).

> *"I think looking back over the midwifery education courses, even over the last ten to fifteen years, the significant problem has always been students kind-of getting a certain amount of teaching in the classroom and then going out into the clinical area and there being a theory- practice gap, quite a major one, and then students picking up, sort of conflicting ideas and conflicting advice about how to advise women and certainly I think probably one of the more significant bits is that this initiative has definitely corrected all of that and it was very important that that was used."*
>
> *(Midwife Lecturer 5)*

The midwife lecturers believed the accreditation process also had a positive impact on learning and teaching in the practice placements and on mentorship by acknowledging breastfeeding as an important aspect of students' education. On midwife lecturer said

> *"I think too it has an impact on clinical staff as well. They're aware that the students have got the workbooks to complete and aware that the students are going for tutorials and things on a regular basis so I think it kind of brings it more to the fore for them too so they're more up to speed and that the teaching is evidence- based and up to date*."
>
> *(Midwife Lecturer 1)*

Another suggested the introduction of the BFI outcomes was attractive to potential employers. (This will be discussed in greater detail in section 4.3.3).

"*Sometimes when you actually speak to the different grades of clinical staff, they find the whole idea of breastfeeding, of what the students actually get very, very attractive. Sometimes they're actually quite jealous of it and they wish that they had actually had it. And something about that, and many years ago, and it makes them a bit sad that they hadn't got that. I mean I've been in different clinical areas and I'm talking about out with our own practice placements where particularly managers, like what my colleague was saying about particularly down in London, that is an area where up to very, very recently this kind of teaching, this kind of topic would not have been taught in this particular way*." *(Midwife Lecturer 5)*

"*I think it's to do with the whole idea of education and practice working in a sort of symbiotic relationship. … you then get people out who are trained or educated to a particular set of standards that should immediately be able to start to make a difference and that is something which is quite attractive particularly with managers."* *(Midwife Lecturer 5)*

It was obvious however that there were also contradictions in interpretation of the BFI standards and therefore consistency in practice as discussed in the student midwives focus group.

"... looking at some areas where we find it quite difficult like bottle feeding support, that we don't show them how to do, we don't show them in hospitals now how to make up a bottle feed because you're not…"

(Student Midwife 2, FG)

another interrupted

"we're not allowed to do that." *(Student Midwife 4, FG)*

This is obviously an area of concern as students must also be able to support mothers who choose to bottle feed, as stated in UNICEF UK BFI educational outcome (UNICEF, 2002, 2008) (see appendix 2) and some students are not being given the opportunity to practise this skill. This raises the professional issue of whether or not mothers who choose to formula feed their babies are being supported in practice. When discussed further the students in the focus group acknowledged that mothers should be taught and supported with formula feeding however they felt that some midwives misinterpret the UNICEF standards and "bully" women in to breastfeeding.

"That's how they interpret it so there's a lot of that in the antenatal classes as well, no mention of, so you do actually feel sometimes that you really bully women, it's you know breast, breast, breast." *(Student Midwife 2, FG)*

4.3.1.2 Putting breastfeeding high on the agenda

The overarching purpose of Baby Friendly Initiative accreditation is to ensure high standards of care for breastfeeding mothers by providing support to those whose strive to implement best practice. The assessment and accreditation process has been recognised at national level by the NMC in the skills clusters (Nursing and Midwifery Council, 2007a) and NICE guidelines (National Institute for Health and Clinical Excellence, 2006) as one way of recognising that these high standards have been achieved.

There was general consensus amongst the midwife lecturers that the accreditation process had a positive effect on the learning and teaching in the curriculum by heightening awareness of the need to integrate breastfeeding throughout the programme.

"I think it's certainly raised everyone's awareness of UNICEF and the importance of Baby Friendly and I think it helps to sort of focus things a bit more, sort of making sure that we're kind of flagging up breastfeeding at every opportunity." *(Midwife Lecturer 1)*

"I think it's brought it up the agenda, it was always a kind of add on before and it's very high up the agenda now." *(Midwife Lecturer 4)*

The midwife lecturers also said they liked the fact that it was an external and objective validation of the breastfeeding education in the programme.

"... and I like the idea of having that, yeah, because it's an objective external thing that's happening." *(Midwife Lecturer 5)*

When the project began the curriculum had already been validated and commenced which meant the lecturers had to reflect on their teaching and clearly identify where in the programme the outcomes were being met and if not where to include them.

"We had to go through the curriculum and we had to look at matching up what UNICEF wanted, so to speak, and correspond just what we were teaching and that

just clarifies what was said there that it did make us more aware of what to teach, how to teach it, when to teach it." *(Midwife Lecturer 2)*

"I think it gave a greater focus on breastfeeding for our students and I think we used to teach breastfeeding but we didn't teach too many hours on breastfeeding and because we had the UNICEF we realised we needed to put in more hours to teach about breastfeeding to students." *(Midwife Lecturer 3)*

Through this process of reflection the midwife lecturers identified disparity in their knowledge and also acknowledged that some of their teaching was not evidence-based and was an area they needed to improve. One way of doing this was for all the midwife lecturers to attend a three day breastfeeding management course run by UNICEF UK BFI themselves. One midwife lecturer said

"I think it also made sure we were all singing from the same hymn sheet and that we were evidenced- based, because I think that was not necessarily the case before and that we all had our own opinion, so now we've all got the same knowledge that we transfer to the students and I think that's very important." *(Midwife Lecturer 4)*

Although students in the focus group agreed with the midwife lecturers that breastfeeding was high on the agenda in the curriculum they found the impact on their learning of the accreditation process difficult to comment on.

"I think that's quite difficult to compare because we're not working for a university, that's not, so…, my assumption being that this is the norm or should be the norm, the minimum standard that we would have to do or be going through to promote breastfeeding for women and their babies." *(Student Midwife 1, FG)*

When Polly, a previous student, reflected on her experience as a student midwife she reported slightly hesitantly

"... it was kind of brought to our attention and we were part of the cohort that had managed to achieve the accreditation for the university so I think we were more aware maybe than some other cohorts were perhaps." *(Polly, Previous Student)*

Overall Polly believed it was a desire to please the midwife lecturers that had the most impact of the accreditation process.

"*I think the lecturers are your influence and your…, the people who you look to within the university setting. Because as well as trying to please yourself, you're trying to please the lecturers, especially when we were going for our accreditation. It was a big part of wanting to do really well so that you could kind of please everybody else as well. I think that was a huge influence, uh huh because you wanted to make sure that you did well and that you did well for the university and as individuals as well so."* *(Polly, Previous Student)*

4.3.1.3 Pieces of a jigsaw puzzle

Both Polly and Paula (previous students) had completed their BSc in Midwifery and were employed as practising midwives. When asked in retrospect what impact they felt the accreditation process had on their learning about breastfeeding Polly responded that it had been positive and highlighted the importance of consistency in approach and avoiding conflicting advice, reiterating what a midwife lecturer had previously suggested- '*singing from the same hymn sheet*'.

"*So we're all kind of singing from the same hymn sheet and all having the same training and education so uh huh, I think, I think I'm quite good at promoting and supporting women on breastfeeding.*" *(Polly, Previous Student)*

She also described it as a jigsaw puzzle, as did Orland-Barak and Wilhelm (2005).

"*I think, uh huh, I think you do see it piecing together. It's a bit like a jigsaw, you kind of, the penny drops and you see wee bits piecing together but it's almost when you qualify there's maybe one wee piece of the jigsaw missing and it's not until you're an autonomous practitioner that wee bit just pops in because it's all about reflective practice and you think that's why we had to know about this, this, this and this, do you know? So I think you do learn as you go along but I think reflective practice is quite a big thing as well …"* (*Polly, Previous Student)*

The first year student midwives however felt unable to comment about the impact of the accreditation processes on their practice because they had nothing to compare it to. Second year students recognised the guidelines it provided and by year three Anne said

"I think it's given me a confidence as well as the fact that if you know it's accredited, it's good quality learning that your getting you know as well because you want to stay that high standard." *(Anne, Year 3).*

4.3.2 Professional issues: UNICEF Baby Friendly Initiative

4.3.2.1 The role of the project leader

From the outset of this project I was appointed project leader. When asked how they felt about this and whether the role should have been disseminated amongst the team the midwife lecturers strongly intimated that there was a need for a project leader to co-ordinate and take the project forward. They particularly liked the central reference point of a project leader who communicated with them not only about the process of accreditation but also kept them up to date with new research in this fast moving and dynamic subject. Through the experience of this initiative some felt this model would be good practice to develop other subject areas within the curriculum.

> *"I think it should be a project leader in fact. I think we should have more project leaders for more projects to be honest. I think it would be nice to have other people who could keep their finger on the pulse of other major initiatives in education to keep us up to date because we don't have time to do all the reading up that we should be doing on a regular basis."* *(Midwife Lecturer 4)*

> *"I think that is the important thing, having that project leader. Keeping us on to time because otherwise we would leave it aside but that project leader said 'look you have got to do this' and that brought us on line. It is so easy in a busy schedule to put things to the side…"* *(Midwife Lecturer 3)*

> *"It's very difficult for us all to research individual topics all the time and we have a nominated person who's interested in both keeping us up to date and we can access her very easily and we have also got a lot of articles and workshop material available for each one to go and access and that's also kept up to date and that's been valuable."* *(Midwife Lecturer 3)*

> *"It saves time if you think about it. We're all teaching a subject and we're all doing our own researching and making sure it's up to date and we're all reinventing the same wheel aren't we? So this is a much better way of doing it."*
>
> *(Midwife Lecturer 4)*

> *"It's more organised isn't it?"* *(Midwife Lecturer, 2)*

4.3.3 Professional issues: Employability

One of the initial reasons UNICEF UK BFI developed the standards for education was in response to potential employers querying why they had to re-train newly qualified midwives

to ensure they had the knowledge and skills to practice (UNICEF, 2009, p. 3). Both lecturers and students believed that UNICEF accreditation had a positive effect on employment.

Over the last ten years there has been a steady reduction in the numbers of midwives being trained in Scotland and is forecast to reduce further over the next few years. Scottish student midwife numbers are determined by the Scottish Government and are influenced by the numbers of students gaining employment in Scotland.

This is of course a great concern not only for the students but also for the midwife lecturers. As well developing a curriculum that prepares student midwives to "practise safely and effectively so that, on registration, they can assume full responsibility and accountability for their practice as midwives (Nursing and Midwifery Council, 2009, p. 3)", lecturers are trying to include extra qualifications/ certificates that may make them stand out from other candidates seeking employment: UNICEF UK BFI accreditation is considered to be one of these. One lecturer commented in the focus group

> *"Quite a few of our students have got jobs out with our own clinical areas and in some cases it's been because of the UNICEF standards. That's been the key thing that's allowed one person I can think of to go into a community job very, very quickly after going into registered practice. And that was at the time where it was kind of not the norm to do that really and that was all down to the UNICEF training."*
>
> *(Midwife Lecturer 5)*

One of the QAA (Quality Assurance Agency for Higher Education, 2004-2009) enhancement themes is employability. They use Knight and Yorke's definition of employability as

> "A set of achievements, understandings and personal attributes that make individuals more likely to gain employment and be successful in their chosen careers."(http://www.enhancementthemes.ac.uk/themes/Employability/overview.asp)

They also highlighted that 'good learning' and 'academic values' were both related to employability, citing The Scottish Funding Council as saying that one of the five hallmarks of good quality higher education was "where learning and teaching promotes the

employability of their students."
(http://www.enhancementthemes.ac.uk/themes/Employability/overview.asp)

The university collects first and second destination statistics for exiting students. One advantage of this on a local level has been that students keep in touch and let their personal tutors know where they are working and informally how they are getting on. Those who are employed in areas other than the university practice placements report positive gains from being educated on a UNICEF UK BFI accredited curriculum.

> *"…some of our students have been asked to set up breastfeeding workshops in London because they haven't had the breastfeeding training."*
> *(Midwife Lecturer 4)*

In order to demonstrate commitment to ensuring the midwifery programme reflected the employability requirements of a newly qualified midwife, the University of the West of Scotland decided to introduce the same clinical workshops 'BEST' into the BSc in Midwifery programme (which also reflected the BFI outcomes) that all qualified midwives and health visitors in one of the clinical placement areas were attending to demonstrate 18 hours of education to meet the BFI practice standards. This was made easier as one of the midwife lecturers also taught these workshops with her clinical colleagues in Argyll and Clyde Health Board area (now Clyde division of Greater Glasgow and Clyde Health Board). One midwife lecturer pointed out

> *"Ultimately it's the employability set up as well ... Having a certificate that shows they've attended these four initial workshops and have worked steadily throughout the three years towards achieving the criteria so therefore at the point of entry to being a midwife they have the basic sort of foundation skills in breastfeeding."*
> *(Midwife Lecturer 2)*

Although this study has not been able to gather information directly from employers Paula, a newly qualified midwife, agreed that having been educated in a UNICEF UK BFI programme was one of the reasons she was employed in a London hospital.

> *"Well one of the reasons I got the job in London was because I had done breast workshops and trained at a Baby Friendly university."* *(Paula, Previous Student)*

"And did they tell you this?" *(Interviewer)*

"*Yes, it's because they were going for Baby Friendly status and one of the things they asked me at my interview was would I be interested in helping them achieve Baby Friendly status. So yes I definitely did but you're up against the world, you know it's the whole hospital it's not just, it would be a huge, a huge job and even when I resigned and I told them I was leaving and the Sister that interviewed me said 'oh we really wanted you to take this Baby Friendly thing forward' and I mentioned to her that I was coming back [to Scotland] and I wanted to do my Masters and that I would eventually want to go on to do breastfeeding advising and that, and she said 'oh but we've got a post and just stay here and we could have given you the post' and so yes I definitely helped me."* *(Paula, Previous Student)*

It was highlighted at all stages of training by the students that they felt being able to put that they had trained in a UNICEF UK BFI accredited programme on their curriculum vitae would be a positive aspect for future employment.

"*I have spoken to a girl who trained in *[University of the West of Scotland placement] very recently and I remember her saying that she went to a hospital, I think it was down in London and she was a breastfeeding adviser, because they knew she had been trained so well, that Paisley had this credibility about them …, she was the main breastfeeding support midwife down in the area where she worked, as a brand new qualified midwife!"* *(Anne, Year 3)*

When a second year student, Sally, was asked about her views of the potential impact of the accreditation on potential employers was she said

"I think that if you are looking at two CVs that are very similar but you know that somebody's perhaps put in extra effort and put in extra work and has got more knowledge and you've got proof that they've achieved it then you're definitely going to think well that's less training that we then need to give and we're going to get the benefit of them having had this training from day one rather than waiting till we can put them through further breastfeeding training to start getting the benefit …."
(Sally, Year 2)

As well the accreditation status of the programme being attractive to potential employers, Sally suggested it would be beneficial in attracting new students to the university.

"*Well from the education point of view, it's given us something extra when we graduate it's something else that we've worked towards that we've got, another string to our bow but also to be training in places that are implementing it as well it's better*

for the woman to know that all this research has gone into it and that there are standards that we are striving to achieve and that there's people that are making sure that we are achieving that standard so I think it lets them know that they are going to be supported and that there is a benchmark there that we're working towards and that everybody should have the same standards of care so it's not like the people that come in and they're more vocal about wanting to support breastfeeding whereas the wee quiet people don't get it, everybody should be getting offered the same assistance and the same support so I do think it's a very worthwhile thing and I think as time goes on when people are deciding which Uni's to apply to it'll be something that they'll say that they particularly want to come here because they'll get the benefit of that rather than other Uni's that might not have got that far or might not be pursuing it." *(Sally, Year 2)*

Over 41% of hospitals in Scotland have UNICEF UK BFI accreditation. In the West of Scotland catchment area for clinical placements the larger placement areas are BFI accredited whilst the community units have registered their intent, therefore ensuring the standards of practise are the same as those being taught in the curriculum. In theory this should make it easier for newly qualified midwives making the transition however as previously mentioned not all will be employed in these areas and will have to move to hospitals that are not UNICEF UK BFI accredited which may pose challenges for them. Paula, a previous student, talked of the challenges she faced when she moved to a 'non-Baby Friendly' hospital for her first job as a registered midwife.

*"Obviously the hospital I worked in, in London, isn't Baby Friendly which was a huge challenge because ….basically it's not top of the agenda for them even though they are going for Baby Friendly status, there's not very much knowledge and not much support down there breastfeeding wise, so I found that difficult to cope with. I finished there the beginning of June and I'm back here now and I'm now going to be going to the *[local hospital] which is Baby Friendly so I hope I get the chance to use my Baby Friendly skills."* *(Paula, Previous Student)*

When asked if she felt prepared for this through her pre-registration education she replied

"I found it very, very difficult going from being Baby Friendly to not being Baby Friendly. I think it would be a lot easier to go the other way round. I think if you came from an area that wasn't Baby Friendly into a Baby Friendly area, you had adequate support, it would be a lot easier. But to be one person, they didn't even know what a BEST workshop is where I was, I mentioned BEST workshops and they were like 'what's that'? They don't know about it. So I did find that quite challenging." *(Paula, Previous Student)*

"Do you think then you left your programme being unprepared for that?"
(Interviewer)

"Yeah maybe I did. I never expected to have to go to London. You know you. I didn't expect, not only didn't expect, I didn't realise there were so many hospitals… not Baby Friendly. I didn't realise that. Maybe that's me just being naïve. But I didn't realise that. So that was an eye-opener." *(Paula, Previous Student)*

In summary, research aim 3 was to explore the impact of the BFI accreditation on the curriculum. The student participants had some difficulty discussing this as they had not known a different curriculum. However, they were able to express advantages in terms of employability. There was consensus amongst the lecturers that the accreditation process had been of benefit to the curriculum and had assisted them to integrate theory to practice using a consistent approach.

4.4 Critical Incident Diaries

The six student midwives (see table 4.3) who were interviewed individually were also requested to keep a critical incident diary. They were asked to write several accounts of clinical experiences, that I was unable to observe, related to breastfeeding, that had an impact on their learning (Jasper, 2003; Hunter, 2008). These could have been positive or negative experiences.

Table 4.3: Critical incident diaries: student midwives

Name (pseudonym)	Designation	Proficiency Level *
Andrea	Student midwife in year 3	Independent
Anne	Student midwife in year 3	Supported
Sally	Student midwife in year 2	Supervised
Sarah	Student midwife in year 2	Supervised
Debbie	Student midwife in year 1	Dependent
Denise	Student midwife in year 1	Dependent

*Refer to section 2.5.2 for further detail

The student midwives were given a time limit of three months to complete the diaries, which I made sure included at least one practice placement. Participants were given guidelines for these diaries (see appendix 7) to ensure there was some consistency with regard to format and length without constraining or suggesting what they should include. However, the students reported they found this exercise difficult to complete either knowing what to write or due to lack of breastfeeding experience during this period of time. The guidance was reiterated on a one to basis.

On reading the diaries it was clear that the students had difficulty writing about what made the episode a learning experience for them and instead focussed in greater depth on the clinical situation itself.

The aim of collecting data through critical incident diaries was to improve methodological triangulation by comparing the themes that arose from the actual clinical experience to those from the focus groups and interviews.

Initially I carried out a comparison of individual's critical events and then compared the diaries against each other, and finally to the themes that arose in relation to the three case study aims as in sections 4.1, 4.2 and 4.3. However, I found that research aim 3 was not addressed in the diary entries but the themes from research aim 1 and 2, influences on learning and confidence, were reflected throughout.

