



Nursing and Midwifery in Scotland: Being Fit for Practice

The Report of the Evaluation of Fitness For Practice Pre-Registration Nursing
and Midwifery Curricula Project

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The views and opinions expressed are those of the Authors

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Chapter 1 Background Context to the Study

1.1 Introduction

The debate about the competence of newly qualified nurses and midwives has a long and contentious history. Much of this debate has not been informed by a strong evidence-base, but has often relied on anecdote, personal experience and deeply held opinion. Recently, Clark and Holmes (2007) reported findings that in England ward managers have low expectations of newly qualified nurses, who themselves reported feeling poorly prepared for their new role. Whether this reflects an accurate picture of real competence is open to question and this potential disjuncture between judgements about competency and actual competency is at the heart of this evaluation. The wider political debate on pre-registration curricula shows little sign of disappearing with the current RCN General Secretary questioning the competence of newly qualified nurses (Snow & Harrison 2008). Such pronouncements by high-profile figures have characterised much of the debate around pre-registration education since the Project 2000 curriculum. The literature outlined in this chapter will extend to exploring social cognitive theory (Bandura 1977). Many evaluations of pre-registration curricula are atheoretical and it is the intention of this evaluation to avoid such a significant limitation by explicitly locating the evaluation within a theoretical framework.

1.2 Pre-Registration Education

The United Kingdom Central Council for Nursing, Midwifery and Health Visiting Commission for Nursing and Midwifery Education and its report Fitness For Practice (UKCC 1999) has been central to developments in nurse and midwifery education for over a decade and provides the backdrop to this evaluation. Fitness For Practice proposed that the Project 2000 curricula had resulted in newly qualified nurses who were under-skilled. Fitness For Practice was the solution and would introduce students to clinical skills in a more comprehensive fashion, with an emphasis on early exposure to teaching and learning skills. In Scotland, the last national review of pre-registration nurse education was conducted over ten years ago (May et al 1997), with corresponding evaluations in England (Luker et al 1996, Macleod-Clark et al 1996). There have been at least two, and in many

cases three, major curricular redesigns since then. There is no strong and compelling educational argument for this frequent curriculum upheaval. There has however, been major and ongoing change in the health service, which has directly impacted on curriculum delivery.

Currently, healthcare provision and the nursing and midwifery professions in Scotland are in the midst of an exciting and challenging phase. One report that is having an impact on these is Rights, Relationships and Recovery – the Report of the National Review of Mental Health Nursing in Scotland (SEHD 2006a). The report sets out a framework for pre-registration mental health nursing programmes that strongly reflects principles of patient self-management, promotion of recovery and developing patient and carer autonomy. The Perinatal Mental Health Curricular Framework (NES 2006) is another report in which the focus is mental health and is a recognition that mental health problems have a significant impact during the perinatal period. Similarly, changes in the structure of nursing and midwifery services in the community detailed in Visible, Accessible and Integrated Care: Report of the Review of Nursing in the Community in Scotland (SEHD 2006b), currently being taken forward in four development sites in Scotland, will change the expectations of how practitioners in community settings practise, with potential changes to the structure of pre-registration nursing and midwifery programmes.

Other national drivers include the Nursing and Midwifery Council (NMC) consultation on pre-registration nursing education (NMC 2007a) and the Pilot Project to Support New Staff Nurses into Primary Care (SEHD 2006c). Nursing and midwifery education must play a full part in these reviews and consultations by providing practitioners whose portfolio of skills and attributes enables them to be both flexible and responsive to a changing environment (SEHD 2006d). This will require a vision for nursing and midwifery education that will enable the professions to prepare practitioners whose portfolio of skills and attributes enables them to be both flexible and responsive to a changing environment over their entire career (SEHD 2005).

Fitness For Practice (UKCC 1999) mapped out the future direction of pre-registration nursing and midwifery education, with the aim of ensuring fitness for practice based on healthcare need. This begs the question as to why we have a UK-wide curriculum despite health being a devolved matter from Westminster to the Scottish Government. The logic of the practice-led curriculum leads one to argue for at least some degree of devolved responsibility for the development of a Scottish curriculum designed to meet the healthcare needs of Scotland as reflected in the priorities of the NHS in Scotland.

In a fluid and fast moving health, social, economic and political context, it is essential that evaluation research provides more than an historical and descriptive snapshot of pre-registration curricula and post-qualifying preparation at one point in time.

1.3 The Relationship between Pre-Registration Education and the NHS: An Historical Context

Walsh and Jones (2005) provide an historical dimension to the relationship between Higher Education Institutions (HEIs) and the NHS in England and Wales, a relationship that, in the 1990s, went through a period of drift. The Scottish drift can be traced to the purchaser-provider notion in the early 1990s, when some colleges of nursing and midwifery became directly managed units of the purchaser while NHS divisions became providers. This period of drift was intensified with perceptions around the lack of clinical relevance of the Project 2000 curriculum model and the transfer of nursing and midwifery education from the NHS to the higher education sector in 1996. Scottish relationships were not as acrimonious as was evident in Australia and, to a lesser extent, in England (Bradshaw 2001). In Scotland, the partnership difficulties were relatively short lived and a strengthening of partnerships is evident over the last five to ten years. In this review, the term 'student' refers to the generic student for convenience, but we acknowledge that important differences may be found in many respects between programmes and between nursing and midwifery students and where these are germane to the research design, we are mindful about this distinction.

Fitness For Practice became the UK Government's driver for changes in nursing and midwifery education as a response to what Kenny (2004) calls the failure of HEIs to deliver

skilled practitioners for the modern healthcare system. One could argue that claims about HEIs having failed are overly pessimistic (Thompson & Watson 2001, Watson & Thompson 2001), but, nevertheless, the perceived need to respond to concerns in the profession about clinical relevancy appears to be an important driver in policy development. Fitness For Practice (UKCC 1999) directly emerged from concerns about the fitness for practice of undergraduate curricula. These concerns have always been around, but gained greater prominence after Project 2000 (Mallik & Aylott 2005). The historical record of such concerns can be traced back to the Nightingale reforms and have deep seated roots in socio-cultural attitudes on the 'true' role of the nurse or midwife.

Fitness For Practice (UKCC 1999) signals the moment when the then current approach to curriculum design was seen to be untenable and a refocusing on clinical relevancy was required (Kenny 2004). This refocusing was to be achieved by: 1) creation of new practice roles; 2) improved communication systems; 3) modes of learning such as problem-based learning (PBL); 4) improved learning environments; and 5) better learning opportunities and resources (Field 2004). Field also suggests that Fitness For Practice (UKCC 1999) formally acknowledged that HEIs and the NHS shared responsibility in producing competent clinicians.

1.4 What is the Purpose of Pre-Registration Education?: Tensions and Trade-Offs

Pre-registration nurse and midwifery education is often blamed for all the 'ills' in nursing and midwifery and the healthcare system in general (Watson & Thompson 2001) and paradoxically, proposed as a solution to many of those ills. Much of the debate on Fitness For Practice, and in fact much of the debate on curriculum design over the last 100 years, has been focused around the question whether pre-registration education, at a given moment in history, is a process of effectively and efficiently engineering a skilled and productive worker for service or whether it is a project aimed at developing the informed intellect. The opposing tensions in curriculum design revolve around balances between educating the mind and producing skilled practitioners (Lauder 1993). This tension has been described as 'vocationalism versus liberalism' (McAllister 2001). The debate is a constant theme in the professional and research literature on curriculum design, with

differences in the perceived balance between developing the mind and developing a skilled worker voiced by students, practitioners, policy makers, politicians and educators. This divergence in values, perceptions and attitudes is a theme that is woven through much of the literature presented here.

The profession has witnessed what might be described as the 'demonisation' of Project 2000. Commentators claimed that the Project 2000 curriculum had resulted in priority being given to theory at the expense of practice (MacLeod Clark et al 1996). O'Neil (2003) argues that the major evaluations of Project 2000 (Luker et al 1996, May et al 1997, Runciman et al 1998) were the precursors of curriculum change in the direction of fitness for practice. Runciman et al (1998) crystallise much of what has emerged from these major evaluations when they state:

The evaluations of these 1992 nursing and midwifery programmes highlighted the continuing concern of employers, students and recent graduates relating to the acquisition of skills.

Although this belief is now widely held and often cited as an established truth, these evaluations did not provide much in the way of robust, valid and reliable data that Project 2000-educated nurses were less skilled than students qualifying from earlier pre-registration curriculum, or vice versa.

The main emphasis of and aims for Fitness For Practice curricula are easily understood, but are underpinned by theoretical and empirical relationships that are complex and involve many causal assumptions. Fitness For Practice (UKCC 1999) might be said to propose that, in pursuit of competence outcome A, teaching action B, in context of learning context C, will be most effective for student D, entering the system through entry gate E. Even this causal chain is a very simplistic model and the multiple assumptions underpinning Fitness For Practice (UKCC 1999) would indicate a considerably more complex model being proposed and tested. There is a great deal of consensus supporting Fitness For Practice although some dissenting voices are beginning to emerge (Thompson & Watson 2005). The challenge is for educational research to provide robust empirical data to evaluate this important initiative. Arguably, the main features of Fitness For Practice (UKCC 1999) are

mentorship and student support, teaching and learning, partnerships, flexibility and competency.

1.5 Mentorship and Student Support

The importance of student supervision and mentorship was soon identified as important in the implementation of Project 2000 curricula in Scotland (Cerinus & Ferguson 1994). Mentorship in clinical practice is a key element in ensuring fitness for practice (Field 2004, Hughes 2003, Spouse 2001). Supporting learning in the clinical setting and the many mechanisms proposed to facilitate this is one of the oldest and most written about aspects of pre-registration curricula over the last 45-50 years. However, there is little consensus in the literature on the appropriate support that facilitates deep learning (Andrews & Roberts 2003).

The move of nursing and midwifery education into the higher education sector is associated with, if not the direct cause of, a decline in the clinical role of the nursing lecturer (Clifford 1993, Ioannides 1999). The role of the clinical teacher, already eroded by classroom activity, has virtually disappeared and been replaced by link teachers as a model for incorporating clinical practice into the academic role (Cave 2005). However, earlier work by Murray and Thomas (1998) suggests that those who teach must be clinically credible and similarly, Cave (2005) argues that nurse academics need to be aware of the clinical realities that can affect the application of the theory they teach. Elliot and Wall (2007) suggest that academics need to be aware of the knowledge and skills the students they are teaching require in a constantly changing healthcare environment. Furthermore, Fisher (2005) states that the ability to apply theory to practice in an educational environment gives academics clinical credibility. Other suggestions identified in the literature include adopting a tripartite approach to assessment of student nurses at the undergraduate level (student, clinical supervisor and lecturer), recommended by Long and Asbury (2000), although there appears to be no robust evidence of effectiveness of the proposed arrangements.

Duffy and Watson (2001) used focus groups to interview nurse teachers from three Scottish nursing and midwifery departments and reported that they perceive their role to be

multifaceted, to include support for clinicians, advising, networking and maintaining professional standards. These views may be valid, but how well placed nurse teachers are to have a sustained impact in these respects is unclear. Certainly, the role in relation to students in the practice setting is currently much diminished (Fisher 2005). Academics rather than engaging in direct clinical practice should use their unique role as researcher and teacher to educate students about best practice (Elliott & Wall 2007).

Considerable effort has been devoted to the description and definition of roles that are meant to support students in practice. The central recommendation from the Lambert and Glackin (2005) study was the urgent need to define the role in order that all stakeholders share a common understanding of the activities of the role holder.

The terms mentor and preceptor seem commonly interchangeable, but with the former more often referring to qualified nurses specifically prepared to work, where possible, with students and support them during practice allocations. The notion of preceptor (Burke 1994, Fowler 1996, Pembrey 1980) has been used to denote the role of a more senior and experienced qualified member of staff with a special remit to induct qualified nurses into positions of greater responsibility. Watson (2000, 2004) undertook two relevant studies – one focusing on the preparation of mentors through the English National Board Teaching and Assessing in Practice courses – reporting that many nurses, especially senior staff nurses, saw involvement in mentorship as a stepping stone to promotion, but a number were not wholeheartedly committed to the role.

Jones et al (2001), in their comprehensive study of mentors, suggest that students were often unable to work for sufficiently long periods of time with their allocated mentors. Long et al (2003), in their evaluation of the preparation of specialist paediatric oncology nurses, found that students and mentors reported a lack of opportunities to work together and greatly varying practices in supervision and assessment. Watson (1999) reports a focused qualitative investigation of students' views of mentoring in a pre-registration common foundation programme (CFP). Students on the programme had a very clear view of the role of mentor, which, as distinct from mentors' views, included planning their learning

experiences during the allocation. For students, this did not mean a constant presence, but that arrangements made by the mentor should persist in their absence. Students who report greater perceived faculty support appear to be more likely to remain on a course than students who withdraw either voluntarily or because of academic failure (Shelton & Sellers 2003). In their study of 458 associate degree students, Shelton and Sellers identified two forms of support: psychological support, directed at promoting a sense of competency and self-worth; and functional support, directed at the achievement of tasks to reach the goals of persistence and academic success.

Peer mentoring will be familiar to many nurses and midwives who studied on pre-1992 curricula and remember being taught by senior students. A revisionist appreciation of the importance of peer mentoring (Topping 2001, 2003, Topping et al 2004) and peer mentoring in pre-registration nursing and midwifery (Aston & Molassiotis 2003), is currently evident in the literature.

Of note however, is the change in role of the mentor described in the literature from that of facilitator/supporter/supervisor of practice to one of assessor. Nettleton and Bray (2007) identify Fitness For Practice (UKCC 1999) as the catalyst for this change, reinforced later by the Department of Health (DH 2001), which defined a mentor as someone who 'facilitates learning and supervises and assesses students in practice'. With this definition the term mentor has been adopted for the role formally known as assessor or supervisor. Professional regulations have identified the need to be fit for practice at the point of registration, and research carried out by Duffy (2003), and Duffy and Hardacre (2007a, 2007b), regarding 'failing to fail', identifies the lack of a clear definition of the role as exacerbating the situation, with practitioners being unclear of their precise responsibility and a dichotomy existing between being a student supporter, facilitator, counsellor and their assessor.

Research suggests, however, that mentor preparation is directly linked to improved reliability in the assessment of students (Finnerty et al 2006). Until recently, the mentor role in nursing and midwifery has not commanded protected time or any additional status, unlike

in the allied health professions, where professional bodies are considering accreditation for practitioners who undertake assessment of practice (Foster-Turner 2006).

Scotland, in recognising the opportunities and challenges outlined above, has developed and implemented the Practice Education Facilitator (PEF) role to support mentors in practice (McArthur & Burns 2007). Also, NHS Education for Scotland (NES) have developed guidance in the form of the report National Approach to Mentor Preparation for Nurses and Midwives (NES 2007a), which incorporates the NMC's Standards to Support Learning and Assessment in Practice (2006); this a much needed benchmark to assist with the appropriate preparation of mentors and assessors. All of these initiatives are key components of a concerted strategy to support students and mentors.

1.6 Teaching and Learning

The issue of teaching and learning in the context of Fitness For Practice (UKCC 1999) is one that is rightly subject to considerable debate and discussion in the professional literature (Brennan & Hutt 2001, Hughes 2003, Lord 2002, Meakin 2003, Spouse 2001). Educators, students and clinicians all have strongly held views on what are the most effective teaching and learning methods. Nevertheless, there is a dearth of evidence to support the implementation of an entirely or even predominantly evidence-based curriculum in pre-registration education. A review for the Queensland Nursing Council (Fitzgerald et al 2001) failed to identify sufficient evidence about teaching and learning to support the development of specific teaching and learning guidelines in undergraduate programmes. It is ironic, given the frequent references educationalists make to students that clinical practice should be evidence-based, that little teaching practice is evidence-based.

Many teaching and learning activities have been documented in the context of fitness for practice and PBL is one of the most prominent. Roberts and Ousey (2004) outline the value of problem solving teaching methods in a first wave Fitness For Practice site in England. Mixed results are found in the literature. Gurpinar et al (2000) report higher scores in a group exposed to PBL compared with a group exposed to traditional education methods in a test of public health knowledge. Beers (2005) found that there was no difference in

objective test scores on diabetes in a lecture versus PBL experiment. In a study comparing PBL and traditional education in dentistry, Ritch et al (2005) report that students using the PBL method performed better in examination and skills procedures on simulated patients, but did not fare better on skills performed on real patients. Nevertheless, the consensus in nursing and midwifery education is that PBL is effective in Fitness For Practice curricula if incorporated in an appropriate fashion (Barlow et al 2002, Thiest & Ayers 2004) and in conjunction with information technology (IT) (Nelson et al 2005).

The NHS Health Informatics Competency Profile recognises the need for practitioners to develop information literacy skills within their pre-registration programmes so that they can become 'discerning information consumers, acquiring the knowledge and skills required of their developing roles and recognition of the need to become lifelong learners (Craig & Corrall 2007). Recent curriculum designs have incorporated the use of e-learning to complement and enhance more traditional teaching and learning activities (Ruiz et al 2007). Suggested benefits of e-learning include increased flexibility of learning, delivery of quality assured programmes, cost effectiveness, particularly for large student numbers, and the control of their learning that e-learning provides for students (Farrell 2006). Disadvantages of this form of learning and teaching include it being seen by students as an isolating experience (Levinson et al 2007), with drop-out rates from e-learning programmes being estimated at between 30-75% (McVay & Lynch 2002). Farrell (2006) further suggests that users of such a learning and teaching strategy must have the minimum IT and computer skills to benefit. However, this could be problematic given that a national survey in 2003 indicated significant deficits in these skills among nurses (NHS Information Authority 2003).

1.7 NHS-HEI Working Partnerships

Partnerships are considered so integral to Fitness For Practice curricula that these are enshrined in the NES Quality Standards for Practice Placements (2002a). One indicator in this document that suggests that quality standards are being met is evidence of joint HEI-NHS approaches to educational audit (Watson et al 2005). One of the differences between

Scotland and England is that service providers under quality guidelines in the latter are responsible for providing resources and time to meet training and developments needs of mentors. Considerable ingenuity and thought has been devoted to developing partnership models. Several models and initiatives are described here but this is by no means an exhaustive survey.

Burns and Paterson (2004) report the setting up in Dundee of a clinical practice and placement support unit dedicated to mentor support, learning environment development and placement management. Drennan (2002) undertook a national evaluation of the role of the clinical placement co-ordinator (CPC) in student nurse support in the Republic of Ireland. This is a supernumerary, but clinically-based role specialising in learning support and, at first sight, seems to mimic that of the PEF. However, according to Drennan, the role of the qualified nurse mentor to students (sometimes called preceptor in Ireland) is less widely taken up, and there remains a clear need for student support by other means. The CPC was, therefore, a temporary solution to the problem.

Other partnership models described in the literature include: the Bournemouth Collaborative Model (Mallik & Aylott 2005); Home Trust Model, Clinical Education Partnership Programme (DEST 2002); Clinical Guide Model at the University of Salford (Andrews & Roberts 2003); the Clinical Demonstrator Role at the University of Sheffield (Hilton & Pollard 2005); lecturer-practitioner (Leigh et al 2005); and Nottingham Practice Learning Teams (Chapple & Aston 2004). Clearly, a wide range of partnerships have been proposed, but how effective different models are on the ground is difficult to judge as accounts are generally provided by those who have been intimately involved in the development of projects. It is likely that the most effective share many of the same core elements. Holland (2005) has identified the challenges and opportunities in partnership working.

A major study of working partnerships in England highlights more acutely than any other the limitations in relying on descriptive methods. Scholes et al (2004) make several

recommendations, many of which do not appear to be rooted in their data (i.e., 3.1.2: 5.3: 5.5: 5.5.1), but at the heart of their findings they state:

Further evaluation is required to establish whether or not changes made to the Partnership curriculum have produced alumnae who are fit for purpose, practice and the demands of the NHS.

One would have thought that outcomes would be a major focus in any major evaluation, but Scholes et al (2004) have ploughed an all too familiar furrow by relying on perceptions at the expense of hard outcome data. The limitations in the type of descriptive methods used by Scholes et al (2004) are evident in a summing up statement in their conclusion:

Generally there was a feeling that things had improved as a result of the Partnership curriculum and that strategies were in place to keep improving.

Robust evidence as to the success of an initiative requires to be based on more than a general feeling. Success is likely to be plural (Smith & Cantley 1985) with different stakeholders having different ideas about what nurses should do, how they should be trained and how best to measure this. Evaluation needs to take account of this plurality (Nolan & Grant 1993). This notion underpinned our proposed evaluation of working partnerships. It is important that a critical stance is taken towards claims made about partnerships as these may be mere window dressing or obscure a partnership where one partner contributes more than others.

1.8 Flexibility in Curricula

Flexibility is an implicit element in curriculum design in Scotland. In the absence of national curricula, designers have a large measure of flexibility when constructing new programmes provided certain statutory elements are met, such as minimum hours on programmes. The recent Facing the Future report on retention and recruitment provides an insightful analysis of recruitment and retention in nursing and midwifery education (SGHD 2007a). One aim is to develop flexibility through a multi-entry and multi-exit strategy. Nursing has arguably the widest entry gate in the university sector (Lauder 2004). Flexibility in entry gate includes provision for credit accumulation and transfer, Recognised Prior Learning (RPL), Access to Nursing, SCOTVECs and HNC in Healthcare. The NMC five standard grade-entry for nurse education and a common entry criteria of one to two higher grades plus five standard

grades, can also be seen as one aspect of widening entry to university nursing education in Scotland and possibly the most widely used. For midwifery programmes, the NMC (2004a) standards for pre-registration midwifery education state that reduction to any part of a three-year direct entry midwifery programme is not an option. Wales has all-graduate entry in all programmes across the country. Students have to compete for places and meet not only the HEIs' and NMC's criteria, but also those identified in the Welsh Assembly Government's All Wales Access and Entry policy (WAG 2006).

RPL is one of the core elements of Fitness For Practice (UKCC 1999) and has long been recognised as opening up exciting prospects for wider access in pre-registration education (Rowbotham 1991). Its potential in post-registration nurse and midwifery education has also been acknowledged, but Heath (2001) claims that opportunities for its use in pre-registration education have been fewer than originally estimated.

Many of the NMC competencies for pre-registration education can be mapped onto care NVQs and should be taken into account in Fitness For Practice (Grundy 2001). The Caring for Scotland Strategy (SEHD 2001) tasked Directors of Nursing and Midwifery with exploring employment opportunities for those exiting pre-registration education at the end of first and second years. All years are accredited against the SCQF framework. The HNC in Health Care is also a relatively new addition to the range of entry gate options.

Another dimension to this debate is whether pre-registration exit points should be diploma, degree or a combination of both (Giot 2000). The wholly degree-exit point argument is based on several different and sometimes competing *a priori* positions which can be regarded as: 1) The 'Keep up-with the Jones's' principle, which in essence says that as all other AHP courses are degree-level entry, nursing also should have degree-level entry; 2) Fitness For Practice is positively co-related with higher exit qualifications; and 3) The pragmatic approach which argues the need to have a wide entry and exit gate to increase the attractiveness of nursing and midwifery as a life-time career option and to improve attrition and retention and this is best achieved by a mixed economy of entry and exit points. One recent study by Clinton et al (2005) reported no difference in competencies

between degree or diploma students. Watson et al (2005), in their commentary on this study, highlighted that the critics of graduate nurse education could not have things both ways; graduate nurses were apparently as competent as diploma nurses, and no less competent. It is not clear how HEIs in Scotland are performing relative to the proportions of students exiting with diplomas or degrees.

High attrition, like many of the issues already discussed, has been a long-standing concern in the professions. As far back as 1968, Scott-Wright, in a study of all nursing entrants in Scotland during a single year, reported a total attrition rate of 35%. This varied considerably across Scotland. Attrition in absolute terms remains high and varies between institutions (SGHD 2007a). The debate around attrition rates and wider access in nursing is somewhat different to that in the higher education (HE) sector as a whole, in which wider access (associated with low entry qualification, students with parents who have not had university education and lower socio-economic status) is strongly correlated to high attrition. This finding is a constant cross-national phenomenon seen in Australia (McMillan 2005), the USA (Jones & Watson 1990), as well as the UK (HEFCE 2000). Research on attrition in nursing and midwifery (*Wells 2003 is one exception to this general criticism*) is in a similar position to that seen in HE as a whole in the 1970s, when studies were largely descriptive and atheoretical and which, as a result, failed to provide a clear understanding of why students leave and what can be done to reduce attrition (Andres & Carpenter 1997).

In the wider HE sector, attrition and retention rates differ by sector of education, age of the students, level of course, subject of course, socio-economic group and institution. The UK has the second best completion rate in the developed world, second only to Japan (HEFCE 2000). Reasons for student attrition operate at individual student, institutional and supra-institutional levels (Hall 2002). Hall concedes, in his review, that data on student retention and attrition in the HE sector is often of poor quality and may be inaccurate or even misleading. Higher Education Funding Council England performance indicators graphically illustrate the very different attrition rates across subjects, with non-completion rates for young full-time students ranging from 2% (medicine, dentistry and veterinary science) to 11% (engineering and technology) (HEFCE 2000). Very different attrition rates can be seen

in the Scottish Further Education Sector. Cloonan and Canning (2000) report a non-completion rate of 26% for HNCs from their inspection of the SQA database. Rabb (1998), in her study into higher education in Scotland, investigated geographical variations in attrition and noted that the evidence suggests that withdrawal from degree courses is more likely for students from disadvantaged backgrounds. The Select Committee on Education and Employment Sixth Report (2001) identified the three main factors in attrition as entry qualification, subject and age.

In nursing, the debate around attrition focuses on the phenomenology (student reported reasons for discontinuation) of attrition rather than structural factors. These are not mutually exclusive, but represent very different assumptions and methodologies. Students are unlikely to report that the reason for discontinuation is the socio-economic status of their parents. In fact, the reasons for student nurse attrition are hard to ascertain (Deary et al 2003). Deary et al also provide evidence that different personality types may lead to different levels of stress and burnout, but it is also the case that those students who experience more stress and burnout are the more conscientious ones who are more likely to drop out. Finance and family problems may also play a part (Lauder & Cuthbertson 1998).

Another factor reported to be problematic for student nurses is the relatively new phenomenon of second employment (Ferguson & Cerinus 1996). The Student Retention Project at Napier University found that the most successful students were working in paid employment for up to 10 hours per week, the least successful over 16 hours a week (data provided to Select Committee and contained in sixth report). Many other methodological problems make research in this area problematic. The specific reasons why students leave their programmes of study are rarely recorded (Deary et al 2003). Definitions of attrition vary and national figures on acceptable attrition are arbitrary. Different primary leaving reasons tend to be given by current and completed student groups than those provided by the same discontinued students obtained by exit questionnaire (White et al 1999). Glossop (2002) has shown that almost 50% of students discontinue for at least two reasons, creating problems when trying to unpick interrelationships between leaving reasons and

consequent possible explanations for the findings.

The focus on attrition may have unintentionally obscured one of the great successes in nurse and midwifery education. A large proportion of entrants in many HEIs do not have entry qualifications required by other degrees in the same HEI. The fact that departments of nursing and midwifery take students with relatively poor entry qualifications, many of whom are from under-represented groups in the university sector and within three years prepare them for the profession, is a major achievement in educational terms and in terms of social mobility and social inclusion. Nursing and midwifery education is, in this respect, one example *par excellence* of a force for social good.

The relationship between flexibility and attrition in the changing demographic, supply-demand and basic preparation context in which nursing and midwifery education must operate is complex and many of the consequences of these changes have not been fully documented nor anticipated. Complex research designs including the type of modelling studies found in HE and policy research may be best placed to unpick these relationships.

1.9 Competency in Pre-Registration Curricula

The question of the competency or perceived competency of newly qualified nurses and midwives is the single most important driver in Fitness For Practice curricula. Implicit in this view is the suggestion that Project 2000 over-emphasised the development of thinking at the expense of doing (Bradshaw 2001). Supporters of the lack of doing skills position or, more accurately, the perceived lack of doing skills, received support in several studies, most notably the original Scottish Project 2000 evaluation (May et al 1997). The issue of research design arises here, as these studies did not actually measure whether students in curriculum model A were any less or more skilled than students in curriculum model B. Instead they relied on impressionistic data about perceived competence and, on this basis, doubts have been cast on these curricula and have led to claims alluded to earlier about the failure of Project 2000 curricula. Carlisle et al's (1999) reliance on perceptions and self-reports as proxies for actual behaviours simply reinforces these views, when they conclude that:

Managers raised the long-standing concerns of clinical skills and competencies, which really need to be addressed at national rather than local level.

Future evaluation must move this debate on by using more sophisticated measures of the competence levels of students. However, the concept of competence is elusive (Redfern et al 2002, Watson et al 2002a) and a longitudinal study of methods to assess competence in student nurses in Scotland showed that the methods in use were not validated and that students were seldom failed on the grounds of lack of competence (Calman et al 2002, Norman et al 2002). The limitations of self-report data are legion and are not limited to nurse education evaluation. Problems with this type of data are found in almost every area of research from self-reports on weight, alcohol consumption, nurses' empathy and nurses' delivery of patient education on medication. As early as 1975, Bendall illustrated that what nurses said they could and would do in written tests bore little relation to reality. For example, the provision of a bowl for hand-washing after use of the then common bedpan was often described but infrequently observed.

Murrells and Robinson (2005), using the shortened Nursing Competence Questionnaire developed by Watson and co-researchers (Watson et al 2002b), used structural equation modelling techniques to investigate competency development in diploma and degree prepared nurses in the early post-qualification period. There was little difference in overall competence and specific competencies based on self-reports and line-manager ratings. There were differences in aspirations, job satisfaction and plans, with graduates being more ambitious than diplomates, having lower levels of job satisfaction three years after qualification and being less likely to signal intentions to remain in nursing and midwifery.

The length of time students need in placement and the quality of that time is another common theme in the Fitness For Practice literature and was commented upon in the Fitness For Practice Report (UKCC 1999). Like so many other issues in pre-registration curricula, it is difficult to find robust empirical data to provide guidelines for total hours, length of placement, number and range of placements at particular stages of a programme which must structure a given curriculum model. Most of the major reviews of pre-registration educations focus on this issue but, as with other aspects of the curriculum,

research findings cannot cast light on this issue based on anything other than 'gut feeling'. In the absence of empirical data, curriculum designers make best guesses on placement length through a combination of course evaluations, professional expertise and a little empirical data combined together in 'rule of thumb' heuristics. These may provide optimal use and sequencing of practice time, but we simply do not have evidence one way or the other at the moment.

In studies of motor learning, Welford (1987) concluded that, for some type of skills, learning practice effects are proportional to the time taken to learn and for others skills it is not proportional. In a study of pianists, Williamson and Valentine (2000) found that overall quantity of practice was not related to quality of performance. Pianists who spend longer time segments at particular stages (middle segments) produce better outcomes. This suggests that, when structuring the length of placements, curriculum designers may need to have placements of varying lengths, with longer placements at particular stages of the programme and perhaps not in the final stage of the programme as is normally the case. In a meta-analysis of behaviour modelling training, Taylor et al (2005) identified longer training times as one predictor of effective skill development. Similarly, in a study of simulator training for laparoscopic skills there was a positive correlation between hours of practice and improvements in the skill performance of surgeons (Hanson & Mitchell 2001).

Competency-based assessment and curricula are emerging across the globe as the dominant model for curriculum design (Rong & Chung 2006). The perceived benefits of competency curricula in the USA have been sustained by reports suggesting that NCLEX-RN pass rates in competency curricula are consistently higher than national and state averages (Klein 2006). One key theme in the debate about competence and how this is best measured and assessed, is the assumed relationship between actual competence and self-reported competence. In fact, self-assessed competency is a requirement for continuing registration in parts of Australia (Fereday & Muir-Cochrane 2006). McCaughan and Parahoo (2000) argue that the value of self-reported competence assessment receives strong support from the literature. Cowan et al (2005) report how work undertaken under the auspices of the European Healthcare Training and Accreditation Network has seen the

development of two versions of a self-report nursing competency assessment. The key distinction between competency and self-report competency is simply who assesses whom. Competency assessment requires someone other than the student to assess competence using explicit protocols, and in self-report, students themselves make the assessment.

One of the earliest attempts to devise a standardised competency measurement was the Slater Nursing Competencies Rating Scale (Wandelt & Stewart 1975). This rejected a self-report methodology in favour of an observer-rated approach due to the limitation of relying on students' own evaluation of their skills. The spread in the use of objective structured clinical examinations (OSCEs), since Harden and Gleeson (1979) first developed them in the medical school at the University of Dundee in the 1970s, shows no signs of slowing down. Rong and Chung (2006) suggest OSCEs are 'of the moment' in the current climate of evidence-based education and the imperative to demonstrate clinical performance standards. OSCEs are no longer seen as being relevant only to pre-registration education, but may be the bond linking clinical performance up to and including Masters Degree level competence (Ward & Willis 2006). Despite the considerable coverage in the professional literature, there remains a lack of substantive evidence on the relationship between competence and self-reported competence. It seems likely that, in the multifaceted and multi-skilled environment of nurse and midwifery education, a series of skill type-student-curriculum-length/type of placement interactions are to be found.

1.10 Self-Efficacy

One of the major explicit goals of undergraduate curricula is to equip students with a sense of confidence (self-efficacy) that they can succeed in becoming a competent nurse. The notion of self-efficacy grew out of social cognitive theory (Bandura 1977). According to Bandura's theory, the perception of self-efficacy among students depends greatly upon four principal sources of information: performance accomplishments of similar tasks; vicarious experience (observation of tutors, other nurses' performance); verbal persuasion (lectures, suggestions, advice); and self-evaluation of physiological state (before, during and after attempts at tasks) (Harvey & McMurray 1994). Bandura proposed that individuals who perform unsuccessfully are likely to do so, not necessarily because they lack the skills and

knowledge, but because they lack the sense of self-efficacy to use skills effectively. Self-efficacy influences academic motivation, learning and skill development (Pajares 1996) and career progress in nursing (Harvey & McMurray 1994).

Farrand et al (2005) have recently reported that students in Fitness For Practice curricula, with their reportedly greater emphasis on practical skills learning, had higher confidence in their competence levels than students in Project 2000 curricula. High levels of self-efficacy are associated with effective learning in nursing (Chacko & Huba 1991, Colquitt et al 2000). Given most studies are cross-sectional, it is not clear whether this is a causal relationship or even the direction of the relationship. In their study of palliative care nurses, Fillion et al (2005) found that educational needs were negatively associated with perceived self-efficacy when providing good palliative care. Sewell and St George (1999) succinctly sum up the potential importance of self-efficacy to pre-registration programmes when they argue that self-efficacy may be a better predictor of performance than capability.

A small recent qualitative study by Anderson and Kiger (2007), undertaken with ten final-year student nurses who were given the opportunity to visit patients and clients in their home on their own, demonstrated that this built confidence. Students reported that they saw this as evidence that their mentors trusted them to deliver the care appropriately, but their experiences of managing in different situations served to enhance their belief in themselves and their abilities.

Self-efficacy may moderate the relationship between on-the-job training and levels of anxiety and stress (Saks 1994). Students who begin a clinical placement with previous experience as a nursing assistant or good clinical experiences as a student would have less anticipatory anxiety and see the new placement as a less threatening experience. Self-efficacy, therefore, exerts an indirect effect on performance by mediating the relationship between prior exposure and action. Social cognitive theory hypothesises that self-efficacy has a mediating effect on performance (Bandura 1986). Zimmerman et al (1992) provide support for this hypothesis, reporting that self-efficacy mediates the influence of self-regulated learning on academic achievement. Pintrich and De Groot (1990) suggest such

mediation offers a target for educational intervention. A virtuous cycle can be created by increasing students' self-efficacy, which in turn facilitates greater use of cognitive strategies. More effective use of cognitive strategies results in improved student performance.

Self-efficacy is a complex phenomenon, which appears to interact with both gender and exposure to life experiences. Women have been reported to have lower self-efficacy in relation to mathematics performance (Pajares & Miller 1994). This may explain the previous research, which suggests that nurses have poor numeracy skills (Wilson 2003). Hammond and Feinstein (2005), in their secondary analysis of data from a large sample in the National Childhood Development Study, suggest that self-efficacy in adult life may improve with exposure to opportunities for self-development and formal education (Hammond & Feinstein 2005). In a secondary sub-sample of 15 women with poor school attainment, sampled from the National Childhood Development Study Cohort, Hammond and Feinstein report that perceptions of achievement in adult education increase self-efficacy and that adult education may lead to more challenging occupations, which in turn builds self-efficacy. They also suggest that, while learning on the job can build self-efficacy, undertaking training provided by employers may not. Given the possibility of a maturation effect on self-efficacy and that around 50% of nursing students are mature students, this demographic profile may have an important bearing on self-efficacy research and a focus for education interventions in pre-registration curricula.

High self-efficacy is associated with effective learning in nursing (Chacko & Huba 1991, Colquitt et al 2000). Students undertaking a competency based pre-registration nursing curriculum reported high levels of confidence in the provision and management of care, holistic orientation, lifelong learning, addressing quality standards and being a safe and competent nurse (Farrand et al 2006). These students appeared to have higher levels of confidence in their clinical skills than nursing students in non-competency based curricula. Self-efficacy levels are higher in those individuals who are exposed to more diverse sources of efficacy information. Sources of efficacy feedback can come from mentors, peers, academic support teachers, patients and ward staff (Laschinger & Tresolini 1999).

Interestingly, there is also evidence suggesting that there may not in fact be a strong relationship between self-efficacy and competence in nurse education. Mavis (2001) has reported no significant correlation between self-efficacy and OSCE performance. She suggests that OSCE performance is highly dependent on several other factors such as knowledge, skills, anxiety, self-confidence and preparedness. This finding challenges social cognitive theory and needs to be subject to further investigation.

1.11 The Transition from Student to Qualified Practitioner

The 'Caring for Scotland' Nursing Strategy identified the provision of structured support for newly qualified nurses as an action point for implementation by 2005. The transition year from student to registered nurse is seen as a:

... period of learning and adjustment when the graduate (diplomate) applies and increases knowledge and competence and is socialised into the workplace (Victoria Department of Human Services 2002).

Problems in the transition from student to registered practitioner are widely reported in Canada (Ellerton & Gregor 2003), Israel (Greenberger et al 2005), South Africa (Moeti et al 2004) and the UK (Andrews et al 2005, Holland 1999). This issue has on occasion been reconceptualised as 'work readiness'. Medicine has long recognised the need for a longer period of training with qualified medical staff undertaking training posts on qualifying. Nevertheless, measurement of the problems faced by the new practitioner has proved more challenging than recognising that this problem exists. O'Conner et al (2001) make the all too familiar observation that:

However, the ability to gauge the performance of newly qualified nurses remains a largely subjective exercise relying upon anecdotal evidence or general statements of newly qualified nurses' feelings of inadequacy on qualification.

These researchers compared the perceptions of competence of newly qualified nurses provided by 139 senior nurses and the actual competence of 36 newly qualified nurses. They found that newly qualified nurses consistently performed at a higher level than that expected by senior nurses. Whilst the evidence-base has marginally improved since 2001, O'Connor et al's observation cautions us to the limitations in research relying on

perceptions. The unremarkable, but often overlooked point that perceptions, although important, are very different from actual behaviour, is one that should always be at forefront of those seeking to evaluate fitness for practice. An Australian review (Victoria Department of Human Services 2002) also reported that up to this point, there is little empirical evidence to support the benefits of costly and complex graduate programmes. Once again, the different needs and values of students, service and academics raises its head in this review in which students wished to have a programme which led them to be 'work ready', whereas academics wanted a programme replete with generic competencies to produce the 'educated person'.

One of the least well known and certainly one of the least implemented Project 2000 recommendations, was the need to see the newly qualified practitioners as still a work-in-progress. What was recommended was a period of mentored on-the-job training, which should last around three to four months. Macleod-Clark et al (1996), in their descriptive account of Project 2000 in England, report concerns from stakeholders about initial skill deficits in newly qualified practitioners. These deficits quickly disappeared with greater exposure to practice and learning-on-the-job. Mallik and Aylott (2005) provide a useful comparison of the problems of Fitness For Practice and more specifically quality, cost and provision of practice placements in both UK and Australia. Many Australian healthcare agencies have developed a one-year graduate programme for newly qualified nurses as a consequence of limited exposure to clinical practice settings in pre-registration programmes and the perceived lack of competency. In Australia there is no specified number of clinical hours in undergraduate programmes and these generally vary from 650 to 1,200 over three years.

Runciman et al (2002) investigated perceptions of skill adequacy in newly qualified diplomates in their first staff nurse post, within a nursing homes context. Perceptions of adequacy varied, but were, on the whole, favourable. All stakeholders agreed that perceived strengths were confidence, knowledge and a questioning approach (Runciman et al 2002). This was improved if support was provided and by the end of the first year midwives were described by managers as competent and confident. In her small-scale,

cross-sectional survey comparing interview data of newly qualified nurses in 1985 and 1998, Gerrish (2000) reports the latter cohort felt less stressed about transition than newly qualified nurses in 1985. This design is too weak to make any generalisations and should be seen as exploratory.

In a small-scale evaluation of a course on community nursing with mostly newly qualified nurses, Wright (2005) reports that students felt the course had improved their key community nursing skills. Amos (2001) identified that newly qualified nurses perceive they do not have the necessary skills. Newly qualified child health nurses who obtain their first post in the community were also not thought to have the necessary skills (Hickey 2000). Barriers to learning in this period may share many similarities to those experienced by student nurses. Moeti et al (2004) identify the many organisation factors that impede newly qualified nurses' development.

Solutions to this problem include the long-standing provision of rotational programmes for newly qualified nurses (Evans 2002). Rotational programmes are one element in the proposed plans for structured programmes in Scotland. Wong (2000), in a small-scale study, suggests that learning groups for newly qualified nurses facilitate quicker adaptation and a smoother transition to working in intensive care. Brasler (1993), in a study of 63 new graduates, found that the strongest predictors of clinical performance were support provided by peers, preceptor skills, and emotional support provided by preceptors. Participation in formal support groups was not found to be a predictor. This study highlights what appears to be the centrality of peer and workplace support in the transition phase.

Proposed curricula in support of the graduate year are not well described in UK, relative to Australia and USA. The revised graduate programme in Victoria (Department of Human Services 2002) focused on clinical risk management, harm minimisation, management skills, clinical competencies and ethical dimensions of practice. They also suggest a framework for evaluation that measures recruitment and retention, anxiety reduction and integration, clinical competencies and growth and development of the professional. Cooney (1992) describes a three-stage programme in Texas that started with an orientation and

socialization period, followed by the development of advanced skills, finally leading to assignments of complex cases after completing tailored educational courses. Cooney reports that the in-house evaluation indicated nurses reported greater autonomy, increased job satisfaction and improved retention rates.

The transition period is the time when nurses learn to manage and control many aspects of their practice. This involves a balance between demands and control. Nurses who report less job control report higher stress levels (Chang et al 2005). It is the adverse effect of participation without control, rather than participation *per se*, which affects job stress (Israel et al 1989). Lack of control over one's work has been identified both as source of stress and as a critical health risk for some workers. Demand-control theory of work is also linked to learning and professional development (Parker & Sprigg 1999, Taris et al 2003). In a study of 876 Dutch teachers, Taris et al (2003) found that the transition to high demand/low control posts, such as we see in the newly qualified nurse, is associated with a strong deterioration in learning and self-efficacy. Employees who are unable to exert control over their work are more likely to experience work stress, which in turn impairs learning in new staff (Taris & Feij 2004).

Mastery learning has been shown to be effective in developing self-efficacy in relation to therapeutic psychomotor skills (Mann & Eland 2005). In their study of new workers in eight countries, Feij et al (1995) highlight the importance of supervisors and co-workers in effective professional development. Teaching through simulations in skills labs has been shown to improve student nurses' self-efficacy (Goldenberg et al 2005). Four common themes in much of the literature reflect the need to further develop competencies (Nkosi & Uys 2005): the high stress levels during the transitional stage (Hartshorn 1992, Chang et al 2005); the value of peer and mentor support to newly qualified nurses (Smith & Chalker 2005); the reality shock of managing complex workplace demands (Mersch & Nekimken 2005); and structured programmes may reduce stress and improve retention (Squires 2002).

1.12 The Changing Context during the Evaluation

Since the commencement of the project there have been several changes, which may influence future curriculum design and the broader climate within which this is enacted. Two of the HEIs who participated in the project have merged to form the University of the West of Scotland (University of Paisley and Bell College). The Scottish Executive has become the Scottish Government and the Government has instigated several major health policy initiatives such as the Community Health Nurse and Flying Start NHS. The Community Health Nurse role is yet to be fully established and evaluated, but it does signal a shift in the balance of care from acute to community care and an explicit commitment to addressing health inequalities, which will need to be reflected in pre-registration curricula and post-registration education and role enactment. Flying Start NHS is the national development programme for all newly qualified nurses, midwives and allied health professionals in NHS Scotland. It is designed to support the transition from student to newly qualified health professional through supporting learning. It is a web-based or CD-ROM programme that seeks to increase the confidence and competence of newly qualified nurses and midwives during their first year of employment following registration. Hickie et al (2007) suggest that Flying Start NHS will create a positive learning environment and this will in turn result in improvements in long-term recruitment and retention within the NHS.

Concerns around retention and attrition have been subjected to a major review (SGHD 2007a) and a raft of initiatives designed to address these issues, such as the Pastoral Support Worker, have been implemented. Numbers of new entrants to nursing education will see a small decrease in 2008-09. Possibly one of the most important trends in the next five years will be shifting the balance of service delivery to the community and the requirement for nursing and midwifery curricula to reflect this trend. Project 2000 curricula specifically incorporated the requirement for students to be competent to practice in both community and hospital settings and in this respect may have been ahead of its time.

Chapter 2 Evaluation Design

2.1 Overview of the Evaluation Design

The broad evaluation design was developed in response to the ambitious objectives, which were informed by methodological limitations in previous large-scale national evaluations of pre-registration curricula and the findings from a systematic review of curriculum evaluation methods.

This project sought to evaluate pre-registration nurse and midwife education, the impact of Fitness for Practice (UKCC 1999) and the structured programme for newly qualified nurses in Scotland by:

2.2 Research Aims

1. Identifying the extent of and perceived impact of increased flexibility, achieving fitness for practice and partnership working on the skills and competence of newly qualified nurses and midwives
2. Evaluating the one-year development programme for practitioners qualifying from September 2005
3. Further constructing an evidence base and research platform on which to build and develop appropriate nurse and midwife education programmes which reflect and meet modern health care needs

2.3 Research Objectives

1. To evaluate the influence of flexibility and Fitness For Practice educational processes within programmes
2. To describe the relationship between flexibility, Fitness For Practice curricula and 'fitness for practice' outcomes
3. To identify and evaluate changes to the way in which partnership working has been developed between HEIs and service providers
4. To evaluate the impact of the programmes in NHS Scotland in terms of perceptions of fitness for practice

5. To evaluate the impact of the one-year development programme for newly registered nurses and midwives

The research design was informed by theory and the use of multiple measures of competency as a form of methodological triangulation. The quantitative measures which were developed were tested for reliability and the trustworthiness of the qualitative methods were ensured by several different researchers undertaking analysis, providing a thick description of events and findings being presented to stakeholders at specially designed stakeholder feedback events. Robustness and rigour are consequently ensured using a variety of established procedures.

The evaluation design was multi-phase and multi-method using a combination of qualitative and quantitative methods. These methods included:

- A systematic review
- Postal survey of pre-registration students
- OSCEs and paper-and-pencil test with students
- In-depth, face-to-face interviews with practitioners and educators
- Telephone interviews with practitioners
- Focus groups with practitioners, educators and students
- Four stakeholder events with practitioners, students, practitioners, carer and service-users and educators
- Written feedback from carer and service-user organisations
- Postal survey of Flying Start NHS newly qualified nurses

The methods used will be described in more detail with issues related to all aspects of design and method outlined in depth.

2.4 Phase 1: Student Self Report Competence and Confidence: Research Design and Methods

2.4.1 Postal Survey

The first of the empirical phases in the evaluation of student competence and confidence was a postal survey. This element of the evaluation aimed to investigate the relationship between self-efficacy, support and self-report competency in the 2004 and 2005 cohorts of student nurses and midwives. The survey comprised a postal survey of a stratified random sample of student nurses and midwives in pre-registration education in Scotland. Cross-sectional self-report data were obtained.

2.4.2 Ethics Approval

Ethics approval was received from University of Dundee non-clinical human subjects research committee. All participants were provided with written information about the study and were offered the opportunity to discuss the study with a member of the research team before deciding to participate. Written consent was obtained from each participant. It was also emphasised that participants were free to withdraw at any point from the study without detriment to their progression through their programme of study. Confidentiality and anonymity were guaranteed.

2.4.3 Sampling

A stratified random sample design was used to select nursing and midwifery students (n = 2011) from the Autumn intakes of the 2004 and 2005 cohorts of pre-registration nursing and midwives in seven SGHD contract HEIs in Scotland (stratified by programme; adult, children, learning disability, mental health and midwifery). The direct entry degree programmes provided by Abertay University, QMUC, Glasgow Caledonian University, University of Edinburgh, and University of Glasgow were excluded due to the nature of their recruitment, curriculum design or their 4th year honours option. A randomisation with replacement procedure was employed. Responses were received from 777 students – a 39% response rate. This is likely to underestimate the true response rate as sample frames provided by HEIs appeared to list several students who were not currently on programmes.

2.4.4 Data Collection

Data were collected by self-completion questionnaire (Appendix 1). The questionnaire was posted to either the student's home address or their university address depending on the recommendations from each HEI. A second, follow-up questionnaire was sent after two weeks to non-returners.

2.4.5 Measures

2.4.5.1 Demographics

The questionnaire included demographic items, self-report competence and self-efficacy instruments. Demographic data included intake year, marital status, entry gate and age.

2.4.5.2 Self-Report Competence

Self-report competence was operationalised in the Short Nursing Competencies Questionnaire (SNCQ). This is an 18-item scale developed by Watson et al (2002a) and derived from the 78-item Nursing Competencies Questionnaire (NCQ) (Bartlett et al 1998). The SNCQ was developed using Mokken scaling and measures the competence of nursing and midwifery students according to how often they engage in activities ranging from fundamental aspects of nursing and midwifery (e.g., giving emotional support) to more advanced competencies (e.g., planning and implementing health teaching). It has a four-point response format (always; usually; occasionally; never) and scores range from 18–72 with a score of 72 being the highest level of self-reported competency. Cronbach's alpha in this survey was 0.90.

A combination of the response format in the NCQ and the fact that many of the items refer to relatively standard nursing and midwifery tasks or functions, may produce inflated or homogenous responses and responses which cluster highly around the 'always' or 'usually' ratings. Clinton et al (2005) suggest that this leaves little scope to differentiate a very high level of performance from an average but acceptable level of performance.

2.4.5.3 Self-Efficacy

Self-efficacy (confidence) was operationalised in the General Perceived Self-Efficacy Scale (GPSE). The GPSE (Schwarzer 1995) is a ten-item scale that measures self-efficacy. It has been shown to be valid and reliable (Grau et al 2001) and remains robust in over 13 countries (Schwarzer & Born 1997). It has been shown to have good convergent and discriminatory validity (Schwarzer et al 1997). It has a four-point response format (not at all true; hardly true; moderately true; exactly true) and scores range from ten to 40, with 40 being the highest level of self-efficacy. Sample means for both German high school students (mean 29.60, SD 4.00) and USA adults (mean 29.48, SD 5.13) are very similar. Cronbach's alpha in this survey was 0.81.

2.4.5.4 Support

Support was measured by a four-item scale developed for the project. Items elicited views on the quality of support from the university/college, supervisor, peers, family and friends. Items were measured on a ten-point anchored visual analogue line response format. Support was analysed as four variables (range 0-9) reflecting the source of support and also as an 'all source support' variable (range 0-36). The 'all source support' variable was developed by combining raw scores from all four individual sources of support. Briggs and Cheek (1986) propose that alpha coefficients are not appropriate for scales with few items and that mean item correlations between 0.20-0.40 provide the optimal range for items. In the 'all source support' scale three items had values (0.2176; 0.2302; 0.2077) within the optimal range (0.2-0.4). The remaining three values (0.4827; 0.1714; 0.1881) are within close proximity to the optimal range.

2.4.6 Data Analysis

Data were analysed using the SPSS 12 programme. Kolmogorov-Smirnoff Tests revealed GPSE and age had non-normal distributions and attempts to transform data using log-10 and square root procedures were unsuccessful. In variables displaying a non-normal distribution, non-parametric tests of difference included Chi-Square Test, Mann Whitney-U Test and Kruskal-Wallis Test, with Monte Carlo adjustments used where uneven group sizes were present. Spearman's Test of correlation was performed with non-normal

variables. In normally distributed variables parametric tests of difference included T-Tests and ANOVA, and for tests of association Pearson's Test was employed.

No items had more than 5% missing data. Where subjects missed four or more items on the GPSE ($n = 2$) they were excluded from further analysis. Subjects missing five or more items from SNCQ ($n = 12$) were also excluded from further analysis. Missing values analysis included Expectation-Maximisation analysis with Little's Missing Completely at Random (MCAR) test. This demonstrated that all variables met MCAR assumptions and therefore, a listwise deletion procedure was used for missing data.

2.4.7 Competency Tests

The aims of this element of the evaluation were to: a) measure competence, self-report competence and self-efficacy; b) explore any differences between cohorts and student entry gates; and c) explore the relationship between competence, self-report competence and self-efficacy.

2.4.8 Sampling

Participants in this phase were student nurses and midwives from 2004 cohort ($n = 44$) and 2005 cohort ($n = 55$) from Scottish HEIs whose pre-registration programmes were funded through the SGHD contract. All participants who returned the questionnaire from the phase 1 postal survey were then invited to take part in this phase and 99 participants eventually completed agreed.

The extent to which this sub-sample was representative of the larger sample from which they were sampled, was tested by Mann Whitney U-Test, Chi-Square Test or Student's T-Test. The sub-sample of students in this element of the study differed significantly from the main sample in terms of their programme ($\chi^2 = 13.196$, $df = 4$, $p = 0.01$), entry qualifications ($\chi^2 = 6.387$, $df = 1$, $p = 0.011$), greater age ($U = 24245.0$; $p < 0.001$) and higher self-report-competency scores ($t = 2.431$, $df = 688$, $p = 0.02$). Self-efficacy scores did not differ significantly between sub-sample and main sample ($U = 29541.5$, $p = 0.673$).

2.4.9 Data Collection

The OSCE assessors undertook training prior to the main data collection point. Two pilot sessions with student nurses were also undertaken and as a consequence, changes were made to the design of all the tests. Students who returned completed questionnaires as part of the earlier postal survey were given a date and time to arrive at the clinical skills centre in their HEI. On arrival each student was fully informed of the procedure, asked once again if they wished to participate and, if they agreed, to provide written informed consent. Then the two-station OSCE and pencil-and-paper test then commenced. There was one examiner at each station and one person who ensured that all the stations ran efficiently. Stations lasted between five to ten minutes. There was no set order of processing through stations and once the student completed a station they were then directed immediately to the next station. Students had been informed they would receive a £10 book token for participating. This amount is generally thought to be large enough to act as an incentive but not sufficiently large to influence behaviours.

2.4.10 Measures

2.4.10.1 Demographics

A range of demographic data were collected which included age, gender, programme and cohort. Two single-year cohorts from the 2004 and 2005 intakes were recruited. Entry gate was a dichotomous variable with the NMC minimum entry gate of five standard grades and above group and a wider access group. The wider access group includes all students who entered the course from any route other than the NMC minimum entry requirement of five standard grades and above.

2.4.10.2 Competency

Competency was measured in a two-station OSCE and a paper-and-pencil numeracy test which reflected a pragmatic selection of three core dimensions of the NHS Knowledge and Skills Framework (DH 2003), which is a framework for the knowledge and skills for NHS staff. The skills selected are fundamental skills taught and assessed in both nursing and midwifery curricula.

The measures used in this phase complement and extend the self-report competency measure employed in the postal survey and thus, provide an opportunity for methodological and theoretical triangulation of competency measurement. The communication skill OSCE (Appendix 2) was adapted by the research team from Simulated Client Interview Rating Scale (Arthur 1999). The original scale had 39 items and measured basic communication and motivational interviewing skills. The adapted version of the Simulated Client Interview Rating Scale consisted of 11 items. These items represent core communications skills, which apply across many clinical contexts. Items on the revised scale were scored on a three-point response format ('not done' 'done' 'done well'). The potential scores ranged from 11-33; with higher scores representing greater levels of competence Cronbach's alpha for this survey was 0.85.

The paper-and-pencil numeracy test (Appendix 3) was adapted by the research team from the instrument developed by Wright (2005). Paper-and-pencil tests have a long-established track record in testing 'clinical' skills and have been reported to have a very high correlation ($r = 0.89$) with performance tests in final year medical students (van der Vleutan et al 1989). The test focused on testing basic numeracy skills such as proportions, ratios, percentages, fractions and problems solving. The adapted version consisted of 24 items. All the drug names used in the test were fictional as the main focus was on the numerical skills of the students. The potential scores ranged from 0-24, with higher scores representing greater levels of competence. Cronbach's alpha for this survey was 0.87.

The hand decontamination OSCE (Appendix 4) was adapted by the research team from the work of Major (2005). The adapted version consisted of a hand decontamination procedure that was viewed as having ten separate and observable actions, each of which were scored on a dichotomous 'unsatisfactory' or 'satisfactory' response format. The potential scores ranged from 0-10, with higher scores representing greater levels of competence.

2.4.10.3 Self-efficacy

Self-efficacy was measured by the General Perceived Self-Efficacy Scale (GPSE). This measure has been described previously.

2.4.10.4 Self-report competence

Self-report competence was measured by the Short Nursing Competencies Questionnaire (SNCQ). This measure has been described previously.

2.4.10.5 Support

Support was measured by four-item scale developed for the project. This measure has been described previously.

2.4.11 Data Analysis

Data were analysed using the SPSS programme. Kolmogorov-Smirnoff Tests of normality revealed that variables in the analysis, with the exception of self-efficacy, had a non-normal distribution. Attempts at transformation using log-10 and square root transformations were unsuccessful and consequently non-parametric tests were used with these variables. The non-normal distributions were expected as the whole point of assessment of skills in a curriculum is to get as many students close to the maximum as possible and, therefore, a strong ceiling effect may be inevitable in many specific competencies. Descriptive tests reported include modes and quartiles. Tests of difference include Chi-Square Test, Mann-Whitney-U Test and the Kruskal-Wallis Test for variables with non-normal distributions and Student's T-Test used in the normally distributed variable. Tests of association include Spearman and Pearson.

2.5 Documentary Analysis of Curricula: Research Design and Method

One objective of the evaluation was to compare different curricula that had been developed by each HEI. This was achieved through documentary analysis of curriculum documents provided by HEIs in the seven SGHD contract departments.

2.5.1 Sampling

All HEIs were contacted through the lead link for that HEI. This contact requested paper copies on their Fitness For Practice curriculum documents. A large number of documents were received and most contained similar data. Nevertheless, substantial variations in the specificity and completeness of data were apparent. The research team made at least two further requests to each HEI to obtain missing data or to ask for clarification of data which had been provided but which was not interpretable. In addition, a member of the evaluation team undertook a series of informal interviews with HEI links or another contact in the HEI to fill in gaps in information gaps and to validate data already extracted from previously supplied curriculum documents. Generally, these succeeded in sourcing data, but not all HEIs were willing or able to provide all necessary data or clarifications and consequently, in the findings much missing data is apparent. Future evaluations would benefit from a standardised minimum-data set for pre-registration curricula.

2.5.2 Data Collection

Data comprised hard copies of nursing and midwifery curriculum documents. These had normally been prepared as part of the approval and/or validation process for pre-registration programmes. Data collected included: mean length of placement per academic year; total number of placements per academic year; total number of practice hours in each academic year; hours in primary and acute care placements per academic year; number of academic assessments per academic year; and time spent learning clinical skills in skills labs. Data were collected between July 2006 and February 2007.

2.5.3 Data Analysis

To facilitate abstracting data from curriculum documents a proforma was developed, piloted and refined (Appendix 5). Abstracted data were subjected to descriptive statistical analysis

with counts and percentages. Findings from the three elements comprising Phase 1 are discussed in chapters 3 and 4.

2.6 Phase 2: Fitness For Practice and the Contribution Played by NHS-HEI Working Partnerships: Research Design and Methods

This phase of the study aimed to capture all stakeholders' constructions of what constitutes success in Fitness For Practice the extent they perceived success has been achieved and the contribution of working partnerships to success (chapters 6-9). Stakeholders were operationally defined as HEIs, NHS Boards and their constituent academics, clinicians, managers, students and carers and users. Incorporated into this phase were the student views, attitudes and beliefs about Fitness For Practice.

2.6.1 Ethics Approval

Advice and guidance were sought from COREC (now National Research Ethics Service) (NRES) regarding phase 2. COREC judged this phase of the project as service evaluation and therefore, advised there was no requirement for COREC approval. The project team decided, however, to apply for UREC (University) ethical approval through University of Dundee. UREC Approval was gained. The team then followed this by discussing with each lead link in the 11 HEIs the requirement to seek their local university ethics approval. Only one HEI requested this. Copies of University of Dundee UREC were lodged with the remaining ten HEI. The project team also wrote and sought access approval from Directors of Nursing to access staff. All NHS Boards agreed access.

All participants were provided with written information about the study and were offered the opportunity to discuss the study with a member of the research team before deciding to participate. Written consent was obtained from each participant. It was also emphasised that participants were free to withdraw at any point from the study without detriment. Confidentiality and anonymity were guaranteed. Student nurses, student midwives and mentors were all given a £10 book token for participating, although this was not disclosed to them prior to them agreeing to participate. Verbal consent was sought from service users

and carers who participated in the 'open space' event, with the project team ensuring that all participants understood what was required of them.

2.6.2 Sampling

All 11 NHS-HEI working partnerships in Scotland were sampled. A working partnership was defined as those people, relationships, policies and practices that facilitate the delivery of pre-registration education between an HEI and its related service partners. Within each unit several sub-samples of managers, academics, practitioners, PEFs, carers and service users and students from all programmes were recruited. Working partnerships sampled were:

- Bell College — NHS Dumfries and Galloway, NHS Lanarkshire, State Hospital Carstairs
- University of Paisley – NHS Ayrshire, NHS Glasgow & Clyde
- University of Dundee – NHS Fife, NHS Tayside
- Stirling University – NHS Western Isles, NHS Forth Valley
- Robert Gordon University – NHS Grampian
- Edinburgh University – NHS Lothian, NHS Borders
- Glasgow University – NHS Glasgow & Argyll
- Napier University – NHS Lothian, NHS Borders
- Glasgow Caledonian University – NHS Glasgow & Argyll NHS Ayrshire
- Abertay University – NHS Fife, NHS Tayside
- Queen Margaret University – NHS Lothian, NHS Borders.

Within each working partnership a range of stakeholder participants were recruited (n = 311). This included students (n = 78), senior charge nurses (n = 24), NHS managers (n = 22), mentors (n = 78), educators (n = 59), educational managers (n = 16), PEFs (n = 24), carers and service-users (n = 10). Written responses were received from five carer organisations. Access to participants was facilitated by the lead link recruited from each HEI at the commencement of the project. NHS Orkney and NHS Shetland were excluded for logistical reasons.

2.6.3 Data Collection

Data were collected during face-to-face, in-depth interviews (Appendix 6) (n = 39), telephone interviews (Appendix 7) (n = 24), focus groups (n = 41) (Appendices 8a-d) and a stakeholder event with service users and carers, incorporating a modified nominal group technique (Appendix 9). Data were collected between January 2007 and September 2007.

Senior charge nurses/midwives and PEFs were not identified as potentially key informants until data collection was underway. It became increasingly apparent during data collection that senior charge nurses/midwives and PEFs featured prominently in the unfolding narrative around pre-registration education. It was decided to recruit participants from these two groups to explore areas around mentor preparation, mentor support, mentor and PEFs roles in relation to student learning in the clinical environment.

All interviews and focus groups were audio-taped and a set of field notes for each session was prepared. Telephone interviews were recorded through extensive contemporaneously taken field notes. An interview schedule and focus group topic list were developed, piloted and refined. The topics sought data on contextual issues, such as local and national policy as they impact on stakeholders, how partnerships had developed and how successful they were perceived, how curricula were operating, what the implementation issues were, and what outcomes had been identified as a consequence. Outcomes included a shared sense of responsibility for education, shared values and notions of success. The ways in which partnerships facilitate students to learn in an interdisciplinary context and across interagency boundaries were also examples of issues explored. Aspects of good practice have been identified.

2.6.4 Data Analysis

An adapted narrative analysis approach was utilised. This involved three members of the project team independently completing a stage 1 analysis. This required each researcher to complete an initial impression reading of all data and memo record emergent ideas. They then conducted a thematic content analysis and finally a detailed analysis with illustrative verbatim quotes. They then met as a team over a two-day period and agreed the broad

themes that had emerged from the data at this point. Phase 2 findings are discussed in chapters 5 through to 8

2.7 Phase 3: An Exploration of the Implementation of Flying Start NHS in Scotland: Research Design and Methods

The first aim of this element of the project was to evaluate the early implementation of the one-year development programme for newly registered nurses and midwives (chapter 9). Specifically baseline data were collected on self-report competency, job demands and career intentions. The early implementation was also explored with a focus on mentors, managers and senior charge nurses/midwives' perceptions and experiences of support, resource and value of Flying Start NHS.

The aims for this element of the project were met by a cross-sectional survey of Flying Start NHS students and an analysis of in-depth interview data of nurse and midwifery mentors, senior charge nurses/midwives and managers, which are reported in detail in chapter 9. During these interviews participants were asked about their experiences and perceptions of Flying Start NHS.

2.7.1 Ethics Approval

Ethical approval for this phase of the project was included in phase 2.

2.7.2 Sampling

Participants (n = 97) in the cross-sectional survey comprised a convenience sample of newly qualified practitioners who were registered as undertaking the Flying Start NHS online programme during Autumn-Winter 2007. The sample comprised 81 females and nine males (seven participants did not provide gender or programme; Table 2.1) with ages ranging from 21-49 years and a mean age 31.78 years (SD 8.83). Most participants (n = 58; 64.4%) were married or living with a partner. Participants were currently practising in 14 Health Boards, with the largest number working in ward-based settings (n = 53) and only five practising in the community. Most participants were adult nurses (n = 73; 81%). A majority had exited with a degree (n = 50; 56%) with 40 exiting with a diploma (44%).

Table 2.1 Flying Start NHS Participants by Major Specialty

Programme	Frequency (%)
Adult	73 (81.1)
Mental health	12 (13.3)
Learning disability	1 (1.1)
Midwifery	4 (4.4)

Senior charge nurses, mentors, NHS managers and PEFs who were interviewed have been described in an earlier section.

2.7.3 Data Collection

The cross-sectional survey was designed initially to be administered via an email survey. When newly qualified practitioners registered online for Flying Start NHS course, an automatically generated email was sent to their email address informing them of the evaluation. Participants were then directed by a hyperlink to the study questionnaire. The methodological literature supports the use of email surveys (Selwyn & Robson 1998), but in this instance an exceptionally low response rate was achieved, with only 12 questionnaires being completed. These questionnaires were included in the final analysis. This low return made the proposed before and after administration of questionnaires redundant.

As a consequence, a second administration method was developed in collaboration with the lead links for Flying Start NHS. Taking their advice as to how best to distribute across their organisations resulted in a combination of administration procedures. An electronic or hard copy of the questionnaire (Appendix 10) was provided to the link, who then either forwarded this via email or hard copy to the participant. Hard copies were accompanied by stamped addressed envelopes. Even with the range of methods used a small sample was recruited relative to the number of participants undertaking Flying Start NHS. Thus, generalising findings to the wider population undertaking Flying Start NHS should be undertaken with a degree of caution.

2.7.4 Measures

2.7.4.1 Demographics and career data

The questionnaire package included demographics, personal and career aspiration items, job demands, self-report competence and self-efficacy instruments. Demographic data included intake year, marital status, pre-registration exit point and age. Career choice included items relating to KSF core dimension levels, Agenda for Change (AFC) Band aspirations at five years and 20 years post-qualifying and the quality of career advice to date. Retention was measured in two items asking if participants would remain working in the NHS on completion of the course and remain in the NHS one year after completing the course.

2.7.4.2 Self-report competency

Self-report competence was operationalised in the Short Nursing Competencies Questionnaire (SNCQ).

2.7.4.3 Self-efficacy

Self-efficacy (confidence) was operationalised in the General Perceived Self-Efficacy Scale (GPSE).

2.7.4.4 Job demands

Job demand was operationalised through the Job Content Questionnaire (Karasek et al 1988). This instrument can be used in studies of the high demand/low control model of job strain development, worker motivation, job satisfaction, absenteeism and staff turnover. Demand-control-support theory suggests that autonomy in decisions regarding the delivery of an individual nurse's practice and control of outcomes from this practice, are positively related to job challenge. Autonomy and behavioural control are negatively related to overchallenges in role demands and expectations (i.e., too many and too complex demands in the new post). Challenge appears to have a consistently positive impact on employee mood and stress and behavioural intentions (nursing actions, absenteeism and job turnover); overchallenge has a consistently negative impact on the same outcome variables. The scale has items measuring psychological job demands (five items), skill

discretion (six items), decision authority (three items), co-worker social support (four items) and supervisor support (four items). The items on hostile supervisors and co-workers were omitted. Items are scored on a four-point Likert scale. Good reliability has been demonstrated (Malinauskiene et al 2004). We did not conflate sub-scales in this analysis as sub-scales provided data that had a better fit to the research objectives.