The following themes in diagram 4.4 arose from the critical incident diary entries:

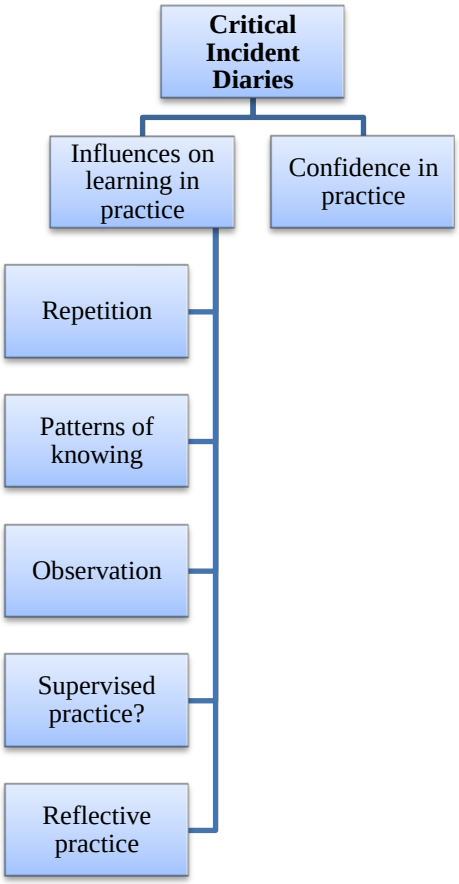


Diagram 4.4: Representation of emergent themes from critical incident diaries

4.4.1 Influences on learning in practice

4.4.1.1 Repetition of theoretical learning

Repetition for revision purposes had been a continuous theme threaded through the focus groups and interviews. Debbie (year one) highlighted the importance of attending the clinical workshops (tutorial) as a revision tool.

> *" I had learned about this in the breastfeeding tutorials held at the hospital. I try to ensure that I go to them, even if I am repeating the same tutorial; it is good to refresh the information in my mind."* *(Debbie, Year 1)*

She also pointed out that the workbook had been a useful tool for reference whilst in placement as was the independent revision via the virtual learning environment Blackboard she had undertaken for the compulsory OSCE. This appeared to give her confidence when giving advice to a particular mother regarding demand feeding.

> *"In this instance I found the breastfeeding experiential workbook a useful tool to refer back to. I had also been using the breastfeeding section on blackboard quite a lot to revise for the OSCES, which was handy… information was fresh in my mind, which helped me feel confident about what I was saying to the mother…This was a positive experience for both the mother and myself."* *(Debbie, Year 1)*

Denise agreed, writing

> *"The breastfeeding workbook questions and breastfeeding workshops at university allowed me to deliver up-to-date information to the woman."* *(Denise, Year 1)*

Other students mentioned the university and the above strategies in their extracts for example Anne stated.

> *"To help my patient I explained and demonstrated the correct positioning, attachment and expression that I was taught from the university and from the tutorials received from the lecturers."* *(Anne, Year 3)*

4.4.1.2 Displaying the patterns of knowing

Most of the students displayed that they were incorporating some of the patterns of knowing into their practice (Carper, 1978) considering the care of the mother from a holistic point of view.

"It helped to understand a little about the woman's aims and wishes regarding feeding her baby, and her level of discomfort etc." *(Denise, Year 1)*

Andrea also recognised that just having knowledge was not enough and that in fact it was being able to develop a therapeutic relationship that was important (Carper, 1978).

"Once the baby had fed, I felt relieved that she was going to continue to breastfeed and had persevered. I used the information given at Uni to discuss benefits of breastfeeding but while the theory is useful, how you relate to the woman and relay that information to her is also important. It was a good experience because it shows how perseverance and understanding with the woman can lead to a good result." *(Andrea, Year 3)*

Anne demonstrated 'personal knowing' as well recognising ethical dilemmas in practice and how she needed to address her own feelings in order to provide adequate support for the mother in her care (Carper, 1978).

"When I approached her I noticed a used formula bottle at the side of the bed. Mrs X explained that she felt her abdomen was too sore to breastfeed so gave the baby a bottle. I explained to Mrs X (using the UNICEF guidelines that the university had taught me) about the dangers of mixed feeding, nipple/teat confusion. Mrs X stated she still wished to breastfeed but felt she needed a rest in-between feeds. Although I know fully that under the NMC rules that it is the patients choice to choose the course of healthcare they wish, I still found myself feeling slightly let down and disappointed in this care. I was unsure if it was because I had put so much effort and time into helping her or it was because maybe Mrs X felt she could not talk to be about her breastfeeding experience. I continued to support her and informed her of the benefits to breastfeeding without trying to come across as patronising or heavy on the pro breastfeeding option. I advised informed her to seek assistance from the night staff when she breastfeeds to ensure they can support her." *(Anne, Year 3)*

4.4.1.3 Learning through observation

Most of the students discussed the value of observing their mentors in practice. Not only did they find this enhanced their learning by linking theory to practice, it also gave them confidence in their own abilities to support mothers. Attitudes to breastfeeding appeared to be an important issue that determined whether the students' experiences were positive or not.

"*Many of my breastfeeding experience has came from the clinical environment. By watching the midwives giving out advice and support and being able to link it to the university teachings I found I have built confidence to carry out breast feeding support."* *(Anne, Year 3)*

In another entry she wrote

> *"I had been able to give Mrs X this information due to my past clinical experiences with breastfeeding in the community areas. I had watched my mentors give women advice and solve problems and try to encourage them to continue. By having this experience I was able to integrate it into my practice."* *(Anne, Year 3)*

Sally a year two student gives an in-depth description of the care provided to a mother by her mentor in the ward. Again she demonstrated some of the patterns of knowing described by Carper (1978) where she was able to recognise the mother's emotional needs as well as physical.

> *"The woman was very keen to breastfeed but nervous and needed reassurance and assistance…"* *(Sally, Year 2)*

In another situation she observed her mentor and identified the need for good communication skills and how to gain informed consent. She went on to describe how the mentor also provided an opportunity for discussion when appropriate. She suggested it was a very positive learning experience that she hoped to emulate.

Sally described another clinical situation in the community which she was involved in with her mentor, a community based midwife.

> *"This was a very positive experience for me, as this was Anna's first postnatal visit. The midwife scheduled her visits to allow Anna to be last to allow us to spend quality time with her and her husband. The midwife also encouraged Anna to remain in her bed where she was clearly comfortable and relaxed which I feel certainly helped. The midwife is passionate about breast feeding and this is evident whenever she discusses it but her gift is she can explain everything in very simplistic terms which allows the woman and her partner to understand how milk is produced, supply and demand etc which seems to be very effective in helping them to establish their breastfeeding. From this experience I would hope to demonstrate the same passion for breastfeeding and the same patience when teaching mothers. I learned a great deal from this midwife from her simplistic explanations and her style of bringing the woman into a conversation which really puts them at ease , and while she does say that breastfeeding can be difficult at the start she describes the benefits and instils confidence in the woman that she will shortly be feeling the benefits herself. I do realise that this episode of care does stand out due to the calm, relaxing environment*

and it may be difficult achieve this on a busy post natal ward but I do feel I learned a great deal from this episode and will strive to recreate." *(Sally, Year 2)*

Sarah described a positive clinical experience in the neonatal unit where she observed her mentor supporting a mother of a very premature baby to express breastmilk.

"I learned from this experience as it showed me the importance of getting down to basics explaining enabling the woman to understand what she was doing and why. A very simple explanation of the anatomy of the breast helped the woman understand how to hand express and position the breast pump for optimum use.
Most of my learning experience in this instance came from talking to the mother and the midwife and listening to the midwife's conversation with the mother."
(Sarah, Year 2)

She also described another neonatal experience whereby she valued being able to discuss and question the mentor after the episode of care.

"In future practice I will ensure that I encourage mothers and help them to feel confident in their ability to breastfeed successfully. Most of my learning experience in this instance came from the hands on experience I gained during this period of care I was also able to discuss the situation with the midwife afterwards and ask questions which I had which I feel also assisted my learning." *(Sarah, Year 2)*

Sally also described an episode of care in the neonatal unit which she referred to as "*a very negative experience which I feel could have been greatly improved".* The mentor was assisting a mother with an ill baby in busy and full neonatal unit where there was a lack of privacy. Sally was aware of the problems the environment could create for the woman and was able to demonstrate a holistic view of the care the mother required.

"The woman was understandably anxious and in need of reassurance and support which was difficult to provide in such cramped conditions and with all the other visitors able to hear the conversation. The staff member was also caring for the other three babies and struggled to provide one to one attention. In the end the woman was unable to establish breast feeding and decided to return later in the day when the unit was quieter to try again.
This experience did educate me in several ways, firstly that comfort and privacy are essential when establishing breastfeeding, as are trust and familiarity between the woman and the person providing the support. The fact that this woman was putting her baby to the breast for the very first time meant she needed patience, and reassurance. I feel she needed hands on assistance to facilitate positioning and attachment yet this was not really possible in this situation, the staff member was also

quite matter of fact not really understanding the degree of this woman's nervousness. I learned from this experience by recognising cues that neither the staff member or the woman were happy in this situation and quickly identified the problems in this scenario, this will be valuable in my future practice as I recognise the need for a private, comfortable setting for initial breast feeds." *(Sally, Year 2)*

Denise, a year one student, who in the individual interview suggested that apart from one placement she felt there was often a lack of supervised practice from mentors, described a situation where she had a positive experience supporting a mother. She felt that both the knowledge she had acquired from the university and her mentor had prepared her.

"… I was able to advise her otherwise, and provide information regarding successful positioning from knowledge gained from Uni and my first mentor on the ward, who was extremely knowledgeable and an obvious pro breastfeeding practitioner (not always the case, in my experience on placement)." *(Denise, Year 1)*

Again a positive attitude towards breastfeeding from the mentor was an important factor in this description.

4.4.1.4 Supervised practice?

The issue of adequate supervised practice was discussed by Debbie who described her anxieties when dealing with a situation she was unprepared for on her own. She described the mentor "*who popped in from time to time*" to provide encouragement. Debbie appeared to appreciate this and believed it to be adequate as part of the learning process despite the fact that she should have been working at dependent level (see section 2.5.2).

"… but in this case, I didn't feel I had enough experience to really help her. (describes clinical event)…the mother was becoming a bit anxious and stressed. I spent a long time with her and her baby attempting to get the baby latched, but did wonder if I would have got it sooner if I had had more experience and been further on in my training. We did get there in the end, but I felt a bit like I didn't know all that much about how to deal with problems, and had worried at the time that my inexperience could have put her off breastfeeding. I think because I persevered with her and spent time talking to her to try and relax her that this did have a positive outcome, and also I had the support of my ward mentor who popped in from time to time and not only encouraged me but also the mother. The ward mentors are

extremely important in facilitating our breastfeeding education and experiences, as they deal with breastfeeding mothers and common problems every day."

(Debbie, Year 1)

Sarah (year 2) described an incident where she believed she learned from observing a negative experience. In this extract she also demonstrates confidence to step in and advise a mother where her mentor fails to do so.

"The mother had become quite distressed because she felt as though she wasn't feeding her baby properly. This could have been avoided however had she been shown alternative positions to feed her baby, which midwives had failed to do before this visit. When the woman said that although she didn't want to she was considering bottle-feeding, the midwife made no offer of assistance with position changes instead said to her that if that was what she wanted to do then it was her choice. I however suggested that she try lying down whilst feeding her baby. This was attempted and the baby fed successfully."
"I will realise the importance of speaking to a woman about any difficulties she may have or concerns she may have regarding feeding her baby and explore options in order to resolve any problems and avoid unnecessary distress. A simple change of feeding position solved this woman's difficulty and she went on to successfully feed her baby when she was considering formula feeding. Most of my learning experience in this instance came from both talking to the mother and the midwife but also the hands on experience gained." *(Sarah, Year 2)*

At the time of writing her diary Anne was working at supported level (see section 2.5.2). In the following extract she describes how feeling supported by her mentor in deciding the plan of care for a mother increased her confidence.

"I was helping a prim, postnatal day 2 woman in the ward who had buzzed early in the morning for assistance with breastfeeding. The baby had not received a long, lengthily adequate feed since birth and had been receiving 1ml of EBM [expressed breast milk] every 3 hours. The staff had previously informed me that the baby was not latching on and was very sleepy when attempting to breastfeed. I was concerned that as a student I may not be able to fully help her. To try to overcome this I spoke with my ward mentor and sought advice about what it was she wanted me to do to help this woman and how I would be able to put it into action. By getting the support from my mentor at this stage reassured me and gave me some confidence to help the patient." *(Anne, Year 3)*

She also reflected on another episode of care where she also demonstrated the 'art' of midwifery and the ability to empathise (Carper, 1978). She felt she learned through having the actual clinical experience and was then supported to make sense of it with her mentor.

> *"With this breastfeed I felt very let down with myself as I had been unable to help her achieve a successful breastfeed. I had stayed with her for an hour demonstrating and trying different breastfeeding positions, none of which were successful. I could sense the woman was becoming extremely stressed with the situation. I reassured her and gave her positive feedback a number of times. I advised the woman of the benefits of skin- to- skin and continuation of expressing breastmilk to continue lactation. Having this experience although it was difficult was very useful to me from a professional view point; it provided me with difficulties and hurdles to try to overcome. It was a positive problem solving experience as I had to think of different techniques to help the mother with the feed. After trying to help my patient I spoke to my ward mentor for feedback on areas to improve and advice. With the next feed both me and my mentor assisted the woman so that I could have my breastfeeding skills assessed and look for areas of improvement."* *(Anne, Year 3)*

4.4.1.5 Reflective practice

Reflection was a common theme identified in the interviews. Denise referred to how she reflected on action when writing this entry to her diary however she also identified the problems students encounter when theory and practice are in conflict.

> *"This baby had been coming on and off the breast, but fed well whilst attached. I have always resisted touching the woman's breast when assisting with attachment. This is a practice I regularly observe in the hospital setting. I do question its validity, and on reflection wonder if this is due to my inexperience with the diversity of breastfeeding mothers and babies. Could it just simply be the influence of time-challenged staff or a divide between theory and practice? I have questioned whether this encourages first-time breastfeeding mothers to handle their own breasts while attempting to attach the baby, and further encourages them to bring the breast to the baby."* *(Denise, Year 1)*

She continued to explain the impact this had on her confidence.

> *"I felt confident in my knowledge of breastfeeding prior to clinical placement, but now am unsure of the correct approach. Staff seem generally 'hands on' when supporting women to breastfeed, and I was also aware of staff negativity in regard to breastfeeding. This was mostly due to time constraints, though I do wonder if this attitude oppresses pro-breastfeeding members of staff."* *(Denise, Year 1)*

Andrea also made references to the dilemmas she faced when where theory and practice did not match or when there is no evidence to support practice. However, she displayed confidence in how she would overcome this problem in her future practice.

> *"The experience however could have been better – at times you hear different people recommending different ways to agitate or stimulate the baby with one member of staff saying one thing and others saying different things, sometimes you are not 100% sure which ways should actually be promoted (like the damp cotton wool ball – a good idea or too distracting?). Information at Uni on this sort of topic is generally by discussion so you don't actually go out with any sort of definitive answer, it sometimes just raises more questions. (I do accept that every mum and baby is different and that there is no actual answer, but ideas about what is acceptable differ from person to person). In the future I would probably find out what is acceptable in the area I am working in and also check that this is acceptable with the mum involved!"* *(Andrea, Year 3)*

Andrea also reflected on a situation whereby a mother she was caring for at home on the fourth postnatal day, had not been given sufficient information about breastfeeding before she was discharged home. Despite the support and information Andrea gave the mother overnight she decided to discontinue breastfeeding.

> *"While this was not a great result for breastfeeding, it was a good experience for myself. I think it was good because it has made me consider what information I would give to breastfeeding women in hospital in the future. It is important not just to go for the positions that are easy to show people but to actually show them and teach them other positions which may be useful for them and also to discuss care of their breasts whilst breastfeeding. I also actually found this case quite hard because I felt that when I was explaining things to her, she was looking at me as if she wanted to ask how if that was the reason, she not been told all that in the hospital? Which also hit home the fact that it is important to make sure that they understand the information that they have been told we sometimes tell women what they should do without actually explaining why they should do it (it might just seem dead obvious to us so we don't elaborate on what we are saying)."* *(Andrea, Year 3)*

4.4.2 Confidence in practice

Research aim 3 was to gauge student midwives self-confidence in their ability to support and advise mothers with breastfeeding as they progress through the programme.

In the extracts in section 4.4.1 some of the students described episodes of care where they demonstrated confidence in their knowledge to advise and support mothers. Even in year one Debbie felt she had the knowledge to discuss breastfeeding issues with a mother before the birth in her first labour ward placement. However, she does not specify whether this was supervised or not.

> *"My first case happened when I was on my first labour ward placement. It involved a 29 year old primigravida. As her labour had been progressing she had expressed a keen desire to breastfeed. I talked to her a bit about the literature on breastfeeding that she had been given antenatally, and we spoke about the importance of skin to skin contact as a way of promoting bonding, and helping the baby root naturally for the breast. This was something I had been taught in the breastfeeding classes at university."* *(Debbie, Year 1)*

Andrea described a clinical experience in third year that she felt was a positive learning experience and ultimately increased her confidence. She described the clinical situation and the advice she had given in detail but expressed her initial lack of confidence. She went to describe the input from the mentor.

> *"I felt I had not been much of a help to the mum and felt that a qualified person with more experience (breastfeeding specialist midwife) would be able to do better and get the baby to feed so I asked one of the midwives to come and help (after explaining what I had already done and asked both the mum and midwife if I could observe) to see what advice they could give. The midwife spent a further 20 minutes with the mum telling her the same information I had and "showing" her the same positions I had before the mum said that the student had already done all that and unless she had something else to show her, she was happy to just stick with the student. This made me feel better about the situation because she seemed to accept that I had done everything I could to try and help at that stage and she knew her baby had had something to eat.*
> *This for me was a good learning experience because it gave me more confidence in my own knowledge and abilities because the qualified person had the same difficulties as me. It reassured me that it wasn't specifically anything I was doing or not doing that was the problem. I had expected to learn something new from the qualified staff member but instead just learnt and realised that it comes down to the mum and the baby as much as actual theory."* *(Andrea, Year 3)*

In summary, the intention of using critical incident diaries was for methodological triangulation and to get a 'snap shot' of clinical episodes that I could not observe. These were then compared with each other and the themes identified through the focus groups and

interviews. The themes that arose were similar to those in section 4.1 and section 4.2 with a great focus on learning through observation of positive role models and reflective practice. Students also displayed evidence of Carper's (1978) patterns of knowing and confidence in their approach with mothers.

Concluding comments

The findings were based on data collected via focus groups, individual interviews and critical incident diaries to ensure methodological triangulation. The data are organised into the themes that emerged in the coding and also in relation to the research aims. By doing this a natural storyline began to develop.

There was overall agreement that the accreditation process had been a positive initiative particularly in relation to consistency of teaching approach in the academic setting and employability.

Repetition through the spiral curriculum was positively viewed however learning through clinical observation and experience were key influences on students learning. This was despite the negative issues raised surrounding the provision of adequate supervision and mentorship in this subject area. Most students displayed evidence of Carper's (1978) patterns of knowing.

Those participants who had graduated from the programme felt confident to support mothers with breastfeeding as did the second and third year student participants. All participants appeared confident in their knowledge for the stage of the programme and demonstrated this in their critical incident diaries.

The following chapter will discuss the findings of this case study in relation to meeting the aims of the study and the current literature.

Chapter 5

Discussion

The purpose of this case study was to explore how student midwives, in a UNICEF Baby Friendly accredited programme, learn about breastfeeding to prepare them for practice as a registered midwife. The study's main conclusions are:

1) Although student midwives identified a lack of supervision from mentors in some areas of clinical practice they perceive providing 'hands on' care for a mother and baby as the key influence on their learning about breastfeeding.
2) Student midwives feel theoretically prepared for practice-based placements for their level of education. Graduates also reported feeling confident at the point of registration to support and advise breastfeeding mothers.
3) The main impact of the UNICEF UK Baby Friendly Initiative accreditation on the BSc in Midwifery has been to employ a consistent approach within the spiral curriculum and enhance employability prospects.