2.7.5 Data Analysis

Data were initially subjected to descriptive analysis based on counts, percentages and proportions. Differences in self-efficacy and self-report competency in degree and diploma pre-registration exit point students were examined by Student's T-Test as both variables had normal distributions. Correlations between job demand sub-scales, self-efficacy and self-report competency were explored by Pearson's correlation. Regression analyses were performed using Categorical Regression with Optimal Scaling procedure in SPSS Version 15 (CATREG). CATREG was selected as variables had both nominal and numeric levels of measurement and did not meet other assumptions of multiple regression such as normality and homoscedasticity.

The regression analysis was conducted with self-report competency as the dependent variables and skills discretion, supervisor support, co-worker support, psychological job demands, decision authority, self-efficacy and pre-registration exit point as predictor variables. An initial CATREG analysis was performed. All variables were considered numeric with the exception of pre-registration exit point, which was treated as a nominal variable. A random initial configuration was selected as recommended when at least one predictor variable is treated nominal. A second CATREG on significant predictors was performed. Pratt's measure of importance is also reported. This provides estimates of the relative importance of significant predictor variables in a more readily interpretable form than beta values.

2.8 Project Awareness and Timely Dissemination of Findings

A key part of the research methodology was to raise awareness of this project, engage stakeholders and to disseminate findings in a timely manner. Raising awareness and engaging stakeholders at the outset was achieved by a member of the project team meeting personally with key stakeholders, that is, HEI link contacts and attending Strategic HEI-NHS joint meetings to inform of the project. Further awareness-raising was undertaken by producing fliers and posters that were sent to all NHS Boards and HEIs. The project team commissioned and developed a website (www.p2pevaluation.org.uk) as a further means of communicating and disseminating to stakeholders. Furthermore, the project team have held four stakeholder events to share and validate findings, but, more importantly, for the team to consider further areas of analysis.

A small stakeholder conference was held in Glasgow Caledonian University on the 8th March 2007 to share findings from the survey, OSCE and test element of the project. Several issues were discussed (many of which informed a line of inquiry during phase two) included:

- 1) Mentors have to deal with many students from HNC to degree, from many institutions, with different practice assessments and contact arrangements
- 2) Charge nurses remain the key to a good ward learning climate but their roles and responsibilities have changed dramatically.

In addition to the stakeholder event, the project team, in collaboration with several HEI links, presented a symposium at the RCN International Research Conference, Dundee, 2007. An 'open space' event was held with service users and carers at Dundee University in November 2007 as a mechanism to seek their experiences, perceptions and opinions on how education and the NHS can consider more fully their future involvement in curriculum design and delivery.

A two-day event was held on the 13th and 14th February 2008 at the Stirling Management Centre, Stirling. The aim was to replicate Phase 1 event by seeking feedback on data from Phase 2 from stakeholders who participated (Day 1 event). The emphasis on Day 1 was the learning experiences of students, the experiences of mentoring and the experiences of

teaching as seen by academics. This provided an opportunity to explore the validity of analysis and to engage in discussion about its implications. Participating in the event were mentors, senior charge nurses, students, PEFs and academics. This was followed by an event on Day 2 with key individuals from across the NHS, HEIs and professional bodies to discuss and debate the wider implications for future policy and practice. The emphasis on Day 2 was partnerships, policy and curriculum design.

Further dissemination of the research findings internationally was undertaken at the 2nd International Nurse Education Today/Nurse Education in Practice Conference, Dublin, June 2008, with a symposium presenting both Phase 1 and Phase 2 findings. The project team presented in September 2008 at the Nurse Education Tomorrow Conference, Cambridge. Several publications have been produced and accepted for publication in high quality journals.

Chapter 3 An Evaluation and Analysis of the Pre-Registration Nursing and Midwifery Curriculum

3.1 Introduction

The aim of this chapter is to provide a theoretical overview of curriculum evaluation studies in the UK, together with presentation and discussion of the findings of the analysis of the Fitness For Practice curricula undertaken as part of this study. These findings had implications in relation to the findings of Phase 2 of the study and potential recommendations for both service and higher education partners.

3.2 Curriculum Evaluation

The one fact that seems to be constant in the nursing and midwifery curriculum in the UK is that it is regularly subject to change. Since the 1980s we have seen changes in the underlying principles of nursing and midwifery education in the UK that have meant major changes in both the modes of delivery of nursing and midwifery education and to the content.

These changes must be considered along with many initiatives such as the Scottish Review of Mental Health Nursing (SEHD 2006a), Modernising Nursing Careers (SEHD 2006e) the one-year development programme for all newly qualified nurses and midwives – Flying Start NHS (SEHD 2006f), and the pilot project to support new staff nurses into primary care (SEHD 2006c). Better Health, Better Care (SGHD 2007b) signifies a period of potentially dramatic change in the delivery of health services in Scotland, which requires nursing, and midwifery education to play its fullest part by providing a practitioner whose portfolio of skills and attributes enables them to be both flexible and responsive to a changing environment. Many of these changes are not just a result of professional imperatives but also have been driven by political imperatives (DH 2007, SGHD 2007a, 2007b).

3.3 A Brief Overview of Changes in the History of Nurse Education and the Curriculum

Prior to the introduction of what is known as Project 2000 in England and its counterparts elsewhere in the UK, nurse education in the early 1970s and 1980s was delivered, in the main, in schools of nursing and midwifery which were situated either in or close to NHS hospitals. This co-location of schools and hospitals emphasised the apprentice style approach to nurse training (as opposed to education) and reflected a style of training that had been established by Florence Nightingale in the 1850s (Nightingale 1980). There were some university-based degree programmes at this time but even these generally adhered to the national requirements for what was expected to be delivered in nurse training. These requirements were regulated by the General Nursing Council (GNC). Most nursing and midwifery students undertook 'state final' examinations for the part of the register for which they were undertaking training. Apart from a category of 'experimental' programmes, such as some of the degree courses, these examinations were universal and undertaken by all nurses on the same day.

The publication of the Briggs report in 1972 proposed major changes to nurse education and the nurses' statutory bodies, resulting in the setting up of the UKCC and the four National Boards for Nursing, Midwifery and Health Visiting for Scotland, England, Wales and Northern Ireland. The eventual outcome was a series of projects and working papers, leading to the recommendations for Project 2000 (UKCC 1986). One of the recommendations was that: 'the number and organisation of schools of nursing and midwifery should be rationalised and linked with establishments of further and higher education' (Department of Health Nursing Division 1989).

Many of these schools of nursing and midwifery remained initially co-located with hospitals and used premises previously inhabited by a school of nursing and midwifery. For many of these, however, elements of the curriculum were delivered in the HEIs and/or by university lecturers. This was particularly so in the social and biological sciences which became a focus of the new curricula.

There was a period of transition where both the old training type curriculum (with the focus on clinical skills and nursing care of patients mainly in hospitals) and the new curriculum (with its focus on social and biological sciences and a more holistic view of patient care which included community nursing and care of the newborn) were to be found side by side. This created several tensions in curriculum delivery, both for schools of nursing and midwifery staff and their clinical colleagues.

Project 2000 was designed to change the philosophy of nurse education from apprenticeship style training to a more educationally driven enterprise. This was to result in the 'knowledgeable doer' (UKCC 1986), rather than someone who simply followed orders and worked according to local procedures and policies. Project 2000 introduced the 18-month CFP, which was followed by an 18-month branch programme (one of four) (nursing programmes only). The aim of this was to register in a particular area of nursing, such as adult nursing, learning disability, children's or mental health nursing. The aim of the CFP was to give all nurses a common introduction to the basic sciences, such as biology, psychology and sociology, as well as to nursing care and to the skills that would equip them to undertake specialist study for their programme of nursing.

Project 2000 was so named because, by the year 2000, all nurses entering the register would have undertaken this type of preparation and would thus be prepared for the next century. However, despite the radical changes brought about by Project 2000 curricula, there was significant concern from service providers particularly that the course was not preparing them to work in the NHS on qualifying as registered nurses (DH 1999). This was especially pertinent in relation to their apparent lack of clinical skills, due in part to the changes to their practice allocation and time spent in the clinical areas (Farrand et al 2006). The students were also no longer employees of the NHS and they were considered to be 'too academic'.

The late 1990s brought significant changes in the NHS, in particular the publication of the proposals in Making a Difference - Strengthening the Nursing, Midwifery and Health Visiting

Contribution to Health and Healthcare (DH 1999). At the same time there was the publication of the findings of the Fitness For Practice Report (UKCC 1999) into nurse education the focus of which was 'Fitness For Practice based on health care need'. This report made a significant number of recommendations. Examples of these were:

- Recruitment and selection should be a joint responsibility between health care providers and HEIs.
- The CFP should be reduced to one year and should enable the achievement of a common level of competence. It should be taught in the context of, and enable integration with, the branch programmes and should introduce clinical skills and practice placements early in the programme.
- Students, assessors and mentors should know what is expected of them through specified outcomes and competencies which form part of a formal learning contract, give direction to clinical placements and are jointly negotiated between the health care providers and HEIs.
- Practice placements should achieve agreed outcomes which benefit student learning and provide experience of the full 24 hour per day and seven day per week nature of health care.
- There should be a period of supervised clinical practice of at least three months duration towards the end of the pre-registration programme.

Evidence from research evaluations of the Project 2000 curricula, such as that by Fulbrook et al (2000), supports these suggestions, especially in relation to clinical skills and competencies. It can also be seen that there was a strong bias towards bringing nurse education back to a closer relationship with the NHS and its workforce. Subsequently, in England, there were several pilot sites commissioned to implement most of the recommendations of the Fitness For Practice report (UKCC 1999), which were then formally evaluated (Scholes et al 2004). This pilot site initiative was named Making a Difference for Pre-Registration Education in England (NHS Executive Circular 1999).

Making a Difference was an English phenomenon and as such, was imposed across universities in England only. Wales and Scotland did not adopt all of the Making a

Difference recommendations, but they were, however, obliged to revise the delivery of nursing and midwifery education in their countries (National Assembly for Wales 1999, SEHD 2001). Northern Ireland followed the English model closely (Watson et al 2004). This was a result of a report by the UKCC, then in its final days of office and which applied across all four countries of the UK, which made very similar recommendations to Making a Difference (UKCC 1999), and led to such things as the imposition of three-year degrees in Scotland and the shortening of the CFP from 18 months to one year. Therefore, while there is variation across the UK in the delivery of nurse education, there is similarity in terms of the objectives, the balance shifting towards competency and skills-based education and training as opposed to the previous focus on a more rounded higher education experience and knowledge base for nursing and midwifery. Curriculum developers must ensure that the standard content of their programmes meet the NMC standards by, for example, benchmarking against the Standards of Proficiency for Pre-registration education for Nursing and Midwifery (NMC 2004a, 2004b). The role of the Quality Assurance Agency for Higher Education (QAA) has also become relevant with its focus on ensuring benchmarking of outcomes across all curricula. Scotland, for example, has its own Nursing Benchmark Statements (QAA/Scottish Executive 2002). The NMC quality assures and approves all aspects of nurse, midwifery and public health nursing education programmes directly in England and devolves by contractual arrangements in Scotland, Wales and Northern Ireland (Watson et al 2004). Universities have relative autonomy to design programmes according to these guidelines and the similarly broad Quality Assurance Agency benchmarks. The extent of flexibility in curriculum design will feature prominently in later chapters in this report. Criteria for Fitness to Practice, therefore, become a very localised issue as distinct from the earlier GNC requirements, which stipulated certain skills that had to be achieved by all prior to becoming a registered nurse. Since commencement of this project, the NMC (2007b) has introduced new standards of proficiency in the shape of the 'Essential skills clusters' to provide clarity for the profession and the public in addressing some concerns around skill deficits.

It is of interest to us all, but especially those who fund nursing and midwifery education in the UK, to know how well that education prepares nurses for practice. This can be

approached through quality assurance (Watson et al 2004), taking the outcomes of monitoring bodies into account, or examining the products of nursing and midwifery education (i.e., registered nurses) when they are in practice.

3.4 Review of the Literature

The aim of this element of the project was to review methods and outcomes of curriculum evaluation related to Project 2000 and Making a Difference in nursing and midwifery education in the UK. Systematic review methods were applied and the review was guided by the research question: 'Is it possible to identify systematic approaches to curriculum evaluation in nursing and midwifery?'

A literature search was undertaken as follows: limits applied included restricting the publication dates to 1997-2006; search terms used included the use of Boolean Operators to link key words – (student nursing OR nurse education) AND (evaluation OR course evaluation) post-98 from CINAHL and Nursing education AND (evaluation OR course evaluation) post-98 from BNI. Papers retrieved were read and filtered by three of the research team (RW, MR, MJ) to decide, by consensus, which was relevant to the present review. Decisions were made on the basis of whether the papers were:

- About nursing curricula
- Concerned with evaluation of nursing curricula
- Used systematic methods to evaluate nursing curricula.

Thus, papers that were, for example, about educational policy, curricular design (without evaluation), reviews and did not use systematic methods (e.g., were merely the opinion of the author) were excluded from the review.

3.4.1 Findings

Twenty-six papers were identified from BNI and 30 from CINAHL. Studies identified during the search were retrieved based on the article title or abstract resulting in 36 articles for review. Following filtering of the papers according to the criteria described above, 14 papers remained for review. We have subsequently included the unpublished report by Scholes et al (2004) in view of its rigour and relevance. The papers are shown in Table 3.1.

Studies all came from Scotland, England, Wales and Northern Ireland). Seven studies were based on national surveys funded by national bodies in England (Carlisle et al 1999, Davies et al 2000, Morrison-Griffiths et al 2002, Scholes et al 2004), Scotland (May & Veitch 1998, Runciman et al 2002) and Northern Ireland (Parahoo 1999). Five studies were based on single universities (Farrand et al 2006, Fear 2004, Fulbrook et al 2000, Ousey 2003, Wakefield et al 2003). Two studies were based in NHS Trusts or hospitals (Pfeil 2003, Philpin 1999), and one study was based on nurses, but did not specify where they were based (Gerrish 2000). Seven papers were concerned specifically with the Project 2000 curriculum (Carlisle et al 1999, Davies et al 2000, Fulbrook et al 2000, May & Veitch 1998, Parahoo 1999, Philpin 1999, Runciman et al 2002); one paper and one report were concerned specifically with Making a Difference (Farrand et al 2006, Scholes et al 2004); and the remainder were not specific to any curriculum. The papers and reports are classified on the basis of being concerned with the content of the curriculum (n=2), the process of the curriculum (n=6), or the product of the curriculum (n=6). Generally speaking the papers reported favourably on Project 2000 and Making a Difference reported favourably; however, results were generally mixed and effects were small.

Table 3.1 Details of Review Papers

Reference	Sample	Aim	Findings	Classification
Carlisle et al 1999	National survey (England); 132 managers; 5417 nurses	To examine 'fitness for purpose of Project 2000 reforms	There is a need to identify core skills for the preparation of registered nurses	Product analysis
Davies et al 2000	National survey (England); first questionnaire 2742 pre Project 2000 nurses & Project 2000; second questionnaire 2635 nurses	To examine whether Project 2000 attracted more academically qualified nurses and led to more rapid career progression	Project 2000 did not attract more academically qualified nurses or lead to more rapid career progression	Product analysis
Farrand et al 2006	one university; 139 students	To examine whether Making a Difference recommendations have led to improvement in student nurses'	Students studying the Making a Difference curriculum have more confidence with clinical skills	Process analysis

		confidence in clinical skills	than Project 2000 students	
Fear 2004	one university one cohort of students; number of participants not provided	To describe outcome of evaluation of cohort of students undertaking community placement	Student and mentor perspectives emerged	Process analysis
Fulbrook et al 2000	one university; 94 students	To compare pre-Project 2000 & PSK students' views on how curriculum prepared them for clinical practice	Small difference in favour of Project 2000 students	Process analysis
Gerrish 2000	10 nurses (1985); 25 nurses (1998)	Secondary analysis of data from newly qualified nurses comparing data from 1985 & 1998 comparing preparation for being a staff nurse	Newly qualified nurses still feel inadequately prepared but more recently qualified find transition to staff nurse less stressful	Product analysis
May & Veitch 1998	National survey (Scotland); six universities; 228 tutors; 498 students; 210 RNs	To examine educational experiences of Project 2000 students	Variation across universities and evidence that not all expectations were being met	Process analysis
Morrison-Griffiths et al 2002	National survey (England); 33 universities	To examine adequacy of pharmacology education for nurses	Variation in pharmacology teaching	Content analysis
Ousey 2003	one university; no of participants not provided	To present evaluation of first 12 months of new curriculum using PBL	The new curriculum is preparing nurses fit for practice	Content analysis
Parahoo 1999	National survey (Northern Ireland); 1368 nurses	Compare pre-Project 2000 and Project 2000 nurses' research training and research use	Project 2000 nurses better prepared but not using more research	Product analysis
Pfeil 2003	NHS Trusts (number not provided); 145 students; 16 lecturers; 40 RNs	To present development of assessment criteria for problem based learning curriculum	Issues related to confidence, being able to explain actions and safety were raised	Process analysis
Philpin 1999	Three hospitals (Wales); 18 nurses	To explore occupational socialisation of Project 2000 nurses	No firm conclusions, location experience may be a determining factor	Product analysis
Runciman et al 2002	National survey	To examine educational issues for	Mixed but generally favourable	Product analysis

	(Scotland); nine nursing homes; 30 nurses	Project 2000 nurses working in nursing homes	impressions	
Wakefield et al 2003	one university; 34 students (22 nursing; 12 medical)	To examine the use of simulated patients and mixed groups for breaking bad news	Simulated patients and mixed groups viewed favourably	Process analysis

3.4.2 Discussion

Whilst there is a paucity of papers fulfilling the criteria of the present review, it is clear that the effectiveness of the nursing and midwifery curriculum is important, given that 43% of the papers retrieved were based on national surveys in the UK which were funded by the bodies which fund or regulate nursing and midwifery education. In addition, and again emphasising the importance of the curriculum, there was evidence of individual universities in the UK evaluating and/or researching their own curricula. The majority of the papers (57%) were concerned with investigating curricular change as brought about, and described in the introduction, by significant changes in the nursing and midwifery curriculum caused by changes in UK government policy, specifically, Project 2000 and Making a Difference. Otherwise, investigations were concerned with the content of the curriculum or with experience related to specific aspects of the curriculum. One large study, by Scholes et al (2004), focused on partnership in the context of the 16 Making a Difference pilot sites. However, by surveying and interviewing relevant stakeholders, this study investigated curriculum content, processes and outcomes in some depth. Papers were classified according to whether or not they were concerned with the content, the process or the product of the curricula being investigated.

3.4.3 Content Evaluations

There were very few papers investigating content. This could be expected given that curricula influenced by the NMC and QAA requirements, leading to entry to the same UK register, have similarities across the UK. Morrison-Griffith et al (2002) undertook a national survey of the pharmacology content of nursing and midwifery programmes across England. Of 52 institutions mailed, 36 replied giving a 69% response, with many interesting comments made by informants. For example, at that time, the lecture predominated by far as the most common mode of teaching and at least one-fifth of departments did not

formally assess pharmacology knowledge. The authors were clearly concerned that wide differences exist in the teaching and assessment of pharmacology and therefore, in all probability, the competence of registered nurses in this respect.

It is reasonable to hypothesise that, despite a curriculum prescribed in very broad terms, the product of the curriculum – the registered nurse – will differ according to the university that has produced it. It has to be noted however, that given the unpredictability of the nurse-patient encounters and illnesses, that students cannot be exposed to and learn the same knowledge base, but there would seem to be an argument for agreed minimum core knowledge. The national partnership evaluation by Scholes et al (2004) concurred (in message 15) that the amount of time dedicated to the delivery of applied physiology and pharmacology and the way this was tested in practice remained one of the weakest aspects in the new curriculum. They went on to argue that the minimum amount, delivery, timing and progression of applied physiology and pharmacology pedagogy and how that is assessed should be reviewed.

3.4.4 Process Evaluations

If the curricular content is important to the product, then the process whereby it is delivered and experienced by students, teachers and clinical supervisors, is also a legitimate and important area of study. The aspects of process that were studied varied, but the key question, surely, is, how do changes from one curriculum to another affect nursing and midwifery students? Two studies compared experiences under different curricula. Using a questionnaire built from the then UKCC (later NMC) competency statements, Farrand et al (2006) compared the more recent Making a Difference curriculum with Project 2000 in the University of Plymouth. They found that the sample of 74 Making a Difference students self-reported that they had more confidence with clinical skills than 65 Project 2000 students by an average of approximately one point on a nine-point scale.

Using a five-point Likert scale format, Fulbrook et al (2000) compared questionnaire results from 39 Project 2000 students with 55 pre-Project 2000 students from the University of Portsmouth. They found that Project 2000 students were marginally better prepared for

clinical practice; the 'old' cohort scored an average of 2.22 on this aspect, with the 'new' students scoring 2.48, a difference of 0.26 ($p < 0.05$). Given the size of most university departments of nursing and midwifery student intakes (many are over 200) and the particular advantage of questionnaires, that they may be easily given to many people, it is surprising that in studies such as these greater numbers are not used. However, the findings are of interest.

Other studies of curricular process (Fear 2004, May et al 1998, Pfeil 2003, Wakefield et al 2003) did not compare one curriculum with another. However, May et al's (1997) study was a national examination of Project 2000 in Scotland and compared curricular process with expectations based on Project 2000. The investigation used six of the 12 providers as case studies, collecting data through 'illuminative' methods such as semi-structured individual and group interviews with students and mentors. The study did not come to any clear conclusions about the benefit – or the disadvantages – of Project 2000. From these studies of curricular process, it appears that curricular changes have only modest effects, with some limited evidence of improvements, for example, in preparing nursing and midwifery students for clinical practice.

Studies of curricular product represented some of the most rigorous studies retrieved in the review in the sense of being multi-centre and/or national and often including large numbers of participants. Carlisle et al's (1999) large DH-funded study drew on survey data from over 5,000 qualified nurses prepared by both Project 2000 and 'traditional' approaches and on interviews with 132 nurse managers. Carlisle et al (1999) concluded that a set of core skills needed to be identified. Drawing on other aspects of data from the same study, Davies et al (2000) found that Project 2000 did not attract more academically qualified nurses nor lead to more rapid career progression. Gerrish (2000) replicated a qualitative study along the lines of work she had published ten years earlier to examine any differences. In the earlier study, her interviews with ten newly qualified nurses led to her describe their early efforts to adjust to qualified responsibility as 'fumbling along'. In the later study, she claimed that in 1998 (after Project 2000 was implemented), newly qualified nurses still feel inadequately prepared ('still fumbling along'), but were less stressed by the experience; however, no

formal measurement of stress was made. Drawing on a large sample of 1,368 qualified nurse respondents in Northern Ireland, Parahoo (1999) investigated research training in Project 2000 nurses compared with pre-Project 2000 nurses, the only study of curricular process that made a direct comparison between the two groups. He found better education, but no more implementation of research by Project 2000 nurses. Philpin (1999) interviewed 18 qualified nurses working in various departments in three Welsh hospitals to explore the occupational socialisation of Project 2000 nurses. Although she suggests that acute placements seemed to provide a 'harsher' experience, she was unable to make any true comparisons across types of curriculum. Runciman et al (2002) interviewed managers in nursing homes to explore educational issues for working in this area of care. They found mixed, but generally favourable, results with regard to Project 2000 nurses.

3.4.5 Conclusion

The aim of this review was to examine whether or not it was possible to identify systematic approaches to curriculum evaluation, and in particular Making a Difference and Fitness For Practice curricula in the UK. The answer to this question is, surely, 'yes'. However, it is disappointing that there is a paucity of Scottish evaluations at the macro level. Evaluations of teaching and learning strategies at the micro level are in abundance. However, for the purpose of the review focus was on macro level studies.

Systematic approaches to curriculum evaluation were evident to the extent that national studies were undertaken; comparisons were made with previous curricula and in the research methods applied. However, in some cases, the methods were little more than localised and not very rigorous case studies and these cannot be viewed as particularly useful. The extent to which the present review is useful is represented by the papers where methods were applied that could be repeated in subsequent studies. For example, it was the intention of Project 2000 to produce a better educated and more enquiring nurse and research was seen as being key to this. In that light, Parahoo's (1999) study could be viewed as useful, provided the objectives of the curriculum remain the same, which they do not. National data from other studies on how well prepared nurses and midwives and

nursing and midwifery students feel for clinical practice could also inform future studies and methods could be directly applied.

There are two fundamental problems, however, that have a direct impact on the feasibility of any research that takes forward the knowledge base to date. The first problem is extrinsic to this review and the second problem is intrinsic. First, as described in the introduction, the nursing and midwifery curriculum is under almost continual evolution and its purpose has changed. This is often due to the major changes taking place in the NHS and, therefore, the evolving expectations of the newly qualified nurse; however, we can be certain that, despite a paradigm shift approximately every 30 years, such as the incorporation of 'communication skills' or 'problem-based learning', the medical student curriculum does not respond so immediately, or bureaucratically, to policy and structural changes in the NHS.

For example, the Making a Difference curriculum, and its subsequent derivatives, is directed at increasing clinical skills as early as possible in nursing and midwifery students and does not emphasise the 'knowledgeable doer' that was the focus of Project 2000. This probably renders the approach taken by Parahoo (1999) null and void; at least, expectations regarding, for example, research education and implementation in practice, would be very different. The second problem, arising directly from the review, is the fact that none of the studies presented here examined the curriculum from content, through process, to product. Also, they were concerned with only limited aspects of the curriculum such as pharmacology or research. This is not to say that the parent studies from which some of these papers were taken do not address wider issues; however, related papers were not retrieved.

The question arises, why are there such frequent changes to the nursing and midwifery curriculum? Project 2000 was widely researched and evaluated and the results, at the very least, showed that it was broadly meeting its objectives. Where it was thought to be failing to produce nurses ready to 'hit the ground running' especially in terms of clinical competence, this was rapidly compensated for in a short time.

The review has two main lessons for those who evaluate curricula. There remains a need for a rigorous evaluation of the nursing and midwifery curriculum that encompasses all aspects from content to product, including process. In addition, there is a pressing need to provide rigorous research which will inform funders and purchasers of nursing and midwifery education in order that they can make informed decisions about future directions in the nursing and midwifery curriculum.

(NB: This review (published in a similar format by Roxburgh et al 2008, and reproduced with kind permission of Elsevier) offered a background context to the analysis of the curricula documents from the HEIs in Scotland and supported the inclusion of this element of the project.)

3.5 Fitness For Practice Curricula in Scotland: Analysis of Curricula Documents

The NMC (2004b) advise that the 'primary aim of pre-registration programmes is to ensure that students are prepared to practice safely and effectively to such an extent that protection of the public is assured'. In pursuit of this aim, the NMC specifies that all pre-registration curricula meet a small number of requirements such as the 4,600 minimum hours for nursing.

A key objective was to collect data from each HEI relating to their Fitness For Practice programmes. Given the overall objectives of the project it had been agreed that in the time available and the evidence required that only selected aspects of curricula would be analysed. Data collected included: mean length of placement per academic year; total number of placements per academic year; total number of practice hours in each academic year; hours in primary and acute care placements per academic year; number of academic assessments per academic year; and time spent in learning clinical skills. In keeping with other elements of Phase 1 of the project, only the seven HEI with Scottish Government contracts were included.

3.6 Data Collection

To facilitate abstracting data from curriculum documents, a proforma was developed, piloted and refined. All HEIs were requested to provide copies of all curriculum documents for the team to extract the required data. However, on commencing the analysis it became clear to the team that there were data that were not present in all curricula documents. A member of the project team, therefore, undertook a series of interviews with HEI links or Programme managers in the institution to fill information gaps and additionally validate data already extracted from previously supplied curriculum documents. Information was provided between July 2006 and February 2007. Data not supplied by the HEI has been identified by 'M'. Where information is not relevant or applicable this is denoted by 'N/A'.

3.6.1 Programme Practice Hours

To comply with the NMC Standards of Proficiency for pre-registration education (2004b), HEI programmes must comply with the NMC statutory requirement of 4,600 hours, divided equally between theory and practice. All seven HEI exceed these statutory requirements in the B/N stream but total hours in the diploma stream ranged from 4,600 hours to 5,224 hours. Total number of hours in the degree stream ranged from 4,702.5 hours to 5,677. Five HEIs had the same number of hours for both diploma and degree streams. One HEI had a 600 hours difference between streams. Three HEIs allocated equal hours to theory and practice; three allocated more hours to practice; and one allocated more hours to theory in the diploma stream (Table 3.2).

Table 3.2 Theory Hours: Nursing

HEI	Total Hours Dip	Theory Hours Dip	Practice Hours Dip	Total Hours BN	Theory Hours BN	Practice Hours BN
D	5077	2437	2640	5677	3037	2640
E	4762.5	2381.25	2381.25	4762.5	2381.25	2381.25
G	4702.5	2340	2362.5	4702.5	2340	2362.5
F	5224	2920	2304	5224	2920	2304
B	5062.5	2512.5	2550	5062.5	2512.5	2550
A	5060	2530	2530	5060	2530	2530
C	4600	2300	2300	4750	2450	2300

Table 3.3 Theory Hours: Midwifery

HEI	Total Hours Dip	Theory Hours Dip	Practice Hours Dip	Total Hours BM	Theory Hours BM	Practice Hours BM
D	5175	2587.5	2587.5	5175	2587.5	2587.5
E	M	M	M	M	M	M
G	5125	2837.5	2287.5	5725	3437	2287.5
F	5400	2480	2920	5400	2480	2920
B	4850	2300	2550	5140	2950	2550
A	5062.5	2531.25	2531.25	5062.5	2531.25	2531.25
C	M	M	M	M	M	M

Total hours in the midwifery diploma stream ranged from 4,850 hours to 5,400 hours. One HEI had fewer hours in the nursing curriculum than the midwifery curriculum, while four had more hours. One HEI had more hours of theory than practice, while two had more practice hours and two had equal theory and practice hours. Three HEIs had equal numbers of hours in diploma and degree streams, while two had more hours in the degree curriculum. The largest difference between diploma and degree curricula was 600 hours (Table 3.3).

3.6.2 Number of Placements by Year, Nursing Branch and Midwifery

There were small variations in the number of placements over the three years with child programme at HEI D having most placements (12) and with lowest number of placements (8) in learning disability, child, mental health and adult programmes in various HEIs. No discernable patterns of placements being more or less frequent over the three years was observed (Table 3.4).

Table 3.4 Placements in Nursing Programmes

HEI	YR1 Child	YR2 Child	YR3 Child	YR1 LD	YR2 LD	YR3 LD	YR1 MH	YR2 MH	YR3 MH	Yr1 AD	YR2 AD	YR3 AD
D	4	4	4	3	3	2	3	3	2	M	M	M
E	M	M	M	M	M	M	M	M	M	M	M	M
G	2/3	3	3	2	M	1	4	3	3	4	3	3
F	N/A	N/A	N/A	N/A	N/A	N/A	2	4	4	2	3	3
B	3	3	2	N/A	N/A	N/A	3	3	2	3	3	2
A	3	2	3	N/A	N/A	N/A	4	3	3-4	2	3	3
C	N/A	N/A	N/A	3	2.5	2.5	3	2.5	2.5	3	2.5	2.5

Midwifery programmes, with two exceptions, had more placements than nursing curricula. The largest number of placements was 17 at HEI D. There was a general pattern with fewer placements in year one than years two and three (Table 3.5).

Table 3.5 Placements in Midwifery Programmes

HEI	YR1	YR2	YR3
D	3	7	7
E	M	M	M
G	3	3	3
F	4	4	6
B	3	6	5
A	2-3	6	5
C	3	2	3

Child programme

Universities with child programmes, in general, provide their students with consistent numbers of placements in each year. This averages between three to four placements for each student across the programme (Table 3.4).

Learning Disabilities Programme

Students on these programmes have, on average, three placements per year. However, of note is that HEI G appears to offer just one placement for year 3 (Table 3.4).

Mental Health Programme

There is a slight variation across HEIs in the number of placements offered to students, which range from two to four. Of note are HEI F and HEI A which, in 3rd year gives students four placements (Table 3.4).

Adult Programme

Adult students from HEIs across Scotland average three placements per year (Table 3.4).

3.6.3 Number of Placements within Primary and Secondary Care

A relatively large difference was observed between the number of primary care placements in child programmes (range 1-7/8), adult programmes (1/2-3/6) and mental health (2/3-5) (Table 3.6).

Table 3.6 Primary and Secondary Care Placements: Nursing

HEI	Secondary Child	Primary Child	Secondary LD	Primary LD	Secondary AD	Primary AD	Secondary MH	Primary MH
D	5	7	4-5	3-4	Missing	Missing	5	3
E	M	M	M	M	M	M	M	M
G	7-8	1	2	2	6-9	2	4-6	3
F	N/A	N/A	N/A	N/A	5-7	2	7-8	3
B	5	3	N/A	N/A	5	3	4/6	2/3
A	7	1	N/A	N/A		1-2		5
C	N/A	N/A	M	M	3-4	3-6	M	M

Midwifery curricula all provided more secondary care than primary care placements. There was a mode of two primary care placements although one HEI provided five placements (Table 3.7).

Table 3.7 Primary and Secondary Care Placements: Midwifery

HEI	Primary Care	Secondary Care
D	5	12
E	M	M
G	2	7
F	N/A	14
B	2-3	M
A	2	11
C	2	7

3.6.4 Total Number of Hours Spent in Primary Care during Programme

There were differences in the numbers of hours in primary care between HEIs in child (range 225-1125), learning disability (1600-112.5), adult (225-665) and mental health programmes (1040-300) (Table 3.8).

Table 3.8 Hours in Primary Care: Nursing

	Number of hours in Primary Child	Number of hours in Primary LD	Number of hours in Primary AD	Number of hours in Primary MH
D	1125	900-1600	M	1040
E	M	M	M	M
G	225	112.5	665	781
F	N/A	N/A	600	840
B	562	N/A	300	300
A	412.5	N/A	225	900
C	N/A	2151.5 - 2343	800-1767	2151.5 - 2343

There were differences in the number of hours spent in primary care in midwifery curricula (Table 3.9) with a range of 267.5-900 hours.

Table 3.9 Hours in Primary Care: Midwifery

HEI	Number of hours in Primary
D	267.5(average)
E	M
G	326.5
F	M
B	512.5
A	900
C	608

3.6.5 Clinical Skills – Number of Hours by Year

Wide variations were observed between HEI in the number of hours clinical skills offered in curricula, with a high of 150 hours and a low of zero hours. There was a general trend to offering less clinical skills in the third year of programmes (Table 3.10).