The Baby Friendly Initiative (BFI) best practice standards for higher education institutions were developed to improve breastfeeding education for student midwives through the introduction of specific outcomes into the curriculum (see appendix 2) and to ensure that health care professionals are equipped with the knowledge and skills to support mothers with breastfeeding using a consistent and evidence based approach (UNICEF, 2002, 2009). The Baby Friendly Initiative is supported by the Nursing and Midwifery Council (NMC), through the introduction of the Essential Cluster 4 (Nursing and Midwifery Council, 2007a) and for practice recommended by the National Institute for Health and Clinical Excellence (2006).

The curriculum in this case study was developed using a competency-based approach and structured using Beattie's fourfold approach to curriculum planning. The BFI outcomes were introduced post-validation and the curriculum accredited by UNICEF UK BFI in 2007. The curriculum model (see diagram 1.1) was primarily based on Bruner's (1960) concept of a spiral curriculum which encompassed a range of learning and teaching theories to integrate

theory and practice (University of Paisley, 2001b). Practice was considered core to this curriculum, providing students with supernumery status (University of Paisley, 2001a). The aim was to introduce them to a 'community of practice' to legitimately participate on the periphery of practice initially and gradually reach a point of full or central participation by the end of the programme (Lave & Wenger, 1991).

A single site case study design frame was chosen for this study as this was one of the first universities in the United Kingdom (UK), the first in Scotland, to achieve BFI accreditation and was therefore a unique case that had not been studied before. To explore how students learn as part of the social world and to give meaning to their experiences an interpretivist approach was employed.

A case study was an appropriate strategy for this study to enable the theoretical concepts that underpin how student midwives learn breastfeeding knowledge and skills to be considered whilst exploring an innovative and unique programme (Stake, 1995; Hancock & Algozzine, 2006). The design is descriptive, using a qualitative organising framework, to capture the developing storyline and gain an understanding of the perspectives of the participants through focus groups, individual interviews and critical incident diaries. The sample included student midwives from each year of the programme; previous student midwives and midwife lecturers. The analysis strategy was based on Glaser and Strauss' constant comparative method (cited in Boeije, 2002) to enable the different groups of participants and different methods of data collection to be compared against each other.

This chapter will discuss the findings that have emerged in relation to meeting the aims of the study, the key influences on learning (section 5.1), confidence (section 5.2) and the impact of accreditation (section 5.3). The emerging themes from the findings in chapter 4 have been collated and are represented in diagram 5.1.

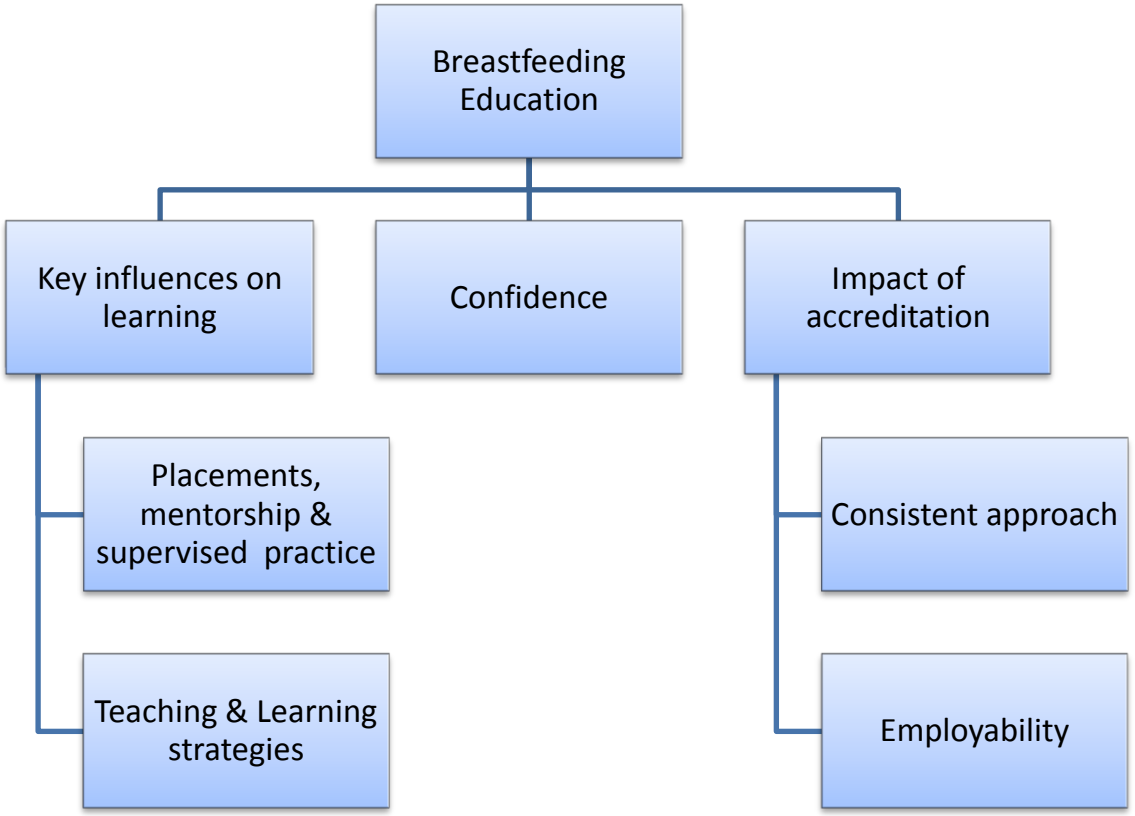


Diagram 5.1: Representation of emergent themes for discussion

The theory generated from this case study is from the perspective of the participants in this study and therefore cannot be generalised to all midwifery pre-registration programmes.

5.1 Key Influences on learning about breastfeeding

Research aim 1 was to identify the key influences which impact on student midwives learning about breastfeeding. Previous accessible research in this area is limited from the pre-registration student midwife's perspective. Although the semi structured schedules used in both the focus groups and individual interviews included questions on both the academic and clinical aspects related to the curriculum, the findings illustrate that participants predominantly wanted to speak about clinical experience rather than the curriculum as a whole.

In 1997 Chamberlain published the results of an ethnographic study of the challenges of clinical learning for student midwives in a large urban hospital and its surrounding community area in the South East of England. Since the data collection of this study midwifery education has moved to higher education and statutory guidelines have been updated. However, Chamberlain's study does give some interesting insights into how student midwives learn in a general context and demonstrates how some of the problems with situated learning have not changed despite these advancements. One major difference between these studies is that Chamberlain found students felt unprepared for clinical practice whereas student participants in this case study perceived the theoretical content of the programme as valuable and suggested that it prepared them for clinical practice with regards to breastfeeding. Nevertheless, all participants were in agreement that the key influence on student midwives learning about breastfeeding was clinical experience, whether they perceived this as good or poor.

The curriculum in this case study is underpinned by a combination of Bruner's (1960) concept of the spiral curriculum and Lave and Wenger's (1991) theory of situated learning. They believed learning to be an active process involving current or past knowledge and experience. This section will discuss the key influences on learning about breastfeeding in relation to these theories: section 5.1.1-3 clinical practice; placements, mentorship and supervised practice, and section 5.1.4 learning and teaching strategies.

5.1.1 Practice-based placements

It could be argued that Lave and Wenger's (1991) theory of situated learning has been identified as fundamental to the epistemology of this midwifery programme. As with Bruner's (1960; 1996) approach, the focus is on active participation but in the social setting where learners engage with others in a 'community of practice' through participation rather than learning abstract concepts. They described it as a process whereby newcomers gradually become part of the community of practice through 'Legitimate Peripheral Participation' ultimately leading to full participation over a period of time. Lave and Wenger (ibid) illustrated their theory using five groups of apprentices, one group being Yucatec midwives, demonstrating that through active participation these midwives absorbed the essence and knowledge of practice. It must be acknowledged however that their practice was different from contemporary midwifery practice in the UK.

Lave and Wenger (ibid) claimed that communities of practice had a shared identity and shared common concerns for what they do and learn and improve practice through personal interaction. They suggested that learning was more than learning by 'doing' and the acquisition of knowledge and skills instead it was about relationships, shared identity and other resources such as vocabulary and documentation. Therefore learning was not an individual process but affected by other participants or members of the community.

At first it appears that midwives (mentors and lecturers) and student midwives in this case study are one community of practice because they have a shared purpose to provide care for childbearing women and their families. However, it became evident that in fact there were three communities of practice each having a distinct relationship with the other. Although they had a shared midwifery identity using the same vocabulary, documentation and other resources they also demonstrated their own identity, specific goals and language required to be accepted within the community which will become apparent in this discussion.

The philosophy of the curriculum established that clinical practice was considered core to this programme (University of Paisley, 2001b), with the aim of providing meaningful learning experiences through the integration of theory and practice. The achieve this students were exposed to regular clinical experience, with supernumery status, to introduce them to a

‘community of practice’ (Lave & Wenger, 1991). Lave and Wenger (1991) believed situated learning, learning that takes place in social contexts through active engagement or participation, to be central to effective learning. Appropriate practice-based placements and mentorship are fundamental in facilitating this (Chamberlain, 1997; Nursing and Midwifery Council, 2006b). In section 4.1.2 there are several examples of students from each year of the programme highlighting clinical practice as most important in their learning; this theme was discussed through all interviews.

Dolan (2003) identified disparity in exposure to clinical experience which could have potentially been a problem for the students in this case study due to the varying demographics of placements and associated breastfeeding rates. However, there was little discussion regarding access to mothers who breastfeed suggesting this was not a problem. On the other hand there was some concern particularly from first and second year students (Debbie and Sally, sec. 4.1.2.1) about the flow of placements in year two suggesting the period without ‘normal’ midwifery experience was too long, resulting in a lack of available breastfeeding experience. Sally (sec. 4.1.2.1) disputed this and although admitted it had been of concern before progressing into year two, subsequently it had not been a problem for her.

Chamberlain (1997) described disparity in learning opportunities between community and urban placements finding that more time was given to mentoring students in the community. This was reiterated in this case study. Sally (sec. 4.1.2.2) suggested this was because they spent more time with the mothers. Likewise Denise (sec. 4.1.2.2) agreed that community midwives were more likely to provide feedback on their performance and used the time travelling in the car as time to teach.

5.1.2 Mentorship

The majority of practice-based placements in this case study are Baby Friendly accredited (or working towards it). Through accreditation UNICEF UK BFI are acknowledging that all midwives (mentors) caring for breastfeeding mothers have achieved the appropriate standards (UNICEF, 1998, 2001) and therefore should be confident and competent to support student midwives in their learning. Despite this levels of professional knowledge are not always

consistent (Furber & Thomson, 2008). A component of the assessment for the BFI accreditation process for higher education institutions was to demonstrate that all mentors were also given information regarding the education standards and outcomes and what was expected of them in the teaching and assessment of student midwives (UNICEF, 2002, 2009).

Student midwives have supernumerary status and must be supervised at all times, directly or indirectly, dependent on their competence. Forty percent of the student's time should be spent with the mentor who in his/her absence will make alternative arrangements. The mentor is responsible for assessing the level of supervision required and accountable for the students practice (Nursing and Midwifery Council, 2006a, 2008b). Mentors are advised to use the clinical competency profile as a guide to determine the level of competency students should achieve at different stages of the programme and also the level of supervision required (University of Paisley, 2001a).

Mentors are in the position to facilitate learning opportunities and to provide feedback on performance. Through mentoring student midwives become part of that community of practice in the clinical setting, learning through Legitimate Peripheral Participation at dependent/supervised level, until in third year when they reach full participation, supported/independent level (Bondy, 1983; Lave & Wenger, 1991). Within a nursing context in a Scottish college of nursing and midwifery, Gray and Smith (2000, p. 1548) found that students perceived their mentors as the 'linchpin of their learning in practice'.

5.1.3 Supervised practice

Despite the midwife lecturers (sec. 4.3) suggesting there was greater consistency in learning and teaching between the academic and clinical areas, the student participants, throughout the interviews, raised concerns about appropriate supervision from their mentors and supernumerary status. The EC Directive article 27- Part B 89/595/EC requires that clinical areas will support the student to gain the appropriate experience required for registration as a midwife (University of Paisley, 2001b) and the NMC *Standards to support learning and assessment in practice* (2006b, 2008b) state that this should be carried out by mentors who are first level practitioners. Their role is to take responsibility and accountability for teaching, assessing and supervising students practice.

However, there appeared to be some confusion about what supervision students could expect in this case study. A first year student, Debbie (sec. 4.1.2.4) who should have been working at 'dependent' level (University of Paisley, 2001a) suggested she was getting appropriate supervision because the mentor would 'pop in' and suggested she could ask if she needed help. At 'dependent' level students should be dependent on the mentor for demonstration of practice; requiring continuous verbal and physical cues. Although they can provide care it is acknowledged that this will be unskilled and lacking in confidence and efficiency (University of Paisley, 2001a, p. 11). This example is of concern because such a junior student or novice would not know if her transfer of knowledge to practice is correct without feedback and may be delivering sub-standard care to mothers.

Debbie and Denise, first year students at dependent level, (sec. 4.1.2.3) described being supervised and taught by non-midwifery staff, who are not first level practitioners, and perceived it as a good thing because they had 'time' for them. Student midwife 4 from the focus group supported this suggesting she learned by listening to the auxiliaries and watching what they were doing. It is noteworthy that they were aware that sometimes the practice of these 'unofficial mentors' was different to that taught in theory (Denise, year 1). This practice is a major professional as well educational concern when one of the main reasons for poor rates of breastfeeding in the UK is due to inconsistent and inaccurate advice (Sikorski et al., 2002; Chiu et al., 2003; Hall-Moran et al., 2004; Renfrew et al., 2005). It also suggests that practice-based placements are not achieving the NMC standards to support learning and assessment in practice (Nursing and Midwifery Council, 2006b, 2008b). Debbie (year 1, sec. 4.1.2.3) reported that a mentor excused this practice by stating "*…it's kind of different in practice to what it is in theory*". This statement appears to suggest that some mentors are aware that practice does not live up to theory and are accepting of the theory- practice gap.

In the focus group student midwife 3 (sec. 4.1.2.4) discussed the lack of supervision compared to other skills they were being taught in the clinical areas such as antenatal examination and documentation, as did Denise (first year student). Chamberlain (1997) suggested that where there is a lack of structured clinical learning 'trial and error' was the main learning strategy used. Student midwife 4 suggested some mentors send them to care for mothers on their own because they are *"...supposed to be learning so on you go and see*

how you get on". A consequence of this strategy was that although the student was in third year she was concerned whether her own practice was correct because she was alone and not receiving appropriate feedback on her performance. Lack of supervision can be associated with negative emotions such as anxiety and decreased confidence (Chamberlain, 1997) which will be explored further in section 5.2. Denise suggested that she coped with these sorts of situations by using 'textbook knowledge', knowledge derived from theory.

Concern over the lack of supervision was also expressed by a third year student Anne in section 4.1.2.7. She described a couple of episodes of care where she asked for support from the mentor but was told "*oh just tell her [the mother] to go on the breast pump*" or without any involvement in the episode suggested that if the student could not resolve the problem then neither could she. There were also examples in the focus group (3 and 5, sec. 4.1.4.2) where mentors, in similar situations, suggested "*just give her a bottle"*.

In spite of these examples the midwife lecturers did not appear to fully appreciate the problems students encounter in some practice-based placements. This was evident as midwife lecturer 5 (sec. 4.1.2) explained that there had always been a practice-theory gap describing it as a 'major' problem in the past leading to conflicting advice for women. However, she suggested the accreditation had corrected the theory-practice gap, a view that appeared to be shared by the focus group.

In summary, a lack of supervision from mentors has implications for students learning about breastfeeding. It appears students are often left to 'do' and acquire knowledge and skills through 'trial and error' by assisting mothers on their own without support or feedback rather than learn through interaction with the mentor through Legitimate Peripheral Participation. Without this interaction they are then unable to learn the essence of practice and how to provide holistic care that is evidence-based. Also if there is no interaction then mentors will be unable to assess the student's competency. The participants suggested the following reasons for lack of supervision: lack of knowledge and confidence, negative attitudes towards breastfeeding or a lack of time to devote to mothers. These issues will be explored in the following sections.

5.1.3.1 Assessing clinical practice

Assessment is a crucial part of pre-registration midwifery curriculum (Nursing and Midwifery Council, 2009) and assessing competence in breastfeeding continues to be a challenge. Since moving midwifery education from an apprenticeship model into higher education (UKCC, 1986) there has been concern about confidence and competence of graduates. In response to this the United Kingdom Central Council (UKCC, 1999) recommended pre-registration programmes become competency-based and include assessment in practice. The NMC *Standards to support learning and assessment in practice* (2006b, 2008b) reinforced this recommending that students should, where possible, be assessed to demonstrate their competence in a practice setting. It was not the purpose of this case study to assess individual competence however, it is accepted that the programme is UNICEF UK BFI accredited suggesting that the students have the basic knowledge and skills required to support breastfeeding mothers.

In this case study clinical competence was assessed by mentors through achievement of competencies from dependent to independent level using an adaptation of Bondy's criterion-referenced rating scale (Bondy, 1983; University of Paisley, 2001a). Bondy's intention was to develop an assessment tool that would reduce the subjectivity and inconsistency in the assessment of clinical performance taking in to account their level of study. This tool not only assesses cognitive and psychomotor skills but also includes the affective domain of learning. As well as an assessment tool Bondy (ibid) intended this tool to be used as a method of feedback for students to make sense of their practical learning.

However, the findings of this study relating to inadequate supervision imply that the clinical assessment tool is not appropriately used by all mentors either to determine the level of supervision required or to assess competency and provide feedback. To assess a student's competency at any level mentors need to observe practice and the examples provided by students in the previous section suggest this is not always the case.

A major part of the partnership role of the mentor in midwifery education is to provide feedback through assessment (see section 5.1.2.4). Without feedback on performance students are unable to make sense of the experience as they will not know if they have

interpreted events accurately and performed appropriately. There are also implications for progression throughout the programme such as poor practice through inconsistent and conflicting advice may be perpetuated.

5.1.3.2 Mentors knowledge and confidence

Student 2 (sec. 4.1.2.5) in the focus group suggested the lack of supervision was due to the mentors' lack of confidence or knowledge in their own abilities in this area of practice. She commented that it was not unusual for mentors to suggest the students knew more than they did, as in Anne's earlier example. Neary (2000) suggested that mentors may lack confidence because they feel unprepared for the role of teacher and assessor. Others have suggested it is because they do not see it as part of their role, have a lack of time or a lack of motivation (Neary, 2001; Dolan, 2003; Bray & Nettleton, 2007). Another explanation could be a lack of in-service training or training and updates from the higher education institutions. It is possible that the midwife lecturers assumed that because the mentors practise in Baby Friendly hospitals that their knowledge and skills would be of a comparable standard to their own thereby reducing the theory –practice gap.

Bandura (1994) suggested that avoidance of particular tasks may be due to diminished self-efficacy. Arguably mentors may feel threatened by the students who are given more structured breastfeeding education than they would have had and as student midwife 2 (sec. 4.1.2.5) described, she would tell them if they were not doing things as she was taught, which has the potential to reduce their confidence to mentor in breastfeeding situations. Diminished self-efficacy may be one explanation for the difference some students described in the level of mentorship they had for breastfeeding compared to other midwifery subjects (student midwife 3, Denise and Debbie, year 1, sec. 4.1.2.4).

Field (2004) however offered another alternative suggesting that expert practitioners may not appreciate their role in communicating skills possibly because practice becomes so instinctive that they cannot articulate the steps used in decision making. However, with good support and preparation for the role of mentorship this should not be a problem.

One student midwife (4, sec. 4.1.4.1) gave an example of mentors demonstrating good knowledge and skills in an antenatal class but not putting them in to clinical practice. This implies that even when mentors do have knowledge and skills they are unable to transfer this to provide holistic care for mothers or to students in their role as mentor.

It could also be argued that if there is a knowledge and skills deficit in some mentors which could be improved by the mentor-mentee relationship. Lave and Wenger (1991) believed situated learning would enable the mentor and mentee to learn from each other by sharing information. This was illustrated by Paula, a previous student (sec. 4.1.2.2), who acknowledged this two-way process explaining that when her mentor asked her advice in the planning of care that it increased her confidence.