Table 3.10 Clinical Skills Teaching: Nursing

	C S YR1 Child	C S YR2 Child	C S YR3 Child	C S YR1 LD	C S YR2 LD	C S YR3 LD	CS YR1 AD	C S YR2 AD	CS YR3 AD	C S YR1 MH	C S YR2 MH	C S YR3 MH
D	27	30	4	42	30	30	M	M	M	75	20	0
E	M	M	M	M	M	M	M	M	M	M	M	M
G	48	36	6	48	0	6	48	36	5	48	32	0
F	N/A	N/A	N/A	N/A	N/A	N/A	150	100	50	150	100	50
B	25 + 8 option	29 + 3 option	11 + 3 option	N/A	N/A	N/A	25 + 8 option	13+ 3 option	8 + 3 option	25 + 8 option	20 + 3 option	20 + 3 option
A	48	31	17	N/A	N/A	N/A	48	6.5	10	48	M	M
C	N/A	N/A	N/A	30	23	17	30	18	17	30	25	17

Table 3.11 Clinical Skills Teaching: Midwifery

HEI	YR1	YR2	YR3
D	56	28	0
E	M	M	M
G	18	36	10
F	112	70	M
B	175	107	40
A	132	22	22
C	53	45	17

3.6.6 Number of Assessments during Programme

Total number of assessments in the diploma stream ranged from fifteen to twenty-eight and in the degree stream from eighteen to thirty-four for nursing (Table 3.12). This may not equate to differences in student workload.

Table 3.12 Total Assessments: Nursing

HEI	Total Assessments Child	Total Assessments LD	Total Assessments AD	Total Assessments MH
D	30	26	MISSING	22
E	M	M	M	M
G	27(DpH) 33(BN)	28(DpH) 34(BN)	28(DpH) 34(BN)	28(DpH) 34(BN)
F	N/A	N/A	24	25
B	15(DpH) 18(BN)	N/A	15(DpH) 18(BN)	15(DpH) 18(BN)
A	21(DpH) 23(BN)	N/A	28(DpH) 30(BN)	18(DpH) 20(BN)
C	N/A	16 (Dip) 18 (BSC)	16 (Dip) 18 (BSC)	16 (Dip) 18 (BSC)

Numbers of assessments in midwifery curricula ranged from nine to twenty-nine (diploma stream) and ten to twenty-three (BM) (Table 3.13).

Table 3.13 Total Assessments: Midwifery

	Total Assessments Midwifery
D	9 (DipH), 10(BM)
E	M
G	29
F	23
B	20
A	21 (DipH), 23 (BM)
C	(22(DipH), 24 (BM) 11(DipH), 14 (BM)

Table 3.14 Degree and Diploma Exits in Autumn 2003 Intake

HEI	Degree N (%)	Diploma N (%)
A	113 (57.65)	83 (42.35)
C	224 (92.56)	18 (7.44)
E	104 (68.87)	47 (31.13)
B	99 (62.27)	60 (37.73)
D	114 (53.02)	101 (46.98)
G	253 (77.13)	75 (32.87)
F	64 (42.67)	86 (57.33)
Scotland	971 (67.38)	470 (32.62)

Note. Outcome at 22.02.2008

The data in Table 3.14 provides a snapshot of the Autumn 2003 Intake. It is acknowledged that some HEIs have two intakes and so this data does not represent a full-year intake. Nevertheless, it demonstrates the wide differences in the proportions of students exiting with degrees in HEIs. Three HEIs have higher than the average proportions exiting with degrees. The percentages of degree exit students ranged from 42.67% to 92.56%.

3.7 Discussion

The key finding in curricular data is the variability between HEIs and the variation between nursing and midwifery curricula within HEIs. This may be a good example of flexibility, with HEIs deciding on a particular structure in the light of HEI-specific factors such as the numbers of student intakes, student profile and availability of placements. This can be described as 'designed-in variation'. Equally, this variability may not reflect rational choices based on HEI specific circumstances, but may be simple random variation based on preferences of curriculum design teams. The extent of variation within and between HEIs suggests that balance of evidence does not favour the designed-in variation hypothesis. Whatever the explanation, questions remain about the direct and indirect costs, resource implications and costs benefits of additional hours on programmes.

Most HEIs factored in additional hours to accommodate the demands of delivering the programme. This extra time is used to allow for sickness absence of students, as well as essential flexibility to manage the complexity of delivering the programme within the

constraints of placement capacity and the University calendar. However, one could argue that these additional hours accrue additional costs to students over what is in essence around 12 weeks of additional programme time. In addition, it may increase the use of valuable clinical practice placements. There is some anecdotal evidence that this may change student behaviours, with students using this build-in time as 'sickness' time to be used during the programme.

There was a notable increase in graduate exit from all programmes other than children's nursing. This is significant given the possibility of an all-graduate exit point as a result of the findings of the recent consultation on pre-registration nursing (NMC 2007a). Midwifery as a profession has agreed to move to an all-graduate profession from September 2008. Recent data from Centralised Applications to Training Clearing House (CATCH) highlight the large differences in the proportions of students exiting with a degree between HEIs.

The balance of primary care and secondary care appears very different from that seen in Project 2000 curricula. Project 2000 set out to provide a balance of primary and secondary care experience. Given the emphasis on providing care in the community the balance of placements may require to be adjusted to provide more primary care placements. This may not be practical as primary care placements may be more difficult to source and secondary care placements may be simply more practical to obtain. The number of hours mental health students spend in primary care placements is, on the whole, much higher and may reflect the type of change in emphasis to community care which has been at the heart of mental health policy for some considerable time.

The length of time students need in placement and the quality of that time was commented upon in the Fitness For Practice Report (UKCC 1999). Like so many other issues in pre-registration curricula, it is difficult to find robust empirical data to provide guidelines for total hours, length of placement, number and range of placements at particular stages of a programme. Most of the previous major reviews of pre-registration education focus on this issue, but, as with other aspects of the curriculum, research findings cannot cast light on this issue based on anything more robust than a 'gut feeling'. In the absence of empirical

data, curriculum designers make best guesses on placement length through a combination of course evaluations, professional expertise, and a little empirical data combined together in 'rule of thumb' heuristics.

The use of skills laboratories has been very much part of the Fitness For Practice debate, with academics such as Nicol and Glen (1999) championing their use. A NES report identified a pressing need for NES to develop a multidisciplinary clinical skills lab education strategy at a national level which would provide direction, enhance coordination and foster collaboration across Scotland (O'Neill 2003). Mallik and Aylott (2005) contrast very different approaches to skills learning in the UK and Australia, with a much higher reliance on clinical skills labs in Australia.

The UKCC's terms of reference of the Commission for Education were to 'prepare a way forward for pre-registration nursing and midwifery education that enables fitness for practice based on healthcare need' (UKCC 1999). Mole and McLafferty (2004) suggest that recommendation 19 encouraged increased use of skills labs for simulating the clinical environment, providing students with the opportunity to learn and practice skills in a safe environment. More recently, the NMC (2006a) decided to identify a baseline standard for the use of simulation and its inclusion as a contributory part of practice learning. This change has been influenced by perceived variations in the levels of competence upon registration (NMC 2005) and is clearly linked to the Essential Skill Clusters (NMC 2006b) within pre-registration programmes to ensure new qualifiers are capable of safe and effective practice.

It is not clear whether the shift to skills lab teaching is driven by pragmatic concerns about lack of placements (cost shifts from the NHS to HEIs which accompany this are seldom commented upon) or by empirical-theoretical reasons around more effective learning. Empirical data does reveal that as a learning approach, students value this method. Studies by Alinier et al (2004), Mole and McLafferty (2004) and Schoening (2006) detail that students exposed to this approach found their learning needs met and they experienced increases in confidence and competence.

Nursing practice has changed dramatically over the last decade. For example, nurses in acute settings manage an increasingly complex range of health care interventions that incorporate advances in technology and disease management, while nurses in primary care settings manage the increasing burden of chronic disease and facilitate patient self-management of their health.

The economic reviews of the health service commissioned by the government suggest further changes in the way health services are organised and health care is delivered (Wanless 2002, Wanless 2004). The report identifies over-reliance on acute hospital care and recommends more primary and community-based care. To achieve this, pre-registration education must reflect this view in providing more of a balance between primary and secondary care placements for students for them to gain the knowledge and skills to function in both settings. The curricular data on hours in primary and secondary care placements suggests that there is still a heavy reliance on secondary care placements across all HEIs. Where students are allocated to community/primary care placements the amount of time spent is considerably variable

In the following chapters the evaluation will set out findings related to the process, content and outcomes of pre-registration curricula in Scotland. A range of methods was employed, with participants representing the broad range of stakeholders including mentors, students, PEFs, NHS managers, academics, academic managers and carer and service users.

Chapter 4 Student Competence Evaluation

4.1 Introduction

This chapter reports findings from a two-part survey of the 2004 and 2005 cohorts of pre-registration nursing and midwifery students in Scotland. Comparing curricula is very difficult given that many contextual issues are particular to a curriculum, country and time period. Nevertheless, key concepts such as self-efficacy, student support and self-reported competence transcend place and time and allow comparisons to be made between curricula. This chapter will explore student self-efficacy, self-report competency and support as understanding these concepts will open up insights that have relevance to all nursing and midwifery curricula. The survey had two phases, comprising a postal survey of a stratified random sample of student midwives and nurses in Scotland and also an OSCE and paper-and-pencil test of competency with a sub-sample of students who had previously participated in the postal survey.

4.2 Postal Survey Findings

4.2.1 Demographics

The mean age of the sample was 28.39 years (SD 8.97). The 2004 cohort had a mean age of 29.04 (SD 8.96) and the 2005 cohort a mean age of 27.76 (SD 8.96) ($t = 1.983$, $df = 767$, $p = 0.48$). Over half the sample (50.9%) can be classified as mature students using the Scottish Government Health Directorate bursary definition for mature students (26 yrs and over) (Table 4.1). Mental Health programme students had the highest mean age whilst Child programme students had the lowest (Kruskal-Wallis = 31.679, $df = 4$, $p = 0.001$). Significant age differences were observed between the 2004 and 2005 cohorts ($U = 65477.5$, $p = 0.006$).

The majority of students entered with five standard grades or more ($n = 590$, 77.3%). Most students were single ($n = 446$, 58.8%) and a small percentage were divorced/separated ($n = 42$, 5.5%). Divorced/separated students were more likely to undertake the mental health programme (Kruskal-Wallis = 37.947, $df = 8$, $p = 0.001$).

Table 4.1 Number of Participants by Cohort, Programme and Marital Status.

Demographic Items	N (%)	Age (SD)
<u>Cohort</u>		
2004	382 (49.2%)	29.04 (8.96)
2005	395 (50.8%)	27.76 (8.95)
<u>Programme</u>		
Adult	574 (73.9%)	28.22 (8.91)
Learning Disabilities	19 (2.4%)	29.72 (10.26)
Mental Health	86 (11.1%)	31.36 (9.17)
Child	48 (6.2%)	23.30 (7.11)
Midwifery	50 (6.4%)	29.72 (7.48)
<u>Marital Status</u>		
Married/Partnered	271 (35.7%)	33.58 (8.61)
Single	446 (58.8%)	24.11 (6.50)
Divorced/Separated	42 (5.5%)	33.83 (5.63)

Kruskal-Wallis and Chi-Square analyses were performed to investigate whether non-responders differed from responders based on limited information available on non-responders. There were no significant differences in terms of programme (Kruskal-Wallis = 3.691, df = 4, p = 0.449) and cohort ($\chi^2 = 0.31$, df = 1, p = 0.861) between returners and non-returners. In this respect participants are representative of the population sampled.

4.2.2 General Perceived Self-Efficacy

General Perceived Self-Efficacy mean scores for the sample were 30.67 (SD 3.42), with a mean of 30.47 (SD 3.21) for the 2004 cohort and a mean of 30.88 (SD 3.61) for the 2005 cohort (U = 64318.0, p = 0.289). There was no significant difference between students (Table 4.2) with five standard grades or more and those who entered nursing via wider access routes (U = 42442.5, p = 0.305).

Lowest self-efficacy scores were observed in the learning disability programme and highest scores in the mental health programme, but this difference was not significant (Kruskal-Wallis = 1.630, df = 4, p = 0.811). Students who were divorced/separated had the highest GPSE scores (Kruskal-Wallis = 6.223, p = 0.045).

Table 4.2 GPSE Mean Scores and Standard Deviation (SD) by Programme, Entry Gate and Marital Status.

Demographics	Mean (SD)
Programme	
Adult	30.67 (3.45)
Learning Disability	29.78 (3.64)
Mental Health	30.90 (3.09)
Child	30.89 (3.64)
Midwifery	30.47 (3.48)
Entry Gate	
Five standard grades or more	30.72 (3.38)
Access to Nursing Course	30.58 (3.38)
Marital Status	
Married/Partnered	30.70 (3.60)
Single	30.55 (3.15)
Divorced/Separated	32.10 (3.95)

4.2.3 Self-Reported Competency

SNCQ mean scores for the sample were 59.81 (SD 6.88). The 2004 cohort had slightly higher competency scores (mean 60.16, SD 6.52) than the 2005 cohort (mean 59.50, SD 7.25), but this was not significant ($t = 1.365$, $df = 680.9$, $p = 0.173$). Students entering with five standard grades or more had a mean of 59.94 (SD 6.77) and students who entered via wider access routes a mean of 59.40 (SD 7.28) (Table 3). This difference was not significant ($t = 0.959$, $df = 675$, $p = 0.338$). There was a large amount of missing data in the entry gate variable. The highest programme mean score was child 61.75 (SD 6.52) and the lowest score observed in learning disability (mean 58.35, SD 5.14) (Table 4.3). An ANOVA test with age as a covariate was not significant ($F = 1.611$, $df = 4$, $p = 0.207$).

Table 4.3 SNCQ Mean Scores and Standard Deviation (SD) by Programme and Entry Gate.

Programme and Entry Gate	Mean (SD)
Programme	
Adult	59.44 (7.06)
Learning Disability	58.35 (5.14)
Mental Health	61.05 (6.25)
Child	61.75 (6.52)
Midwifery	60.53 (6.30)
Entry Gate	
Five standard grades or more	59.94 (6.77)
Access to Nursing Course	59.40 (7.28)

Mean HEI self-report competency scores ranged from 58.52 to 61.35. An institution effect was tested by ANOVA, with age, programme and cohort as covariates. Although there was a trend in differences in self-report competency levels between HEIs this was not significant ($F = 1.880$, $df = 6$, $p = 0.083$). A post-hoc power calculation using the general linear model procedure indicates that the sample size in this element of the analysis was underpowered with a power of 0.697.

4.2.4 Quality of Support

The quality of student support was analysed as an 'all support' variable and as four single item support variables reflecting different sources of support. The all support mean score for the sample was 27.27 (SD 4.9), with mean HEI all support scores ranging from 29.64 to 26.25 (Kruskal-Wallis = 36.16, $df = 6$, $p = 0.001$). Support from family and friends was given the highest mean score (7.46, SD. 1.82), whilst support from the university/college was given the lowest quality score (6.15, SD 2.03).

Table 4.4 Quality of Support for Students across all HEIs.

HEI	All source Support	Mentor	HEI	Peer	Family & friends
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
University C	29.64 (3.95)	6.88 (1.51)	7.42 (1.38)	7.88 (1.31)	7.49 (1.84)
University G	28.80 (4.30)	6.39 (1.87)	6.72 (1.94)	7.75 (1.49)	7.94 (1.30)
University D	27.40 (4.82)	6.81 (1.79)	6.09 (2.01)	6.78 (1.87)	7.72 (1.39)
University F	26.91 (4.63)	6.02 (1.73)	6.42 (1.78)	7.36 (1.44)	7.30 (1.84)
University B	26.62 (5.06)	6.41 (1.78)	6.08 (2.08)	6.94 (1.82)	7.19 (2.32)
University A	26.61 (5.11)	6.36 (1.96)	5.74 (2.16)	7.29 (1.70)	7.21 (1.99)
University E	26.25 (5.02)	5.87 (1.89)	5.38 (2.09)	7.34 (1.57)	7.66 (1.64)
Total	27.27 (4.86)	6.32 (1.84)	6.15 (2.03)	7.33 (1.63)	7.46 (1.82)

All four individual sources of support were significantly correlated. The strongest relationship was between support from HEI and support from supervisor/mentor ($r = 0.493$, $p = 0.001$). This was anticipated but the relationship is not so strong as to obviate each source of support being treated as distinctly separate in future research. Weak but nevertheless significant associations were seen between support from family and friends and support from HEI ($r = 0.227$, $p = 0.001$), support from peers and support from HEI ($r =$

0.272, $p = 0.001$), support from family and friends and support from mentors/supervisors ($r = 0.199$, $p = 0.001$), support from peers and support from mentors/supervisors ($r = 0.211$, $p = 0.001$), and support from peers and support from family and friends ($r = 0.267$, $p = 0.001$).

4.3 Discussion

High levels of self-efficacy increase the effective use of cognitive and metacognitive strategies and subsequent performance in many contexts (Bandura 1986). Self-efficacy is a central concept in social cognitive theory and is thought to facilitate actions and behaviours such as decision making. Levels of self-efficacy in the population reported in this chapter were within the expected range of sample means (Scholz et al 2002).

There were no differences in levels of self-efficacy between the 2004 and 2005 cohorts. This was anticipated as general perceived self-efficacy refers to a global confidence in one's coping ability over a wide range of potentially difficult and taxing contexts and is stable characteristic (Schwarzer 1994). Similarly, there was no significant difference in self-efficacy between entry gates into nursing or midwifery programmes. This may reflect the stable nature of generalised self-efficacy or may be an artifact of the categorical nature of the entry gate variables used in this study.

Lowest self-efficacy levels were seen in the learning disability programme and the highest in the mental health programme, although differences between programmes did not reach statistical significance. A moderate positive correlation was found between self-efficacy and self-report competence. This was expected and is consistent with social cognitive theory in which Bandura (1977) argues that self-efficacy is a determinant of performance. This effect is independent of underlying skill levels.

One sub-group of particular interest were divorced and separated students. This group were more likely to be undertaking the mental health programme. Students on this programme also had significantly higher levels of self-efficacy. This group was the oldest and one would expect there to be a greater chance that older students would be divorced and separated compared with the younger groups. Applicants for this programme may

consider mental health nursing after they had been through some form of life crisis. Those who come through such situations positively and then go on to undertake a career as nurses or midwives may be a self-selecting group who have the higher levels of self-efficacy needed to cope with adverse life events.

Competency progression in nursing and midwifery can be viewed as being either on a continuum or as a series of steps. The continuum model sees competency development as a progressive accretion of skill development. On the other hand, the step model is a series of upward steps, followed by plateaus in which competency is stable. Irrespective of model, the 'competence escalator' is a fundamental principle in nursing and midwifery education. This progression was not supported in this data as there was no significant difference in self-report competency between cohorts or between entry gates. We do not know if the two cohorts were working to the same baseline. It may be the case that the 2005 cohort erroneously overestimated their competence, whilst the 2004 cohort were more realistic. A second explanation may be that nursing and midwifery skills are developed and practiced to the extent needed in pre-registration nurse education in the second year of training. Alternatively, a third explanation may be that nursing and midwifery students have an inflated sense of their competence and that self-reports and actual competences are poorly correlated. The problem of relying on self-reports is well established in much research but may have been overlooked in nursing and midwifery. Clinton et al (2005) found no significant difference in self-reported competency, between nursing and midwifery graduates and diplomates using the full version of the NCQ.

Differences in self-report competency between HEIs were evident although this was not statistically significant. The range of self-report competence scores was larger between HEIs and programmes than between access route and cohort. Self-competency showed a range of nearly three points between highest and lowest scoring HEI. There is a possibility that this analysis of difference reflected a type 2 error, as this element of the overall analysis was underpowered. The suggestion is that the most important determinants in self-report competency are the institutions in which students study and the programme they decide to study rather than access route. HEI can be seen as a proxy measure of

curriculum, in which the curriculum and the context in which it is delivered are inextricably interwoven. Dewey (1938) describes the collateral learning of attitudes and values that occurs in educational institutions and which are more important in lifelong learning than is the formal and codified curriculum. Kelly (1999) in his discussion of the 'hidden curriculum' takes this idea further when he argues that much student learning occurs as a consequence of the ways in which the work of the university or college is planned and organised and which remain implicit in this formal planning. These processes are often not even recognised or understood by educators or curriculum designers.

A moderate positive correlation was observed between self-efficacy and self-report competence. This association was anticipated, although was smaller than may have been expected given the key role of self-efficacy in social cognitive theory. One of the main contributors to variations in support offered to students was the institution in which students were studying. There were correlations between sources of support, which suggests that sources of support have a multi-collinear relationship, but that this is sufficiently weak to support the value of conceptualising support as originating from separate and distinct sources. Students rated family and friends and peer support as being highest quality. There were significant differences between HEI in student rating of support. There have been significant resources invested in training supervisors and mentors and in student support mechanisms in HEIs, but these investments seem to be less valued by the students than informal peer and family networks. Such informal support mechanisms are seldom factored into curriculum design and given the fact that they come at no direct financial cost this finding may represent a valuable yet under-resourced asset. There needs to be a debate about effectiveness and cost-effectiveness and the continued financial investment in current student support systems.

Limitations in this survey include the use of self-reports of competence. Self-reports may overestimate competence and may not reflect more objective measures of competence. Although by survey standards a response rate of 39% is satisfactory, non-responders may have reported different self-efficacy and self-report competence scores. No corrections were made to accommodate the multiple hypotheses tests conducted.

4.4 Conclusions

Self-report competency is relatively high in pre-registration education, although it may suggest that students might have an unrealistically high perception of their competence. These high scores suggest that, as far as students' perceptions of their competence is concerned, Fitness For Practice curricula are meeting their stated objectives. No significant differences in programmes or access routes were evident.

The quality of student support differed between HEIs. Support from family and friends was given the highest mean score, whilst support from the university/college was given the lowest score. The level of mentor support and peer support was also significantly different between institutions. All of this suggests that, in general, institutions could mobilise higher levels of support. This failure to provide support includes failure to mobilise the peer group to provide support. Peer and family and friend support systems may be currently under-utilised and should be considered as core issues in future curriculum design.

This survey reports evidence that diminished self-efficacy is not a problem in pre-registration nurse and midwife education, even for those coming through less favoured access routes, and is particularly strong for divorced/separated students. Self-efficacy scores were similar to that seen in other populations and were stable across cohorts and access routes. Importantly, there were no differences in self-efficacy between different access routes into the profession. Students who were divorced/separated had the highest self-efficacy, but this might have been because of compounding with the variable of age. Social cognitive theory was supported in the finding of a moderate correlation between self-efficacy and self-reported competence.

4.5 Observed Competency Findings

In the postal survey competency or more accurately self-report competency was measured using the SNCQ. In this second phase, the measurement of competency is extended by using Objective Structured Competency Examinations (OSCE) and a paper-and-pencil test to measure competency in the core skills of communication, hand decontamination and numeracy. These methods in combination with methods used in other phases of the

evaluation were specifically developed to provide methodological triangulation and thereby improve the robustness and rigour of the evaluation.

4.6 Findings

Performance in the decontamination (hand washing) OSCE showed a mode of 10, range 5 to 10 with a mean score of 8.99 (SD 1.23). There were 45.5% (n = 45) of students who scored 10 out of 10. Performance in the communication OSCE shows a mode of 29, range 14 to 33 with a mean score of 26.75 (SD 4.43). Performance in the numeracy test shows a mode of 14, range 3 to 23 with a mean score of 12.71 (SD 4.87).

Differences in competency between the 2004 and 2005 cohorts and between the two access routes (five standard grades+/wider access), were examined by Mann-Whitney U-Tests. There were no significant differences between cohorts on the communication (U = 1154.5, p = 0.692), decontamination (U = 1195.0, p = 0.910) and numeracy scores (U = 1100.5, p = 0.440). There were no significant differences between entry gates on the communication (U = 871.5, p = 0.521) and decontamination OSCEs (U = 1022.0, p = 0.784). Students with five standard grades + had a mean numeracy score of 13.55 (SD 4.70) and those entering through wider access a mean of 10.72 (SD 4.55). Wider access students' scores on the numeracy test were significantly lower (U = 692.0, p = 0.006).

The association between performance on the OSCEs and paper and pencil test was examined by Spearman's Test. There were no significant correlations between students' performance on the three tests (Table 4.5). There were no significant associations between self-report competency and any of the test scores.

Table 4.5 Associations between Competency, Self-Report Competency, Self-Efficacy and Support

	1	2	3	4	5	6
1.Numeracy	1.00					
2.Communication	.001	1.00				
3.Decontamination	.080	.032	1.00			
4.Self-report competency	-.125	-.139	.035	1.00		
5.Self-efficacy	.239*	.095	.112	.190	1.00	
6.Support	-.026	-.009	.245*	.244*	.145	1.00

*Significant at $p \leq 0.05$

Current thinking around education places considerable emphasis on the value of student support. Only hand decontamination ($r = 0.145$, $p = 0.02$) and self-report competency ($r = .244$, $p \leq 0.05$) were associated with the 'all source support' variable.

Social cognitive theory hypothesises that self-efficacy would be associated with performance. Self-efficacy showed a moderate significant association with the numeracy test ($r = 0.239$, $p = 0.02$).

4.7 Discussion

Data reported here suggest that the Fitness For Practice report (UKCC1999) recommendation for curricula to foster skills learning in students at an early point of the course appears to have been met, insofar as communication and hand decontamination skills are concerned. It needs to be recognised that there was no robust evidence produced

in the Fitness For Practice report (UKCC 1999) that students did not have necessary skills in any event. Students have skill levels that vary across the small range of skills tested in this study. High skill levels were seen in hand decontamination, with the mode score being 10 out of a maximum 10. Given the current emphasis within the NHS placed on minimising hospital acquired infection (National Patient Safety Agency 2004), this is a satisfactory achievement for curriculum designers. Students also demonstrated good communication skills. Again, this is a core skill that lends support to the claim that pre-registration curricula are producing students who are competent in important core skills. There was no difference between cohorts, which suggests these skills levels are developed in or before the second year and are then maintained over the subsequent year.

Numeracy skills of students were relatively lower than was seen in the two OSCEs. Low numeracy skills are consistent with other studies (Jukes & Gilchrist 2006). There was no significant difference between cohorts, which suggests that poor numeracy skills are: 1) not detected by educators; 2) detected but no educational intervention provided; or 3) detected and interventions offered but these were not effective in improving numeracy skills. The early identification of numeracy problems (Wright 2005) and the implementation of effective education support are recommended (Sandwell & Carson 2005). Duffin (2005) comments on the relatively recent proposal to make numeracy tests compulsory for prospective students. Whether students are screened before entry to pre-registration may be less important than offering all students numeracy interventions.

There were no significant associations between students' performance on the three skills tests. Therefore, even within the small and relatively limited range of skills tested in this study, performance on one skill may have little bearing on the performance of other skills. This highlights the complexity of assessing competency for both nursing and midwifery and exposes the difficulties of designing an assessment portfolio to measure the vast array of nursing and midwifery skills over a three-year programme (Watson et al 2002a). It does lend support to the need to test in a controlled, standardised and verifiable manner a range of core skills within a national framework. This does not have to be a national curriculum,

but an agreement to share best practice in assessing a set of core competencies in a valid and reliable manner.

The concept of transfer, much overlooked in nursing and midwifery curricula, has a fundamental role when considering the extent to which performance in one skill or skills developed in one setting transfer to another skill or another setting. Lauder et al (1999) have suggested transfer may be more complex and problematic than often assumed. Lave (1988) has articulated a widely held view that there is overwhelming evidence that transfer frequently does not occur. The distinction between low road and high road transfer may illuminate this issue. Skills within skills clusters that are sufficiently similar allow low road transfer. In this form of transfer relatively well-practised skills almost in an automatic fashion transfer from one skill to another (Schunk 2004). High road transfer is required for transfer between very different skills clusters as these require decontextualisation and abstract knowledge. This necessitates much time for exploration and the investment of mental effort (Salomon & Perkins 1988). The difficulties in transferring skills may have a major importance for the ongoing debates in UK around generalist curricula and would suggest that generalist curricula may be more likely to lead to underskilling relative to the type of branch specialisation in the current curriculum structure. It would be interesting to explore if there were significant associations between skills within the same KSF core clusters. This finding does through lend support to the value of conceptualising skills as a series of competencies rather than a single overarching notion of competency.

There was no significant association between self-reported competency and competency as measured by OSCEs and paper-and-pencil test. This raises questions about what is actually being measured in self-reports of competency. A caveat here is that the self-report measure used in this study measures a much wider range of competencies than those measured in the OSCEs and this may explain the lack of association. These findings do not support the connection between self-assessment and competence proposed by Fereday and Muir-Cochrane (2006). If self-reports are informed and reflective judgements by students about their ability to perform, on the basis of these findings their judgements have little basis in their actual level of competence. Whatever the explanation, questions must be

raised about the use of measures of competency based on self-reports and the value of self-reports within the statutory registration frameworks operated in many countries. The self-report competency scale (SNCQ) (Watson et al 2002a) used in this study does not appear to measure the standard of performance in a given skill and thus may be better conceptualised as a measure of the frequency that students are provided with a variety of learning opportunities.

Social cognitive theory proposes that students' self-perception of their performance will have an important, if not the most important, role in predicting the level of self-efficacy. Sewell and St George (1999) believe that the relationship between self-efficacy and expectations about educational outcomes is causal and that outcomes depend largely on an individual's judgements on how they will perform. This proposition found little support in this study, as the only significant association was found in hand decontamination. Even that association was not of the magnitude that would be predicted by social cognitive theory. Curriculum designers should be cautious when suggesting that self-efficacy is the vehicle through which all competence-linked change is to be effected. Theoretically informed education for competence should be formulated from a much wider base than social cognitive theory. Self-efficacy and drug calculations were positively associated, a finding that was anticipated given the well-established link between self-efficacy and maths performance (Pajares & Kranzler 1995).

4.8 Limitations

Students participating in this element were significantly different from the larger sample from which they were drawn. Participating students were older and had higher self-reported competence scores. The self-selecting nature of the sample suggests caution in extrapolating the study findings. We do not, however, believe this had a major influence on the findings given the finding that self-report competence was not associated with competency. The tests used in this pragmatic survey were core skills but tested only a small dimension of nursing and midwifery practice and did not test more complex skills such as decision making or patient education. Future analysis needs to employ more complex statistical techniques such as structural equation modelling to test the relationship

between competence, self-efficacy and self-report competency with more congruence between self-report competencies that are measured in the SNCQ and the competencies tested here

4.9 Conclusions

Fitness For Practice curricula appear to be meeting the original aspiration to introduce skill development at early stages in the programmes. This has implications for future proposed pre-registration nurse and midwifery education curriculum design as the essential message is that Fitness For Practice curricula are preparing students who are competent in core general skills even at a very early stage of their programme. Performance in the hand washing and the communication OSCE indicates that participating students were competent, but by contrast the same cannot be said for numeracy skills.

Both standard entry gate and wider access students had poor numeracy skills and this supports the need for the identification and remediation of numeracy skills as a matter of course. Hand decontamination was somewhat associated with support. Self-reported competency was not associated with any skill score and this has major implications for nursing and midwifery curricula that emphasise the importance of self-assessment.

There were no significant correlations between performances on the three tests. Students entering through wider access had significantly lower scores on drug calculation. There were no significant differences between cohorts, suggesting these skills were established early and remained stable over the subsequent year.

The assumptions emerging from the NMC in much of the debate on future models for pre-registration curricula are that there are major problems in pre-registration education that need radical solutions. There is simply no robust evidence in support of that position. This is not to argue for the status quo, but the lack of evidence for the underskilling of students simply exposes those who appear to be arguing for overhaul in pre-registration preparation for what appears to be promoting change for change's sake.

Hand decontamination was associated with the 'all support' variable. Support from peers and support from family appear to be important, possibly more so than is currently thought to be the case. Self-efficacy was significantly associated with numeracy only. This suggests that self-efficacy theory needs to be developed to explain different relationships with self-report competency and observed competency.

Chapter 5 Fitness for Practice

5.1 Introduction

It is suggested from the literature that there has been much debate regarding the concept of fitness for practice. As indicated by Meerabeau (2001), it is clear that unless there is a universally understood benchmark which students must reach by qualification, then opinions will continue to vary on whether or not the expectations of the various stakeholders are met.

Given that the project is about the quality of the preparation of students of nursing and midwifery, it seems wise to begin with their perspective. In a focus group at a department with a four-year programme, students had a clear view of the need for safety, and regularly mentioned ethical concepts like confidentiality. When asked what they understood by the term fitness for practice it was stated:

I think how we (have) a good understanding of what's safe practice and what's not safe and the confidentiality. (Student nurse Case study I)

At a different site students recognised the need to be 'standing on their own two feet':

Well, I'd assume that it meant how prepared you were to go into the real world without the support of the Mentors and the University.
(Student nurse Case study D)

At Case Study F, a respondent built on this:

That you've been taught enough that you can go into your job even though you still have to learn, learn more on the job when you first start that you've been taught enough that your going to be safe and competent to carry out what you can and ask if you don't know. (Student nurse Case study F)

A student respondent summed up what is the essence of the situation as follows:

Probably making sure that you don't do anything that you are not sure of is the biggest thing because I have seen myself almost going away to do something and I am like no I don't think so (laugh) being aware that you have to say "no", not just "yes" to people all the time
Knowing your own limitations and not feeling pressurised to do something you are not sure off, just because the ward is busy or something like that, you have to work where you are comfortable. (Student nurse Case study K)

Remarks like this were common in discussions with students, but came through as an abiding message from all stakeholders.