5.1.3.3 Observing expert practise

As well as a lack of supervision, the findings suggest that at times students are not given the opportunity to learn through observation of the mentors. Social learning is observing others to learn something (Bandura, 1977). Situated or social learning in clinical practice (Lave & Wenger, 1991) is required to develop the cognitive, psychomotor and affective domains of learning. The findings of this case study indicate that in all the students' accounts (interviews and diaries) they valued the opportunity to observe their mentors in practice, 'learning the tricks of the trade'.

Observing the mentor in dependent and supervised stages of the programme enables students or 'the newcomer' to learn the language of the community of practice to communicate within the norms of the community through social engagement rather than using cognitive processes (Lave & Wenger, 1991), thus introducing them to the 'hidden curriculum' through professional socialisation.

A different perspective was offered by Field (2004) who expressed concern that this could also lead to the perpetuation of non evidence-based and habitual practice because students are absorbing the mentors attitudes, values and preferences and thus perpetuating poor practice. She suggested this may be a cause of the theory-practice gap.

Anne, a third year student (sec. 4.4.1.3) explained that by watching the community midwife she was able to integrate theory to practice. I interpreted this as using 'role modelling' (Bandura, 1977) to observe the demonstration of the patterns of knowing whereby the mentor is pulling all the information she acquires from the mother and theory together to provide holistic care by giving support and advice (Carper, 1978) thus enabling the student to make sense of the abstract concepts she had learned in the university setting. Anne went on to say this episode gave her confidence to provide mothers with support. It was fortunate with this example that Anne perceived the experience above as positive however role modelling may work as both a positive and negative activity whereby the student adopts the mentors attitudes, behaviours, skills and actions and continues them in his/her practice in order to gain acceptance in the community and then continues them as the norm.

5.1.3.4 Attitude of mentors

Some student participants in this case study identified the midwife lecturers as having a positive and proactive attitude to breastfeeding, promoting best practice (5, sec. 4.1.2.5). Denise, a first year student, however commented on the disparity between the attitude of lecturers and some mentors and ultimately the support they received suggesting there was not the same input from mentors (sec. 4.1.2.4).

Negative attitudes towards breastfeeding appear to be inherent in clinical practice and the impact this had on learning opportunities were discussed consistently throughout the interviews. Debbie, a first year student (sec. 4.1.4.2), expressed disappointment in the number of mentors she came across who had negative attitudes towards breastfeeding, using unconstructive language and predicting problems before they occurred. Several students (2, 3, and 5, sec. 4.1.4.2) in the focus group said some midwives were not interested in breastfeeding and "*paid lip service to it*". They suggested that these midwives did not devote time to mothers or facilitate supervised learning and assessment opportunities for them.

Despite the problem of negative attitudes mentors are seen to have greater credibility than lecturers because they are practising on a daily basis in real life scenarios. Students are more likely to conform to the cultural norms within that clinical setting and possibly perpetuate poor practice (Hollins-Martin & Bull, 2004). Anne, a third year student (sec. 4.1.4.2), agreed

with this stating that she knew of other students who had "*picked up bad habits*" in clinical placements that reflected the language and behaviour of mentors.

This issue was not a surprise to the midwife lecturers as one (4) said they were aware of the problems with negative attitudes and that students can become disillusioned. It could be argued that it is not sufficient to be aware of the problem but instead action to rectify or reduce the problem is required by adjusting the curriculum in some way to improve relationships and develop closer liaison with the mentors. Denise, a first year student (sec. 4.1.3.3), suggested having more frequent reflective sessions with tutors would possibly mitigate against this and stop them "*going down the same road*".

On the other hand all the students in their individual interviews and diaries were also able to provide examples of midwives with positive attitudes and explained how they learned from these experiences, particularly in relation to interpersonal skills. Characteristics of good mentors were described by 'spending time with the women', 'waiting and having a conversation with the women' and 'seeing how she [mother] was doing' (Sally, year 2, sec. 4.1.2.2). Denise suggested having the opportunity to ask questions and the opportunity to reflect on events was important to her. Sarah (sec.4.1.4.2) described her positive 'role model' (mentor) as passionate about breastfeeding and enthusiastic.

Carper's (1978) patterns of knowing are evident in the participants descriptions of positive learning experiences, where midwives are providing holistic care based on empirical evidence but also incorporating the art of midwifery and getting to know mothers by giving them time and respect.

In summary, it could be argued that through Legitimate Peripheral Participation students learn how 'to be with women' as in the literal translation of 'midwife'; absorbing how mentors relate to mothers using the patterns of knowing that are more difficult to teach such as aesthetics and personal knowing. It is important however, that students develop ethical knowing and are able to identify what is right or wrong when exposed to different attitudes towards breastfeeding in the hidden curriculum.

5.1.3.5 Lack of time to mentor

A perceived lack of time was a significant finding of this case study. It was mentioned throughout the data collection as a possible reason for poor mentorship. In a recent study of mentors and mentees from midwifery, medical and nursing backgrounds at a university in the North West of England, Nettleton and Bray (2008) found amongst other issues that mentors did not feel they had enough time to dedicate to the mentoring process. Pressure of time can affect the provision of learning opportunities for students and particularly assessment (Bray & Nettleton, 2007). One can speculate that this may be due to an ever increasing and complex workload as well as the length of time some breastfeeding mothers require. Other reasons may be difficulty in organising continuity of mentor due to annual leave or other commitments, or diminished self-efficacy (Bandura, 1994), as discussed in section 5.1.2.3. Using a postal questionnaire Nettleton and Bray (2008) found that only 45% of mentors felt mentorship was part of their role and 39% felt it was not a recognised or supported part of their role and were not given sufficient time to devote to it. Gray and Smith (2000) provided a different perspective describing poor mentors as 'toxic mentors' who avoid or leave students to their own devices. Due to the constraints of this doctoral study mentors were not interviewed and therefore speculation of their views cannot be made.

Debbie (sec. 4.1.4.1), a first year student, suggested that mothers are also aware of this and often prefer students caring for them because the midwives are seen as being too busy whereas the students have more time to spend with them. Denise (year 1) suggested that rather than leaving mothers with no help or support she would assist them and gave this as a reason why she felt pressurised into unsupervised practice. From a professional perspective it could be argued that this leaves mothers exposed to sub-standard care and may contribute to the cycle of conflicting advice and inadequate support.

The NMC (2008b, p. 31) *Standards to support learning and assessment in practice* advises that mentors "will need time, when undertaking work with a student, to be able to explain, question, assess performance and provide feedback to the student in a meaningful way" and that workload should "reflect the demands of being a mentor". Without this students may be progressed through the programme and be eligible to register as a midwives without having achieved the appropriate standards of competency perpetuating poor standards of practice.

The findings of this study illustrate that on a regular basis mentors are not complying with the NMC standards for mentorship.

In summary, this case study has provided an insight into student midwives' experiences of learning about breastfeeding in practice-based placements. Although each individual's experiences are unique they do share commonalities. The major theme that emerged from the findings was the value they placed on practical learning and practical knowledge. Appropriate placements and mentorship are to key to a successful learning environment. In this case study, practice and education have the same external accreditation which should lead to a consistent approach to learning and teaching. Nevertheless, student accounts explicitly identify areas of weakness in relation to mentorship, particularly in urban hospital placements. Some students described a lack of supervised practice compared to other midwifery skills and a lack of opportunities to learn through observation of, and working alongside skilled practitioners through Legitimate Peripheral Participation. Negative attitudes and a lack of time were suggested to be contributing factors. In contrast when good mentorship was highlighted it was most often in relation to integrating theory to practice and increased confidence. Students identified observation, reflection and feedback as crucial elements in their learning.

5.1.4 Learning and teaching strategies

The epistemological assumptions made about a programme of learning will determine the learning and teaching strategies employed. The curriculum definitive document in this case study (University of Paisley, 2001b) identified the need to use an 'eclectic' curriculum model (Beattie, 1987) to prepare students to achieve the required competencies to register as a midwife (UKCC, 2000; Nursing and Midwifery Council, 2004, 2007a) and to develop the generic graduate skills required for employment (Quality Assurance Agency for Higher Education, 2004-2009). The spiral curriculum is a theoretical framework used in this case study to promote learning as an active social process rather than a product, whereby learners construct new ideas and concepts from current or previous knowledge (Bruner, 1960). The aim was to encourage students to problem-solve as a way of making connections between concepts and thus making sense of their experiences, 'discovery learning' (Bruner, 1960;

University of Paisley, 2001b). Bruner (ibid) suggested teachers provide the 'scaffolding' and introduce material appropriate to the stage of understanding and gradually build on it whilst ensuring there is structure and appropriate sequence; introduction to subjects early in the process but in a general way and then building on the more complex concepts; encouraging intuitive and analytical thinking; and arousing interest in the subject. The intention of the spiral curriculum is to prepare learners to become critical thinkers and transfer their knowledge to real life situations.

The *Definitive Curriculum Document* (University of Paisley, 2001b) identifies the spiral curriculum as a framework to promote the 'revisiting' of basic concepts at different levels and from different perspectives throughout the programme; building on and integrating students' theoretical and clinical experiences whilst introducing new knowledge and skills at the appropriate stage of their understanding. The BFI did not specify how the outcomes should be integrated into the curriculum however through scrutiny of university documents submitted to UNICEF UK BFI, I was able to identify that the midwife lecturers in this study appeared to recognise the need for students to learn about breastfeeding through discovery and as a team decided to thread them throughout most modules beginning with general concepts moving on to more complex problems introducing cultural, social and ethical issues. Only one of the midwife lecturers (5, sec. 4.1.1.2) referred to the spiral curriculum specifically and although none referred to any theories or theorists employed in the curriculum they did discuss pedagogical issues in relation to breastfeeding education and the most appropriate methods for 'scaffolding' information so that students could make connections between new and prior knowledge. Midwife lecturer 4 (sec. 4.1.1.1) described how they had integrated the BFI outcomes to ensure they were looked at from different perspectives. Another (3, sec. 4.1.1.1) described students linking breastfeeding concepts to other subjects in an analytical and critical way to demonstrate this was being achieved. Nevertheless, it cannot be assumed that because the curriculum documentation and the lecturers involved state that specific outcomes were threaded through the curriculum that students were cognisant of this. The student participants in this case study struggled to identify the actual BFI outcomes in the curriculum (sec. 4.1.1.1).

The definitive programme document (University of Paisley, 2001b) emphasised that the programme was designed for adult learners who were considered partners in the educational process. Knowles (1984) described adult learning as learning through self- directed learning and motivation, autonomy and enquiry. This may be stifled if students are not guided in their learning and aware of the outcomes they should achieve particularly in practice-based placements where learning may be more self-directed than in the academic setting. The two previous students, Polly and Paula reported that they could only see the integration of the BFI outcomes at the end of the programme. Polly (sec.4.2.2) described it as "*it all comes together like a jigsaw puzzle in the end*". Thus the BFI learning outcomes need to be made more explicit in the modules and also the outcomes that are expected of the students when in clinical placements.

The curriculum document (ibid) promoted the use of a flexible approach to learning emphasising students as adult learners. It acknowledged midwifery education as a dynamic process involving the development of caring skills and attitudes as well as a foundation built on evidence-based practice. The key influencing learning and teaching strategies referred to in the findings of this case study were experiential learning, 'revisiting and repetition', reflection and assessment and will be the focus of this section.

5.1.4.1 Experiential learning

Experiential strategies are used to enable students to practise the transfer of theory to clinical situations either through simulation or actual practise through social learning (Chamberlain, 1997). Bandura (1977) described social learning as learning through others to develop knowledge, skills, interpersonal skills and professional attitudes to become part of the community of practice. Experiential learning appeared to be prominent in the curriculum philosophy (University of Paisley, 2001b). The experiential learning strategies identified most often in the findings were simulation, group work, workshops and experiential workbooks, as well as clinical experience with mothers.

Most lecturers gave accounts of teaching about breastfeeding and agreed that breastfeeding education, apart from the anatomy and physiology components, required some form of experiential learning from simulated practice to discussions of scenarios (sec. 4.1.1.3). Some

of the students in the focus group (1, 3, 5, 6) discussed this issue stating that they particularly valued simulation or interactive learning to prepare them for practice. Arguably this is because simulated learning allows the student to rehearse prior to actually providing care for mothers in a safe and supportive environment providing an opportunity to build on previous experience or knowledge. It also provides a forum for feedback on performance with the aim of increasing confidence prior to clinical experience. It also enables tutors to address outcomes that students may not be able to achieve in practice-based placements.

Active engagement and critical reflection are central to the process of experiential learning. The clinically-based workshops were highlighted as a good example of this by all groups of participants. The workshops were held in the clinical areas by midwife lecturers for students to attend whilst on placement. Midwife lecturer 4 described the workshops as student-led whereby the aim was to discuss key breastfeeding topics in relation to students' recent clinical experiences enabling them to critically reflect and learn from the experience in a more meaningful way in a protected and confidential environment, away from the mentors. She added that as they worked so well she wished clinically-based workshops could be used for other subjects as well.

One lecturer (3) particularly identified the opportunity they provided to 'revisit' subjects with students at different stages of the programme, with different clinical experiences providing the opportunity to view breastfeeding from different perspectives. When students are in practice-based placements they have limited opportunities to meet as a group. This strategy appears to provide a venue for the students as a 'community' to engage with each other and learn from each other by sharing knowledge and experiences but moderated by the lecturers to ensure accuracy.

5.1.4.2 Revisiting or repetition?

'Revisiting' of subjects at different levels and from different perspectives is a core concept of the spiral curriculum (1960). The intention is to introduce students to basic concepts and encourage learning through enquiry. Areas where these concepts can be integrated and connected to other knowledge are identified. The concepts are revisited again and again to enhance conceptual understanding and develop of a 'portfolio of meaningful experience'

through experiential learning and reflection, as well as the inclusion of socio-political debate and discussion of ethical issues 'agenda of important cultural issues' (Bruner, 1960; Beattie, 1987). It could be argued that using this approach should enable students to consider breastfeeding more critically as the norm and part of the childbearing continuum rather than a stand-alone subject.

Despite the midwife lecturers' desire for students to see the difference between 'revisiting' and 'repetition', the 'revisiting' of breastfeeding concepts was perceived as 'repetition' by all the student midwives in the interviews and diaries. They appeared unable to articulate the connection to the larger body of knowledge they were developing. Debbie (sec. 4.1.1.2), a first year student, described the value of hearing about something several times before it was really absorbed. All the students referred to 'repetition' and were able to identify this most often via the use of the experiential workbook, clinically based workshops/ tutorials, Blackboard (virtual learning environment) or assessment rather than in the modules. It is not clear from these findings whether what the student participants referred to as 'repetition' was just repetition of the same information at different times in different ways or whether they did not appreciate the inclusion of the spiralling of concepts.

Despite this it appears that although students and lecturers use different terminology to describe the processes of 'spiralling', the effect of 'revisiting' or 'repetition' throughout the programme is viewed as being beneficial by the students because breastfeeding is reintroduced at regular intervals through a variety of learning and teaching strategies. This is of interest when designing a curriculum as UNICEF UK BFI do not stipulate how the outcomes should be integrated into curricula and have suggested this "may be delivered in conjunction with other elements of the course or a discrete module" (UNICEF, 2009, p. 4).

5.1.4.3 Reflection

Reflection, defined as critically thinking about events after they have occurred, is a cognitive skill. Reflective practice is where this process is applied to practice to develop and improve performance. Schön (1983) suggested this was a defining characteristic of a profession as it is associated with deep learning.

As discussed in the previous section a couple of the midwife lecturers described how they found the clinically-based workshops/ tutorials assisted them in 'revisiting' subjects through reflection on recent examples from the students' experiences and being able to relate the theory to practice immediately (sec. 4.1.1.3). The first year students supported this and in particular the immediacy of reflection on practice. This strategy appears to be particularly useful because as Denise, a first year student (sec. 4.1.1.3) suggested *"you have that kind of feedback while you are on placement so it's very fresh in your mind*". This is particularly poignant if students feel unsupported by their mentor in the placement. Denise also pointed out that the workshops provided the opportunity to talk to other students and hear their experiences as well as the tutor who she described as "*who really knows what they are talking about".*

Denise (year 1, sec. 4.1.3.3) also believed that having reflective sessions with the lecturers, who were seen to have a positive attitude, would be more objective. She expressed the need for this in particular to discuss the negative attitudes they encounter whilst in placement so that they do not perpetuate them. It appears therefore that it is important for students to learn about breastfeeding away from the clinical environment to assist them to make sense of the clinical experiences. This is in contrast to the theory of situated learning where it is suggested that "for newcomers then the purpose is not to learn from talk as a substitute for Legitimate Peripheral Participation; it is to learn to talk as a key to Legitimate Peripheral Participation" (Lave & Wenger, 1991, p. 109).

Despite one midwife lecturer (3, sec.4.1.3.3) expressing concern that at times students were not aware of the learning that takes place through reflection the majority of the student participants and previous students at some point in the interview suggested that reflection aided their learning by making sense of it.

Interestingly Denise (year 1, sec.4.1.2.2) was the only student to mention the role of the mentor in reflection. She believed that by observing her mentor's practice and then reflecting helped apply theory to practice. This supports Bandura's (1994) suggestion that learners use vicarious experience or 'modelling' to let them see that they may also be cable of achieving similar activities. Having a positive 'model' gives them something to aspire to. Reflecting on

these episodes takes this one step further enabling the student to make sense of the experience. Denise particularly mentioned this in association within community placements and informal reflection sessions in the car. As discussed earlier in the discussion, in other areas of practice time appeared to be a barrier for mentors providing opportunities for reflection.

The student accounts gave many examples of reflection, particularly in the critical incident diaries. It could be argued that because of the nature of writing the critical incidents this lead to more structured reflection. Polly, a previous student (sec. 4.1.33), suggested that although she was encouraged to reflect as a student it was not until she was a registered midwife that it became an integral part of her practice.

5.1.4.4 Assessment

Assessment enables universities to demonstrate quality of the programme as a feedback mechanism on student learning (Wellard et al., 2007). The midwife lecturers reiterated this as they perceived assessment was an essential component of the Baby Friendly Initiative to demonstrate learning was taking place and also to emphasise the importance of the subject within the curriculum (sec. 4.1.1.5). McCormick (1999) inferred that much of what was taught in universities was geared towards passing assessments rather than dealing with real life situations. One lecturer (3, sec. 4.1.1.5) agreed with this suggesting that assessment leads programmes and encourages students to learn the subject as well as emphasising its importance in the curriculum.

A range of assessment strategies were implemented into the theory component of the curriculum (for example, experiential workbook, on-line tests, and observation of simulation practice). However, at the time of the study there was only one discrete formative assessment at the end of year one in the form of an OSCEs (objective structured clinical examination), although breastfeeding was used in parts of other assessments. OSCEs are not intended to replace clinical assessment however they do give the student the opportunity to have their competence assessed in a safe and supportive environment and receive feedback on it. OSCEs have an objective and structured marking criteria for all students which assess psychomotor, cognitive and affective domains of learning. Debbie (sec. 4.4.1.1) particularly

identified the OSCE as a useful learning tool that promoted confidence. It could be argued that students find this particularly valuable if they feel they are not receiving feedback on performance in clinical placements. In a group of 23 final year pre-registration student midwives, Jay (2007) found that students reported OSCEs as a valuable learning tool because it encouraged deeper learning because of the practical component. Student midwife 1 (sec. 4.1.1.3) supports this as she referred to the OSCE as useful in terms of experiential learning.

Students were expected to complete an experiential workbook whilst on placement as an assessment of continuous learning in practice. Midwife lecturer 4 (sec. 4.1.1.5) also described the workbook as a way to facilitate learning, relating theory to practice. There were however differences in opinions about the experiential workbook (sec. 4.1.1.5). A couple of the student midwives in the focus group described the amount of additional work as onerous. Three of the midwife lecturers agreed with this.