Many stakeholders interviewed had quite clear views of what fitness for practice meant to them:

There is a difference between what I understand it to mean and what I would like it to mean. What I understand it to mean is that we have a group of people, i.e. students who are competent to practice as per the NMC competencies for registration for entry on to the register. What I would like it to mean is that they go beyond that and they are actually, when they come in to a ward or a department as a newly qualified practitioner that they have a confidence about their level of skill. (Director of Nursing Case study E)

This senior manager's view is indicative of others. She is realistic in appreciating that the wide-ranging programmes of study are only a starting point, but she hopes that newly qualified practitioners would have self-confidence in their skills. From a university perspective, a lecturer at case study A emphasises that midwifery practitioners might need to envisage working outside the NHS, perhaps even in independent practice, and should be mindful of the special responsibilities in relation to safety that this confers:

I know there was lots of government documents they talk about fitness for practice in terms of employability with the NHS and also where there are areas where we have had midwifery students who immediately on registration have gone out to practice as independent midwives, I think we have to be careful about placing everything within the context of the NHS because I think it will change in the future as well, so it is really about being able to provide an effective care which actually meets the needs of women, babies, families, and within the context of the safety as well. (Midwife academic Case study A)

Another midwifery academic quite clearly linked it to care and safety:

Fitness for practice to me means safe to deliver the normal care that a midwife would be expected to deliver at the point of registration but also the emphasis of safety and the NMC outcomes for the actual Midwifery programme itself. So it's safety of the student participating in the clients care within the bounds that they are allowed to professionally. (Midwife academic Case study B)

As one might expect, clinicians had a pragmatic view of their requirements. Whilst recognising that the newly qualified practitioner is at the start of their new career and a

lifelong learning process, this charge nurse does expect safe practice in 'core nursing skills':

I think the title says it all really. I would expect a newly qualified staff-nurse coming to me having a certain core skills and be fit for the job. It is obviously the start of their learning curve as a qualified nurse but that they have a basic understanding of the issues under-pinning, safe and secure, handling medicines, communication, basic clinical knowledge in the specialty appointed to but they have safe practice in all core nursing skills. (Senior charge nurse Case study A)

Another senior charge nurse also links it to competence and having the theoretical knowledge:

For me Fitness For Practice is someone who has the competence and the ability, the underlying theoretical knowledge to be able to carry out practice clinically, to be able to deliver it. So they have an understanding of the theory to put it into practice. (Senior charge nurse Case study A)

Students also appeared to have some consensus with regards to its meaning, especially around the issue that it is a beginning, with more to learn:

You feel you are able to do the job, to do the tasks that are in front of you, to recognise your own limitations as well as doing something that you feel out with your own capabilities. I think something like that comes to that as well, so you kind of know what you can do but also you are aware of what you can't, what you need extra help with, extra training or experience. (Student nurse Case study K)

That you've been taught enough that you can go into your job even though you still have to learn, learn more on the job when you first start, that you've been taught enough that you're going to be safe and competent to carry out what you can and ask if you don't know. (Student nurse Case study F)

One student however saw it as very much as standing on her own yet within a team:

Well, I'd assume that it meant how prepared you were to go into the real world without the support of the mentors and the University...how prepared you were to stand alone, well not alone, but within a team as a starter. (Student nurse Case study D)

It is clear from these perceptions that fitness to practice is also about 'being able to do the job 'as a newly qualified staff nurse with the required knowledge and skills. It is interesting to note that there was no focus on the issue of conduct of the students in relation to being

fit to practice, however, as Sellman (2007) points out, being of good character is an essential prerequisite to being considered eligible for registration.

5.2 Skills, Knowledge and Attitudes Essential to Fitness for Practice

As seen above, it was evident that there were certain skills and certain knowledge thought necessary to be fit for practice and this was explored further with the participants.

5.2.1 Clinical Skills

There is little doubt that the presence or lack of clinical skills has been the major area of concern and debate by both the public and the profession since the wholesale move of nursing and midwifery into higher education. Over ten years ago MacLeod-Clark et al (1996) noted that whilst managers and other stakeholders might wish for the newly qualified Project 2000 nurses to 'hit the ground running', such an expectation may be unrealistic and that the nurses themselves felt that they soon made up any deficits in practice (MacLeod-Clark et al 1996). Shortly afterwards, of 72 nurse managers interviewed in a DH-funded evaluation of the UK Project 2000 diplomates' fitness for purpose, some claimed that many still required to be taught 'basic nursing skills which we would have thought they would have been trained in' (Carlisle et al 1999). There was also evidence in the UKCC (1999) Fitness for Practice report, that even though there had been a significant improvement in the overall pre-registration education of nurses and midwives that there were still concerns regarding the development of practical skills.

In an English context, Gerrish (2000) replicated a qualitative study she had undertaken in 1985 with 'traditionally trained' RGN students by interviewing a fresh cohort of newly qualified Project 2000 nurses. In the 1980s she had found informants felt that they had acquired the essential clinical skills to enable them to function as qualified nurses, though not being 'proficient in all aspects of technical care' (p476). By contrast, she argues, in 1998 newly qualified nurses varied in the extent to which they felt they possessed appropriate clinical skills. For example, some felt that they had deficits in administering medicines, giving injections and caring for patients requiring intravenous fluids. In the present study some students felt similarly, but took some responsibility for this:

I don't feel like I've pushed myself enough. I think you have to push yourself to do, to keep yourself updated with, you know, doing medications or injections and things like that. I've not done enough injections; I've hardly ever catheterized anybody. (Student nurse Case study H)

At Case study E, charge nurses in a focus group confirmed that this did happen:

(In) our experience some semester 6 students (Year 3) are deficient in basic skills like catheterisation and wound care.

Sometimes, however, rules got in the way of students learning what practitioners believe are important skills. A community mentor makes the point:

I think it just depends, like in district they're not allowed to give any vaccinations so, and I kind of disputed that, because if you're with a student and it's flu vac time, that's great experience of them giving the injection. You're still there, with their adrenalin, you're with them, they are just physically doing the technique. But they are not allowed that. (Community mentor Case study G)

In common with MacLeod-Clark et al (1996), and Gerrish (2000) participants interviewed felt that these deficits were soon made up in practice, a view firmly expressed by students in Gray and Smith's longitudinal study of student nurse socialisation in Scotland (Gray & Smith 1999). In the words of one of her students:

Well it annoys me intensely when I hear it being said...Practical skills you can pick up. It's not that we don't know how to do things. We are maybe a bit slower. I think it's a handy little peg to hang their hang-ups about the course on...I have great hopes that once you're in a job, in an area for more than four weeks that your motor skills and things like that will speed up and you will pick up the skills pertinent to that area. (Karen, in Gray and Smith 1999, p 644).

As seen in chapter 7, there is confidence from the service managers that both nursing and midwifery students have the required skills at the point of registration, but they are possibly not the same skills as were required in practice ten or more years ago. What is essential to take into consideration is that the practice of nursing and midwifery has significantly changed in terms of the kind of clinical skill that the students can be exposed to and in which they subsequently learn to become proficient.

When asked to identify what skills they might need to become fit for practice, midwifery students not only identified basic observation skills, but also those involving a more holistic approach to caring for a woman:

You need the same basic observation skills, temperature, pulse, blood pressure, abdominal palpations. competent with the general examinations, but you also have to know what care is needed and how to look after a woman who is low risk , and how to look after a woman who is high risk, how to interpret CTGs, how to perform amniotomies, how to get the doctor involved if you think the CTG is not giving a good trace, if there's deceleration, you have to get the doctor in and how to assist the doctors as well in terms of epidurals, blood sampling, blood gas analysis. (Student midwife Case study B)

5.2.2 'Other Clinical Skills'

It is easy to assume that 'clinical skills' are those such as injections, routine observations and drug administration because a good deal of emphasis on these appears in the literature. Respondents were keen to point out, however, that a modern view of clinical or core skills should be much broader than this:

In general, I think communication, I feel that that is a huge one because a lot of midwifery care is the 'with women' stuff and at the negative end a lot of the complaints that we have, or where we don't do things well, its about lack of communication or unclear communication or somebody just not realising the 'why' for something. So I think a large part of being fit for practice is to be able to appreciate that other people need explanation of what your doing and for you to be able to read the person and actually say, 'excuse me one minute we're going to be interrupted'. (Midwifery manager Case study A)

As might be imagined, in mental health care communication was felt to be a vital skill, but that practitioners might in future need to be prepared at a more advanced level than now:

(They will have to have) a range of transferable skills; those core skills, communication, the ability to work effectively and to forward think and to adapt to changing environments. I think these are all crucial skills that we would hope all of our students would have at a certain level as well as that it goes back to what we were saying earlier, there is a definite range ... of what we would call psychotherapeutic skills that we would say are absolutely essential for mental health nurses who hope to operate within the next five to ten years. (Senior manager Case study F)

Communication skills were also seen as important by others:

I think what's really important is their communication skills, so, I think they should be calm, confident communicators and I think a lot of the other things then can fall in within that. (Director of Nursing Case study B)

When students were asked to give an example that illustrated their fitness to practice, they offered a variety of examples:

I had a patient who was passing away and relative came in and we got to discussing the fact that the patient was very religious, so we managed to include the pastor, the minister for the hospital, the family said the patient would really like that. I like being able to empathise. (Student nurse Case study F)

Just when you go on placement, that you're doing it as well as the trained nurses and you can see how you're getting more confident and then when you see what you're doing is affecting work then it gives you more confidence(asked to give an example).....Well in an acute admission ward, my last placement, there was a lady and she was very anxious and just being able to go in and talk with her and listen to what she was saying and help her like deal with her anxiety ... (Student nurse Case study F)

It is suggested that more practitioners will need to consider working in the community on qualification. A recent study in England shows a consistent increase since 1995 in the proportion of registered nurses (RNs) working in the community (as compared with health visitors and district nurses) (Drennan et al 2007). This study shows that whilst numbers of the latter have remained consistent at approximately 10,000, the number of RNs has risen in a decade from approximately 12,000 to over 22,000. In Scotland the development and support for newly qualified nurse in the community is a priority with over 60 posts recently being created and Flying Start NHS being utilised as an integral part of their career development. The proposed integration of community nursing roles in Scotland will no doubt maximise a role for relatively newly qualified RNs in the future (SEHD 2006b).

In particular, nursing homes will feature more prominently in the work plans of the newly qualified. Mindful of this, a Scottish study (Runciman et al 2002) examined the views of nurse managers in nursing home settings with regards to newly qualified Project 2000 nurses. They noted that new staff proved to be quick learners with 'fresh ideas' and a 'questioning, enthusiastic and sometimes challenging approach'. On the other hand, they felt that newly qualified staff lacked 'organisational' and 'business' skills, deficits not yet

systematically remedied by the present programme, but that might usefully be developed in the Flying Start NHS or similar post-registration programmes. Whilst Fitness For Practice programmes supersede Project 2000, it is clear that many of the strengths and some of the limitations of nurses prepared for this role in higher education remain extant (Runciman et al 2002).

5.2.3 More 'Advanced' Skills

In the context of the move toward community care, and with increased use of planned approaches to care at the end of life such as the Gold Standards Framework and the Liverpool Care Pathway (Hockley 2006) and other developments outlined in the Scotland Partnerships for Palliative Care report (Scotland Partnerships for Palliative Care 2007), relevant communication and practical skills in this field will need to be learnt:

In an ideal world, they would come with the appropriate skills and apart from what we would term the basic skills in terms of management etc., the other things that we looked for the students to have or to be trained in is palliative care is to deal with syringe drivers.These are skills that they don't normally come with but they can be taught, to have knowledge of Community. (Community health service manager Case study G)

Although syringe drivers for palliation at the end of life were once a specialised area of care, some managers felt that, given the greatly increased complexity, turnover and dependency of hospital patients, they would ideally want the newly qualified nurse to have been trained at university in many such skills beyond those traditionally in the curriculum. In midwifery it was commonplace to expect venepuncture but some acute care managers go further:

I would like to see them coming out with the skills that are deemed as core clinical skills, which then they are trained, they have the theory behind it, practical skills, and have OSCEs (objective structured clinical examination) signed off as competent, before they actually hit the clinical areas, by the time they reach the clinical areas they can do supervise practice and ensure that we are happy with their standard of competence clinically with our own areas get them signed off and that would include venepuncture, cannulation, 12 lead ECG recording there is such a large number of core clinical skills, because what we deal with is staff coming in to the clinical area who were trained to be registered nurses but see it as an enhanced role when in fact in my mind it is a core clinical skill... (Health care manager Case study K)

Clearly such needs will place new demands on nursing and midwifery education as they evolve to meet them. The transfer of skills from one occupation to another has long been a strategy for the professionalisation (Freidson 1970). Such developments need to be carefully planned as part of an overall workforce plan, ensuring that fundamental care is not neglected.

A charge nurse from Case study 'A' summed this up:

(We need to) recognise the importance of basic nursing care, that personal care is really important for registered staff as well because there are some, but not all, but some would appear to feel that you know, are too posh to wash, that is core to that, communication skills, medication and awareness of their own limitations and the importance of adhering to policy. (Charge nurse Case study A)

5.2.4 Knowledge

There may have been even more rapid developments in the knowledge base that student nurses need than any other area of their development. Although all have to meet certain minimum requirements to be validated, in keeping with both NMC competencies and QAA Benchmark Statements, university departments vary considerably in their specific curriculum content, and in the emphasis placed on different subjects. Whilst a detailed analysis of subjects and their integration, or otherwise was beyond the scope of this project, we asked respondents to identify what they thought to be essential knowledge for practice. Here a case study 'A' midwife gives her view:

The knowledge I would expect them to have, I, I mean, I focus a lot myself on the physiological knowledge, so, an understanding of how a uterus works and understanding the changes the woman's body experiences during pregnancy and post-natally. I would also expect them to have an understanding of certain emergency procedures that you can anticipate within pregnancy and labour. (Midwife Case study A)

Building on the 'textbook knowledge', she continued:

Yeah, in an ideal world the real knowledge of birth is normal, this is for Midwifery. If you think, you know, it's different from nursing in that respect. A real confidence if that's the case and a knowledge about the physiological process and skills just to, basically a Midwife is someone who is 'with woman', that's just to be with her, to be a normal human being and giving care. (Midwife Case study A)

Another midwife made it clear that women's needs during pregnancy were becoming more complex and that midwifery had to rise to this challenge:

I think on the other-hand as well from a strategic point of view if you look at all the documents that are coming from the Scottish Executive, each one of them, you have to put a picture of a pregnant woman with a learning disability for instance and how we have to be able to care for her and provide her with all the appropriate needs when she is pregnant as well as when she is not pregnant so I think there is more and more pressure on trained staff and on girls in training to have quite a broad handle on child protection, ...learning disability, mental health. (Midwifery manager Case study E)

It is acknowledged that an increased focus on mental health and illness has already been addressed by midwives in Scotland, to the extent that there is now a Perinatal Mental Health Curricular Framework (NES 2006). This offers a set of learning outcomes for curriculum developers which focus on mental health and illness competencies in five dimensions of practice: underpinning knowledge, prevention, detection, management and professional, ethical and legal practice.

A Charge nurse (Case study A) was reluctant to specify knowledge, but had clear expectations of the level:

I wouldn't expect them to be completely prepared for what is coming in front of them. I often say to students, particularly final year students, you know, the university academic and the clinical preparation that they receive during their training does not adequately prepare them for what is going to happen once they receive their registration. Once they receive their registration that is when their education really begins because then they have the accountability, they have the responsibility, you know, it is just that the university training is a preparation for what is to come forward.

Although many students felt that their knowledge level was very good, there remained some concern that theory and practice do not always come together:

A lot of the theory doesn't even relate to the stuff you do on placement, you know like, maybe in the first year, you know, you've your core skills and that, your blood pressures and that, but like in relation to third year...most of, the majority of the stuff doesn't relate to what you learn on placements, so placemen's like a separate entity. You know, you are learning everything you need to know as much when you're on placement, and you're learning aspects of nursing while your doing theory but you're not really learning what you need know when you're on placement, you learn it when you're on placement, kinda thing.....that's what I find. (Student nurse Case study H).

Despite this, most acknowledged that the theory and the practice do fall into place by the end of the programme. The students in particular, noted that there was also knowledge required of physiology and other subjects such as evidence based practice:

Anatomy, physiology and everything that you do in first year gives you a real good grounding for the kind of human disease and understanding. I think the way that they focus on how the healthy body works and then they go into all those diseases, I think that really helps you to understand what should be like, results and things out on the ward. (Student nurse Case study J)

...knowing the rationale and know why you do a procedure in such a way, the best evidence to know why you do it in such a way. (Student nurse Case study K)

It is interesting to note that even in the previous evaluation of pre-registration programmes for nursing and midwifery in Scotland (May et al 1997), students were already beginning to use research knowledge and saw the value of evidence based practice. Although there were other examples of different subjects the students main responses focused on the skills and related knowledge discussed above.

5.2.5 Attitudes and Values

Considerable attention has been paid to the vocation, or character that nurses and midwives should possess. Indeed, this 'virtues' or 'good character' approach might seem outdated, of importance when Florence Nightingale was trying to improve the public image of nursing and create a respectable profession for upper and middle class ladies, but possibly not relevant today. Interestingly, it persists at the point of registration in current NMC requirements. Sellman (2007) reminds us that in the UK, for nurses to be eligible to register, educators have the responsibility of signing to certify that:

... to the best of my knowledge... [I] believe the above named student's health and character are sufficiently good to enable safe and effective practice and that there is an intention to comply with the Code of professional conduct: NMC standards for conduct, performance and ethics (Sellman 2007).

We undertook to establish respondents' views of key qualities, attitudes and values that seem appropriate for newly qualified nurses in the context of fitness for practice:

I think that nurses should have the person at the heart; they have to be able to put themselves into the shoes of the service user. I am trained nurse, my background is (the) disability field and a person centred way of working was my ethos as far as I can remember, and I think putting forward that value base should be the heart of any nurse at the end of the three year training.

And to be frank it should be there before they come in, it is not something that you can grow within three years, it is something that is the core ... that we are all equal in life and if deviation from health occurs in whatever shape or form we have to be able to put that person in the centre. (Senior health service manager Case study C)

Perhaps on the premise that good nurses are born not made, this manager clearly believes that the relevant qualities ought to be present at recruitment, let alone on qualification.

Another clearly has strong feelings that not all have the same person-centred approach:

In terms of behaviour and attitude I have a concern in nursing generally and I don't just mean in this area, what I want to see is somebody who is 'I can do and how can I help you', and I want people to have that attitude of 'I am here to help you, how can I do that, how can I make you better, how can I make you feel better, what can I do to help you?', and I think if we don't have people who have that attitude then I would really like to give them their P45 quite frankly, I don't want them..... (Director of Nursing Case study E)

A helpful attitude extended to collegiality or team-working too:

I suppose attitude as well comes into that element of sort of teamwork and things like that too and that they recognise their place in their team that they have a good ethic towards punctuality. You know what it's like, punctuality and working hard whilst they are there, and being punctual from breaks and that kind of thing; notice of being off sick, notice of return to duty that kind of stuff, flexibility around shift patterns and that kind of thing as well is attitude. (Manager Case study J)

The other thing is about having a really fundamental core set of values of about putting the patient first and all of the values that are in the Code of Conduct and that are in the delivering of care, enabling health and rights, relationships and the kind of citizenship, the valuing of people, valuing diversity, all of these things I think are pretty core. (Director of Nursing Case study B)

It would appear that the issue of 'conduct' as outlined by Moore (2005) in relation to 'fitness to practice' does have resonance in these comments.

A recent study in England compared student nurses in terms of how prepared they would be to change shifts at short notice (Johnson et al 2007). In 1983, 54% of students agreed that this would be expected, whilst in 2005 the proportion happy to change shifts at short notice had dropped to 22.5%, more than a 30% change. It must be remembered that in the 1980s a majority of students were single, lived in nurses' homes and had an average age of 22 years. As a result of improved access and assertive recruitment policies, their modern equivalent averages age 29 and many have domestic and other responsibilities, which make changing shifts much less practical. To presume that they are generally less altruistic may not be fair, rather, their priorities have become, quite reasonably, more focused on their family.

In summary, there was a feeling that, with concentration on 'skills', an element of 'person-centredness' and 'vocation' may be lost. On the other hand, much may have been gained by the recruitment of more experienced people, many of whom have worked in the care sector previously.

5.3 Unfitness for Practice

In asking the questions concerning 'fitness to practice', it was apparent that issues were raised related to the opposite, that is 'unfitness to practice'. On the evidence of this study, a great deal of effort is expended in supporting students who need it. Respondents generally suggested that help was available to those students who seemed unable to make progress in their practice placements:

We get in touch with the PEF (Practice Education Facilitator) and I've not had student, but there have been students in the ward that other people have been mentoring and they've got in touch with the Practice Education Facilitator and she's come along and talked to them and talked to both the staff, the ward manager and both the, the staff, the ward manager and the student and then goal and action plans have been set up for them to work towards and it seems to work because you know the person did get through their placement and did pass the placements so. (Mentor Case study B)

Building on her own PhD study of how students' competence in practice is assessed, Duffy has recently published helpful guidance to mentors and others in the assessment role (Duffy & Hardicre 2007a, 2007b). Duffy had in previous work (Duffy 2003, 2006) reported

that mentors found referring (failing) students to be very challenging and sometimes felt it not to be their responsibility:

Whose responsibility is it? It's not mine. I've got enough in the way of work problems without taking on the university's problem students. I would contact the university and say, look I've got a problem please sort it out and yes pass the buck, whatever you want, but at the end of the day they're your students, your responsibility. You're the ones that should deal with them (Duffy 2006).

The research team asked respondents about these issues, and certainly a reluctance to confront students' failure to make progress remains to some degree, but the innovation of PEFs has helped in terms of supporting their decisions:

They don't like to fail the students, however, I must stress that mentors have failed students more since we have come to the post due to, they realised that it is not their responsibility not only for themselves but also for the patient and for the student you know it is unfair to let them carry on if they are not achieving, it is also unfair to other students to carry on when they are not achieving and not being able to. (PEF Case study I)

In some cases, despite a package of support from mentors, managers, PEFs and university staff, failure of the student is the right thing to pursue. Often the issue is more to do with attitude than skills:

I have had to fail, and it wasn't just my decision to fail it was taken by a group of people because obviously personalities were clashing. It was like, you treat all the students that come in the very same and you give everyone of them the same amount of time but if you feel that after constant back-up support, education and stuff that the attitudes are not there, the willingness to learn is not there and you just think this is just a placement and a placement only and we have failed. I think I have actually been involved in failing two students who were subsequently asked to leave nursing, but the annoying thing about it was that and we felt very guilty about it because we were doing this in module five and you just think what has happened all the way down the line and that is the reason you never make that decision on your own because you think 'well that is module five, what has been going on? (Nurse manager Case study E)

This manager clearly feels that the problem should have been dealt with, and if necessary the student 'failed' much earlier. Complex programme structure, relatively short placements and a lack of time to deal with the issues are aspects of this reluctance to fail students, but Duffy (2006) continues to point out that mentors, whose responsibility this increasingly is,

often lack knowledge, experience and support when dealing with students who fail to progress.

The universities in the study all had mechanisms, for example formal university committees, such as '*a panel for fitness for practice but has a separate function to the assessment board*' (Senior academic Case study B) for dealing with students who had failed their practice assessments.

5.4 Competence and Fitness To Practice

Given the increased responsibility for assessment faced by today's mentors, their view is crucial in relation to the students' competency to practice as a qualified nurse. In the following example, a mentor highlights the potential for subjectivity in the assessment process, and that a key responsibility is to be able to articulate clear criteria for deciding on competence:

If you fail somebody and a colleague was to come to you and say 'why have you failed that student?' and you couldn't say outcomes why you have failed them it is only your opinion. We have had incidents where different members of staff have had different opinions about students and where a student failed where other members of staff wouldn't failed her she just lacked confidence which is a big thing for that student.

Some people have very high expectations for the students where as I feel that I have less high expectations because I know they lack confidence but I think that a lot of qualified nurses expect too much - far too much. (Mentor Case study E)

A hospital midwife identifies this in a more focused way when she suggests that, in the climate of greater awareness of accountability, students need time to adapt to the qualified role, and that varied experience in the first year post-qualification is a good idea:

I would say they have got the knowledge, they have acquired the skills so they just need to build on that and become confident in order to provide that service and that just comes with time. We used have this fast-track thing that you went through in your first year after you qualified which provided four months in labour suite, four months in community and four months in a ward and that really made you sit up and take notice because you would go out to community and you would be running a midwife led clinic within a year of being qualified, and that is not suitable for everybody. I think they do have the knowledge, I think they do have the skills, I think

it is the confidence, I do think there is just a need to let them go out and give them the opportunity. (Midwife Case study A)

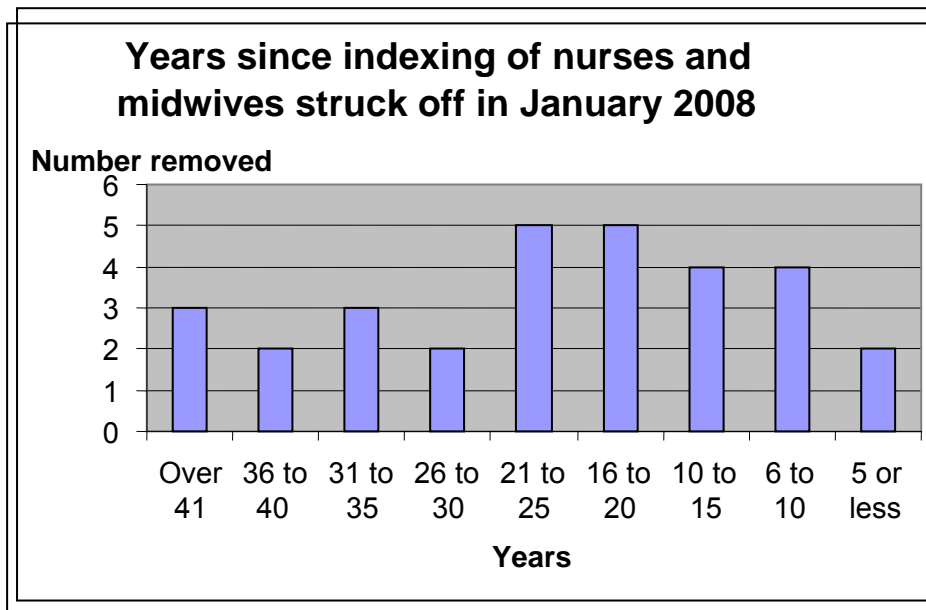
Extract from the NMC Code of Professional Conduct:

6.2 To practise competently, you must possess the knowledge, skills and abilities required for lawful, safe and effective practice without direct supervision. You must acknowledge the limits of your professional competence and only undertake practice and accept responsibilities for those activities in which you are competent. (NMC 2004c)

As is clear from the above quotation the NMC insist on such awareness of limitations to competence and we believe that the present study demonstrates that all stakeholders find this awareness to be strong. The NMC's own data in Fitness to Practice reports give little indication of the length of time those considered by the Professional Conduct and other regulatory committees have been qualified. However, the monthly updates on removals and suspensions from the register clearly show that such removals are rare indeed among those with recent registration dates. As an illustration that recency of qualification is no predictor of 'unfitness to practice', of 30 individuals struck off the register in January 2008, only one has an index date implying 2005 entry and only five in the last five years (NMC 2008)¹. Indeed, those indexed with the NMC, more than six and less than 25 years ago seem to have the highest risk of transgression. The NMC's own most recent Fitness to Practice Annual Report (NMC 2005) does not break data down by recency of qualification, but a more systematic study of all such variables might prove rewarding in the context of the Fitness to Practice debate (Figure 5.1).

¹ Index dates are not an absolute indicator of date of entry to the profession. Some nurses come from overseas and have later dates and we acknowledge that a future study comparing these numbers against the total profile of registrants would be instructive.

Figure 5.1 NMC Data Showing Years Since Indexing of Registrants Later Removed from the Register as Unfit to Practice



Despite the occasional moral panics of politicians and executives of professional organisations, the majority of new registrants are fit for practice. A student reminds us however, that the journey for them involves encouraging feedback and support, not only from practitioners but also from those that they are learning to care for:

They are always quite good at saying,... even if you don't feel confident doing it, you know, if you have confidence issues it is always nice to have somebody tell you that's fine, that's what you suppose to do and I suppose also getting a feedback from the patients as well, to see if they feel you have done an adequate job, do they feel better because of it or something, you know...something like that and you have been treating them, that's good, it helps you see that it actually does work. (Student nurse Case study K)

5.5 Summary of Fitness for Practice Issues

Fitness for practice inevitably means different things to different stakeholders in the health care environment. The increasing diversity of practice settings for the qualified, from the more traditional wards to intensive care units, private nursing homes, community health care settings and even independent practice for midwives leads naturally to different expectations. Some health service managers would of course find it cost efficient and practical for the newly qualified to have a wide range of human, technical and

organisational skills, but most are realistic enough to accept that a three or even four-year pre-registration programme can only be a beginning, creating a mind-set in which new skills and abilities can be quickly learned in new settings under the supervision of the more experienced.

Above and beyond the obvious 'core' skills such as hygiene, wound care, and observations, there is some concern that preparation and ability in specific skills of drug administration and, for example, urinary catheterisation, might be more widely or equitably taught to beginning practitioners. Demand for what until recently were medical skills, such as electrocardiography, venepuncture and venous cannulation is variable.

With all the recent changes in nursing and midwifery and health care generally and the additional requirements of the NMC, the curriculum could be considered as being overcrowded, so the competing demands of the more theoretical subjects underpinning nursing and midwifery knowledge with the increasing demands for more competency-based practice may not easily be resolved. Respondents however, focused more on the need to maintain a high degree of respect for persons at the core of nursing and midwifery preparation, a view which betrayed some slight concern that fundamental care is being relegated to health care support workers with the qualified becoming potentially more remote from direct care.

Chapter 6 Preparation for Practice

6.1 Introduction

This chapter focuses mainly on the preparation of student nurses and midwives for their practice experience, but given the nature of the focus group questions and participant responses, there was clearly an accepted integration of their narratives of preparation in the university with their actual experience in practice.

Pre-registration nursing and midwifery students' preparation for practice is governed by the requirements of the NMC standards of proficiency for pre-registration nursing and midwifery education (NMC 2004a, 2004b). The nursing and midwifery standards encompass the domains of: professional and ethical practice; care delivery; care management; and personal and professional development; and those of midwifery: effective midwifery practice; professional and ethical practice; developing the individual midwife and others; and achieving quality care through evaluation and research.

These standards, along with specific outcomes to achieve them, are the foundation upon which HEIs develop and deliver their individualised academic programmes in partnership with the NHS and other organisations across the UK. Following a consultation and report regarding 'fitness to practice at the point of registration' (Ball 2006) stemming from concerns regarding the 'perceived variation in competencies or fitness to practice, at the point of registration' (NMC 2005), the NMC also agreed to establish essential skills clusters to complement those already in place for both nursing and midwifery, and these were published in 2007. It was proposed that these were mandatory for all new students commencing programmes from September 2008 (NMC 2007b, 2007c).

Alongside the concerns regarding clinical practice skills and competencies, which resulted in the above outcomes, was the possibility that some of the clinical skills taught in practice could realistically be taught and assessed through simulated practice learning. The findings of a pilot project published in December 2007 (NMC 2007d) resulted in the NMC publishing its arrangements for 'using simulated practice learning as an adjunct to the safe and

effective application of clinical skills in direct care in the practice setting' (NMC 2007e). The main outcome which will have significance as to how student nurses are prepared for their future role as qualified nurses is that HEIs, if they so choose will be able to use:

... up to a maximum of 300 hours of the 2,300 hours practice component to provide clinical training within a simulated practice learning environment in support of providing direct care in the practice setting.

This will have relevance to all UK HEIs and their practice partners, in particular in relation to what facilities will need to be provided for the simulated learning, who delivers and manages this and also how clinical placements are organised during their three or four-year programmes. This is a significant development and acknowledgement of the importance and value of simulated learning. A study by NES (2002b) had already evaluated the provision and use of simulated teaching, learning and assessment of clinical skills in all 11 of its HEI providers. The findings indicated that there was variation in the provision of facilities and their quality and use, but that there was support for their further development and use in the student learning experience. It was clear that there was varied multi-disciplinary use of the provision at that time. One of the main recommendations, however, was the need to develop a multidisciplinary, clinical skills education strategy at a national level that would provide direction, enhance coordination and foster collaboration across Scotland but that this should take account of the 'diversity of educational institutions and health service educational provision'.

6.2 Preparation for Practice: Clinical Skills

Given the NMC (NMC 2007e) recommendations regarding simulated practice learning, it had been fortuitous that responses had been sought as to the student experience of this in Scotland. It was evident from the case study data that there was variation in the provision for simulated practice learning provided in all HEIs and the facilities to deliver this. This ranged from access to skills equipment to fully managed and resourced simulated learning laboratories. It was also clear that great emphasis and preparation was placed on the development of skills by the universities prior to the students undertaking clinical practice experience. Although overall, this emphasis was placed mainly in the first year, there was also an indication that other skills such as management were focused on in Years 3 and 4.

Skills involving moving and handling, hand washing and resuscitation were to be found throughout the programmes. It was noted in the focus group discussion at two case study sites that clinical skills was either part of a module which included communication skills and professional terminology or was a module in its own right and given academic credits. When asked about the importance of this, and especially relevant given the new NMC guidance on simulated learning (NMC 2007e), it was thought that:

I think we certainly try and keep them safe and try and make it as less a shock when they go out in clinical practice because we still get a lot of students who don't have any health care experience at all and its quite difficult when you've got nothing to build on sometimes to prepare them for the real world and I think we do that to the best of our ability but I think there will still be some students that do have this practice shock going out there and feel unprepared but I don't know how we'll get over that. (Midwifery academic Case study F)

In the main the skills learnt were what the nursing and midwifery students called 'the basic skills':

I think they have done quite a bit you know before our first placement in our first year, we were taught the basic skills, blood pressure, temperature, the basic things and we have done quite a bit about communication, non-verbal, verbal ... although it was only a few weeks into the course, we were given the basics. (Student nurse Case study K)

This was also affirmed by many of lecturers, but the skills were often termed 'core skills'.

Asked to define this one lecturer stated that they were:

Washing a patient, feeding a patient, being able to dress a patient, talk to a patient, communicate and one of the basic skills, one of the most important, eh, you know all of those sorts of things like nutrition, elimination ... like the activities of living, really the skills that we use that very much as a core in the activities of living model but also it's about being able to talk to the patient and communicate with the patient because it doesn't matter what you put on top of that, all the fancy skills you want, if the foundations aren't secure then the whole thing is going to topple down. (Academic Case study H)

Some students also gained not only an ability to undertake the skill itself, but also how to manage the context and gain an insider understanding of what a patient might feel:

Things like feeding each other, I mean I didn't have to do it in a class, but feeding each other, washing each other, some of the guys even let us shave them before we did the placement and that I thought they were really useful kind of things, putting yourself in the patient's position, what did it feel like to be fed and not to have the

control of the cup getting tilted or whatever so that was quite valid, I mean my placements have mainly been in elderly wards and it is mainly basic nursing skills that I have been using up until now, I found it very good grounding and also the reasons for communication and looking at things, reading stuff on how does it feel like to be fed, you know do you like butter on your roll thick or thin, I think, you know if you are feeding someone if you don't think to say to them, do you like marmalade on, you know how you would feel like, I think, that's our thing their always kind of say how you would feel if that was you, if it was your mum or your dad, you know try and put yourself in a patient's position as well. (Student nurse Case study K).