In contrast, four of the participants (sec. 4.1.1.5) in the individual interviews described the workbook positively in terms of promoting adult learning by facilitating reflection, motivation and promoting independent enquiry (Knowles, 1984). Debbie (year 1) said "*it put the responsibility on yourself to get be getting out there ... to be learning more because you could just sit there and just get what you were taught in lecturers but that's just kind of the start*". Anne (year 3) suggested it gave a more formal platform for reflection that she may not have had without the workbook.

In conclusion, although practical learning was seen as the main influence on learning about breastfeeding participants acknowledged the supportive role of the teaching and learning strategies employed in the curriculum. Student participants identified experiential learning as a fundamental part of their preparation for practice- based placements. Repetition of concepts and reflection on learning were continuous themes throughout the interviews. As well as complementing and supporting their learning in practice it was suggested that they also enhanced their confidence. Confidence will be explored further in the following section.

5. 2 Confidence

A lack of knowledge and skills to support mothers with breastfeeding have been consistently identified in the literature as major contributing factors to low rates of breastfeeding in the UK (Sikorski et al., 2002; Chiu et al., 2003; Hall-Moran et al., 2004; Renfrew et al., 2005). Through accreditation, UNICEF UK BFI acknowledged that the educational outcomes had been integrated into the BSc in Midwifery curriculum and that the student midwives had the basic knowledge required to support mothers with breastfeeding. However, research aim 2 was to explore this issue further and gauge student midwives self-confidence in their ability to support and advise mothers with breastfeeding as they progress through the programme and on completion as registered midwives. Confidence was a major part of the storyline throughout the findings of this case study however this section will focus on confidence (self-efficacy) of students during the programme and on graduation in more detail.

Bandura (1977; 1994) described self-efficacy as a person's belief in their ability to perform in situations that affect their lives. He suggested it was dependent upon previous experience; vicarious experience (observation); verbal/ social persuasion or self evaluation of physiological state (mood). A sense of self-efficacy increases belief in one's ability to determine how they will think, feel, behave and motivate themselves in different situations, through cognitive, motivational and affective processes. He proposed that those with increased self-efficacy would have a greater chance of being successful, enabling them to think about learning in a positive way to motivate themselves and set goals, thus reducing anxiety and stress. A major purpose of the curriculum is to develop graduates who have confidence (self-efficacy) to become safe and effective practitioners.

Lauder et al. (2008) conducted a study across seven higher education institutions (HEI) to investigate the relationship between self-efficacy, support and self reported competency from a sample of student nurses and midwives (*n= 2011*) in pre-registration education programmes in Scotland. Data was collected was via questionnaires. They reported that there were differences in self-reported competency between HEIs speculating that this could be attributed to attitudes and values of particular institutions; the hidden curriculum. They suggested that institutions were not providing an adequate level of support from mentors. Students reported family, friends and peers as the greatest source of support with the HEI and

mentors as the lowest. But despite these findings they reported that diminished self-efficacy was not a problem for the participants and there was a moderate correlation between self-efficacy and self-reported competence. The findings of this case study would generally support Lauder et al. (2008) as overall students did not appear to have problem with self-efficacy.

Polly, a previous student (sec. 4.2.1) reported the programme prepared her to give advice to mothers that was consistent with her current peers (registered midwives) which gave her confidence to feel she was doing a good job. Some reported that they felt armed with adequate knowledge from university to prepare them for their placements. This may be due to the focus on experiential learning and the emphasis on practical skills or competency-based BFI outcomes (Department of Health, 1999; Farrand et al., 2006).

On the other hand the first year students (Debbie and Denise, sec.4.2.2) at times expressed some lack of confidence in the interviews, but this was particularly in relation to a lack of supervision. This was an expected finding given that both first year students should have been practising at dependent level and the clinical competency profile (University of Paisley, 2001a, p. 11) states that "the student can undertake some practice but will be unskilled and lacking in confidence". Denise went on to suggest she was confident in theory but needed to develop clinical skills. However, in section 4.4.1.3, critical incident diaries, she did express confidence in dealing with a situation where she could use knowledge acquired at university and also from a 'pro breastfeeding' mentor.

It is the role of the mentor and the HEI to support students to develop cognitive processes so that they can analyse theory and apply it to individual situations. If students have a diminished sense of self-efficacy this may reduce effectiveness of performance. Saks (1994) suggested that those who begin a placement feeling confident would be less likely to experience anxiety. All students in the individual interviews expressed concern about lack of supervised practice but did not describe their feelings in relation to anxiety (sec.4.1.2.).

There had been some concern about the programme flow interrupting access to breastfeeding experience from the first and second year students however the second year students did

demonstrate confidence in their interviews and diary entries. Sarah (year 2, sec. 4.1.4.1) attributed this to night shift placement on the ward at the end of year one where she gained a lot of clinical experience supporting mothers (previous experience). Both the third year students also recognised their confidence developing throughout the programme.

In students' accounts throughout the findings they recognised the need to know and understand theory to ensure evidence-based practice and associated this with confidence. It was anticipated that Carper's (1978) fundamental patterns of knowing would have been more evident in the findings as they were influential in the development of the research design to illuminate how the students learned about breastfeeding. It was surprising therefore that the patterns were not more transparent in the participants' accounts. There was however some evidence of the development of the patterns of knowing in the different year groups, particularly in the critical incident diaries where students described the episodes of care from a holistic point of view including issues related to the 'art of midwifery' (aesthetics) and personal knowing. They appeared to know that care was built on more than evidence-based practice and were cognisant of the importance of being able to develop a therapeutic relationship. Communication and empathy were key issues evident in their practice and one third year student Anne, described an ethical dilemma (sec. 4.4.1) she encountered in practice however she was in the third year of the programme. Both previous students, Polly and Paula (sec.4.2.2), stated that they felt confident in their knowledge and skills and prepared to support mothers with breastfeeding on graduation.

In summary, confidence was a key message running through the interviews however it was more explicit in the diary entries where each of the students explained their role in clinical events. This may have been because they were using the process of reflection-on- action to identify the effect the incident had not only on their learning but the impact on their confidence as well. It can be speculated that by ensuring student midwives are equipped with the appropriate knowledge and skills for their level of understanding prior to practice-based placements and graduation helps them analyse and integrate theory to practice reducing their sense of anxiety and stress whilst increasing their confidence to support mothers with breastfeeding. Good mentoring enhances this process enabling them to learn through observation and feedback in the 'community of practice'.

5.3 The Impact of Baby Friendly Accreditation

Research aim 3 was to explore the perceived impact of implementing the Baby Friendly standards in the BSc in Midwifery curriculum. The following section will explore the main themes that were identified from the findings: consistent approach and employability.

5.3.1 Consistent approach

The aim of the UNICEF UK BFI (1998, 2002, 2008) was to ensure healthcare professionals were providing mothers with consistent up to date evidence-based information in a structured framework. All of the midwife lecturer participants suggested that the education accreditation process had assisted them to integrate theory to practice using a consistent approach. They stated this had not only been due to the integration of the BFI standards and outcomes into the programme but also because they had all attended the UNICEF UK BFI breastfeeding management course and updated their own knowledge in-line with the Baby Friendly Initiative.

5.3.1.1 Bridging the theory –practice gap

Supporting the curriculum definitive document (University of Paisley, 2001b) and NMC (Nursing and Midwifery Council, 2004, 2009) standards for pre-registration education, practice did appear to be core to the curriculum for both midwife lecturers and student participants in this study. The midwife lecturers frequently discussed bridging the theory-practice gap throughout the interview and all agreed that the accreditation process had helped achieve this by heightening awareness through the prestige of the award and combining learning and teaching strategies between the theoretical and clinical setting. However, as discussed earlier in section 5.1.2.1/4, this was sometimes contradicted when students described observing practise that was not evidence-based and was in conflict with the theory taught in the university setting. This suggests there is still a theory- practice gap in breastfeeding knowledge and skills.

Allmark (1995) suggested the theory- practice gap arose either because practice does not live up to theory; there is a relational problem between higher education institutions and clinical areas, or theory is irrelevant to practice. In this case study there was no evidence to suggest a

relationship problem with the practice-based placements who were also Baby Friendly accredited. The programme was accredited by UNICEF UK BFI, which in turn suggests the theory being taught to the students should be consistent with practice. Therefore, it appears the problem may be that practice does not always live up to theory.

A couple of students in the focus group (2 and 3, sec. 4.3.1.1) discussed an example of this where they struggled with what appeared to be misinterpretation of the BFI standards. They stated that in the placements they were not allowed to demonstrate how to make up bottles of formula milk for mothers who chose to bottle feed. This is one of the BFI education outcomes and is taught in the university setting however it appears that some students may not be getting the learning opportunities related to this skill in the clinical setting (see appendix 2). Arguably this could be because mentors are not familiar with the outcomes student midwives have to achieve despite this being a condition of accreditation. Another reason could be misinterpretation of the BFI standards leading to apprehension that they may be seen as encouraging artificial feeding. Either way this is of great concern for both students learning in practice who are not getting the opportunity to develop this competency whilst on placement as well as a considerable safety issues for mothers who are not being taught how to safely reconstitute formula milk.

One midwife lecturer (4, sec. 4.3.1.2) suggested breastfeeding was seen to be higher on the agenda in clinical areas. Another (1, sec. 4.3.1.1.) suggested the accreditation had an impact on mentors because they had to sign activities in the students experiential workbooks and were aware of students attendance at clinically-based workshops/ tutorials. Specific breastfeeding competencies were also introduced in the clinical competency profile (University of Paisley, 2001a) to be signed by the mentor by the end of each progression point to assess the students level of competency.

The lecturers described the impact of working towards the accreditation had on their own practice. They acknowledged that there had been disparity in what they had been teaching and suggested that completing the UNICEF UK BFI management course themselves had highlighted this issue. One midwife lecturer (4, sec. 4.3.1.2) commented that by undertaking the course the team were all "*singing from the same hymn sheet*" and had updated their own

knowledge and skills. Tappin et al. (2006) recommended health visitors complete an evidence-based programme to ensure their knowledge and skills were adequate to support breastfeeding mothers. This recommendation could also be applied to midwife lecturers to ensure they also have up to date knowledge and skills to teach student midwives to support breastfeeding mothers using a consistent approach.

There was discussion in the midwife lecturers' focus group about the process of integrating the breastfeeding educational outcomes into the curriculum. One midwife lecturer (2, sec. 4.3.1.2) described how they had to go through the curriculum and identified where the outcomes matched what was currently being taught. Another (3) pointed out in section 4.3.1.2. that the BFI had improved quality by highlighting what was missing and they realised that they did not devote as much time on breastfeeding as was required.

A significant finding of the case study was that the appointment of a project leader was considered essential by some of the midwife lecturers (2, 3, and 4, sec. 4.3.2.1), although there appeared to be general agreement in the group, to maintain a consistent approach to breastfeeding education. The role was seen as a central point of reference for new information and research to keep them up to date and also for someone to co-ordinate the iterative project on an ongoing basis as re-accreditation takes place every three years (sec.4.3.2.1) (UNICEF, 2009). One midwife lecturer (4, sec. 4.3.2.1) argued that the appointment of a project leader for other initiatives would be beneficial to save time whilst improving practice.

In conclusion, it appears that although the theory-practice gap in breastfeeding education has not been fully resolved by the accreditation process the lecturer-lecturer differences in knowledge and skill may have been. All lecturers were involved in the project development, guided and supported by the project leader, which appears to have led to a consistent approach for teaching breastfeeding throughout the theoretical component of the curriculum. This could be a particularly useful strategy when other new initiatives or policies are introduced, to ensure someone 'champions' the initiative by co-ordinating resources, action planning and communicating with the relevant stakeholders. The role of a project manager is

also to ensure quality is maintained and in this case that learning and teaching strategies are appropriate to achieve the standards and outcomes.

5.3.2 Employability

Mohanna, Wall and Chambers (2004) recommended that when developing curricula it is essential first to identify the purpose. This is dictated by the NMC who have a statutory responsibility to determine the overarching aims and competencies to be achieved on completion of midwifery programmes to prepare graduates for practice and employment. The Quality Assurance Agency for Higher Education (2004-2009) identified employability as an enhancement theme suggesting that a curriculum that promotes employment is a sign of good quality education. They define employability as "a set of achievements, understandings and personal attributes that make individuals more likely to gain employment and be successful in their chosen careers."
(http://www.enhancementthemes.ac.uk/themes/Employability/overview.asp).
A significant finding of this study regarding the impact of introducing the BFI standards was the perception of improved employment prospects. This is of particular importance in the current employment climate where student midwives struggle to gain employment in Scotland.

The participants in this case study were in agreement that the external accreditation by UNICEF UK BFI enhanced their employment prospects. In section 4.3.3 and 4.3.1.1 midwife lecturers (2, 4 and 5), students (Anne and Sally) and Paula, a previous student, all gave accounts where graduates had been employed because of their breastfeeding knowledge and skills, to assist in the development of good breastfeeding practice, particularly in hospitals that were not 'Baby Friendly' at the time. Sally (year 2) believed that mentioning the accreditation in her curriculum vitae would be attractive to potential employers as this demonstrated that she had the knowledge and skills for practice without requiring additional training compared to other graduates.

Paula, who completed the programme approximately six months before her interview, also gave a personal account of how she gained employment in a non-accredited hospital. One reason given was that she had trained at a 'Baby Friendly' university. She went on to explain

that they were keen to keep her when she resigned from the post and offered her a breastfeeding adviser post. On the other hand she also described how she felt unprepared for practice in a hospital that was not working to 'Baby Friendly' standards, finding it a challenge. This was an unexpected finding in this case study and was only raised by Paula. It could be argued that this was a problem for Paula because she was a 'novice' midwife and therefore unable to deal with conflict within new professional relationships and was possibly expected to conform to norms of practice in that area (Hollins-Martin & Bull, 2004). However, it does raise the issue that students require preparation for differences in practice and to develop the skills to deal with conflicting and non evidence-based practice.

Breastfeeding is a key public health issue and the need to increase breastfeeding rates has been recognised in key policy drivers such as 2009 HEAT (Health, Efficiency, Access, Treatment) target 7 in Scotland. The BFI has also been recommended in the National Institute of Clinical Excellence publication *Routine postnatal care for women and their babies* (2006) as a framework for improving practice. It is possible therefore as pressure increases for service providers to increase breastfeeding rates potential employers may view this initiative as an attractive financial incentive as they would not need to send these new recruits for 18 hours of training as recommended to prepare for and maintain 'Baby Friendly' status (UNICEF, 2001).

In summary, the aim of the BSc in Midwifery is to promote safe and effective practitioners in all areas of midwifery practice whilst ensuring students graduate with the skills to attract employers. The UNICEF UK Baby Friendly Initiative accreditation is one way of doing this demonstrating that students are equipped with the knowledge and skills to support breastfeeding mothers (UNICEF, 2002, 2009). This is particularly relevant with national policy drivers encouraging an increase in breastfeeding rates.

Concluding comments

Despite the negative focus on mentorship there was evidence of deep learning throughout the interviews and in the critical incident diaries. Similar to the findings from Mansouri et al. (2006) the students appeared to be able to find meaning in the their ‘hands on’ learning experiences by contextualising it. This assisted them to develop practical knowledge that gave them confidence in supporting mothers with breastfeeding.

The following chapter will provide the conclusions to this case study and make recommendations for development of the new BSc Midwifery programme, as well as for further research in the area of breastfeeding education.

Chapter 6

Conclusions

The BSc in Midwifery programme, University of the West of Scotland was awarded UNICEF Baby Friendly Initiative (BFI) accreditation for higher education programmes in 2007 which acknowledged the implementation of the education standards (UNICEF, 2002, 2008), integration of the breastfeeding educational outcomes into the curriculum and that students are equipped with the basic knowledge and skills to support mothers with breastfeeding. The purpose of this case study was to explore how student midwives, in a UNICEF UK Baby Friendly accredited university, learn about breastfeeding to prepare them for practice as a registered midwife.

This chapter provides a brief summary of the current situation in relation to breastfeeding education and goes on to provide the conclusions to this case study and make recommendations for development of the new BSc Midwifery programme, as well as for further research in the area of breastfeeding education.

Learning about breastfeeding is a complex process involving the cognitive, psychomotor and affective domains of learning. Orland-Barak and Wilhelm (2005, p. 462) referred to the "learning to nurse puzzle". This phrase is fitting when referring to student midwives learning about breastfeeding. Breastfeeding knowledge and skills cannot be learned through empirical knowledge alone but require the development of skills in the aesthetics, personal knowing, ethics (Carper, 1978) and socio-political knowing (White, 1995).

Schön (1987, p.1) described the different kinds of knowledge as originating from the "high hard ground" (university) where empirical evidence may easily be used and "the swampy lowland" of clinical practice where the most important challenges occur in real life events. Situated or social learning is key to providing holistic care and the development of interpersonal skills and professional attitudes as well as cognitive and psychomotor skills (Bandura, 1977; Lave & Wenger, 1991).

It is generally agreed in the literature that healthcare professionals' lack of knowledge and skills to support mothers to breastfeed their babies are major contributing factors to low rates of initiation and duration of breastfeeding, leading to inconsistent and inaccurate advice (Sikorski et al., 2002; Chiu et al., 2003; Hall-Moran et al., 2004; Renfrew et al., 2005). It is suggested that this could be due to a lack of formal breastfeeding education opportunities and 'chaotic' learning environments (Renfrew et al., 2005; Smale et al., 2006; Jackson, 2007; McFadden et al., 2007).

In 2002 UNICEF UK BFI introduced the best practice standards for breastfeeding education in higher education institutions to address this situation and in 2007 the NMC published a set of 'Essential Skills Clusters' for pre-registration midwifery education programmes (Nursing and Midwifery Council, 2007a). The skills clusters were developed as an outcome of a previous reviews (Nursing and Midwifery Council, 2005) to address concerns about skill deficits in particular areas of clinical practice such as breastfeeding.

It is hoped the findings of this case study will inform the learning and teaching strategy on the BSc Midwifery programme at the University of the West of Scotland to improve breastfeeding education and although not generalisable will also be useful to other higher education institutions when developing pre-registration midwifery curricula.

The findings have identified that confidence increases in students throughout the programme as they gradually display the fundamental patterns of knowing (Carper, 1978; White, 1995). Students reported that they felt equipped, through university teaching, with the required knowledge and skills for placements which increased their confidence however gave examples of a lack of supervision, teaching and assessment from mentors in some areas, particularly urban hospitals. Despite this, graduates of this programme reported that they felt confident to support breastfeeding mothers.

6.1 Conclusions of the study

Research aim 1 was to identify the key influences which impact on student midwives learning.

The key influence on learning that emerged from the participants' accounts was practical learning. There was evidence of movement from Legitimate Peripheral Participation to full participation in the community of practice. Students appreciated the role of the midwife lecturers however they valued observation of their mentors and clinical practice above this because they were seen as 'hands on' in real life situations.

Appropriate placements and mentorship are fundamental to social learning however the findings of this study suggest the provision of learning opportunities and quality of teaching and assessment is variable. Students particularly identified weaknesses in some hospital placements where they were unable to observe or be observed by expert practitioners to learn the language and behaviour of the community. There is evidence to suggest that some mentors may not be meeting the NMC standards for mentorship in relation to breastfeeding. Negative attitudes towards breastfeeding and a lack of devoted time for mentorship were identified as significant issues that may contribute to this problem.

Observation, reflection, repetition and feedback were highlighted as crucial elements in good learning experiences. Positive learning experiences were most often associated with community- based mentors and lecturers.

Students and lecturers agreed that the most appropriate learning and teaching strategy was experiential learning. As well as introducing the BFI outcomes in to the modules via the spiral curriculum a variety of techniques discrete to breastfeeding were also introduced. Participants highlighted the practice-based workshops, facilitated by lecturers, as a useful tool for reflecting on experience and some requested that these occurred more frequently. The workbooks and OSCEs were also identified as beneficial by most participants however on occasions some believed the workbook to be onerous on an already heavy workload.