Midwifery students had similar experiences, although one group noted the variation in linking theory with their clinical placement experience:

Basic observation skills, like blood pressure, pulse and temperature, how to do palpation, but when you went out in practice for the first placement, you really only had, the only theory you had other than those basic skills was about midwifery, which didn't prepare you for practice at all and it was when you come back that you then got the mechanisms of labour and physiology of first, second and third stage of labour, and that is the kind of thing you want to have before you go out to a labour ward. (Student midwife Case study B)

This group of student midwives were generally of the opinion that it was not possible to prepare them for every placement, although one stated:

I think that is a big problem, is knowing where each person is going on the next placement, and how the university can prepare you for each stage, 'cause you're only in, I started first year, seven weeks then placement so everybody's going to a different placement, a different area, different knowledge, and.... (Student midwife Case study B).

Preparation for practice was, therefore, not only about learning clinical skills to help them manage their placement experience, but also about how theoretical knowledge supported this. If this was taught before going out to placement then it appeared to be a bonus but as the following student explains the theory eventually links up with practice:

When you actually go out on practice and see like the signs and symptoms of bipolar or schizophrenia or whatever, you think oh right, that's what that means, it all clicks into place when you actually see itwell in first year we didn't have any of the mental health stuff so going on my first year placements it was still good though it was good experience but then I'd come into second year and we'd get classes and it was interesting because then you could actually say oh right that makes sense now things you didn't quite understand at the time, you could look back and think, oh right, so that's what was happening there so that was interesting and then you go

into your second year placements with your second year knowledge and its different ... (Student nurse Case study F).

The subject of teaching clinical skills raised several issues, in particular who taught them in the university setting? In the main this appeared to be university staff, but in some of the HEIs there was input from clinical practitioners. It was also noted that skills were also examined through OSCEs in both nursing and midwifery programmes:

...we examine their skills in second year using an OSCE format where they have to carry out an interview, an admission interview and construct a care plan from that admission interview (Academic Case study F).

There has been significant development, and indeed a growing evidence base (Anderson & Stickley 2002, Haigh 2007, Joy & Nickless 2007, McCallum 2007, Mole & McLafferty 2004, Scholes et al 2004), in relation to the development of simulated learning of clinical skills, as well as those related to communication and interpersonal skills, in pre-registration education across both professions, and this can be seen in the recent NMC acceptance of its value in the assessment of students' competence to practice (NMC 2007e).

6.2.1 Drug Administration and Venepuncture

Two particular clinical skills that arose in the focus group discussions, both in terms of preparation and actual experience in clinical practice, were the administration of medication (drug administration) and to a lesser degree, venepuncture skills. Again, there was a varied response across the HEIs and across the two professions of nursing and midwifery with regards to when students were taught the theoretical knowledge and the subsequent timing of their ability to practice this skill. For example, it appeared that all the midwifery students were taught in Year 1 and could undertake to practice in the placement following this instruction for both skills:

We teach them it (venepuncture) in year 1they do it in theory and they do it in practice. Once they complete the course and they are competent to undertake the venepuncture, it's part and parcel of the course' (Midwifery academic Case study B) (This was in a simulated learning environment with actual models)

...our students are given administrations of medicines in year 1 and the basic administrations in semester 1 and in the semester 2 they are taught intramuscular injections and venepuncture Because they are going out to do that but we check

with them that they are actually doing it correctly ... (Midwifery lecturer Case study F)

There was however some confusion regarding this amongst student nurses and midwives at Case study F regarding venepuncture, as illustrated in the exchange from a focus group:

Interviewer: do you take bloods?

Student A: No

Student B: no, that's a specialist thing after

Student C: We take blood ... we take blood as the norm

Interviewer: you take blood?

Student C (Midwifery): yes You got it once that was it you got the theory and then once you've got the theory you have to do it whenever you are out on placement

Student D: Down at the hospital for pre-reg nurses there's a course you can go on but once you've done the theory bit you need to have taken six lots of blood within a fortnight of having the theory...

Student A: yes that's right

Interviewer: So you can do that as part of your course?

Student B: No it's once you've qualified

Student: I did it as an NA, venepuncture I did it as a nursing assistant.

It appeared that, in further exploring the nature of clinical skills they had learnt before going out to practice placement, it became clear that this was also a skill undertaken in practice:

Interview Extract

Interviewer: Did you learn any clinical skills before going out in practice?

Student; we practised then in the class. We did blood pressures, aseptic technique, injections, venepuncture

Student: You learn the basics of the skills and then practice them out in placement

Student: the staff's always there if you want to go back and practice in your own time

Student: You always go for extra practice sessions

Interviewer: Do you practice on people?

Student: Either with each other or dummies, depends on what you're doing. When we're doing dressings and stuff we just practice on each other but when it's like bloods we had a fake arm. (Students Case study C)

It appeared that in Case study C, this task was part of a wider simulated learning skills programme. In Case study I the student's assessment of practice book revealed that both undertaking venepuncture (as obtaining a specimen) and undertaking IV cannulation (IV infusions and fluid balance) were expected outcomes of the fourth year of their programme.

In relation to drug administration at linking of theory and practice there was again a variation:

The students are allowed to give, to do drug rounds with their mentors, under the auspices of their mentor; we recommend that they don't do it in year 1 and they do in Year 2 and 3. However I am very comfortable with the fact that some of the mentors do go through what they need and do actually allow them to do it in year 1 as long as that mentor has done work with the student and has judged that student to be at the point that she can cope with that information as well as everything else that's fine – we actually do drugs throughout year 1 - we actually start them from the point of them coming into the programme, they get Authentic World. (Midwife academic Case study B)

The 'Authentic World' programme is a computerised programme that tests medicine dosage calculation skills on an ongoing and accumulative basis. It can also alert the lecturers to the students who may need additional support. It is important to note however that while Authentic World will undoubtedly support drug administration competence, its singular focus is upon medication-related calculation (a specific sub-set of both medicine administration and broader calculation). It can be seen from the respondents' comments that these issues are often conflated.

The students, who were not allowed to practice until Year 2, had varied responses to the issue of whether they should or should not be doing so earlier. This student clearly indicating that her confidence had not been able to be built up prior to an immediate expectation when she become a Year 2 student:

But then come second year I was petrified of doing drug administration because I went through a whole year of you cant do drug administration , you can't look, you're even scared to look at the drug let alone pick it up and give it to someone and the all of a sudden what year are you, oh this is my first day of second year, drug administrations let's go and you're kind of like I don't how anyone else felt , but I know I felt I was absolutely scared ...and even now its like constantly drilled into you. I don't know if that's like number one mistakes that everyone makes but it feels like this massive big step from first year to second year, but even in third year I'm still kind like Ok I'll check it one more time do you know that way and its like paracetamol or something and you, I know you should always question yourself but its getting to the point of like obsessive, compulsive checking. (Student nurse Case study F)

One student in her fourth year of study, when asked if she felt confident to administer drugs once qualified, linked her abilities to herself as an individual:

Um...I think it really depends on the type of person you are, personally speaking I've always been quite forward about saying I need to do drug rounds and such like, so I feel pretty confident in that aspect of care but I think if you are not as pro-active in that aspect that mentors are possibly more inclined to say...oh go and do so and so and I'll do the drugs, so there is that aspect (Student nurse Case study J)

For mentors, however, there were a variety of issues related to students undertaking drug administration, many stemming from the time they had to work alongside students to enable them to learn about drug administration. The following mentor believed that leaving 'doing drugs' until later in their programme was better for the student:

I don't think initially drug administration, yah , an awareness of it maybe with a single patient with your mentor but I think there are a lot of students who come in and want to do drug, drug, drug and for one you don't have time, it is inappropriate but I am talking about the first years because they can't possibly be expected to remember all that you are going to teach them and all about these drugs and they are not safe actually do it and there are so many new things I think it is a shame trying to put that on them and make them think that it is something they have to worry about. (Mentor Case study A)

In relation to midwifery students, one mentor stated that *'I think midwifery is different because there are a lot less drugs'* (Midwifery mentor Case study A). This was affirmed by a senior midwife in the NHS when asked about the competence and confidence of newly qualified midwives (Case study E):

we haven't had many problems actually, again as midwives are covered to give out a lot of drugs ourselves as pregnancy is normal so all we are giving out is paracetamol and things, it gets more complicated if there is a medical condition and then the majority of the time, people, if they are not sure of anything they will come and ask and get a double check but we haven't had any great problems though because again the drugs we use are not complicated.

The academic's viewpoint in the universities where drug administration was taught in Year 1, but not practised until Year 2 in clinical areas, was related to qualified nurses' drug errors:

It think it is absolutely valid and I think we can justify it completely because of the amount of drug errors that take place in clinical practice from qualified staff in the health board areas that we are dealing with and the amount of drug errors that

involve students who are theoretically supervised by a registered staff nurse and that's why we feel that year 2 is time enough. (Academic Case study F)

She continued to explain, however, that:

When you speak to them when they've gone into practice and they're actually involved in the administration for the first time, that is when they realise the responsibility and why we've done it the way we have and they appreciate it then, they certainly appreciate it in Year 3. We've just finished working with the year 3's that are about to go into practice again for the final stretch if you like and its all repeated they get another four hours in the labs to practice anything that they want to polish up on and for us to identify any areas that we're concerned about. (Academic Case study F- a member of the clinical skills teaching team)

There were many other examples of good practice in relation to drug administration skills, including in one midwifery programme (Case study D), where there was a 'strand of pharmacology that threads its way through the programme' which linked the theory of drugs given to skills such as intramuscular and subcutaneous injections, with drug calculation. This approach of integration of pharmacology into the curricula has also been advocated by others (Banning 2003, Lim & Honey 2006, Page & McKinney 2007), in particular as part of preventing medication errors (Page & McKinney 2007).

Although most of the students and practice staff talked about drugs in acute hospital areas, it was evident that even in the community they had some opportunity to practice drug administration:

Well, we have, ehm, we have cases where nurses are prompting the patients to take oral medication, they have monthly to three monthly injections, and we have syringe drivers, we are about to change over to pumps...they also have antibiotic injections. (and In terms of confidence and competence – asked by the interviewer)..... I think it depends, what the nurses tend to do is that they will ascertain what their experience has been so far and I think sometimes it varies and that is dependent on the mentor within the hospital or the placement that they come from and ehm, if they have had experience then they will be watched under supervision how they do it that first time and if they have not had the experience then the nurse will show them and then take them out and make sure they get the experience. (NHS manager community Case study G)

Linked to the issue of drug administration were numeracy skills and drug calculation, with the different HEIs adopting various ways of supporting and testing students. This varied

from formative assessment to using developed online computer packages. These issues have clearly been a concern in many other UK universities (Banning 2003, Jukes & Gilchrist 2006, Wright 2005, 2007, 2008), as well as internationally in countries such as Australia (Elliott & Joyce 2004, Glaister 2007) and Finland (Grandell-Niemi et al 2006).

In the Scottish HEIs in this study, there appeared to be a significant amount of work being undertaken in ensuring that student nurses and midwives were numerate. This was, however, left to each HEI to determine the most appropriate method of preparing students for practice in this key standard for entry to the Register (NMC 2004a, 2004b). In some of the universities it was reported that there was an issue regarding widening participation and the kind of skills base that students were entering with, but that support was given to those who needed it:

I think you have got to remember that the type of student that we are getting in to this university; we're very, very socially inclusive and a lot of our students are coming with basic requirements so those students will require quite a lot of help and assistance so its got be an environment where they can put their hand up and say I don't really know what I am doing here and work with them through workshops to bring them to a certain level. (Senior manager pre-registration programmes Case study F)

In a review of the literature related to mathematical calculation skills for nurses, Sabin (2001) advocated an integrated approach between knowledge and application in practice and made recommendations as to how this could be undertaken, including:

early identification of individual numeracy skills, probably at interview; remedial programmes should be supported by university-wide facilitation; University –based teaching and learning should employ a range of approaches including workbooks, computer aided learning (CAL), study groups and lectures experiential learning in clinical practice should be supported by linking specific clinical activities with calculation learning and practice; assessment of 'competence' in calculation, if the term must be used, needs to examine mathematical knowledge acquisition, and its application in practice, rather than a narrow assessment of clinical performance (Sabin 2001)

It is important to note that building on the work already being undertaken in the pre-registration programmes within the universities is a Scotland-wide initiative led by NES and Learning Connections (part of the Community Regeneration Division at Communities

Scotland), who are supporting several small projects focusing on numeracy and numerical competency in healthcare staff across Scotland. This support of funding is part of a wider strategy for supporting numeracy skills in the Scottish healthcare workforce (NES 2007b). Part of this strategy is also to develop an online assessment tool based on Authentic World (www.authenticworld.co.uk).

6.3 Preparation for Practice: Working in a Diverse and Multicultural Community

Scotland's community profile has undergone a major change since the 2001 Census. The needs of increased number of minority ethnic groups are reflected in government policies, such as those for health (National Resource Centre for Ethnic Minority Health) and housing (Communities Scotland). The Strategy for Nursing and Midwifery in Scotland: Caring for Health (SEHD 2001) also recognised, implicitly rather than explicitly, the need for nursing and midwifery to embrace this changing population in its future actions. The new Capability Framework for Community Health Nursing (NES 2007c) indicates in Domain: Knowledge for Practice 2 that the community health nurse 'is critically aware of all aspects of social, cultural and environmental diversity, and its impact on health, illness and disease'.

Given that, in relation to student nurses and midwives, the NMC standards for both nursing and midwifery education (NMC 2004a, 2004b) include proficiency in 'providing care which demonstrates sensitivity to the diversity of patients and clients' (nursing) and 'practice in a way which respects, promotes and supports individual's rights, interest, preferences, beliefs and cultures' (midwifery), it was evident that students were given exposure to the issues rather than any competency development. Their actual practice experience of meeting people from different cultural backgrounds appeared to be influenced by where they were placed and this varied across the two professions. It also has to be noted that, although this had been one of the key questions to students regarding the kind of preparation they had regarding diverse and multicultural communities, the actual data, when fully analysed, were not as prominent as other data sets. There were, however, indicators that preparation for meeting the needs of diverse communities appears to be focused on very broad principles only and that it may well be integrated throughout curricula delivery, in situations such as PBL, rather than specific modular content as the following comments indicate:

In one class last year, communication, we learnt about, we were broken up into small groups, we had to do different religions, and do the presentation on those and we have had lectures telling us about transcultural things like that The translator services We had a health visitor who works with ethnic minorities – Bangladeshi ...and she was saying, you know, from her point of view, she gives them some of her experience when she walks in the house and the man does all the speaking but she is talking about this pregnant lady, you know does everything you say goes through the husband actually... (Student nurse Case study K)

They have a module on social and ethical implications of child bearing but in it's widest context and the assessment for that requires them to go out and look at a specific area and look at statistics from that area and interpret it with relation to child bearing women, so, you know, they are going out and looking at age difference, cultural difference, religious difference and all those sorts of things and looking at services that are provided for them in areas and ask , as part of the assessment, well how does this impact on the provision of midwifery care and is there a way in which this could be enhanced. (Academic Case study D)

In clinical practice, students' commented on the nature of the communities in which they were based or that information was available to them should they need it if caring for patients from different cultures:

Well up here I think it is different, because although there is a variety, it is not as varied as say the mainland... everybody knows everybody.... (when asked further if they had any training)...We've had lectures on it...when you're on placement, like if there's a patient, your mentor will explain to you , like washing and things like that, and different beliefsIf you're not open to things like that, then you shouldn't be doing nursing, if you're not non judgemental then you're in the wrong job. (Student nurse Case study C)

Its theory based, very basic – they just kind of skim the surface. Also because of our location we don't have a lot of ethnic minorities in our area so it is quite difficult even with the theory that you get. (Student nurse Case study F)

I've found in practice as well that its very much what's the word...information is available on the ward about their like their eating habits or dying wishes. (Student nurse Case study F)

I didn't realise until I went on community, there are so many different languages, we've got Polish, Albanian, Nigerian... (Student midwife Case study B)

It is interesting to note that a report, published in 2004 by the National Resource Centre for Ethnic Minority Health in Scotland (Pankaj 2004), examined the current status of cultural competency training in NHS Scotland. It indicated that the driving force for training had been the Race Equality Schemes and Fair for All (NHS Health Scotland 2006), which provide the legal and moral cases for training in the area of cultural competency. The recommendations from the report included 'developing innovative ways to generate awareness of diversity through informal programmes could be used to create motivation, understanding of the need and importance of learning'. It may be that given the policy drivers and health needs of a changing population that further work is now needed to examine the impact on pre-registration education nursing and midwifery curricula in Scotland. This view that it is important to learn about culture, was also held by the authors of a paper that focused on the experience of a group of lecturers from Scotland in a European initiative (Wimpenny et al 2005). They concluded, from their shared experience with European teachers and students, that 'learning about culture is central to the development of modern and relevant practice in a multicultural world'.

6.4 Preparation For Practice: Working with Other Professionals

The need for inter-professional working and learning is widely articulated (CUILU 2006, DH 2007, Pollard et al 2005), as are the potential benefits (UKCC 2001), but until 2006 there had not been a clear statement in relation to its promotion in Scotland. The Education and Training policy statement for NHS Scotland (NHS HDL 2006) stated that it would, however, explore the inter-professional learning at pre-registration stages with education providers and examine the study project at Robert Gordon University as part of overarching plan in meeting the objectives of 'Delivering for Health'. This project has evolved from an initial one-year pilot project funded by NES in 2003 and had subsequently obtained funding from the Scottish Government for a further three years. It has yet to publish its findings, but it is apparent that the outcome of the future investment in inter-professional education in Scotland will be influenced by its recommendations.

In terms of this project however, this level of commitment and investment was not evident in the students' experience across the pre-registration nursing and midwifery programmes

in Scotland. There were varied experiences reported, from having different professions coming to talk to students in the classroom to actual experience on placements of meeting and working alongside other professions:

I think we have had nearly every member of the team come in and talk to us or when you're out on practice you get time to go and spend with them, spend a day with different members of the team. (Student nurse Case study C)

Much more than they used to... In the new programme we changed the focus and it's a seven week block now and it's a community based placement and yes their mentor might be a health visitor, or it might be the district nurse or it might be a practice nurse....They go out with Community Psychiatric nurse, they go out with physios, you know they go out and visit the voluntary sector work. You know they do amazing things sometimes some of them in terms of what they go out and visit and that's broadened it much more. (Senior academic Case study K)

In terms of actual delivery within the university, again responses varied, but clearly demonstrated evidence that there was a commitment to the principle of inter-professional learning, both from academics and service managers:

We have our second years doing two weeks with medical students, third year medical students... the nursing students get quite a lot of sessions on multidisciplinary team working because I'm kind of familiar with they get in first and second year and some of the third year, so I think it's very good theoretically but the actual practical aspects may not be as much, but certainly you know I think there is a lot of emphasis on the importance of it. (Academic Case study A)

I think it is certainly a good idea, I don't know if we have done a lot really within the organisation but it something that we are looking to develop, obviously there are many common things, certainly one of the things that comes to mind is prenatal mental health and that involves not only midwives but obviously community nurses, psychiatrists etc so we are in the state of developing that one and looking at what we have got in our undergraduate programme, what we would need to do and develop, so possibly with the view of doing that in a programme which could be applicable to more than ourselves as midwives and nurses. (Midwife academic Case study C)

There was also a commitment from both service managers and academics, regarding the focus being on the need for inter-professional learning to take place in the reality of practice, not just on shared learning in the classroom or confines of the university:

In reality all health care professionals work together but not all the professionals work with everybody else, so I think we just have to be careful in terms of how we might look at inter-professional education. I think it has to be realistic – first of all I do

believe that there is probably a set of core issues that all professionals could learn together particularly could learn together practically. I'm not convinced that setting up a system where you bring all the medics and all the physios and all the nurses together works. I think what's much more important is the we provide opportunities for those students to explore quite clear issues, we need to be much more explicit about what it is that we want them to explore if we are going to do that but I think the key really is to provide educational activities that students engage in when they are out in practice because of they are out in practice and they are working with other students then that's I think a learning environment for interprofessional education that we haven't really tapped in to yet –we're very much been of the mind set that let's get all these people together and bring them together and put them in a room together and say right lets explore this or explore that...(Senior academic manager Case study B)

I think that inter-professional learning in the clinical area means, go with the physio for a day and that is not inter-professional learning, I actually think there are core things we can learn together, medics, physios, OT's all the AHPs and nurses, midwives, there are core things we can do together, I firmly believe that I don't think we are anywhere near it, there is limited interprofessional learning in our area and for student nurses that really is limited to let's have a day with so and so, whatever they may be. Some teams work together interprofessionally but they get that experience by default not because we have said 'that is how a team works...work with that team' It would be good to see for instance the COPD team, good to see the student going with them and for that team to have learning outcomes and for the physio to have part of that learning outcome to work with the student. (Senior nurse Case study E)

It is evident from this study that there are many individual developments taking place across all the case study sites in Scotland and that students are working alongside different professional groups when in practice. Obviously, the variety of the placements cannot guarantee learning alongside other professional groups in practice in the same way that inter-professional learning cannot be guaranteed in the universities. Evidence of the developments and the commitment to at least make some progress on this key element of professional practice and care delivery could be seen at the event which took place in 2007, celebrating ten successful years of nursing and midwifery programmes in higher education in Scotland (<http://openscotland.gov.uk/publications/2007/07/251104340/0>). Examples showcased included a simulated learning project at the University of Dundee; a multidisciplinary community practice placement pilot project at the University of Paisley and an inter-professional education initiative for first year students at Robert Gordon University.

This event also highlighted many other innovative initiatives focusing on the preparation of nursing and midwifery students for practice.

6.5 Preparation For Practice: Service User and Carer Involvement in the Curriculum

The involvement of service users and carers in curriculum development is still a developing area in many areas of healthcare education. In mental health however, this has been significant (Hanson & Mitchell 2001, Rush & Barker 2006, Lathleen et al 2006, Speers 2008), and good practice in this was acknowledged in the publication of the Review of Mental Health Nursing in Scotland (SEHD 2006a). One example of a 'positive practice example' was that of the mental health team at Napier University, which has:

Worked with service users and carers to develop a strategy for user and carer involvement in their programmes. This included the appointment of a dedicated development worker. Education is being used as a means to bring about changes in practice that improve experiences and outcomes of care for service users and their families and carers. The value of meaningful service user and carer involvement is a central part of education at Napier and influences all classroom teaching and learning. The strategy has now grown to include working among informal partnerships of lecturers, service user and carer groups, practitioners and students. The 'partnership' is working on two specific projects:

- attitudes and responses to self harm workshops for student nurses
- developing service user and carer-defined proficiencies that will be used to assess students during practice.

The partnership approach is also helping all involved to continue to learn about involvement and is bringing about positive change in practice through joining forces to work together. (SEHD 2006a)

This report, however, highlighted amongst its key actions that 'we need to actively involve service users, families, carers and practitioners in the design and delivery of education programmes for mental health nurses'. In this research study, the case study sites reported a wide variation in service user involvement in the curriculum:

We have brought them... (Referring to mothers and families) into the classroom and what we particularly did was involved mothers and user groups in the development of the curriculum.... So we had representatives of the midwifery committee services ...National Childbirth Trust, their local resource centre and other sorts of people It's been very, very good, very helpful. (Midwifery academic Case study D)

They would link with the carers when they are on placements with us in the community through the Prince's carers trust, so when they are down in the centre

they could have the opportunity to meet the carers there, obviously when they are on placement with the district nurse they would be meeting carers when they are out meeting patients as well so they get involved in meeting with carers and identifying what their needs are and looking at how they can support them, what information they require.(Community lead nurse Case study C)

The comments from students, however, focused more on the actual experience of patients coming into the classroom to talk to them about their illness experiences, as the following student indicates:

I'm half way through my degree module just now and its upper cancer—so a speaker is coming in to talk to us about his experience of nursing (Student nurse Case study F)

As part of the project methodology users and carers were involved in a Scotland-wide 'Open space' event in November 2007. The majority of comments focused on the actual experiences of being cared for by nursing or midwifery students, both positive and negative:

my son in law was diagnosed with cancer and together with my daughter and granddaughter received excellent support. To my surprise my husband and I were also offered support (Carer – Open space event)

Communication between carers and individuals with profound and multiple learning disabilities and the professional is often not good (Carer – Open space event)

When invited to comment on the essential knowledge, skills and attitudes required of the students, the participants felt that knowledge of the roles of carers was important as was knowledge of the impact of illnesses on the carer; skills required were pressure area care, skin, mouth and eye care, injections, infection control procedures, listening and good verbal and written communication, attitudes were empathy, confidence, competence, recognition of limitations, compassion and being non-judgemental. In being asked to comment on how users and carers should be involved in planning and delivery of nursing and midwifery education, the participants felt on the whole that rather than being invited to share their experiences of being a carer or a patient with a long-term condition on a one- off session, that they would like to be involved from the curriculum design stage. Areas they felt they could contribute to were in relation to issues around advocacy, legal rights of carers, stress and anxiety and disease process and management of this process.

At a subsequent stakeholder event, a carer presented feedback from the focus group event and called the session 'Equal partners in caring'. Her focus was that carers have a wealth of 'insider knowledge and experience' regarding the patient/client which nurses and others need to utilise for the benefit of delivering effective care, as well as enabling them to recognise that carers themselves have needs regarding their health and well-being. This was an excellent insight and value for the project team in terms of contextualising the user-carer involvement in preparing students for practice.

6.6 Summary

This chapter has focused on four main overarching themes for the purpose of this report: drug administration and venepuncture; clinical skills; working in a diverse and multicultural community; and service user and carer involvement in the curriculum

It is suggested, however, that to prepare student nurses and midwives for practice and, therefore, 'fit for practice', encompasses significantly more than these four areas and cannot be separated out from the actual experience of the real world of practice discussed in the following chapter.

There is sufficient evidence to suggest that even though there is a need for further and ongoing development, a positive picture is emerging in relation to the preparation of student nurses and midwives across Scotland in the four theme areas discussed.

Chapter 7 Being In Practice

7.1 Introduction

Students spend 50% of their programme in the environment of the NHS, in both hospital and community settings, other health and social care organisations such as nursing homes, or non-healthcare organisations such as prisons. This experience is planned and managed in a variety of different ways according to both programme specification and placement allocation.

The literature refers to the significance of this 'being in practice' as part of the socialisation process of becoming a nurse or midwife (Melia 1987) and that students acknowledge the importance of 'fitting in' to the environment in which they are allocated as significant to their actual experience and their success in becoming a qualified nurse (May & Veitch 1998, Melia 1987).

Whilst it is apparent that student nurses, in their various branch programmes, and student midwives will be prepared for their practice experience (practice being used here to mean any placement the student is allocated to) through the same theoretical curriculum in each university, it is not the same situation with regards to their clinical curriculum. Although there are prescribed NMC standards and outcomes to be achieved, the pathway to achieving them will differ for each student. Each student will experience clinical practice in an individual way, and will be involved in varied and unique interactions with a range of patients, clients, service users, families, health and social care professionals, and, in the case of midwifery students, mothers, fathers, partners and their babies as well. This uniqueness of experiences in clinical practice is often not accounted for in determining both theoretical and clinical skill preparation and acquisition. This uniqueness is illustrated in the responses students gave to the focus group questions.

This practice experience is critical to their becoming 'fit for practice' (see chapter 4) and to becoming 'fit for purpose'; the former easier to recognise given the NMC competencies of practice, and now the essential skills clusters, to be achieved, but the latter possibly

somewhat harder to visualise given that the purpose for which they will be employed on qualifying is so varied, with a wide range of possible employment situations. Fitness for purpose had been the focus of a study by Luker et al (1996), where they used Taylor and Pearson's (1994) definition that it is:

... the effective achievement of the agreed goal between customer and supplier...a relative measure of performance not an absolute statement of achievement (Luker et al 1996).

Their study investigated 'to what degree the managers of the nursing and midwifery workforce, who are themselves almost always qualified nurses, are satisfied with the product of the new educational programme' (namely Project 2000) (Luker et al 1996). It was not the remit of our study to look at this, but, nevertheless, issues were raised regarding the purpose for which managers required the students to be 'fit for practice' in the context of various employment opportunities. Supporting learning in practice is also essential to success of students being fit to practice and there are many initiatives across Scotland being developed to ensure this. One such example is the Clinical Practice and Placement Support Unit at the University of Dundee (Burns & Paterson 2004).

This chapter focuses on the actual practice experience of student nurses and midwives and this includes some of the issues around length of placements and impact on learning, supernumerary status, the support given by university lecturers and how mentors support student learning in practice.

7.2 Clinical Placements and Student Support

During their individual programmes of study the student nurses and midwives spend a minimum of 50% of their time in a variety of placements. From the students' viewpoint the nature and length of individual placements was of importance to their progression through the programme and to meeting their learning needs:

It's good now the placements are longer...because we used to only have four to five weeks placements and by the time you got used to the place, you were leaving, so now they're longer so you get confident and you're more like a member of the team and you ask things and go off and do things and stuff. (Student nurse Case study C)

I think it would be quite good if we stayed in placements longer but still had the same number of placements, you seem to kind of get to know a ward and then you're having to move on again and you're still learning on that ward... (Student nurse Case study F)

Some students undertaking a four-year programme had less clinical experience in their final year and felt that, although the fourth year itself had enhanced their learning in the wider sense, the way in which the programme was structured meant they only had a three-month final placement in the whole 12 months:

(Re fourth Year)... I mean clinical wise it doesn't really do anything..... what fourth year does to be honest for us well it has for me certainly is you've got a bigger understanding of the NHS as a whole as a business in depth and it brings in the management side as well which I don't know that I would have been able to you know put in to practice initially ... (Student nurse Case study J)

(Re placement in fourth year)... the same 12 weeks. So we were kind of anxious about going out because you've not experienced the clinical environment unless you kind of work on the bank or something but even then you're there as an auxiliary...And you feel a bit rusty that's what I feel like... and you feel that expectations of nurses out there of fourth year students are so high that when you explain to people you feel like oh my god what if I do something stupid because I've not been on placement for a year –even the simplest of things. (Student nurse Case study J)

The number of students on placement at any one time affects the learning experience, but it was evidence from the comments that many of the mentors invested a great deal of time in ensuring that whenever possible, this was not compromised:

(Re: How many students do you have on placement?)...Significant amount, it is constant....the placements are roughly between five and eight weeks ... this is always a challenge. University always asks us if we can take more and we try and get the staff a wee break so they don't have a student with them all the time, it is relief for staff but also for the patients in the community because you are constantly asking if you can bring a student and sometimes the patients need a wee break as well from the students so when you are visiting people in their own home you have to be obviously selective at times. (Lead community nurse Case study C)

Where we work I feel we really let the students down, we work in a 27 bedded unit and just now we have eight students who are semester three and four and have got two management students who are semester six so that is ten students. Just now I have got two students and a management student shared with another nurse so trying to facilitate them all with a mentor is very difficult. We have actually devised a

programme that because there are so many students they all get to go into an assessment multi-disciplinary team meeting once and go on a ward round, half a ward round each and try and get them to do that twice. (Mentor Case study E)

In midwifery there may be less of an issue as to student numbers at any given time, but as can be seen in the following extract, there were a different set of issues to deal with:

Midwifery is varied, we have students right from the start through to management and various stages, the early semester ones they go out with the team midwives that's for normal experience, really concentrating on communication that kind of thing and then later on they come into where I am working at the moment is the maternity suite and they in there I think it is semester seven and they are actually, what they are looking for is compromised pregnancy and that's what their speciality is at that stage and they also spend time in the birthing suite and the experience is varied in terms of management...we do try and allocate at least one mentor to a student, well definitely one but do try and get an associate mentor but that is not always possible because of shift, you know, because we are expected to have the mentor on and try and get the mentor on and get at least most of the shifts on at the same time with the mentor but sometimes that is really difficult to do, so that is probably one of the biggest challenges that we find is actually making sure of that...and we do sometimes get, recently we had a complaint you know feedback from the student saying that they hardly spent time with the mentor so we tried to work on that and sometimes we do it better than others but that depends on actually what staff we have because we don't have a lot of staff in the ward. (Midwifery mentor Case study E)

It is interesting to note that in a study by Last and Fullbrook (2003) the quality of placements as well as the poor support received from some mentors and tutors, together with not being supernumerary and not being valued, were contributing factors to students leaving nursing and midwifery. They could not, however, generalise their findings to other settings due to the size of the study and local factors. They are possible indicators to be considered in HEIs with high attrition rates. Placement experiences also formed the basis of a study by Andrews et al (2005), in which it was concluded that 'in particular the absence or presence of a supportive and positive learning environment, are seminal for many students in shaping their first destination employment decisions' and also that 'experiences of one ward can impact upon the perception of the entire institution and consequently the decision to apply for work there'. One very innovative placement organised at the University of the West of Scotland (Paisley) was a partnership with a charity known as Across (Purdie et al 2008). This entailed a well-organised and executed two-week placement for six third-

year student nurses, taking seriously ill and disabled people to Lourdes and back. The reported outcome of this for the students was that the placement appeared to boost their confidence in care delivery to a group of very dependent people. Support for the students was also clearly evident and students were placed in teams where the support staff included a lead nurse who had attended a mentorship programme.

7.3 Being Supernumerary

Since the introduction of supernumerary status for students there has been much debate about its implementation in practice (Elcock et al 2007). The RCN (2005), in their guidance for mentors, quotes the NMC's definition (NMC 2004a, 2004b) of supernumerary status:

'Supernumerary status means that student shall not, as part of their programme of preparation, be employed by any person or body under a contract to provide nursing care'.

They do note, however, that even though the student is not employed as a member of staff, 'they must make a contribution to the work of the practice area to enable them to learn how to care for patients' (RCN 2005). Some of the HEIs also had comprehensive guidance for mentors on their websites, the University of Glasgow being an example. This particular document also had very clear guidance on the university policy on supernumerary status for students, reflective of the RCN's (2005), which in addition, specified issues such as hours expected to work and shift pattern considerations. The students interviewed had had various experiences related to being supernumerary as did their mentors:

Well my example is my second last placement of second year, the team leader came and asked me how many students were on the next day and I said there were four and the next morning I came in and two nursing assistants had been moved out, so we were not supernumerary that day. (Student nurse Case study F)

I think it depends at what stage as well of the learning, because if they're totally at the end there is no point in being supernumerary till the day that they qualify and then suddenly they are on their own, they have responsibility but obviously they still get support but you know to that point that they have a patient load and that's it but I think there is certainly missed opportunities because they're busy.... (Mentor Case study F)

They are supernumerary, we don't even really ,with the third years , count them in the numbers and I must say it does influence me sometimes not to get another member of staff and if there's a sick call 'cos you think that's an excellent third year student but we don't count them in the numbers. (Senior charge nurse Case study A)

It is apparent from all the data that there is a common understanding of what being supernumerary is, in terms of not being counted as a member of staff. However, as in McGowan's (2006) study, there was a view expressed that 'learning opportunities were compromised to meet service demands, that is they felt like an extra pair of hands' (McGowan 2006). When the data are compared to the student experiences of working with their mentors however, it is clear that they had many opportunities for learning and in fact, were treated as a learner and not just a 'worker'. An excellent example of how student nurses gain experience in a community setting, which demonstrates evidence of learning whilst also gaining an opportunity to experience working, was that reported by Anderson and Kiger (2007). In this small study, students in their final year were given an opportunity to visit patients and clients in the community on their own (without direct supervision) to facilitate achievement of the competencies required for entry to the nursing and midwifery register. This was undertaken under very specific protocols agreed between the university and the specific Health Boards. The outcome of this opportunity was that students 'felt they were taking on the role of the nurse, their confidence increased, they developed skills in communication and therapeutic patient relationships, they gained experience in managing care for patients and clients, their learning was enhanced and they felt valued members of the team'.

7.4 University Lecturers' Support for Learning in Practice

The role of the lecturer in clinical practice varied considerably across all the study sites, from the traditional link tutor/lecturer role, clinical supervisors to dedicated teams of practice education lecturers. It was apparent that the employment of the PEFs had also changed the interface between the university and the practice based environment, mainly the mentors. This was also reported in a study by McArthur and Burns (2007) of the first year of the introduction of PEF into NHS Tayside and Fife.

It was also evident in this study that some lecturers also worked on 'the bank' to maintain practice-related skills:

We don't link to areas anymore and these practice education lecturers link in now so basically if a personal student has a problem they go through them, they may come to you and then you have to go to the practice education lecturer who then goes to the practice education facilitator who then goes back to the practice based education lecturer who then comes back to you. That's the system; you don't go directly to the clinical area. (Academic Case study K)

We were all link teachers but as a link teacher I don't go out and teach students, it was there to link with the areas to make sure the audits were up to date and to keep contact between the areas and that was very difficult and then the School strategy completely changedbrought in practice education team and that married very nicely with the practice education facilitators in clinical practice so we have a network within the university of practice education lecturers who support clinical areas now (Academic midwife Case study K)

It was apparent in the above Case study, however, that both midwifery and nursing and midwifery lecturers were still involved in clinical practice in some way, either through pre-arranged agreements with line managers regarding maintaining their own clinical skills or through working on the nursing or midwifery bank. For others there remained the more traditional model of linking with practice:

I suppose starting from the level of supporting the students in practice we have link lecturers who are attached to particular clinical areas that students go to , they link up with the mentors in that particular area, I suppose supporting that arrangement we've got practice education facilitators who are out in the clinical area who link in with our teams here and support the mentors but alert us to any issues that we might need to deal with in practice and in terms of mentorship update and so and at that kind of level...(Academic manager Case study F)

We all have, well I can only speak for the adult team – within the adult team we all have a designated clinical area that we are link lecturer for (Adult team lecturer Case study F)...The same for mental health and we have a link mentor in each of our areas that we have agreed to see at least every three months. (Academic Case study F)

The role of lecturer or nurse teacher in practice remains an area for debate and discussion and it is clear from this study that the findings of Duffy and Watson (2001) in three nursing and midwifery departments in Scotland remain topical in relation to their changing clinical

role and the adoption of a supporter and advisor role in practice. Since the introduction of the PEF role, however, their support role to mentors has changed considerably in many areas and it will be interesting to note the outcome of the study on the role of the PEF in Scotland.

7.5 Mentorship and the Student Experience in Practice

The nature and quality of the experience that students gain in practice placements is, in this study, mainly dependent on their allocated mentors and other practitioners, and how they undertake that role in facilitating learning and supporting the students to achieve their practice competencies (NMC) and learning outcomes as prescribed by the individual university. The mentor role is central to their becoming 'fit for practice' and although there were negative experiences it was apparent that the mentors interviewed made a significant effort to support learning and learners in practice, but were often hampered by lack of time to undertake the role as they would wish or were not adequately prepared for it. It is evident that the same issues were raised in this study as in the previous one undertaken by May et al (1997) and indeed in many other studies. It is anticipated that the new National Approach to Mentor Preparation for Nurses and Midwives (NES 2007a) will address many of the issues regarding preparation for the role. It certainly includes content that will be of value to mentors in relation to both teaching and assessing students. However, it is unclear as to how the issues of protected time and whether all practitioners should be mentors (especially 'sign off' mentors) will be addressed in the near future.

7.5.1 Expectations of Mentors in Practice

There was an explicit expectation of mentors from all key stakeholders and as such a significant responsibility is placed upon them in terms of preparing the students for their future role as qualified nurses and midwives:

What I expect from mentors in practice is that they spend time with the student and assist the student to build on the confidence and begin to build their skills and be able to discuss with them what they are trying to do I am aware that it is difficult for them so I wouldn't be criticising them too much but I think they should at least be civil, sometimes the students say they are not very pleasant, I don't think that is right but then at the same time I think that some mentors are perhaps abused by taking too many on and they never get a break and they never feel like they are

developing so I think the whole thing should be reviewed. (Senior nurse academic Case study C)

I expect them to be a role model; I expect them to be showing appropriate good safe practice, it doesn't always happen.... (Academic Case study F)

(Re expectation that all registered practitioners mentor)...yes. It is an interesting one though because we have started to talk about this, myself and the PEFs in the first instance and then we raised it with our Directorate Nursing and midwifery managers group last week. We were talking about the implications of the NMC standards for mentoring and we were saying should we really be looking at a limited number of mentors rather than saying everybody who is registered is a mentor. I believe that everybody who is registered has a responsibility to support training whether it is of newly qualified nurses or nursing auxiliaries or whoever it may be. I firmly believe that they have a responsibility to train and I always translated that in my mind into...and therefore they will be mentors, I am now beginning to think that actually in some ways we don't make mentoring look good enough, we don't make it attractive, we want everybody to do it and it is just something else they have to do.. .. (Director of Nursing Case study E)

The expectations of the NMC (2006c) with regards to mentors, both in terms of their own learning and that of students, are very clear. There is a statement that recognises the primary role of practitioners is to 'provide care for patients and clients' However, they also state that 'being a mentor requires commitment' and that 'whilst giving direct care in the practice setting at least 40% of a student's time must be spent being supervised (directly or indirectly) by a mentor/practice teacher'. They then stipulate several requirements for effective mentorship.

7.5.2 Student Experience of Mentors in Practice

Students' experience of mentors varied across the institutions and even within the same institutions when in different clinical placements, as these extracts demonstrate:

Interview extract 1:

Student Nurse Case study C: Your mentor really does play a huge, huge part, if you've got a bad mentor you're not going to enjoy your placement and you're not going to get much out of itBut its also like how you get on with your mentor, because some people go in having a bad attitude, they're not going to get on with their mentors.....

Interviewer: So how do they support you in practice then...can you explore that a bit more?

Student: You have a mentor in the placement, and then every time you do stuff in the ward, they have to watch you and then they can send you off to do other things, but you can go with other members of staff but you always have to be watched. Your mentor just supports you and makes sure you are OK, and half way through, you have a talk with them, and if there's any problems, that when you bring it up, and then they write about you at the end, if you're good or not.

Interviewer: It sounds very easy?

Student: basically supervised practice, whatever you do you're with a member of staff to watch, unless they're confident that you can do something relatively simple in your own. If it's a complicated procedure, they say come and watch, or they'll get you involved in it, but it could be something as simple as making a bed or it could be something as complicated like aseptic technique. You're being supervised and trained. (Student nurse Case study C)

Sometimes you're supported better than others, it very much depends on your mentor and it also depends on how busy the ward is because, I remember going to a ward at the end of year 1 and told just go and take that woman's blood pressure, go and do a postnatal check, you know and I hadn't been on the ward before, and I knew what to do for a postnatal check, being in the community and being in labour ward, but there wasn't that kind of support from the mentor and she recognised that but it was a case that the ward was so busy and I think it was raised with the sister at the time that it was just ridiculous, we were just thrown in you know, and they're relying on you then to come back if you find something abnormal whereas in first year, probably shouldn't be doing that in a ward situation. (Student midwife Case study B)

This experience was also clearly reflected in the student's perceptions of whether the mentor was 'good' or 'bad', a view clearly expressed by students in a study by Gray and Smith (2000), who established that the former was related to being 'helpful' and the latter to being 'obstructive'.

7.5.3 Good Mentors and Bad Mentors

From a mentor's perspective, being a good mentor appears very much about commitment and support for the students, also about mutual trust:

... Good understanding of what is expected of you at the stage you are at. We've found quite a lot, they don't, not that they don't understand the competencies but they all rationalise them in different ways, so they mark them in different ways. (Student midwife Case study B)

Somebody who's got a desire to teach and educate somebody who may be able to empower students and encourage them. (Mentor Case study G)

Support, you know really to support and identify with them what they want to gain and I think a lot of the time as well is the student's perceptions of you too, sometimes they have got high expectations of you and you forget, you know, you are there to look after your patients first and foremost and sometimes they want to drain all this information out of you, do you know what I mean, and they want to suck it from you basically, and at the end of the day you are running a ward and that's kind of, that's difficult as well, but definitely support, they've got to give us as well as us giving them. (Mentor Case study I)

Aha...and gain respect for each other, a mutual respect and trust. If you trust your student, they trust you and then they are given the confidence to carry out a task they probably wouldn't have done at the start of their placement, which shows you are progressing them in their career. (Mentor Case study G)

From a student viewpoint being a good mentor involves being able to spend time with them as well as being interested in their learning:

My first year was absolutely fantastic; I've got to say I had fantastic mentors. Last year I hardly worked with my mentors actually....(Then re what is a fantastic mentor)... because they have a lot of time for you, to explain things to you, And ask you questions, test your knowledge and things like that, to see what you have learned and it was really, really good. (Student nurse Case study H)

Someone's actually interest in you and your learning. Because you get some mentors and they're really nice, lovely people but they don't really care, they haven't bothered and you're just left to it and you can go ahead and ask other people but they just aren't bothered and they to your booklet and they say right show me what to tick, where do I sign. So it's not the same, but then you'll get mentors and they're really good and they really cared and they're interested and they teach you stuff and if ever they are doing anything they'll say come on I'll show you this and their great and they really teach you. (Student nurse Case study F)

Being a bad mentor as indicated in some of the above examples appears to be the opposite and linked to lack of interest in teaching and helping the student:

Out in practice, if you are with a good mentor willing to teach you what they know you'll be finding. You'll enjoy it; you'll have a great time. If you're with a mentor who doesn't want a student or just doesn't have the interpersonal skills then you'll hate it. It's a hit or a miss. (Student nurse Case study C).

In one incident a student also reflected on a practice experience regarding current practice in giving injections and thought that not having up-to-date, evidence-based knowledge also affected the student-mentor relationship:

There's an instance that happened recently giving the injection...this is just an example (re: the student knowing more than the mentor) that you do not expel the air bubble because the air bubble is at the bottom so the patient gets the full dose but I was with the nurse who expelled the bubble and when we went back to the trolley I said to her I hope you don't mind me asking but can you tell me why you did that, we've always done that, I mean like I'd snubbed her, but I said to her that actually not what you do, you actually leave the bubble in, who says? Its like we are getting taught that and you go out to practice why don't they? (Student nurse Case study F)

The impact of good and bad mentoring on student learning is evident from the views expressed and also reflects findings of other studies. Kilcullen (2007), for example, reported that 'the ideal mentor as perceived by students offered support in learning by negotiating learning objectives, setting objectives at an appropriate level and giving constructive feedback', as the student reported in Case study H above.

7.5.4 Undertaking the Mentor Role

How mentors undertook their role was varied, but again, it is suggested that having protected time was critical, as was ensuring that the placement was prepared as a positive learning environment for students:

We have a timetable and we try and fill the students not just with our district nursing role but with other multi-disciplinary teams within our whole sector so that they get a complete overview of what a district nurse does and providing holistic care for the patient is really important. It's not just doing one job, it's looking at the whole picture which, like meeting the learning disability team...they're quite accommodating taking the students, which gives them a bigger understanding of a nurses role in the community, which I think 's a good thing...So preparing it before they come, maybe going out with the podiatrist of another team, like the community older person's team usually quite effective and they gain a lot more understanding of the whole...(Community mentor Case study G)

There is no protected time and that came up at the advanced mentors course but it was a case of 'but you've got enough time, you do it as you go'...so it's very haphazard really in my area, CPNs. No protected time and sort of no indication that we'll get that protected time either. (CPN mentor Case study G)

You're expected to fit it in with your job; its part of the job, there is no allocated time. (Mentor Case study F)... (Re time allocation).....I think it would be useful especially for the paper work side of things you know. I've seen myself taking things home because you can't even concentrate sometimes at work. You know if you want to do a good assessment – I just feel it's often hard to fit it in. (Mentor Case study F)

I found it quite hard I've only been a mentor for the past eight months , I've had three students quite quickly after each other and I think that's been really good but I find just identifying, sitting back and writing a list of what I think is available in the unit forgetting their outcomes first but just thinking of all the things I do day in day out and I've actually just done, I've done it on the computer, I did a little list its nothing official, its not been passed by anyone. It just means that I can give the students a wee list that they can match up and try and tie up themselves you know, what they can try and achieve their outcomes and I find that's quite useful and they quite appreciate it as well and it makes you realise what you do in your job as well. (Mentor Case study F)

We have group mentorship now, which has just been introduced which is actually a good thing, there is about three of us, three mentors for one student. (Mentor Case study F)

The issues expressed by mentors are similar to those found in other studies. Protected time appears to be one of the most important issues raised by mentors (May et al 1997, Pulsford et al 2002). One of the main points made in the advice and guidance section of the NMC Standards to Support Learning in Practice (2006a), is that the mentor's 'workload needs to reflect the demands of being a mentor'.

It was also interesting to note that some students commented on the fact that they were also given support by their peers in relation to their learning in practice, reflecting the findings of a study by Aston and Molassiotis (2002) on peer support in clinical placements:

Last year when I was in one placement, I pretty much, you know, followed around the third year, you know, she was teaching me loads because she'd been, that was her management placement. She was there for 12 weeks and she'd been there for about four or five already at that point, so it was really helpful to sort of get me into the way of the routine and you know just how things were on the ward and then you know, but the nurses were really good on that ward actually so it was good to have a balance of her and alongside the nursing staff as well, when they had. (Student Case study H)

One other issue raised by mentors, which have an impact on undertaking their role, was the variety and complexity of the different practice assessment documents. This was a particular issue for those where several students from more than one HEI were placed for their practice placements:

Different colleges have different ways of doing it , the books are all different and some colleges are just a tick list of clinical skills that they have achieved but it is just the way they have done it, it doesn't actually say if they are competent, so I would report that in a separate place .You know if I have any issues with the student and it is not covered in the material and the books I will add to that even if it just putting in a letter to say that I feel that there is a weakness in this or this is not a strength. (Mentor Case study K)

The courses are so different, you know, the course for (X University) is completely different to (Y University) course, as in the books, the outcome in the books. Y University books are very basic and it is basically just a tick list but there is nothing actually written anywhere , you can sign or tick competent/incompetent but there is nothing in the book to add ,What I am trying to say , there is nothing in the book to say how they have achieved it or actually don't , they don't have to given any evidence , apart from being able to carry out the clinical task, or they don't actually have to give any evidence if they have understood it academicallywhere as X University books they have to do a lot of thinking and they have to give evidence of each specific outcome that they are given, depending which year they are in. (Mentor Case study K)

(Re being on a mentorship course).....I find relating what I can teach the student and the actual CAP tool to fill in, the wording of it I find absolutely dreadful. Some of them were quite straightforward and other things I have been doing with the students and I have gained a lot of reward when going through this book, but I don't know if I am ticking the right things sometimes or not .I don't find it plain and clear. (Mentor Case study E)

It would appear that the possible impact of the variety of practice assessment documents, and in some cases the complexity and expectation of these, together with what is then expected of both the mentor during the assessment and in turn the students to achieve them, may lead to an inequality of what is considered to be achievement of competency in practice. In addition, given the pressure on mentors with regards to time to mentor and assess students, it may also lead to inconsistent completion of the practice assessment documentation. This is not to say, however, there should not be variation between HEIs in expected learning outcomes related to practice in their specific programmes, but that

consideration may need to be given to possibly establishing a common approach across the HEIs to meeting the NMC standards of proficiency in the practice assessment documents. (NMC 2004a, 2004b). It was clear from examination of a variety of practice assessment documents included in the curricula that the mentor's experiences had some merit, but all the documents seen included the expectation of students achieving the NMC domains within the standards of proficiency. The way in which those were assessed in terms of related academic level and/or assessment frameworks varied however, across the HEIs. It is nevertheless, also clear from other findings that there are definite safeguards with regards to 'unfitness to practice' that the assessment process is clearly identifying.

7.5.5. Preparation for the Mentorship Role

Mentors interviewed had undertaken varied preparation for the role and there did not appear to be a uniform approach across Scotland. It was clear that this influenced the student learning experience in practice, but it was not all due lack of preparation for undertaking the role:

Its through my personal choice to actually develop myself further that I did the teacher in practice for the degree in nursing ...and that's kind of brought me more up to date you know in changes and things that have gone on. (Mentor Case study F)

We were actually discussing this before I came. It is a long time since I did any mentorship training, years and years, I can't remember and we were kind of led by the students, the students tell us what has changed and what hasn't so we do feel a bit unprepared really for mentoring students. (Mentor Case study E)

Yeah well a lot of the staff here have done the partnership in learning module...but they haven't all completed that. There are some people who are really experienced staff nurses here that have always taken students and they haven't had any formal training but most of them have done or we are trying to get them through it. (Senior charge nurse Case study A)

In reviewing the NMC Standards to Support Learning and Assessment in Practice (NMC 2006c), the responsibility of mentors for practice learning and assessment of student competencies and fitness for practice is very significant and critical to the future of practice-based learning. It is also noted that when competence is being assessed through simulation that mentors should also be involved wherever possible.

7.6 Competence to 'Do The Job' and 'Being Fit for Purpose'

It was clear from all the data sets that there had been a shift in relation to what was expected of the students on qualifying. The following extracts are illustrative of the issues that were raised in discussion with regards to their 'competence to do the job' on qualifying:

I think we've got some excellent students coming through and I think we need to make sure we can employ them and retain them from a workforce planning point of view. You know, plan for the future...But we need to make sure they've got all the basic skills that people have been talking about, you know? And yes academia is spot on but we need it backed up by the practical caring. (Mentor Case study G)

I don't expect them possibly to be the be all and end of all and know everything and think that they can care when they've just qualified but the ability to use their initiative I think is really important and as well as being able to ask questions and identify when they are out of their depth and that's what I always you know, when I'm supervising or when I have in my team newly qualified nurses you know working with them I would say getting to know them, you know maybe if I'm busy down one end of the Unit you know if you have a patient that's quite sick or something is going off you know...OK I know they're brand new but I trust them you know, I've worked with them before to know that they'll use their initiative and know when they're getting out of their depth even if I'm busy they'll come and interrupt me and say can I lend a hand or can I run something by you. (Mentor Case study J)

(in relation to possible consolidation three months in area they might wish to specialise in)...certainly that type of consolidation prior to the point of registration I think would very much welcomed because I think what we're finding is that people generally they are not fit for purpose at point of registration and they need a good six months mentorship which they should have, I think again there is a balance between our expectations of them hitting the ground running and what they can deliver but I certainly think a focused period of consolidation prior to the point of registration would be welcome. (Senior nurse manager Case study F)

It is interesting to note that in two of the case study sites, the NMC/HLSP programme monitoring reports had made reference to employability and fitness to practice:

Practice based clinical nurse managers consider that students are appropriately prepared for employment and fit for practice on completion of training. (NMC/HLSP 2007 – Paisley University)

Service managers and mentors reported that students from all programmes monitored are 'fit for practice' on completion of the programmes and readily employable. (NMC/HLSP 2007 – Queen Margaret University).

It would appear that there has been some shift in recognising that students do not necessarily meet all employer needs and that this is no longer seen as a negative issue. Luker et al (1996) advocated that it was 'important to distinguish between the term fitness for practice which is about being deemed competent to practice within a specific framework and fitness for purpose which is about having the appropriate skills and abilities to meet the needs of the employer'. The fact that the NHS areas linked to the universities in this research study had induction programmes for newly qualified nurses, is possibly another indication that there is a recognition of the difference between the two, but most importantly the significant shift in thinking that students are competent 'to do the job' but may lack overall confidence in doing so. The interviews with charge nurses gave a valuable insight into our understanding of the issues from the perspective of those actually working alongside the newly qualified nurses:

I still think it is (confidence and competence) very variable and it is really, really strange that even student that I have had that are my staff nurses that were here for their management block just before they started they were very confident, ready and talked about as you said hitting the ground running. The minute they got their staff nurse post all confidence went and their responsibility and accountability hit them and it took a few months for this to come back and these were otherwise confident and competent people whereas others just seem to have taken to it like a duck to water. (Senior charge nurse Case study A)

I think they feel competent until they actually start and I think their confidence is maybe knocked with the reality of having to do this job and I think it is just trying to support them with that and be positive and encourage them. Competence wise it is varied and like I said depending on their placements within their training. I am looking at it from an acute surgical area and you may have nurses who have worked in surgery and worked in medicine and they have really got a really good acute knowledge so they work quite effectively but other nurses who have perhaps had more of a community based areas or less acute settings it's different for them so their competency isn't as sharp or they have not had the exposure to make them competent. I think it is very varied, I don't think it is across the board. (Senior charge nurse Case study A)

That (re: lack of confidence) is the main thing that is wrong with them, there is actually nothing wrong with most of their skills, what they lack is confidence in their ability... I have seen excellent students really, really excellent students crumble on their first days as a staff nurse because all of a sudden it is almost like someone flicks a switch and they become this scared little person again, like its their first job ever and actually the good thing is that give them six months and they have really

developed and their core knowledge is far, far better than ours ever was, the theoretical knowledge they have is much better. Their application to practice is where they fall down and it is when you have been around for a few months that you start to notice that they are applying their theory to practice properly but their confidence is terrible, really low. (Director of Nursing Case study E)

I would say they have got the knowledge, they have acquired the skills so they just need to build on that and become confident in order to provide that service and that just comes with time...I think they do have the knowledge, I think they do have the skills, I think it is just the confidence. I do think there is just a need to let them go out and given them the opportunity. Things have changed so much, when I was a midwife we were just given a patient to look after, put into a room and we were working autonomously in our third year as a student. They are not really getting that opportunity now I would say, things have changed there. (Midwifery charge nurse Case study A)

Students also spoke about their 'confidence' levels on becoming a qualified nurse:

Well as I say I don't personally think I'm great and massively confident but all my placements have been really quite pleasantly surprised so obviously they see things that I can't. Obviously and I think most nurses, I've got friends who qualified last year, you know and I'm sort of saying this and they are like that saying don't worry about it we were all like that. (Student nurse Case study G)

It is scary going and thinking I will have to do this on my own. Like right now we are thinking we are going to have to go to places and actually do the work. We are not going to have somebody to say is that right or is that what normally happens? That's why I think it is important when you first qualify there is some kind of support mechanism within NHS, within your wards that you choose to on. (Student nurse Case study K)

Lack of confidence is, therefore, a normal response to what is initially a new role and for many, a new environment. This is reflected throughout the student narratives as well in relation to 'getting used to a new placement'. Interestingly, Donaldson and Carter (2005) found that both 'confidence and competence seemed to improve if the student was supervised appropriately by a good role model', giving rise to the need for further discussion on the issue of how good role modelling can be developed.

7.7 Summary

The practice experience of both student nurses and midwives in Scotland demonstrates evidence that supports the commitment to their learning from all the key stakeholders. There appears to be no longer the expectation from the majority of those service managers interviewed that a student will be able to 'do everything and know everything' on qualifying. As noted in the opening paragraphs to this chapter, it is difficult to determine the added value of the student experience, over and above what the NMC standards and competencies require, because each student trajectory in practice is different. It would be of interest to determine over time whether the clinical placement experiences of the student determined where they would chose to work on qualification, as well as the impact on long-term career pathways. However, the future of this practice experience is dependent on close working relationships between higher education and NHS and other employers who are equal partners in the education and training of student nurses and midwives. Central to this partnership is quite clearly the role and related activity of the practitioners in their key role as mentors and also the provision and quality of the clinical placements.

Chapter 8 Partnerships in Practice

8.1 Introduction

The challenges for nursing and midwifery of a changing population and health profile are clearly identified through national policy initiatives, notably in Better Health, Better Care (SGHD 2007a), Delivering Care, Enabling Health: the Strategic Plan for Nurses, Midwives' and Allied Health Professions' Contribution to Health Care Delivery in Scotland (SEHD 2006d), and in the Modernising Nursing Careers (SEHD 2006e) initiative involving all four UK countries. Change and modernisation are essential in NHS Scotland. This requires that the workforce is fit for purpose and, therefore, fit for change.

8.2 Background and Context

A central theme in UK government policy concerning healthcare delivery is the need for partnership working (DH 1999, 2001, SEHD 2006a, SGHD 2007b). This derives from the recognition that professionals and services do not function independently of each other. The need for partnership working is further evident in the number of government reports recommending this within the context of health and social care services and professional education for healthcare practitioners (DH 1999, SEHD 2001, 2005, 2006a). One of the main reasons for this has been the increasing demand and pace of change for care delivery, in particular, the shift from hospital-based services to that of community. Furthermore, partnership working has also been embraced by nursing and midwifery's regulatory body (NMC 2006c), the QAA (2001) and NES (2005). The two professions at the core of this study, nursing and midwifery, are central to taking forward many of the policies, and as such there has been a major drive to ensure that programmes preparing them for their role are preparing them to be both fit for practice and fit for purpose.

Working in partnership to ensure a successful outcome has become central to ensuring that nursing and midwifery education in Scotland meets the requirements of employers and service users. Benefits to partnership working have been identified as maximising efficient and effective use of public sector resources, but also enables care to be designed around the needs of patients and service users (NES 2005). Recognising that nurses and

midwives need to be equipped to meet the demands of an increasing complex and rapidly evolving health care system have resulted in a realisation that academic-service partnerships present not just an opportunity, but are an imperative (O'Neill-Hewlett & Bleich 2004).

To meet and achieve these changes and challenges, Fitness For Practice (UKCC 1999) identified and recommended that:

Health Care Providers and HEIs should continue to develop partnerships to support students, curriculum development, implementation & evaluation, joint awareness and the development of service and education issues, and delivery and monitoring of learning in practice' (Recommendation 23)

The recommendation identified the need to close the gap between higher education and service providers. Fitness For Practice (UKCC 1999) recognised that the NHS and HEIs had an equal partnership responsibility for the preparation of all nurses and midwives.

With this recommendation in mind, this chapter will explore the extent to which partnership working is applied across organisational levels and between key stakeholders involved in the preparation of nursing and midwifery students in Scotland. The chapter will identify the types of partnership arrangements that have been developed and the perceived benefits of these. It will also identify any limitations in partnership working whilst identifying areas of good practice and areas for further development. For the purpose of this report, it was important to define how the project team identified and measured the strengths and challenges of partnership arrangements.

The Audit Commission (1998) definition was selected for this purpose as this appeared to fit well:

Partnership is a joint working arrangement where partners are otherwise independent bodies cooperating to achieve a common goal; this may involve the creation of new organisational structures or processes to plan and implement a joint programme, as well as sharing relevant information, risks and rewards.

The overarching theme identified in this element of the project is 'Partnerships in Practice'. Several sub-themes are identified and will be explored in this chapter.

8. 3 Partnership Arrangements between HEIs and the NHS

One of the aims of Fitness For Practice (UKCC 1999) was to seek to close the gap between higher education and service providers. Chalmers et al (2001) and Spouse (2002) indicate that the theory practice gap can be minimised by increasing collaborative partnership structures between the NHS and HEIs.

Across all case studies stakeholders were asked to describe partnership working arrangements. At the Strategic level there was evidence to assist in delivering the recommendations of the Fitness For Practice report:

Education Partnerships, it is a committee which has senior staff from NHS and senior staff from the school...four sub groups that work and feed into education partnerships. One is around the learning environment which includes Practice Education Facilitators. One which is around recruitment and retention, that one is really ahead at the moment. One on planning educational provisions which is looking at predicting health needs, what we need to put into the curriculum and one which I head up which is a joint posts steering group which oversees our associate lecturer scheme. (Senior academic Case study A)

With each of our NHS Board Partners we have a Partner in Practice Agreement. That outlines each of the parties' responsibilities within the agreement and it's signed by Head of School and by the Lead Nurse within each of the Boards. We have that for each of our NHS Board Partners where our students go on clinical placement. (Senior academic Case study B)

There are links with the University...A nurse education committee which is Service side led with co-members of university staff on that group...They have just launched Rights, Relationships and Responsibilities; we have close links with the university on each of those sub-groups, particularly on education. (NHS manager Case study C)

We have partnership agreements with them at Director of Nurse level. (Senior academic Case study K)

The lead Midwife works strategically with the Heads of Midwifery (NHS) and inform of any changes that take place. For example Service Development, if they are closing a unit, turning it into a Midwife led unit what are the implications. I also work in terms of advising them about changes in the programme. (Academic Case study A)

A key driver in NHS Scotland is to develop partnerships with users, carers and communities (SEHD 2005, 2006a). In this study there is evidence of this being embraced by HEIs in developing curricula, however, it is limited:

The local Division has a User group forum...We asked user what they felt were the issues and what there expectations of nurses were...they came up with good ideas...all the things you would imagine, communication was an issue, pain management, nutritional management. (Senior academic Case study I)

We have different partnerships, particularly the learning disability partnership; we have carers involved in input into the curriculum development at that level. They don't sit on the strategic group as we said, we don't have members in the strategic group at all but they do input to the kind of programme level review group we have, you know, many carers that come in from mental health and learning disability, new mothers with babies etc all inputting into the programme. (Senior academic Case study G)

Systems and processes are in place to lead, guide and inform partnerships. These local arrangements demonstrate many of the key challenges facing nursing and midwifery preparation and service delivery. They clearly identify and articulate with Scottish policy imperatives (SEHD 2005, 2006a, SGHD 2007b) and demonstrate working together to achieve many of the recommendations laid down in the Fitness For Practice report (UKCC 1999) and QAA requirements (2001). However, further work is required to enhance and standardise carer and user involvement across all HEI-NHS partnership committees.

8.4 Operationalising Partnerships

How strategic partnerships are then operationalised across the HEI-NHS interface is both varied and extensive:

I sit on their 'Course Board' and they have got a new curriculum planning group, so we have representation on the various sub-groups...so they do have a lot of practice representation. (Director of Nursing Case study E)

PEFs, all of them, audit placements. We assess practice placements and where needed we facilitate the induction, orientation, learning opportunities, develop questionnaires for the students to participate and evaluate their own practice placements so the mentors can improve things immediately, rather than waiting. (PEFs East Region)

We have quite a good network in terms of formal meetings and structures and informal networks...the lecturers themselves are quite visible in the ward areas' (NHS Midwifery manager Case study C)

We have also got a forum called the 'Undergraduate forum' which is held by the Practice development team at (Name of Division) which we have an opportunity to attend...we discuss things that are problematic or something simple like a lack of changing facilities at (Name of hospital). (Academic Case study K)

There is a strong sense of close working relations across midwifery in Case study B where a forum was described in which all stakeholders in midwifery attend and have the opportunity to discuss both clinical and academic issues relating to the programme:

This meeting involves clinical managers, student representatives, mentors, ourselves that is teaching...so we meet and it is minuted....We discuss everything related to the programme. (Midwife academic Case study B)

Further evidence of strong partnership links in midwifery was found in the team leader meetings. This is predominately a forum meeting for the NHS midwives, however:

We can be invited to that as well or we can invite ourselves if we feel there is an issue that we want to discuss and bring to the fore. (Midwife academic Case study B)

A supplementary example of collaborative links is in the form of the [Name of District] Normality in Pregnancy group. Again this group has extensive stakeholder input, but of note is the encouragement of and role for student midwives in relation to this group:

We have encouraged them to take part in this group...because our students do a lot of literature searches, literature reviews for their academic work, they can inform these meetings. Just last week we had 8-10 students attend and in fact they were given tasks to do. (Academic Case study B)

Additionally, in the above case study, students are able to contribute to the operationalising partnership arrangements. Much has been described in the literature in terms of 'belongingness' of students as part of their socialisation into the profession (Brodie et al 2005, Levett-Jones & Lathlean 2007, Melia 1987). Such opportunities should be further encouraged for students so that they are part of the 'official' partnership arrangements as a means of building confidence and learning how to work across partnerships and organisations.

8.5 HEI – NHS Partnerships in Delivering Curricula

There is evidence of Fitness For Practice recommendation 26 being achieved:

I think in delivering the 'skills', the teaching, there is collaboration there in that the PEFs and the clinical people come down and participate in the delivery of the teaching of skills. (Academic Case study D)

PEFs do a session, preparation for practice before they come out on their first placement and then some of us do the session with third years before registration. (PEF Case study A)

The senior lecturer liaises with me regularly, there's a Course Board, which I attend every three months, we're also involved in the development of programmes. (NHS Midwifery manager Case study C)

I teach pre and post op care with semester three students every cohort, four times a year and it is good. (Mentor Case study E)

Of significant note is the contribution clinical practitioners have had in developing the learning disability curriculum at Case study D:

The practitioners are involved through the Nurse Development Group and it's quite interesting because they actually wrote our last curriculum and I actually said at one of the meetings it was probably easier if I just sit in my office and write it myself. But, having said that, when it actually came to documenting all the decisions that had been made, everything was more or less done and all I had to do was put it into curriculum speak but more or less in place with the curricular but they designed the whole of the programme they made decisions about these placements, associate placements, they did, we went through every single aspect of the programme. (Academic Case study D).

However, challenges were also identified when exploring the experiences of working in partnership:

We don't have an equal voice in the Curriculum it is very much led by University (E). In fairness they will listen but if University (E) has a view and ours is different in practice I cannot think of a time that view did not go University (E) way. (Associate Director of Nursing Case study E)

We really do try to work together and it can be so difficult because people change all the time, particularly in senior management in the NHS, and that's really difficult because it's like starting all over again every year or two. (Senior academic Case study A)

Within the university I have asked because midwives should be represented more strategically and they aren't...Education Committee for example, there is no acknowledgement that I should be there. (Senior Academic midwife Case study C)

A key achievement identified in relation to midwifery education and service partnerships is their strategic partnership arrangements nationally, as detailed below:

I know all the lead Midwives from Scotland so you are aware of the issues and actually UK wide for the lead Midwives for education. We have a UK wide network, so that gives real strength. (Academic Case study A)

We all know each other because midwifery is small and we all have regular meetings normally down in Edinburgh every three months. (Academic Case study D)

Across Scotland it can be noted that partnership working is widely adopted across the HEI-NHS interface with benefits being identified by partners. Equally stakeholders acknowledge that partnerships do have challenges due to the complex and multifaceted nature of the organisations. In this study, we concur with Banks (2002) who identified in a review of health and social care partnerships that people are no longer questioning whether partnerships are important, but are concentrating on how best to make them work. This is evident from the stakeholder narratives.