Research aim 2 was to gauge student midwives self-confidence in their ability to support and advise mothers with breastfeeding as they progress through the programme and on completion as registered midwives.

The findings of this case study suggest that the participants considered themselves prepared by the theoretical content of the curriculum for their practice-based placements which gave them a sense of confidence (self-efficacy). This was further enhanced when they received, what they perceived as, good mentorship.

Furthermore the previous students stated that they felt confident upon graduation in their knowledge and skills to support and advise mothers who choose to breastfeed.

Research aim 3 was to explore the perceived impact of implementing the Baby Friendly standards in the BSc in Midwifery curriculum.

The integration of the BFI standards in the curriculum has led to a consistent approach to learning and teaching strategies. It was reported that this was enhanced by all midwife lecturers teaching on the programme attending the same breastfeeding management course and having a designated project leader. However, in light of student accounts it appears that the theory- practice gap has not been resolved in all practice-based placement areas despite hospital accreditation.

Findings also illuminate a perceived increase in employment prospects due to the accreditation of the programme. It could be speculated that this is because there is an increasing pressure on hospitals to adhere to BFI standards leading to a financial incentive for potential employers who would not need to re-train these graduates. Several examples were given in the study of new graduates assisting new employers to implement the initiative.

6.1.1 Recommendations for curriculum development

- It would be advantageous for new lecturers involved in teaching to attend the UNICEF UK BFI Breastfeeding management three day course. This provides the foundations and rationale for the initiative and promotes consistent ideals whilst updating the lecturers with evidence-based information required to ensure the standards and outcomes are integrated throughout the curriculum.

- To include mentors in the future development of the curriculum to ensure good relations with clinical areas; that theory is relevant to practice and that practice lives up to theory (Allmark, 1995).

- To employ experiential learning strategies with a clear focus on reflection to ensure deep learning from experiences.

- To be explicit about where the BFI outcomes are included in modules and what is expected of students in placements.

- Attention must be paid to the hidden curriculum as it is acknowledged to be an influential and important aspect of midwifery curricula. It is important to socialise students and engage them in active learning in the real world. However, at times it may have adverse affects on learning and be in conflict with evidence-based practice as well as learning and teaching strategies.

6.1.2 Recommendations for mentorship

- Registered midwives should have access to current and up to date evidence and in-service training on breastfeeding issues as part of the BFI process. This will ensure they are providing appropriate care for mothers as well as teaching and assessment of student midwives.

- It could be beneficial for in-service training to concentrate on the impact of negative attitudes on both breastfeeding rates and teaching student midwives, encouraging

them to provide non-judgmental care for mothers who choose to breastfeed. This may encourage an environment that is conducive to learning through observation and reflection.

- There needs to be greater liaison between lecturers and mentors. Breastfeeding education could be introduced into annual mentorship updates to ensure it is given the same status as other subjects for student midwives. The BFI education standards and outcomes could be introduced into the preparation for mentorship module to ensure new mentors know what will be expected of them.

- In addition, the NMC *Standards for learning and assessment in practice* (Nursing and Midwifery Council, 2008b, pp. 30-31) state that providers of maternity services should ensure that mentors have adequate time to supervise, teach and assess students who have supernumery status.

6.2 Implications for further research

- The *UNICEF UK Baby Friendly Initiative Best Practice Standards into Breastfeeding Education for Student Midwives and Health Visitors* is a recent initiative. The University of the West of Scotland, alongside Kings College, London, were the pilot sites and in 2007 the first universities to be accredited. To date only one other university in the United Kingdom (UK) has received the award. Therefore further studies will be required once it becomes more established to provide further knowledge and understanding of how student midwives learn about breastfeeding in midwifery programmes using this initiative.

- More conclusive evidence is required on the impact the initiative has on breastfeeding rates in the UK as well as on the care breastfeeding mothers receive, particularly as it has gained national endorsement from the NMC in the *Essential skills clusters* (Nursing and Midwifery Council, 2007a) and the National Institute for Health and Clinical Excellence (2006).

- It would be an advantage to explore how mentors perceive their role in supervising, teaching and assessing student midwives on breastfeeding management and whether they feel they have the knowledge and skills to do this adequately. This should include aspects such as time allocation for mentorship and attitudes towards breastfeeding and mentoring. This information would contribute to curriculum planning and appropriate preparation of mentors.

- It would also be of interest to investigate how graduates of an accredited midwifery programme, employed in hospitals that do not adhere to Baby Friendly standards, perceive their role in supporting breastfeeding mothers. Research could investigate the impact their knowledge and skills has on their peers and in turn the influences of the cultural norms on their practise.

6.3 Limitations of the study

This study gives an insight into breastfeeding education in one BSc in Midwifery programme that was accredited by the UNICEF UK Baby Friendly Initiative. By its very nature this programme is unique and therefore the findings cannot be applied to other midwifery programmes but instead may be used to inform them. The purpose of this study was to be exploratory rather than explanatory. These findings must be interpreted in light of the fact that they were based on the individual perceptions of the participants which did not include the mentors and that they may have been influenced by the fact that due to the nature of the data collection methods they were not anonymous to the researcher. In an attempt to reduce this potential problem confidentiality issues were described in writing and discussed verbally at the beginning of each interview. However, it must be taken in to account, particularly for the student participants that they were still students on the programme and therefore may have found it difficult to fully express their feelings.

6.3 Personal Reflection

Reflection has been a strong theme threaded throughout this case study and therefore it seems fitting that I reflect on my personal experience of undertaking this study. I have used Johns (1995) cue questions to assist with this.

What was I trying to achieve?

From a professional point of view I have always had a strong interest in breastfeeding both from a practice and educational perspective. I was very keen to know if introducing the BFI standards into the curriculum had made a difference to students learning. I have a strong belief that breastmilk is the best form of nutrition for human infants whilst recognising that breastfeeding is not possible for all mothers. It concerns me that a major reason for mothers not succeeding with breastfeeding is due to a lack of knowledge and skills from healthcare professionals. This is particularly pertinent to me now as I am a midwife lecturer and feel I have a responsibility to try and rectify this in my area of practice.

How did I feel in this situation?

As this study has taken almost five years to complete the range of feelings can only best be described as a 'roller coaster'. Initially I struggled to maintain the focus on education and kept relapsing in to midwifery practice which was not the purpose of an educational doctorate. It has been a steep learning curve not only in conducting a rigorous research project and exploring educational theory but also as a personal experience and as a reflection on my character.

What knowledge informed me?

I looked at this project from my view of the world in which I wanted to conduct this case study. Through my knowledge of educational theory, midwifery practice and breastfeeding I believed the subject had to be viewed holistically, from a 'real world' point of view. I realised at the outset, given my research aims and the subjective nature of the topic, that an interpretivist approach would be required to gain an insight into students' experiences as these could not be measured from a positivist stance. I used my personal knowledge of the curriculum and the project to assist in my interpretations.

How did my actions match with my beliefs?

I believe I have conducted this study with the rigour described in chapter 3 in an attempt to uncover the meaning students give to their experiences in the programme. Particularly as an insider researcher I was keen ensure it was a trustworthy account whilst ensuring participants confidentiality. I was guided by ethical principles to ensure that the participants of the study did not feel coerced into taking part and offered them the opportunity to withdraw at each stage of their participation. Valuable assets in this process to enable me to make sense of my experience were my personal diary and critical friend.

How do I feel now?

I feel that journey has increased my repertoire of skills for conducting an in-depth research study for future ventures. Secondly, I have been a registered midwife for twenty years and therefore have a strong sense of identity in a 'community of practice'. Moving in to education altered this sense of identity as I now feel that although I have strong clinical links lecturers are viewed as being on the periphery of midwifery practice. I always valued my professional knowledge and skills in my role as a midwife lecturer above education theory until undertaking this study. This process has enabled me to value my role in both communities of practice and appreciate that both are necessary to ensure students area adequately prepared for practice and without a sound educational strategy the transfer of theory to practice will be hindered.

References

Adami, M. F. (2005). The use of triangulation for completeness purposes. *Nurse Researcher,* 12(4), 19-28.

Al-Nassaj, H., Al-Ward, N., & Al-Awqati, N. (2004). Knowledge, attitudes and sources of information on breastfeeding among medical professionals in Baghdad. *Eastern Mediterranean Health Journal,* 10(6), 871-878.

Alexander, M. (1982). Integrating theory and practice: An experiment evaluated. In M. Steed-Henderson (Ed.), *Nursing education*. Edinburgh: Churchill Livingstone.

Alexander, M. (1983). *Learning to nurse. Integrating theory and practice*. Edinburgh: Churchill Livingstone.

Allmark, P. (1995). A classical view of the theory- practice gap in nursing. *Journal of Advanced Nursing,* 22, 18-23.

Andrews, M., & Chilton, F. (2000). Student and mentor perceptions of mentoring effectiveness. *Nurse Education Today,* 20, 555-562.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioural change. *Psychology Review,* 84, 191-215.

Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behaviour* (Vol. 4, pp. 71-81). San Diego: Academic Press.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Reviews in Psychology,* 52, 1-26.

Beattie, A. (1987). Making a curriculum work. In P. Allan & M. Jolly (Eds.), *The curriculum in nurse education* (pp. 15-34). London: Crook Helm.

Begley, C. (1996). Using triangulation in nursing research. *Journal of Advanced Nursing,* 24(1), 122-128.

Bell, J. (1991). *Doing your research project. A guide for first-time researchers in education and social science* (2nd ed.). Milton Keynes: Open University Press.

Benner, P. (1984). *From novice to expert: Excellence and power in clinical nursing*. Reading: Addison-Wesley.

Benner, P. (2001). *From novice to expert. Excellence and power in clinical nursing practice*. New Jersey: Prentice Hall.

BERA (2004). *Revised ethical guidelines for educational research*. Notts: British Educational Research Council.

Bloom, B. (1956). *Taxonomy of educational objectives: The classification of educational goals, handbook one: Cognitive domain*. New York: McKay.

Boeije, H. (2002). A purposeful approach to the constant comparative method in the analysis of qualitative interviews. *Quality and Quantity,* 39, 391-409.

Bolling, K., Grant, C., Hamlyn, B., & Thornton, A. (2007). *Infant feeding survey 2005*. London: The Information Centre

Bondy, K. N. (1983). Criterion- referenced definitions for rating scales in clinical evaluation. *Journal of Nursing Education,* 22(9), 376-377.

Boud, D., Keogh, R., & Walker, D. (Eds.). (1985). *Reflection: Turning experience into learning*. London: Kogan Page.

Bradshaw, A. (1997). Defining 'competency' in nursing (part 1): A policy review. *Journal of Clinical Nursing,* 6, 347-354.

Bradshaw, A., & Merriman, C. (2008). Nursing competence 10 years on: Fit for practice and purpose yet? *Journal of Clinical Nursing,* 17(10), 1263-1269.

Bray, L., & Nettleton, P. (2007). Assessor or mentor? Role confusion in professional education. *Nurse Education Today,* 27(8), 848-855.

Britten, J., & Broadfoot, M. (2002). Breastfeeding support in Scotland. *British Journal of Midwifery,* 10(5), 292-296.

Broadfoot, M., Britten, J., Tappin, D., & McKenzie, J. (2005). The Baby Friendly Hospital Initiative and breastfeeding rates in Scotland. *Archives of Disease in Childhood Fetal and Neonatal Education,* 90(114-116).

Brosnan, M., Evans, W., Brosnan, E., & Brown, G. (2005). Implementing objective structured clinical skills evaluation (OSCE) in a centre in Ireland: A utilisation focused evaluation. *Nurse Education Today,* 26, 115-122.

Bruner, J. (1960). *The process of education*. Cambridge: Harvard University Press.

Bruner, J. (1996). *The culture of education*. Cambridge: Harvard University Press.

Butler, M., Fraser, D., & Murphy, R. (2006). What are the essential competencies required of a midwife at the point of registration? *Midwifery,* 24(3), 260-269.

Cantrill, R., Creedy, D., & Cooke, M. (2003). How midwives learn about breastfeeding. *Australian Midwifery Journal,* 16(2), 11-16.

Carlisle, K., Luker, K., Davies, C., Stilwell, J., & Wilson, R. (1999). Skills competency in nurse education: Nurse managers' perceptions of diploma level preparation. *Journal of Advanced Nursing,* 29(5), 1256-1264.

Carper, B. A. (1978). Fundamental patterns of knowing in nursing. *Advances in Nursing Science,* 1(1), 13-23.

Cattaneo, A., & Bennetti, R. (2006). Effects of breastfeeding training for the Baby Friendly Initiative. *British Medical Journal*, 323, 1358-1362.

Chamberlain, M. (1997). Challenges of clinical learning for student midwives. *Midwifery,* 13(2), 85-91.

Chapman, H. (1999). Some important limitations of competency-based education with respect to nurse education: An Australian perspective. *Nurse Education Today,* 19, 129-135.

Cheetham, G., & Chivers, G. (1999). Professional competence: Harmonising reflective practitioner and competence-based approaches. In D. O'Reilly, L. Cunningham & S. Lester (Eds.), *Developing the capable practitioner: Professional capability through higher education* (pp. 215-228). London: Kogan Page.

Chiu, F. H., Gau, M. L., Kuo, S. C., & Chung, U. L. (2003). Common problems of clinical performance examination in breastfeeding instruction for nursing baccalaureate students. *Journal of Nursing Research,* 11(2), 109-117.

Clements, P., & Averill, J. (2006). Finding patterns of knowing in the work of Florence Nightingale. *Nursing Outlook*, 54(5), 268-274.

Cohen, L., Manion, L., & Morrison, K. (2000). *Research methods in education*. London: Routledge Falmer.

Cresswell, J. W. (1998). Qualitative inquiry and research design: Choosing among five traditions. (2nd ed.). Thousand Oaks, CA: Sage.

Currie, S. (1999). Aspects of the preparation of student midwives for autonomous practice. *Midwifery,* 15, 283-292.

Darke, P., Shanks, G., & Broadbent, M. (1998). Successfully completing case study research: Combining rigour, relevance and pragmatism. *Information Systems Journal*, 8, 273-289.

Darling, L. A. (1985). What to do about toxic mentors. *Journal of Nursing Administration,* 15, 43-44.

Denzin, N. (1984). *The research act*. Englewood Cliffs: Prentice Hall.

Denzin, N., & Lincoln, Y. S. (Eds.). (2003). *Strategies of qualitative inquiry* (2nd ed.). London: Sage Publications.

Department of Health (1999). *Making a difference: Strengthening the nursing, midwifery and health visiting contribution to healthcare*. London: The Stationary Office.

Department of Health (2004). *Good practice and innovation in breastfeeding*. London: DOH.

Devane, D., Begley, C. M., & Clarke, M. (2004). How many do I need? Basic principles of sample size. *Journal of Advanced Nursing,* 47(3), 297-302.

Dewey, J. (1958). *Art as experience*. New York: Capricorn Books.

Dodgson, J., & Tarrant, M. (2007). Outcomes of a breastfeeding educational intervention for baccalaureate nursing students. *Nurse Education Today,* 27(8), 856-867.

Dolan, G. (2003). Assessing student nurse clinical competency. *Journal of Clinical Nursing,* 12, 132-141.

Donovan, P. (2008). Confidence in newly qualified midwives. *British Journal of Midwifery,* 16(8), 510-514.

Dykes, F. (2003). Protecting, promoting and supporting breastfeeding. *British Journal of Midwifery,* 11(10), 24-48.

Eisenhardt, K. (2002). Building theories from case study research. In A. Huberman & M. Miles (Eds.), *The qualitative researcher's companion* (pp. 5-36). London: Sage Publications.

Eisenhardt, K., & Bourgeois, L. (1988). Politics of strategic decision making in high velocity environments: Toward a mid-range theory. *Academy of Management Journal,* 31, 737-770.

Entwistle, N., & Ramsden, P. (1983). *Understanding student learning*. London: Croom Helm.

Eraut, M. (1985). Knowledge creation and knowledge use in professional contexts. *Studies in Higher Education,* 10(2), 117-133.

Eraut, M. (1994). *Developing professional knowledge and competence*. London: Routledge.

Farrand, P., McMullan, M., Jowett, R., & Humphreys, A. (2006). Implementing competency recommendations into pre-registration nursing curricula: Effects upon levels of confidence in clinical skills. *Nurse Education Today,* 26(2), 97-103.

Fawcett, J., Watson, J., Neuman, B., Hinton-Walker, P., & Fitzpatrick, J. (2001). On nursing theories and evidence. *Journal of Nursing Scholarship,* Second quarter, 115-119.

Field, D. (2004). Moving from novice to expert- the value of learning in clinical practice: A literature review. *Nurse Education Today,* 24(7), 560-565.

Field, P., & Morse, J. (1985). *Nursing research: Application of qualitative approaches*. London: Chapman and Hall.

Freed, G., Clark, S., Cefalo, R., & Harris, B. (1995). Breastfeeding education of obstetrics-gynaecology residents and practitioners. *American Journal of Obstetrics and Gynaecology,* 173(5), 1607-1613.

Freed, G., Clark, S., Harris, B., & Lowdermilk, D. (1996). Methods and outcomes of breastfeeding instruction for nursing students. *Journal of Human Lactation,* 12, 105-110.

Furber, C., & Thomson, A. (2008). The emotions of integrating breastfeeding knowledge into practice for English midwives: A qualitative study. *MIDIRS Midwifery Digest*, 18(3), 415-424.

Gillham, B. (2000). *Case study research methods*. London: Continuum.

Goss, J. D., & Leibach, T. R. (1996). Focus groups as an alternative research practice. *Area*, 28(2), 115-123.

Gray, M., & Smith, L. (2000). The qualities of an effective mentor from the student nurse's perspective: Findings from a longitudinal qualitative study. *Journal of Advanced Nursing*, 32(6), 1542-1549.

Guba, E., & Lincoln, Y. (1989). *Fourth generation evaluation*. London: Sage.

Guba, E., & Lincoln, Y. (1998). Competing paradigms in qualitative research. In N. Denzin & Y. Lincoln (Eds.), *The landscape of qualitative research* (pp. 195-220). London: Sage Publications.

Hall-Moran, V., Dykes, F., Edwards, J., Burt, S., & Whitmore, M. (2004). An evaluation of the breastfeeding support skills of midwives and voluntary breastfeeding supporters using the breastfeeding support skill tool (besst). *Maternal and Child Nutrition*, 1, 241-249.

Hancock, D. R., & Algozzine, B. (2006). *Doing case study research*. New York: Teachers College Press.

Heath, H. (1998). Reflection and patterns of knowing in nursing. *Journal of Advanced Nursing*, 27, 1054-1059.

Hellings, P., & Howe, C. (2004). Breastfeeding knowledge and practice of pediatric nurse practitioners. *Journal of Pediatric Health Care*, 18(1), 8-14.

Hewitt-Taylor, J. (2002). Inside knowledge. *Nursing Standard*, 16(46), 33-36.

Hilton, R., & Morris, J. (2001). Student placement - is there evidence supporting team skill development. *Journal of Interprofessional Care*, 15(2), 171-183.

Hinchliff, S. (1992). *The practitioner as a teacher*. London: Scutari press.

Holliday, A. (2002). *Doing and writing qualitative research*. London: Sage Publications.

Hollins-Martin, C., & Bull, P. (2004). Does status have more influence than education on decisions midwives make? *Clinical Effectiveness in Nursing*, 8, 113-139.

Holloway, I., & Wheeler, S. (1996). *Qualitative research for nurses*. Oxford: Blackwell Science.

Hunter, L. A. (2008). Stories as integrated patterns of knowing in nurse education. *International Journal of Nursing Educational Scholarship*, 5(1), 1-13.

Ingram, J. (2006). Multiprofessional training for breastfeeding management in primary care in the UK. *International Breastfeeding Journal, 1*(9). Retrieved 12th Novemeber, 2009, from http://www.internationalbreastfeedingjournal.com/content/pdf/1746-4358-1-10.pdf

Jackson, A. (2007). Breastfeeding education and professional development in the North Trent neonatal network. *MIDIRS Midwifery Digest,* 17(1), 90-93.

Jacobs-Kramer, M., & Chinn, P. (1988). Perspectives on knowing: A model of nursing knowledge. *Scholarly Inquiry for Nursing Practice,* 2(2), 129-139.

Jarvis, P., & Gibson, S. (1997). *The teacher practitioner and mentor in nursing, midwifery, health visiting and the social services* (2nd ed.). Cheltenham: Stanley Thornes Publishers Ltd.

Jarvis, P., Holford, J., & Griffin, C. (2003). *The theory and practice of learning* (2nd ed.). London: Kogan Page.

Jasper, M. (2003). *Beginning reflective practice*. Cheltenham: Nelson Thorne.

Jay, A. (2007). Students' perceptions of the OSCE: A vaild assessment tool. *British Journal of Midwifery,* 15(1), 32-37.

Johns, C. (1995). Framing learning through reflection within Carper's fundmental ways of knowing in nursing. *Journal of Advanced Nursing,* 22, 226-234.

Johnson, A. (1996). 'its good to talk': The focus group and the sociological imagination. *Sociological Review,* 44(3), 517-538.

Kang, N.M., Song, Y., & Im, E.O. (2005). Korean university student's knowledge and attitudes toward breastfeeding questionnaire survey. *International Journal of Nursing Studies,* 42(8), 863-871.

Kitzinger, J. (1995). Introducing focus groups. *British Medical Journal,* 311, 299-302.

Knafl, K., & Breitmayer, B. (1991). Triangulation in qualitative research: Issues of conceptual clarity. In J. Morse (Ed.), *Qualitative nursing research: A contempoary dialogue* (pp. 226-239). London: Sage Publications.

Knight, P. T. (2002). *Small scale research*. London: Sage.

Knowles, M. (1984). *Androgogy in action. Applying modern principles of adult education*. San Francisco: Jossey Bass.

Kolb, D. (1984). *Experiential learning: Experience as the source of learning and development*. New Jersey: Prentice Hall.

Kronborg, H., Vaeth, M., Olsen, O., & Harder, I. (2007). Health visitors and breastfeeding support: Influence of knowledge and self-efficacy. *European Journal of Public Health,* 18(3), 283-288.

Lauder, W., Sharkey, S., & Booth, S. (2003). A case study of transfer of learning in a family health nursing course for students in a remote and rural areas. *Nurse Education in Practice,* 4, 39-44.

Lauder, W., Watson, R., Topping, K., Holland, K., Johnson, M., Porter, M., et al. (2008). An evaluation of fitness to practice curricula: Self-sufficiency, support and self-reported competence in pre-registration student nurses and midwives. *Journal of Clinical Nursing,* 17, 1858-1867.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.

Mansouri, P., Soltani, F., Rahemi, S., Nasab, M. M., Ayatollahi, A. R., & Nekooeian, A. A. (2006). Nursing and midwifery students' approaches to study and learning. *Journal of Advanced Nursing,* 54(3), 351-358.

Marks-Maran, D., & Rose, P. (1997). Thinking and caring: New perspectives on reflection. In D. Marks-Maran & P. Rose (Eds.), *Reconstructing nursing beyond art and science* (pp. 110-141). London: Balliere Tindall in association with RCN.

Maxwell, J. (2002). Understanding and validity in qualitative research. In A. M. Huberman & M. B. Miles (Eds.), *The qualitative researcher's companion* (pp. 37-64). London: Sage Publications.

McCormick, R. (1999). Practical knowledge: A view from the snooker table. In R. McCormick & C. Paechter (Eds.), *Learning and knowledge* (pp. 112-135). London: Paul Chapman Ltd.

McFadden, A., Renfrew, M. J., Wallace, L., Dykes, F., Abbott, S., Burt, S., et al. (2007). Does breastfeeding really matter? A national multidisciplinary breastfeeding knowledge and skills assessment. *MIDIRS Midwifery Digest,* 17(1), 85-88.

Mercer, J. (2007). The challenges of insider research in educational institutions: Wielding a double-edged sword and resolving delicate dilemmas. *Oxford Review of Education,* 33(1), 1-17.

Merriam, S. B. (2001). *Qualitative research and case study application in education*. San Francisco: Jossey-Bass.

Merten, S., Dratva, J., & Ackermann-Liebrich, U. (2005). Do Baby Friendly hospitals influence breastfeeding duration on a national level? *Pediatrics,* 116(5), 702-708.

Miles, M., & Huberman, A. M. (1994). *Qualitative data analysis* (2nd ed.). London: Sage Publications.

Mohanna, K., Wall, D., & Chambers, R. (2004). *Teaching made easy: A manual for health professionals*. Oxon: Radcliffe Medical Press.

Morgan, D. L. (1988). *Focus groups as qualitative research*. London Sage

Morgan, P., & Cleave-Hogg, D. (2002). Comparison between medical students' experience, confidence and competence. *Medical Education,* 36, 534-539.

Morse, J. M. (1994). Emerging from the data:The cognitive processes of analysis in qualitative inquiry. In J. M. Morse (Ed.), *Critical issues in qualitative research methods* (pp. 23-43). London: Sage Publications.

Munhall, P. (2001). Epistemology in nursing. In P. Munhall (Ed.), *Nursing research: A qualitative perspective* (3rd ed., pp. 71-98). London: Jones and Bartlett.

Myall, M., Levett-Jones, T., & Lathlean, J. (2008). Mentorship in contemporary practice: The experiences of nursing students and practice mentors. *Journal of Clinical Nursing,* 17, 1834-1872.

National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research (1978). *Belmont report: Ethical principles and guidelines for research involving human subjects*. Washington D C: US Government Printing Office.

National Institute for Health and Clinical Excellence (2006). *Routine postnatal care of women and their babies*. London: NICE.

Neary, M. (2000). Supporting students' learning and professional development through the process of continuous assessment and mentorship. *Nurse Education Today,* 20, 463-474.

Neary, M. (2001). Responsive assessments: Assessing student nurses' clinical competence. *Nurse Education Today,* 21, 3-17.

Nettleton, P., & Bray, L. (2008). Current mentorship schemes might be doing our students a disservice. *Nurse Education in Practice,* 8, 205-212.

Noble-Adams, R. (1999). Ethics and nursing research 1: Development, theories and principles. *British Journal of Midwifery,* 8(13), 888-892.

Nursing and Midwifery Council (2004). *Standards of proficiency for pre-registration midwifery education*. London: NMC.

Nursing and Midwifery Council (2005). *Proposals arising from a review of the fitness for practice at the point of registration*. London: NMC.

Nursing and Midwifery Council (2006a). *Nursing and midwifery council consultation on a review of pre-registration midwifery education*. London: NMC.

Nursing and Midwifery Council (2006b). *Standards to support learning and assessment in practice*. London: NMC.

Nursing and Midwifery Council (2007a). *Essential skills clusters (escs) for pre-registration midwifery education. Nursing and midwifery council circular 23/2007.* London: NMC.

Nursing and Midwifery Council (2007b). *Review of pre-registration midwifery education- decisions made by the midwifery committee. 12th may 2007. 14/nursing and midwifery council circular*. London: NMC.

Nursing and Midwifery Council (2008a). *The Code: Standards of conduct, performance and ethics for nurses and midwives*. London: NMC.

Nursing and Midwifery Council (2008b). *Standards to support learning and assessment in practice*. London: Nursing and Midwifery Council.

Nursing and Midwifery Council (2009). *Standards for pre-registration midwifery education*. London: NMC.

Opie, C. (Ed.). (2004). *Doing educational research*. London: Sage Publications.

Oppenheim, A. N. (1992). *Questionnaire design, interviewing and attitude measurement* (2nd ed.). London: Continuum.

Orland-Barak, L., & Wilhelm, D. (2005). Novices in clinical practice settings: Student nurses stories of learning the practice of nursing. *Nurse Education Today*, 25(6), 455-464.

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). London: Sage Publications.

Pintrich, P., & DeGroot, E. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82, 3340.

Polit, D., & Hungler, B. (1995). *Nursing research: Principles and methods*. Philadelphia: JB Lippincott Company.

Powell, R. A., & Single, H. M. (1996). Focus groups. *International Journal of Quality in Healthcare*, 8(5), 499-504.

Price, A., & Price, B. (1997). Making midwifery decisions. *Modern Midwife*, 7(10), 15-19.

QAA Scotland (2002). Subject benchmarking. Scottish subject benchmark statement. Midwifery Retrieved 6th December, 2009, from http://www.qaa.ac.uk/academicinfrastructure/benchmark/scottish/midwifery.asp

Quality Assurance Agency for Higher Education (2004-2009). Enhancement themes Retrieved 30th June, 2009, from http://www.enhancementthemes.ac.uk/default.asp

Quinn, F. M. (2000). *Principles and practice of nurse education* (4th ed.). Cheltenham: Nelson Thornes Ltd.

Renfrew, M. J., Dyson, L., & Wallace, L. (2005). *The effectiveness of public health interventions to promote the duration of breastfeeding. A systematic review*. London: National Institute for Health and Clinical Excellence.

Ritchie, J., & Lewis, J. (2003). Generalising from qualitative research. In J. Ritchie & J. Lewis (Eds.), *Qualitative research practice: A guide for social science students and researchers* (pp. 262-286). London: Sage Publications.

Robson, C. (2002). *Real world research* (2nd ed.). Oxford: Blackwell Publishing.

Rogers, C. (1983). The interpersonal relationship in facilitating learning. In M. Thorpe, R. Edwards & A. Hanson (Eds.), *Culture and processes of adult learning* (pp. 228-242). London: Routledge.

Saks, A. M. (1994). Moderating effects of self-efficacy for the relationship between training method and anxiety and stress reactions on newcomers. *Journal of Organisational Behaviour,* 15, 639-654.

Scholes, J., & Albarran, J. (2005). Failure to fail: Facing the consequences of inaction. *Nursing in Critical Care,* 10(3), 113-115.

Scholes, J., Webb, C., Gray, M., Endacott, R., Miller, C., Jasper, M., et al. (2004). Making portfolios work in practice. *Journal of Advanced Nursing,* 46, 595-603.

Schön, D. (1983). *The reflective practitioner*. New York: Basic Books.

Schön, D. (1987). *Educating the reflective practitioner*. London: Jossey- Bass.

Sikes, P. (2004). Methodology, procedures and ethical concerns. In C. Opie (Ed.), *Doing educational research* (pp. 15-33). London: Sage Publications.

Sikorski, J., Pindoria, S., & Wade, A. (2002). Support for breastfeeding mothers [review] (Publication no. 2002:CD001141). from Cochrane Database Systematic Review.

Sim, J., & Sharp, k. (1998). A critical appraisal of triangulation in nursing research. *International Journal of Nursing Studies,* 35(1), 23-31.

Smale, M., Renfrew, M., Marshall, J., & Spiby, H. (2006). Turning policy into practice: More difficult than it seems. The case of breastfeeding education. *Maternal and Child Nutrition,* 2(2), 103-113.

Sobal, J. (2001). Sample effectiveness in qualitative nutrition education research. *Journal of Nutritional Education,* 33(5), 265-280.

Spear, H. (2004). Nurses' knowledge, attitudes and behaviours related to the promotion of breastfeeding among women who bear children during adolescence. *Journal of Pediatric Nursing,* 19(3), 176-183.

Spear, H. (2006). Baccalaureate nursing students' breastfeeding knowledge: A descriptive survey. *Nurse Education Today,* 26(4), 332-336.

Spouse, J., Cox, C., & Cook, M. J. (2008). *Common foundation studies in nursing* (4th ed.). London: Elsevier Health Studies.

Stake, R. E. (1995). *The art of case study research*. Thousand Oaks CA: Sage.

Stake, R. E. (2003). Case studies. In N. Denzin & Y. Lincoln (Eds.), *Strategies of qualitative inquiry* (2nd ed., pp. 134-164). London: Sage Publications.

Tappin, D., Britten, J., Broadfoot, M., & McInnes, R. (2006). The effect of health visiting on breastfeeding in Glasgow. *International Breastfeeding Journal, 1*(11). Retrieved 12th Novemeber, 2009, from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1526418/

Tappin, D., Brown, A., Girdwood, R., Britten, J., Broadfoot, M., & Warren, J. (2001). Breastfeeding rates are increasing in Scotland. *Health Bulletin*, 59(2), 102-107.

The Nursing and Midwifery Order 2001. Statutory Instrument 2002 253. Great Britain: The Stationery Office.

Thomas, G. (2009). *How to do a research project*. London: Sage.

Thorne, S. (2000). Data analysis in qualitative research. *Evidence-Based Nursing*, 3, 68-70.

Treacy, M. (1987). Some aspects of the hidden curriculum. In P. Allan & M. Jolley (Eds.), *The curriculum in nursing education* (pp. 164-175). London: Routledge.

UKCC (1986). *Project 2000: A new preparation for practice*. London: UKCC.

UKCC (1996). *Position statement on clinical supervision for nursing and health visiting*. London: UKCC.

UKCC (1999). *Fitness to practice:The UKCC commission for nursing and midwifery education. Chair, Sir I Peach*. London: UKCC.

UKCC (2000). *Midwifery competencies requirements for pre-registration midwifery programmes*. London: UKCC.

UNICEF (1998). *Implementing the ten steps to successful breastfeeding*. London: UNICEF UK Baby Friendly Initiative.

UNICEF (2001). *Implementing the Baby Friendly best practice standards. A guide to implementing the ten steps to successful breastfeeding and the seven point plan for the protection, promotion and support of breastfeeding in community healthcare settings*. London: UNICEF UK Baby Friendly Initiative.

UNICEF (2002). *Introducing the Baby Friendly best practice standards into breastfeeding education for student midwives and health visitors*. London: UNICEF UK Baby Friendly Initiative.

UNICEF (2008). *UNICEF UK guidance notes for implementing the Baby Friendly Initiative education standards: Higher education institutions* London: UNICEF UK Baby Friendly Initiative.

UNICEF (2009). Guidance notes for the implementation of the Baby Friendly Initiative standards. Higher education institutions Retrieved 20th October, 2009, from http://www.babyfriendly.org.uk/pdfs/ed_stds_guidance.pdf

UNICEF (2010). The Baby Friendly Initiative: Baby Friendly progress by country Retrieved 6th February, 2010, from http://www.babyfriendly.org.uk/

University of Paisley (2001a). Clinical competency profile. Unpublished Document. University of Paisley.

University of Paisley (2001b). Definitive programme document: Diploma of higher education/ BSc in Midwifery. Unpublished Document. University of Paisley.

Vaughn, S., Schumm, J. S., & Sinagub, J. (1996). *Focus group interviews in education and psychology*. London: Sage Publications.

Webb, C., & Shakespeare, P. (2008). Judgements about mentoring relationships in nurse education. *Nurse Education Today,* 28, 563-571.

Weidenbach, E. (1964). *Clinical nursing: A helping art*. New York: Springer Publishing Co., Inc.

Wellard, S., Bethune, E., & Heggen, K. (2007). Assessment of learning in contemporary nurse education: Do we need standardised examination for nurse registration. *Nurse Education Today,* 27(1), 68-72.

Wells, A. S., Hirshberg, D., Lipton, M., & Oakes, J. (2002). Bounding the case within its context. In A. M. Huberman & M. B. Miles (Eds.), *The qualitative researcher's companion* (pp. 331-348). London: Sage Publications.

While, A., Roberts, J., & Fitzpatrick, J. (1995). *A comparative study of outcomes of pre-registration nurse education programmes*. London: English National Board for Nursing, Midwifery and Health Visiting.

White, J. (1995). Patterns of knowing: Review, critique, and update. *Advances in Nursing Science,* 17(4), 73-86.

White, R., & Ewan, C. (1997). *Clinical teaching in nursing*. London: Nelson Thornes.

Wooley, N., & Jarvis, Y. (2007). Situated cognition and cognitive apprenticeship: A model for teaching and learning clinical skills in a technologically rich and authentic learning environment. *Nurse Education Today,* 27(1), 73-79.

World Health Organisation (1981). *International code of marketing of breast-milk substitutes*. Geneva: World Health Organisation.

World Health Organisation (2002). *Infant and young child nutrition. Global strategy on infant and young child feeding*. Geneva: Fifty-fifth World Health Assembly.

Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). London: Sage Publications.

Zander, P. E. (2007). Ways of knowing in nursing: The historical evolution of a concept. *The Journal of Theory Construction and Testing,* 11(1), 7-11.

Appendices

Appendix 1

The Ten Steps and the Seven Point Plan (http://www.babyfriendly.org.uk)

- Step 1 Have a written breastfeeding policy that is routinely communicated to all health care staff.
- Step 2 Train all health care staff in skills necessary to implement the policy.
- Step 3 Inform all pregnant women about the benefits and management of breastfeeding.
- Step 4 Help mothers initiate breastfeeding soon after birth.
- Step 5 Show mothers how to breastfeed and how to maintain lactation, even if they should be separated from their infants.
- Step 6 Give newborn infants no food or drink other than breast-milk, unless medically indicated.
- Step 7 Practise rooming-in – allow mothers and infants to remain together 24 hours a day.
- Step 8 Encourage breastfeeding on demand.
- Step 9 Give no artificial teats or dummies to breastfeeding infants.
- Step 10 Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from hospital.

The Seven Point Plan for the Protection, Promotion and Support of Breastfeeding

- Point 1 Have a written breastfeeding policy that is routinely communicated to all health care staff.
- Point 2 Train all health care staff involved in the care of mothers and babies in the skills necessary to implement the policy.
- Point 3 Inform all pregnant women about the benefits and management of breastfeeding.
- Point 4 Support mothers to initiate and maintain breastfeeding.
- Point 5 Encourage exclusive and continued breastfeeding, with appropriately-timed introduction of complementary foods.
- Point 6 Provide a welcoming atmosphere for breastfeeding families.
- Point 7 Promote co-operation between health care staff, breastfeeding support groups and the local community.

Appendix 2

UNICEF UK Baby Friendly Outcomes for Higher Education 2002

(updated 2008 see http://www.babyfriendly.org.uk/page.asp?page=129)

1. Understand the importance of breastfeeding and the consequences of not breastfeeding in terms of health outcomes.

2. Have developed an in-depth knowledge of the physiology of lactation and be able to apply this in practical situations.

3. Be able to recognise effective positioning, attachment and suckling and to empower mothers to develop the skills necessary for them to achieve these for themselves.

4. Be able to demonstrate knowledge of the principles of hand expression and have the ability to teach these to mothers.

5. Understand the principle of demand feeding and be able to explain this its importance in relation to the establishment and maintenance of lactation.

6. Understand the potential impact of delivery room practices on the wellbeing of mother and baby and on the establishment of breastfeeding in particular.

7. Understand the importance of enabling mother and baby to room-in together in the early postnatal period as a means of facilitating breastfeeding.

8. Be equipped to provide parents with accurate, evidence based information about activities which may have an impact on breastfeeding, such as bed-sharing between parents and babies and the use of dummies.

9. Know about the common complications of breastfeeding, how these arise, and how women may be helped to overcome them.

10. Understand the importance of exclusive breastfeeding for the first six months of life and possess the knowledge and skills to enable mothers to achieve this.

11. Understand the limited number of situations in which exclusive breastfeeding is not possible and be able to support mothers to achieve this.

12. Understand the importance of timely introduction of complementary foods and of continuing breastfeeding during the weaning period, into the second year of life and beyond.

13. Be able to support mothers who are separated from their babies (e.g. on admission to SCBU, when returning to work) to initiate and/or maintain their lactation and to feed their babies optimally.

14. Be able to demonstrate a knowledge of alternative methods of infant feeding and care which may be used where breastfeeding is not possible, and which will enhance the likelihood of a later transition to breastfeeding.

15. Understand the importance of community support for breastfeeding and demonstrate an awareness of the role of community based support networks, both in supporting women to breastfeed and as a resource for health professionals.

16. Appreciate the main differences between the WHO International code of Marketing of Breast Milk Substitutes and the relevant current UK legislation and understand the relevance of the Code to their own work situation.

17. Be thoroughly conversant with the Baby Friendly Initiative best practice standards.

18. Understand the rationale behind the Baby Friendly Initiative best practice standards and what the Baby Friendly Initiative seeks to achieve through them.

19 Be equipped to implement the Baby Friendly Initiative best practice standards in their workplace, with appropriate support from colleagues.

Appendix 3

Nursing and Midwifery Council Essential Skills Clusters (escs) for Pre-registration Midwifery Education 4. Initiation and Continuance of Breastfeeding

Key:
(BFI) = relate to Baby Friendly Education Standards learning outcomes

Initiation and continuance of breastfeeding				
Women can trust/expect a newly registered midwife to:		**By the first progression point**		**For entry to the register**
1. Understand and share information that is clear, accurate and meaningful at a level which women, their partners and family can understand.		Participates in communicating sensitively the importance of breastfeeding and the consequences of not breastfeeding, in terms of health outcomes (BFI). Observes a variety of forums where information is shared in respect of the advantages and disadvantages of different infant feeding methods.		Listens to, watches for and responds to verbal and non verbal cues. Uses skills of being attentive, open ended questioning and paraphrasing to support information sharing with women. Able to lead a variety of forums where information is shared with women about the advantages and disadvantages of different infant feeding methods, without regarding breastfeeding and artificial feeding as 'equal' choices. Understands the importance of exclusive breastfeeding and the consequences of offering artificial milk to breastfed babies. Critically appraises the nature and strength of breastfeeding promotional and support

				interventions. Understands the nature of evidence and how to evaluate the strength of research evidence used to back information. Keep accurate records of the woman and her baby relating to breastfeeding, including plans of care and any problems encountered or referrals made.
2. Respect social and cultural factors that may influence the decision to breastfeed.		Has an awareness of own thoughts and feelings about infant feeding in order to facilitate information sharing to be ethical and non-judgemental. Is sensitive to issues of diversity when sharing information with women. Respects the rights of women.		Demonstrate a working knowledge of the local demographic area and explore strategies to support breastfeeding initiatives within the locality. Skilfully explores attitudes to breastfeeding. Takes into account differing cultural traditions, beliefs and professional ethics when communicating with women.
3. Effectively support women to breastfeed.		Willingness to learn from women. Assist in ensuring that the needs of women are met in developing a clear care pathways. Participate in explaining to women the importance of baby-led feeding in relation to the establishment and maintenance of breastfeeding (BFI). Can recognise effective positioning, attachment, suckling and milk transfer.		Applies in-depth knowledge of the physiology of lactation to practice situations (BFI). Can recognise effective positioning, attachment, suckling and milk transfer. Uses skills of observation, active listening and on-going critical appraisal in order to analyse the effectiveness of breastfeeding practices. Confident at exploring with women the potential impact of delivery room practices, such as the effect

		Is able to help teach mothers the necessary skills to enable them to effectively position and attach their baby for breastfeeding (BFI). Explain to women the importance of their baby rooming-in with them and baby holding in the postnatal period as a means of facilitating breastfeeding (BFI). Recognise common complications of breastfeeding, how these arise and demonstrate how women may be helped to avoid them (BFI).		of different pain relief methods and the importance of skin to skin contact, on the well being of their baby and themselves and on the establishment of breastfeeding in particular (BFI). Uses appropriate skills to support women to be successful at breastfeeding for the first six months of life (BFI). Empowers with women the evidence base underpinning information, which may have an impact on breastfeeding such as bed sharing and the use of dummies (BFI).
		Participates in teaching women how to hand express their breast milk and how to store, freeze and warm it with consideration to aspects of infection control 9BFI).		Skilled at advising women over the telephone when contacted for advice on breastfeeding issues.
4. Recognise appropriate infant growth and development, including where referral for further advice/action is required.		Participates in assessing appropriate growth and development of the neonate. Participates in carrying out physical examinations as necessary, with parent's consent. Informs women of the findings from any assessment/examination performed, in a manner that is understood by the women.		Acts upon the need to refer when there is a deviation from appropriate infant growth. Demonstrates skills to empower women to recognise appropriate infant growth and development and to seek advice when they have concerns.
5. Work collaboratively with other practitioners and		Works within the NMC *Code of Professional Conduct: Standards for Conduct, Performance*		Practices within the limitations of their own competences, knowledge and sphere of

external agencies.	*and Ethics.* Actively works as a team member. Values others' roles and responsibilities in supporting women to breastfeed. Share information about national and local agencies and networks that are available to support women in the continuation of breastfeeding, such as Lactation Consultants, National Childbirth Trust and La Leche League for example.	professional practice, consistent with the legislation relating to midwifery practice. Works confidently, collaboratively and in partnership with women and others to ensure the needs of women are met. Understand the importance of community support for breastfeeding and actively refers women to community based support networks, both in supporting women to breastfeed and as a resource for health professionals (BFI). Actively works with other health professionals and external agencies to promote breastfeeding and support women in their choice to breastfeed.
		Is able to discuss with women the importance of exclusive breastfeeding for six months and timely introduction of complementary foods and continuing breastfeeding during the weaning period, into the second year of life and beyond.
6. Support women to breastfeed in challenging circumstances.	Is aware of the limited number of situations in which exclusive breastfeeding is not possible and participate in supporting women to partially breastfeed or artificially feed (BFI). Is sensitive to the needs of women and their partners.	Involve appropriate help, such as a lactation consultant, where specialised skills are required, in order to support women to successfully breastfeed. Acts upon the need to refer to appropriate health professionals where deviation from appropriate infant feeding and growth patterns are apparent.

				Support women who are separated from their babies (on admission to SCBU, women receiving high dependency care in a separate environment) to initiate and maintain their lactation and feed their babies optimally (BFI). Feed expressed breast milk to a baby, using a cup and/or syringe as appropriate (BFI). Teach women how to use mechanical breast pump where appropriate.

Appendix 4

Extracts from Personal Diary

Midwife Lecturers Focus Group

I wrote about preparation for interviews in the methodology section and was more than aware about preparation and couldn't believe it when I went to start the interview that the microphone was not working and I didn't have a battery. Therefore I had to use the internal microphone which isn't as good. Hope 'H' (transcriber) can hear ok. Took lots of notes later just in case.

It has been difficult organising this focus group and getting enough lecturers together for an hour or so. In the end five out of a possible eight turned up. Had hoped for an observer to be there but this didn't work out and I didn't want to cancel as it would have been difficult to get them together again.

Must admit I felt very nervous with this group probably because they were my peers. Also I was very aware that as project leader for the accreditation this may sway their answers- shouldn't have been worried though as they were very forthcoming.

Two of the participants were very vocal and at times I had to make sure they didn't dominate the discussion whilst not dismissing their views. I did acknowledge their views and reminded them we had to stick to the pre-2008 one. This is more difficult in reality particularly with people you know. I had previously considered bringing in an external moderator but felt by doing it myself would help direct the discussion better and I think it did. There are pros and cons but on balance I think it was the right thing to do as long as I acknowledge it in the thesis.

There were also a couple of times the participants got muddled up with the new curriculum and the one in this study, despite my introduction and explanation about the study.

I had assured the participants the interview would only be an hour and I managed to keep the timing to that which was difficult to ensure I asked the questions and direct the discussion to answer the research aims.

Appendix 5

Information sheet Student Midwives

Who am I?
My name is Maria Cummings and I am conducting a case study for a Doctor of Education programme at the University of Strathclyde.

What is the study for?
The aim of the study is to understand how student midwives learn about breastfeeding, to adequately support breastfeeding mothers, within the context of a UNICEF Baby Friendly accredited midwifery programme.

What will you have to do?

- Fill out the consent form
- Complete a critical incident diary over the next four months
- Be interviewed by me for an hour

Why have you been asked to participate?
You have been asked to participate because you are a student midwife doing a BSc midwifery programme in which the UNICEF Baby Friendly Standards have been integrated.

Do I have to take part?
No you do not have to take part, participation is voluntary.

Confidentiality
Both the diary and the interview will be kept strictly confidential and only members of the research team will have access to them (Myself, transcriber and supervisor).
The interviews will be tape recorded and these will be destroyed after they have been transcribed.
Excerpts of the diary and interview may be used in the final report and any publications leading from it however your name or any identifying characteristics will not be included.
Pseudonyms will be given to yourself and others people discussed in the study.
<u>For further information contact:</u>
Maria Cummings
University of the West of Scotland
0141 849 4271/4200
Maria.cummings@uws.ac.uk

Thank you for your help

Information sheet Previous Students

Who am I?
My name is Maria Cummings and I am conducting a case study for a Doctor of Education programme at the University of Strathclyde.

What is the study for?
The aim of the study is to understand how student midwives learn about breastfeeding, to adequately support breastfeeding mothers, within the context of a UNICEF Baby Friendly accredited midwifery programme.

What will you have to do?
- Fill out the consent form
- Be interviewed by me for an hour

Why have you been asked to participate?
You have been asked to participate because you were previously a student midwife on the BSc midwifery programme in which the UNICEF Baby Friendly Standards were integrated.

Do I have to take part?
No you do not have to take part, participation is voluntary.

Confidentiality
The interview will be kept strictly confidential and only members of the research team will have access to them (Myself, transcriber and supervisor).
The interviews will be tape recorded and these will be destroyed after they have been transcribed.
Excerpts of the interview may be used in the final report and any publications leading from it however your name or any identifying characteristics will not be included.
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Thank you for your help

Information sheet Student focus group

Who am I?
My name is Maria Cummings and I am conducting a case study for a Doctor of Education programme at the University of Strathclyde.

What is the study for?
The aim of the study is to understand how student midwives learn about breastfeeding, to adequately support breastfeeding mothers, within the context of a UNICEF Baby Friendly accredited midwifery programme.

What will you have to do?
- Fill out the consent form
- Participate in a group interview for an hour

Why have you been asked to participate?
You have been asked to participate because you are a student midwife doing a BSc midwifery programme in which the UNICEF Baby Friendly Standards have been integrated.

Do I have to take part?
No you do not have to take part, participation is voluntary.

Confidentiality
The interview will be kept strictly confidential and only members of the research team will have access to them (Myself, transcriber and supervisor).
The interviews will be tape recorded and these will be destroyed after they have been transcribed.
Excerpts of the interview may be used in the final report and any publications leading from it however your name or any identifying characteristics will not be included.
Pseudonyms will be given to yourself and others people discussed in the study.

For further information contact:
Maria Cummings
University of the West of Scotland
0141 849 4271/4200
Maria.cummings@uws.ac.uk

Thank you for your help

Information sheet (focus group lecturer)

Who am I?
My name is Maria Cummings and I am conducting a case study for a Doctor of Education programme at the University of Strathclyde.

What is the study for?
The aim of the study is to understand how student midwives learn about breastfeeding, to adequately support breastfeeding mothers, within the context of a UNICEF Baby Friendly accredited midwifery programme.

What will you have to do?
- Fill out the consent form
- Participate in a group interview for an hour

Why have you been asked to participate?
You have been asked to participate because you are a midwife lecturer teaching on the BSc midwifery programme in which the UNICEF Baby Friendly Standards have been integrated.

Do I have to take part?
No you do not have to take part, participation is voluntary.

Confidentiality
Both the diary and the interview will be kept strictly confidential and only members of the research team will have access to them (Myself, transcriber and supervisor).
The interviews will be tape recorded and these will be destroyed after they have been transcribed.
Excerpts of the diary and interview may be used in the final report and any publications leading from it however your name or any identifying characteristics will not be included. Pseudonyms will be given to yourself and others people discussed in the study.

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Thank you for your help

Appendix 6

Interview Schedules

Focus Group Questions: Student Midwives

	Question	**Purpose of question**	**Research aim**
1	How do you feel the UNICEF accreditation has impacted on your learning about breastfeeding?	*Non-threatening to get them started*. To explore if participants were aware of accreditation and what were the pros and cons of it.	3
2	What methods have been used to teach you about breastfeeding?	To find out about teaching strategies	1
3	Do you feel these methods are appropriate and why?	To explore personal experience, perceptions and preferences	1
4	To what extent do you think the university setting influences your learning about breastfeeding?	*More difficult questions* To start exploring about environment, timing of sessions, relationship of theory to practice, skill development, experiential learning	1
5	To what extent do you believe your clinical placements influence your learning about breastfeeding?	To explore access to clinical experience, mentorship and skill development	1
6	What do you think the strengths and weaknesses in the curriculum regarding breastfeeding are?	To identify strengths and weaknesses to improve curriculum	
7	Can you make any recommendations on how breastfeeding education could be improves?	What and why? Do they relate to learning styles	1,2,3
8	What other factors do you think may affect your ability to learn about breastfeeding?	Open question but looking for motivation, previous experience, social aspect of learning- communities of practice	1
9	As you are at the end of your programme how confident do you feel to support breastfeeding and why?	To probe on metacompetencies. To explore relationship of confidence to above questions.	2

Repeated for individual interviews

Focus Group Questions: Midwife lecturers

	Question	Purpose of question	Research aim
1	What impact do you think the UNICEF accreditation has had on the curriculum?	*Non-threatening to get them started*. To compare to previous curriculum. Explore Implementing change in curriculum, Content, teaching strategies, time devoted. Learning In-line with clinical areas who are accredited, employability	3
2	What teaching strategies do you use for teaching about breastfeeding and why?	To find out about teaching strategies	1
3	To what extent do you think the university setting influences students learning about breastfeeding?	*More difficult questions* To explore timing of teaching sessions & preparation for placements, spiral curriculum, environment, teaching styles and content, relationship of theory to practice, reflective practice, professional attitude, political context, skill development (Carper's patterns of knowing 1978): learning styles of students.	1
4	To what extent do you believe the clinical placements influence students learning about breastfeeding?	To probe: Access to clinical experience, experiential learning, mentorship, skill, learning styles of students	1
5	What are the strengths and weaknesses in the curriculum regarding breastfeeding education?	Explore personal views of the initiative	1,3
6	Can you make any recommendations on how breastfeeding education in the curriculum could be improved?		1,2,3
7	What knowledge and skills do you think student midwives should be exiting the programme with to adequately support breastfeeding mothers and why?	Probe: confidence and competence, lifelong learning Metacompetencies (Cheetham and Chivers 1999) *Communication & problem solving	1, 2,3

		*Knowledge and understanding of theory and *application to practice *Psychomotor skills *Ethical/ professional codes	
8	How do you know that the students are exiting the programme with the knowledge and skills required?	Assessment strategies	1,2

Appendix 7

Critical incident diary guidelines

Thank you for agreeing to complete a critical incident diary.

Jasper (2003, p13) describes critical incidents as

> *"episodes of experiences that have particular meaning to the observer, practitioner or any other person taking part in them. They may be positive or negative experiences and must be suitable for being described in a concise way."*

The aim of this diary is to gain an insight into situations and your personal experiences relating to breastfeeding in clinical practice and how you learn from them.

The term critical incident is used to refer to situations or experiences where you can identify whether they have had a positive or negative effect on your learning about breastfeeding (Schulter, Seaton, & Chaboyer, 2007).

I would like you to record between 3-5 situations that you have been involved with in clinical practice, no more than 500 words each. You should include any experience relating to breastfeeding and describe what happened.

Your account of the situation is personal to you and should therefore be written in a style that suits you. Don't worry about the layout or what to write, it is your thoughts and feelings about the experience that are important however the following is some guidance of what I would like you to include

- ✓ Describe the situation
- ✓ Who was involved? What were their roles and responsibilities?
- ✓ Was it a positive or negative learning experience? Why?
- ✓ How could it have been improved as a learning experience?
- ✓ How will this effect your practice

Excerpts of the diary may be used in the final report and any publications leading from it however your name or any identifying characteristics will not be included. I also ask that you do not use any names of people (lecturers, mentors, women you have cared for) in the diary to maintain their privacy and confidentiality.

I would be grateful if you could word process your entries however if you would prefer to hand write please do.

Please could you return your completed diaries to me by the end of August 2008. If you have any questions or concerns about your diary please do not hesitate to contact me.

Maria Cummings
University of the West of Scotland
High Street
Paisley
PA1 2BE
0141 849 4271
07823440121
Maria.cummings@uws.ac.uk

Appendix 8

Access to Participants letter

UWS UNIVERSITY OF THE WEST of SCOTLAND
in Lanarkshire

Hamilton Campus
Almada Street
Hamilton
ML3 0JB
Scotland

Tel 01698 283100
Fax 01698 300236

JLR/LS

13 May 2008

Ms Maria Cummings
½ 21 Havelock Street
GLASGOW
G11 5JF

Dear Maria

Dear Maria

Thank you for your letter of 2 May 2008 seeking access to interview midwifery students.

I am happy to give permission, subject to your gaining ethical approval. This looks like an interesting study and clearly an important one from the School's point of view.

Good luck with your study.

Yours sincerely

Professor Jack Rae
Dean

cc Professor John Atkinson, Associate Dean

School of Health, Nursing and Midwifery
Professor Jack Rae, Dean of School

iversity of the West of Scotland is a registered Scottish charity. Charity number 002520

Ethics approval

Copy M Cummins

University of Strathclyde
Education

Notice of Departmental Ethics Committee Decision

Date: 16th June 2008

Applicant: Dr June Mitchell

Project Title: Breastfeeding Education in a Pre-registration Midwifery Programme

Approval Of Investigation

The Departmental Ethics Committee confirm ethics approval for the above investigation strictly within the terms as advised on the application.

When your investigation is completed we would welcome a short note indicating completion and advising of any ethical matters that may have arisen but which were not anticipated within your application.

The committee wishes you success in your investigation.

For the Departmental Ethics Committee

David Wallace

David Wallace (Chair)

Department of Educational and Professional Studies
Sir Henry Wood Building
76 Southbrae Drive
Glasgow G13 1PP

t: 0141 950 3365/3368
f: 0141 950 3367
www.strath.ac.uk/eps

Mr Clive Rowlands
Head of Department

INVESTOR IN PEOPLE

Appendix 9

Consent form Focus Group

To be read out at the beginning of the interview by the researcher.
One copy to be left with the participant and a signed copy with researcher.

My name is Maria Cummings and I am conducting this interview for a research study entitled '*Breastfeeding Education in a Pre-registration Midwifery Programme'* which aims to investigate how student midwives learn about breastfeeding in a UNICEF Baby Friendly accredited university.

Thank you for agreeing to participate in this study.
I would like to emphasise that

- Your participation is entirely voluntary
- You are free to refuse to answer any questions
- You are free to withdraw at any time

The interview will be kept strictly confidential and only members of the research team will have access to them (Maria Cummings, transcriber and supervisor). Excerpts of the interview may be used in the final report and any publications leading from it however your name or any identifying characteristics will not be included.
I also ask that you do not use any names of people (lecturers, mentors, women you have cared for) during the interview to maintain their privacy and confidentiality.

If you have any questions you can contact Maria Cummings at:

University of the West of Scotland
High Street
Paisley
PA1 2BE
0141 849 4271
Maria.cummings@uws.ac.uk

Please sign to demonstrate that I have discussed the contents with you.
……..(Signed) ……(Date)
……..(Printed)

Would you like a copy of the findings of the study sent to you?
Yes No delete as appropriate
If Yes what address would like it to be sent to
……

Consent form Student Midwives

My name is Maria Cummings and I am conducting a research study entitled '*Breastfeeding Education in a Pre-registration Midwifery Programme'* which aims to investigate how student midwives learn about breastfeeding in a UNICEF Baby Friendly accredited university.

Thank you for agreeing to participate in this study.
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- Your participation is entirely voluntary
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……..(Signed) ……(Date)
……..(Printed)

Would you like a copy of the findings of the study sent to you?
Yes No delete as appropriate
If Yes what address would like it to be sent to
……
……
……
……