8.6 Service User and Carer Involvement in Delivering Curricula

Service user and carer involvement is not a new or idealistic concept. The last 25 years have seen this concept debated widely within the NHS. The content of discussions in the literature are diverse and consider the theoretical, ideological and practical issues of integrating both users and carers into the varied and often demanding arenas of healthcare provision and delivery in the NHS. The vast array of literature is multidimensional and multi-professional and is constantly expanding due to the current publicity and ever increasing public scrutiny placed on the NHS.

Historically, carer, user and public involvement in the NHS has not been as successful as first anticipated and this maybe for a variety of different reasons. It has been suggested that one reason that should be considered is that it was 'developed in an ad hoc and isolated way' and that despite the increase of patient and public involvement activity 'there is little

evidence of any real shift in power' (Ridley & Jones 2001). Bell (2000) highlights public involvement as 'the bread and butter to a responsive, equitable and efficient health service'. With this caveat in mind, a key question posed to all stakeholders was the extent to which users and carers are involved in the preparation of student nurses and midwives.

When delivering the curriculum simulated patients are used:

We have a team of simulated patients who are members of the general public who come and simulate a particular condition for the students to practice on and they evaluate all of that. (Academic Case study A)

Many HEIs bring in patients to share their experiences as a means of teaching students the benefits of which were detailed by this academic:

I persuaded a woman who had a home birth to come in and talk to the students...they were spellbound by the woman's account of her homebirth. (Academic Case study I)

In collaboration with stakeholders in this project the research team held a half-day event to gain the user and carer perspective on how they could be further engaged in delivering the curricula. The following question was posed: 'How can users and carers be involved in planning and delivering future nurse/midwifery education?'

All participants felt that carers and users are an underutilised commodity in the undergraduate curriculum. Rather than what tends to happen – being invited into the university to share their experience of being a carer or a patient with a long-term condition – participants suggested that they would like to be involved from the curriculum design stage. Areas they felt they could contribute to were in relation to issues around advocacy, legal rights of carers, stress and anxiety, and the disease process and management of this. They also felt it important that their input to the direct teaching not be a 'one-off' event but rather should be a 'build on build' contribution over the course of the programme.

Consideration in future curriculum design and development should be given to allow carers and user to contribute to these developments. As Smith and Beazley (2000) note, service

users often have a different vision to those addressing a corporate, organisational or professional perspective.

Of significant note was this student's suggestion of patients being part of their assessment:

The last couple of placements I've hardly worked with my mentors so when they were writing up my assessment I sort of think it would be quite good for patients to have an input because you are working with them everyday. (Student nurse Case study K)

8.7 Cross-disciplinary Partnerships to Deliver Curricula

A key recommendation of the Fitness For Practice Report (1999) and more recent Scottish Government reports (SEHD 2005, 2006d) is the requirement to foster and develop collaboration across healthcare disciplines. One proposed means of achieving this is at the undergraduate level through shared teaching. However, as can be noted from the narratives, while there is a willingness to expand on this, there are many perceived challenges:

We're in quite an old university with quite a tradition...there hasn't been much recently. We are actually trying now to get more together with medicine but part of the resistance hasn't been on the side of nursing it's actually been on the medical side. (Senior academic Case study I)

There are difficulties around it....however things have moved on quite extensively in the 10 years I have been around...We have shared ethics with the medical students. There is work on normal child birth between midwives and medical students and in clinical skills area there is the chaotic environment and simulated ward environment where the problem solving skills of medical students and nursing students are shared. (Senior academic Case study A)

More detail on this was offered by academic staff, who highlighted further challenges:

I think we're probably better than some places, but we're not as good as we could be. We probably have more opportunities that we could exploit. (Academic Case study A)

Equally, similar challenges were noted from the NHS perspective:

Interprofessional learning, I don't think there is a great deal. I don't think the culture is there yet....In the Community Health Partnerships there is a lot more because they have been through the work....I think in Acute settings I still think we have quite a long way to go. (Senior NHS manager Case study A)

Of particular note was that midwifery identified and detailed shared learning with not just medical students, but with students on child programmes and clinical staff:

We do some learning with nurses, we do some shared learning with medical students, with child students and we also, our students in this particular area undertake newborn life support course and intermediate life support and they do that with the clinical staff. (Academic Case study A)

The benefits of being taught by professionals from disciplines other than nursing and midwifery were identified by this student and academic:

I think the fact they use a lot of not necessarily lecturers but professionals especially in third year to teach you the kind of human diseases, its all mainly Doctors and Pathologists and I think that gives you a really good insight. (Student nurse Case study J)

We have eight health professionals that learn together....I think there are some benefits I can already see...students are mixing with AHP, they are all working together. (Academic Case study K)

The goals of interdisciplinary education in health care are related to the educational benefits for student learning that accrue from shared learning experiences (Fealey 2005).

Collectively, inter-professional education policies have instilled the belief that this type of education can develop the necessary knowledge and skills to promote the delivery of effective inter-professional and interagency care. Findings from systematic reviews of the effects of inter-professional education have indicated that it can make a positive contribution to collaborative knowledge and skills, as well as contribute to an improvement in patient/client care (Barr et al 2005, Reeves 2001). Overall evidence in support for inter-disciplinary education is equivocal.

8.8 Partnerships in Recruitment

When exploring Recommendation 2 of the Fitness For Practice Report (UKCC 1999), joint responsibility for recruitment to undergraduate curriculum, it was noted that this occurs across both nursing and midwifery; there are, however, a few exceptions:

For years we have had joint recruitment stands at Nursing Times Live. We were the only one that did that and the Chief Nurse has commended it. (Senior academic Case study A).

There is a clinical rep on interview selection...occasionally something might happen in the clinical area that the clinical rep is not able to come along so its not 100% but as far as is practically possible it does happen. (Academic Case study D)

(Name) has done that and I know that (Name), one of the other team leaders was along doing it earlier this year. They are keen to do this for the very reason that they are going to end up with these people working alongside them so they are saying we would like to be able to influence the kind of people that they are bringing into the service. (NHS Midwifery manager Case study A)

We have an equal say in who is being appointed. (Senior charge nurse Case study C)

In contrast, one midwifery manager stated:

I have been in a Senior Managers post for three years and have never been asked to be part of a panel to recruit. (Midwifery manager Case study E)

The seven HEIs with Scottish Government contracts all demonstrated achieving Fitness For Practice recommendation 2 to joint recruitment. However, in three of the other universities that provide nurse education programmes, the process does not involve interviewing:

I don't think it's to do with NHS. I think it's through the UCAS System. (Academic Case study K)

We don't interview candidates. We scrutinise all applications finely before making any offer. We interview any candidates who we have concerns about with regards to any issue of the NMC and safety. (Senior Academic Case study J)

Within one institution there was strong opposition to the Fitness For Practice recommendation:

We don't interview for our programme. In fact we ourselves are not involved in the recruitment. (Senior Academic Case study I)

When exploring this point in more detail, it emerged they have not interviewed for the programme in around 30 years and this institution felt there was no evidence to suggest the need for interviewing:

It's based on them applying, having the grades and going through... if we do go down that road we are involving a lot of people in the University and service side and to us it would be an enormous piece of work when you consider we have 400 applicants for 35 places. It's going to be a tough job. (Senior academic Case study I)

When posing this question to lecturers, the response was similar:

There's research on interviewing that says it's not helpful for selection and that we are evidence based. (Academic Case study I)

There did appear to be tensions around this issue, with academics believing that drivers for this were from the NHS:

I find it incredible that the service side wants to put that much time and effort into something that has no proven value whatsoever. (Academic Case study I)

The NMC set minimum entry requirements for approved programmes and, unlike most other higher education students, nursing and midwifery students are subject to interview at an institutional level, in addition to satisfying the academic entry requirements, prior to selection (SGHD 2007b). There is obvious variation across the HEIs which provide undergraduate nurse and midwife education in relation to the issue of joint recruitment and retention. Those who hold Scottish Government Health Department (SGHD) contracts are expected to comply with this recommendation, whereas this is not an expectation of those HEIs that do not have SGHD contracts. Equally, the issue of the 400 students who apply through the UCAS system for a limited number of places raises similar issues; one wonders if these students then apply through CATCH or if they are lost to nursing and midwifery education?

Of note was how some HEI-NHS partnership arrangements also extended to Further Education colleges to assist with the global challenge of recruitment and retention:

We've got partnerships with our FE Colleges in terms of HNC Programmes. So we have a partnership with (name of colleague) and (name of college). Also we have an enhancement project which we've just developed which is being funded by the Scottish Executive around recruitment, selection and retention...part of the

enhancement project is to develop much more strategic partnerships with the schools in the region, working with our marketing department. (Senior academic Case study B)

Furthermore, some partnerships work together in recruitment at the end of the programme for the student applying for a staff nurse/midwife post by seeking to keep vacancies for newly registered practitioners:

We have links with University, HR, and Workforce Planning that we know how many students are coming out of University so we do have robust mechanisms to ensure we can have an early application process and filtering through and ensure we get CV's, disclosures and references ready for when they are registered when there is work there. (Senior NHS manager Case study A)

We try to keep as many posts as we can for the newly qualified staff so that when posts go through vacancy control. (Director of Nursing Case study B).

We struggle to give them all jobs. The quandary that we have is we've to start round about June July not filling vacancies because we know they will be coming, so your left during the holiday period with nobody to run the service because your saving your vacancies, so its getting a fine balance. So we've struggled and we've given every newly qualified just a 0.5WTE or equivalent post so they could all get in rather than just giving a couple a full time job, but we don't have problems with recruitment and retention generally it seems not to be a problem. (NHS Midwifery manager Case study A)

Across all case studies there are a variety of partnerships that support students, curriculum development, implementation and evaluation, joint awareness and the development of service and education issues, and delivery and monitoring of learning in practice.

It is evident that there is a joint approach in the development of the curriculum and the use of clinical staff in curriculum delivery. Of note are the partnerships that demonstrate that joint recruitment and retention processes which are then followed through to supporting employment at registration.

8.9 Partnerships in Developing and Managing Clinical Placements

Around half of all nursing and midwifery preparation takes place within the NHS. Clinical placements are a crucial part of the student learning experience. The QAA (2001) identifies

clearly the responsibility of HEIs in partnership with the NHS to provide suitable practice placements, whilst NES (2002a) strengthens this by emphasising the need for quality and diverse placements to afford students exposure to a variety of healthcare experiences. The Fitness For Practice report (UKCC 1999) recommends that:

... an accountable individual should be appointed by education providers to liaise with healthcare providers to support the provision of suitable placements... (Recommendation 24)

Brown et al (2006) state most universities compete for clinical placements. This has been exacerbated by increased student numbers, increasing patient acuity (Hall 2006) and limited clinical placements (Purdie et al 2008). Consequently, schools of nursing and midwifery can face significant challenges in providing suitable placements. Murray et al (2005) note that sharing an existing practice circuit with other HEIs can pose risks, in particular to the student not gaining the wide range of learning experiences as advocated by the QAA and professional bodies. However, as is noted below, there is strong evidence of cross HEI and NHS working in relation to managing student placements:

The three HEI and stakeholders in (geographical area) have the Practice placement Committee...with representation from PEFs, Managers, Managers in private sector, Academics. (Senior academic Case study K)

In fact (University X) and ourselves have realigned our courses somewhat so that all our students aren't all going out into community at the same time. We have done that sort of negotiation to try and make it better for the service side because the service side have come back and said 'you know, we cannot support this or we cannot offer you placements because of staffing. So we have quite a good relationship. (Senior academic case study K)

This shared practice placement committee demonstrates cross-HEI partnerships in relation to ensuring sufficient and suitable placements from students across the three HEIs. McKenna and Wellard (2004) advocate the development of shared placement committees to reduce competition among academic institutions for access to healthcare facilities, thus providing a more welcoming and supportive learning environment for the student.

In contrast, there appear slight tensions between Case study J and Case study G regarding placement management:

We don't have a great control of where our students go. Our allocation is sorted by University X. (Academic Case study J).

The Placement Advisory Group Meeting, where all the PEFs, the Lead PEFs you are talking about and people who are more operational in this field, programme organisers etc meet on a monthly basis and discuss issues that they have to do with practice and the University and the changes that we have going on. I have also appointed a Senior Lecturer for practice based learning who takes forward all the practice issues...again we have a meeting, which is a, what we call a PAN (name of location) meeting for Academic staff, Lecturing Staff. (Senior academic Case study G)

In one case study Clinical Learning Environment Teams (CLETs) were developed. There are 21 in total covering all clinical areas/specialities areas in this region and also the private sector. The membership of each team consists of a Practice Education Lecturer (Lecturer), a PEF (if available in that particular clinical area; also, the exact title of the post holder may differ in some clinical areas), nurse and midwifery managers, mentors and students when placed in the area. The CLET meets once each semester with a core agenda to ensure students are supported in practice consistently across all practice placements:

A robust system for supporting students in practice and that's the strategy its call SSIP supporting students in practice. There is an infrastructure that supports all of that in terms of the way in which the practice placements are geographically spread across (name of region) and we have Clinical Learning Environment teams so several clinical placements would actually be linked to a clinical learning environment team. That team would have a Practice Education Lecturer attached to the PEFs the practice education facilitators in practice. (Senior academic Case study B)

A system whereby the university and NHS work collaboratively over student learning...it seems to work pretty well and so that if there are service issues around education and what's happening with students and equally if education has issues with service then CLETS address this. (Director of Nursing Case study B)

In another case study a Clinical Practice Placement Support Unit (CPPSU) has been established the key remit of which is to support mentors, develop the learning environment and placement management:

I work closely with (name of university). Communicate regularly with Practice placement officers as far as students are allocated places... we have close links with staff in the placements office and also we communicate regularly with the Director of

CPPSU... A very big link as far as student issues... between university and Trust...especially if it's a student issue because we cannot make that, that link with CPPSU has been very useful. (PEF North Region)

Supporting learning in practice is a joint responsibility of the HEI and NHS. Students require to be placed in the right place at the right time for them to achieve their NMC competencies to progress (Burns and Paterson 2004).

Examples of good practice identified in this current project include the CLETs with representation from all stakeholders to support students, the development of a CPPSU to support mentors and enhance the learning environment and in other case studies the centralised system for the allocation of students from all three local HEIs.

8.10 Joint Posts Across NHS-HEI Services

Professional and Government policy has emphasised the pivotal contributions of joint appointment roles in forging links between HEIs and clinical practice. Working Together – Learning Together (DH 2001) suggested that to improve education in practice more joint appointments should be made.

The Fitness For Practice report (UKCC 1999) recommended that:

Health care providers and HEIs should support time in education and practice for clinical and education staff respectively to enable competence and confidence. (Recommendation 26)

Furthermore, in Recommendation 27 the UKCC made explicit that these arrangements should be formalised, a stipulation emphasised more recently in the NMC Standards to Support Learning and Assessment in Practice (2006c).

Many of the case studies provide detail of how these recommendations were achieved, but also detail the associated tensions. The associate lecturer scheme developed in one case study illustrates how an HEI has invested in developing the educational skills of clinical practitioners. At the time of data collection, there were 20 joint post appointments spanning nursing and midwifery. These posts are offered to clinical practitioners who spend between

one to two years on a 0.5 WTE basis in the school and contribute to all aspects of teaching, learning and assessment of the undergraduate curriculum. This role is modelled on the lecturer-practitioner role; one academic spoke of the benefits of the role:

We have a whole host of Associate Lecturers who divide their time between practice and us. So they keep the programmes clinically credible and up to date. (Academic Case study A)

Williamson and Webb (2001), in their small qualitative study, found that the clinical content of the teaching by the people in such posts offered currency to the teaching in modules/programmes. Driver and Campbell (2000) suggest that it brought 'current time', real situations and experiences into the classroom. Emerging from the literature is evidence suggesting that such roles are not without their challenges, due to the multifaceted nature of the role and the effect having two 'employers' with potentially different expectations, may have (Lambert and Glacken 2005).

In this study one NHS Manager viewed these roles as 'one-sided':

In my view the Associate Lecturer is a clinical post that has a commitment to lecturing at the University. They don't come back to the environment and do lecturing they come back and do their post...it's not the perception that an Associate lecturer is actually helping the learning environment. (Senior NHS manager Case study A)

So it seems the role causes tension with the NHS, with the perception being that the service side gets very little in return for the 0.5 WTE they spend in university. This could be perceived as role ambiguity or lack of ownership of the role.

In one case study honorary contracts have been put in place by the NHS for Academic Midwives to spend time in clinical practice:

We have had arrangements in place for a couple of lecturers to come in and work perhaps in labour suite. I'm not sure that they have worked an awful lot. They've got honorary contracts that kind of thing so it is open for that to happen. I suspect its peoples time commitments that mean it doesn't happen. (NHS Midwifery manager Case study A)

Of note is the joint appointment of a lecturer-practitioner in the midwifery team:

... 0.6 wte is spent in clinical practice...I do teaching, not physiology but learning emergency situations within the community environment. (Joint Midwife/Lecturer Case study A)

In Case study D the learning disability programme has a mix of formal and informal mechanisms, but this works well for them, as noted below:

At the moment we have got four practitioners employed one day a week, four different practitioners. They are employed for different skills, so, ehm, we employ them for certain bits of work, and so, they don't come in and do adult sessions. They don't like come in and do an hour on Epilepsy they come in and are involved in a module, so, the person who is employed on a Thursday is doing Challenging Behaviour modules and the person who is employed on a Wednesday has been doing Complex Needs and the person who is employed on a Friday has been doing Management. So, we have been sort of involving the Practitioners in a different way from what we did before and I think it's actually more meaningful. The Trust agreed, some of the time we don't pay them and some of the time we pay them, it depends on the agreement that we have with the Trust. If the Trust will release them, we give them the PG cert free if they want to do it. So you get a type of win-win thing so, we have, the person for example doing the Challenging Behaviour is doing the PG Cert and is coming in here one day a week to get his teaching experience and we are not paying them. But, the person on a Wednesday we are paying at the moment because he is not doing the PG Cert, so it's like, some people we pay for and some we don't. (Academic Case study D)

The literature abounds with the benefits that joint posts offer in supporting closure of the perceived 'theory-practice' gap and in developing partnership working (Andrews & Roberts 2003, Burns & Paterson 2004, Chapple & Aston 2004, DEST 2002, Drennan 2002, Hilton & Pollard 2005, Leigh et al 2005, Mallik & Aylott 2005). Conversely, there is evidence suggesting that such roles are not without their difficulties, due to their multifaceted nature (Lambert & Glacken 2005).

Setting up the Clinical Learning Environment teams and Practice Education teams has caused tensions with Nurse Academics:

There is the practice team now. So the practice team, which consists of practice education lecturers, are key links for us to correspond with any practice issues. They link with the PEFs, so the link teacher system went. (Academic Case study B)

I think it's the way I feel just now, over the last three to four years I have had less and less input and insight into what goes on in practice. (Academic Case study B)

The above tensions were affirmed by a Senior Academic:

It doesn't stop other lecturers being involved in practice...however a downside is in terms of marketing and relationships, because a lot of that informal work of link tutors has sort of gone. (Senior academic Case study B)

In contrast an academic in Case study G pointed out that the link lecturer role was not a helpful mechanism for building relationships with colleagues in practice:

I think the opposite. The case for the Adult branch students because you could go for two to three years before visiting a student in that placement they have already been at so you don't get a chance to build relationships with your colleagues through that particular process. (Academic Case study G)

The debate surrounding the nurse lecturer role in practice placement is well documented (Ahern 1999, Cahill 1997, Lee 1996). Humphreys et al (2000) and the National Board for Nursing, Midwifery and Health Visiting for Scotland (NBS) (2000) observed that there was a lack of consensus as to what the role should be. With the implementation of Fitness For Practice, the role and function of the nurse lecturer altered to that of liaison lecturer, defined as predominately supporting practice staff and conveying information (Duffy et al 2000, Humphreys et al 2000). Yet, as one NHS Manager noted this seems not to be the case today:

Years ago a Clinical tutor used to be the link there and you new what was happening in the organisation...that doesn't particularly happen now....I think there needs to be a stronger link, much stronger but I think it needs to be somebody who has a joint post between the two. (Senior NHS manager Case study A).

In contrast, midwifery (Case study B) have a clinical skills facilitator who is a practising NHS midwife and works two days per week with the academic team and who is highly valued by her academic colleagues, as noted in the following quote:

She is that great link between the institution and clinical practice where she actually works...a very valuable position and has been well evaluated by the clinicians, students and ourselves. (Academic Case study B)

Conversely, in the rural campus students and mentors detailed the close links and support by lecturers to them:

Yes, you can go anytime, the door is always open, the tutors. (Mentor Case study C)

That's the advantage of having a small campus, you know them, you get to build up a relationship with them, whereas on a bigger one, you're just a number. (Student nurse Case study C)

As can be seen, several formalised joint arrangements have been developed and embraced locally to close the perceived theory practice gap.

Throughout all interviews and focus groups, reference was made to the national PEFs. These national posts have been developed as a result of Facing the Future (SEHD 2002), a SEHD initiative that recognised a need for a group of experienced nurses and midwives to support students and mentors in practice. Introduced in 2004, this initiative has been taken forward on behalf of SEHD (now the SGHD) by NES in Partnership with HEIs and NHS Scotland.

PEFs are employed and managed by the NHS Boards although there is a strong collegiate link to the local HEI. This is supported by Clarke et al (2003) who found that the ambiguous nature of ownership and belonging can affect credibility and the ability to affect change. The funding for these posts comes from SGHD, NES and HEIs. In introducing these roles a national core job description was developed jointly between NES and SEHD, with 100 posts across Scotland being introduced for an initial three-year period (McArthur & Burns 2007).

In exploring collaborative links between the NHS and HEIs, the PEFs detailed ways in which they link:

To be that link for the university so a lot of information...if you have a staff group of 40+ nurses in an area, you know, it's hard to get information from the university to every one of them. So I think its good that we're there. (PEF North Region)

If there are any problems we maybe you know go and investigate if there was anything that we could do to support mentors and liaise between the NHS, University and the students. (PEF East Region)

In essence, the PEFS see their role as one link in the communication chain between HEIs and NHS in ensuring mentors are aware of the curriculum, expectations from the HEIs in relation to what students require to achieve, and as 'troubleshooters' for each party.

PEFs in this study were identified as a crucial link between the HEIs and service, in particular for the supporting role they provide. There was a great sense of *valuing* of the PEFs by academic staff and clinical staff:

There are PEFs to help the mentors. I don't think many of them are full time and it's a big job, there are so many mentors out there. (Senior academic Case study C)

I have to say compared to what it was like before there was definitely a gap. PEFs have actually filled in and helped an awful lot in actually giving us support as well as the student and mentor. (Academic Case study J)

I feel, in my opinion that the PEFs have made a very real difference to the learning environment for students because the mentors now feel supported and they feel there's somewhere that they can go for guidance. They seem to have a more structured approach to what they are doing. (Academic Case study H)

PEFs articulated their link role in enhancing the learning environment for students through several mechanisms:

We assess practice placements and where needed we facilitate the induction, orientation, learning opportunities, develop questionnaires for the students to participate and evaluate their own practice placements so the mentors can improve things immediately, rather than waiting. (PEF East Region)

Of note was also how PEFs viewed themselves as change agents:

The mentors who trained the way we trained have a very unrealistic expectation of students because they expect them to be like we were. That's not possible in today's technology. If you see how they nurse now, there is no way you can throw people in at the deep end and expect them just to swim. So there is a huge cultural element to what we do and we are seeing changes. We're seeing attitude change, if you like, not everywhere but its creeping in. (PEF North Region)

I think challenging clinical placement areas who previously said they're to specialised to take students at a given level and actually going back and being able to act as a, you know, bridge to say, well why are you to specialised. Its about meeting competencies and proficiency that are outlined in the document and if

you've got registered nurses there, NMC Code of Conduct, then they should facilitate. (PEF West Region)

PEFs detailed how they support mentors in practice. These ranged from answering Clinical Assessment of Practice (CAP) booklet enquiries to the teaching and development of mentors:

Providing mentor development programme which is devised by the university. For the mentors we do that at least once a month. We make sure that all mentors in (name of location) have attended this at least once and then go on to do the mentor updates. (PEF East Region)

I do similar things in my area with the student learning group, where the mentors come along, to talks...We also things like the documentation, CAP Book and that kinda thing. (PEF North Region)

A key area in which PEFs spend significant time in partnership with the mentors, is around the issue of student progression. All discuss how they facilitate the 'cause for concern' (failing in practice) process:

We are the first point of contact for mentors if causes for concern...meet with student and mentor to discuss issues and ways to resolve...action and goal planning...reassurance for mentors. (PEF North Region)

Do you remember when we first started, I continually got stories from mentors...telling me was the university, well, I remember failing a student way back and I took some stick and believe you me, its something I don't want to repeat. Its one of the biggest obstacles I have had to overcome, personally, was to actually make people believe I was there to support them if they ever found themselves in that situation again. (PEF North Region)

A senior charge nurse further identified the support she received from a PEF when she had to fail a student on clinical practice:

I recently had to fail a student – first time in 26 years and I found the PEF invaluable. (Senior charge nurse Case study C).

McArthur and Burns (2007), in their local evaluation of the first year of these posts, noted that they were received favourably by from both NHS and academic staff. However, the PEFs themselves acknowledged that the role would require further clarification for staff to appreciate their worth. In this national evaluation of Fitness For Practice (Lauder et al 2008)

and through stakeholder interviews, it would appear the PEFs have made significant progress in achieving this. Equally, McArthur and Burns's (2007) study demonstrated that PEFs recognised at the outset that to produce a positive and productive learning environment that mentors required support. As has been noted in this study in the narratives, a key element of the development in the role has been in building trust and confidence across the HEI-NHS interface through supportive actions.

8.11 Mentorship and Partnerships Working

With the introduction of the Project 2000 curricula the requirement for formal mentorship arrangements was acknowledged (Nettleton & Bray 2007). This was promoted as a strategy for providing support, encouragement and professional vision for students in clinical settings (Gray & Smith 2000, Neary 2000, Rosser et al 2004). Later with the introduction of Fitness For Practice curricula, HEIs together with their partner NHS organisations, collaborated to develop key curricula elements to guarantee equity and quality of education and clinical skills for pre-registration programmes. A key requirement of the Fitness For Practice curricula was to improve assessment strategies to support and measure students' competence to practice safely (Hughes 2004). To achieve these, students require to be supported by mentors, who could facilitate the learning and assessment process in clinical practice (Watson 2004). The UKCC (2000) published revised standards for the preparation of teachers of nursing, midwifery and health visiting. These standards, aimed at lecturers, practice educators and mentors, aimed to promote the integration of theory and practice, serving to ensure student support. More recently, the NMC (2006c) published a new set of standards to support learning and assessment in practice. NES (2005) subsequently undertook a scoping exercise, which highlighted challenges for practice placement providers and mentors.

In this study, mentorship was identified as the crucial partnership ingredient in supporting students in clinical practice. Mentors are the key link with HEIs, students, senior charge nurses, PEFs, academics and the NHS, as one NHS manager identified:

Mentors make the relationship even stronger. They fill in the gap between hospital and university. (NHS manager Case study C)

A key question posed by the research team was about how mentors are prepared for their role. As the quotes illustrate, there is great variation in this, from attending short formal preparation courses to basing practice as a mentor on experience:

We did a mentorship course at University which lasted two to three days. (Mentor Case study E)

We did Partnerships in Learning module in the first year of qualifying and we were then able to mentor. (Mentor Case study A)

The module mentioned above is a 12-week distance learning module accredited at SCQF 9, which meets with NMC preparation requirements (NMC 2006c).

The preparation of mentors in Case study B, as explained by a senior NHS manager, involves students undertaking mentor preparation as part of their undergraduate programme:

The newly qualified nurses now have some mentor preparation in their pre-registration course but there is and (Name of HEI) mentor preparation course because the University is trying to ensure that they prepare mentors. (Director of Nursing Case study B)

Across Case studies D, I and K, it was noted that as well as sharing and co-ordinating their practice placements, they also share a mentor preparation programme:

There are generic mentorship courses certainly between the three HEIs here, which the community mentors are encouraged to do, but on top of that because our programme is so unique...and the whole placement is unique then obviously the contact we offer in advance with the mentors is... (Academic Case study I)

Mentor updates across the country range from between a half day per year to a full day update. Most of the updates now are undertaken by the PEFs on behalf of the HEIs:

The Practice Education Facilitators quite an important role. I think she is quite good in keeping us up to date. She links quite a lot so you ken you've got your day on 'how to' but the audits that she comes along and does and she's contactable as well on any issues so that's quite good support for us by the PEFs. (Mentor Case study D)

PEFs in the focus groups detailed how they facilitate mentor update sessions:

We facilitate all day mentor development programme. (PEF North Region)

Provide mentor developing programme, which is devised by the university. For the mentors we do that at least once a month. We make sure that all mentors in (name of location) have attended this at least once and then go on to do the mentor updates. (PEF East Region)

Senior charge nurses explained the partnership working of PEFs in supporting the mentor and bridging between NHS and education:

PEF helps to support the mentor. (Senior charge nurse Case study A)

They support each other and we have the PEF. (Senior charge nurse Case study C)

When exploring the issue of preparation for mentors with Managers and Senior charge nurses, some challenges were identified:

Partnerships in learning is there but a lot of the girls don't want to fund their own modules and our funding is limited. (Senior charge nurse Case study A)

This pressure on mentors is also recognised by NHS managers:

University always asks us to take more (students) and we try to get the staff a wee break so they don't have students all the time...it is a relief for the staff but also for the patients because you are constantly asking if you can bring a student. (NHS manager Case study C)

Exploring the role of the Senior charge nurse in mentorship, almost all senior charge nurses stated that they do not mentor, but that they support mentors to mentor:

I'm in the background supporting the mentor and bringing in the PEF. (Senior charge nurse Case study A)

I allocate my mentors time, ensure staff share out workload of mentoring equally. (Senior charge nurse Case study B)

Staff are asked if they are happy to mentor, given the option, I control allocation and try and ensure equity and not the same staff doing all the time. (Senior charge nurse Case study G)

To support the mentors in their role, sharing my experience of nursing for years. I tend not to take students but I will help out if required. Last year we had a Sem 6 student who was almost failing so I took over as her mentor and with a lot of support,

guidance and hard work from both sides she caught up and got through. (Senior charge nurse Case study E)

Delivering Care, Enabling Health (SEHD 2006d) recognises that education at pre and post-registration levels plays a major part in preparing nurses and midwives to deliver safe and effective services, and that modern education is about much more than studying courses in higher and further education institutions. The workplace is an important setting in which learning takes place.

The seminal work of Fretwell (1980) and Orton (1981) revealed that ward sisters forfeited clinical teaching in lieu of managerial responsibilities. On the surface, the above narratives would appear to support these seminal pieces of work. However, what the narratives also demonstrate is the important role the current day Senior charge nurses have in providing leadership and support for the team and ensuring that the student learning experience is facilitated. The recent national review of the senior charge nurse role in Scotland supports the actions of the charge nurses in this current study advising that the role of the senior charge nurse is vital in ensuring that the workplace provides a suitable learning environment for staff and students (SEHD 2007)

Senior NHS managers identified that current mentorship preparation arrangements were likely to change due to the new national mentor preparation programme and the NMC requirement for 'sign off' mentors:

I actually think the new guidance about mentors from the NMC will make a difference and midwives actually have an accountability as mentors and taking that a bit more seriously...the profile of the role needs raised. (NHS Midwifery manager Case study E)

In exploring the links between service and education, one clinical midwife noted challenges to the mentoring role:

The problem with mentors is, you might be told what to expect but you don't get the time to mentor. You have your job to do and you tag a student along who needs a lot of help and support and mentoring seems part of your job and there's no allowance for that. (Midwife Case study A)

Academic staff were asked what their expectations of the mentors in practice were:

I think they have to be very honest with the student and not allow a student whose obviously having difficulties with their placement, maybe not coping with clinical about ensuring that the experience that the student has will meet that particular students needs. (Academic Case study K)

While the strengths of mentorship were acknowledged by all stakeholder groups, it was clearly identified that mentors required more support and preparation to enable them to carry out their roles effectively. The findings in this study concur with previous studies in that lack of time to undertake the role puts pressure on the mentor and student (Nettleton and Bray 2007, Philips et al 2000, Wilson 1989), alongside increased patient workloads, lack of staff training and demands for placement capacity (Casteldine 2001, Corlett 2000, Hancock 2003, Jones 2005).

With the introduction of the NMC (2006c) standards to support learning and assessment in practice, however, the provision of protected time for the role should go some way to reducing this pressure. Scotland has embraced these new standards and has developed, in partnership with the Scottish Government, NES, the NHS, the independent sector, HEIs and the Open University, A National Approach to Mentor Preparation for Nurses and Midwives: Core Curriculum Framework (NES 2007a). This demonstrates commitment and values the contribution mentors provide in the preparation of students for professional practice. The development and implementation of this core framework should provide a consistent national approach to the preparation of mentors, support of mentors and the valuing of mentors, yet with some flexibility to meet local service need.

8.12 Summary

Although this element of the project was specifically tasked with identifying local partnership provision by the case studies, it should be noted that nationally the organisations at the fore in developing the policies which influence not only NHS Scotland, but also educational providers clearly themselves demonstrate a commitment to partnership working.

A variety of partnerships arrangements have been detailed which demonstrate reciprocal representation across the HEI-NHS interface in not only working to achieve educational policy recommendations, but also NHS Scotland's Modernisation Agenda. These initiatives occasionally result in tensions between stakeholders.

What was apparent in undertaking interviews with a wide range of stakeholders was the level of engagement, enthusiasm and commitment of the partners and their shared vision. There was a strong sense of interdependency between partners and a confidence in each other in delivering pre-registration education.

Chapter 9 An Exploration of the Implementation Flying Start NHS in Scotland

9.1 Introduction

This chapter reports a preliminary evaluation of the early implementation of Flying Start NHS. Data were obtained from newly qualified nurses, managers, senior charge nurses, PEFs and mentors. Data were collected by questionnaires and in-depth interviews. A larger evaluation has been commissioned by NES and is currently being conducted by a consortium of researchers from the University of the West of Scotland and the University of Dundee.

Flying Start NHS is a unique Scotland-wide initiative for newly qualified nurses, midwives and allied health professionals practising in the NHS in Scotland. It was designed to support the transition from student to newly qualified health professional by enhancing the practitioner's learning in everyday practice through a range of (primarily online) learning activities. Students are supported by mentors and learning outcomes can be explicitly mapped to the NHS KSF. This initiative became operational in 2006.

The evaluation aimed to explore the future aspirations and intentions of newly qualified practitioners. Data were also collected on self-report competency, self-efficacy and job demands. This data will allow limited comparisons to be drawn between qualified nurses and students participating in the main survey reported in an earlier chapter. The limitations inherent in making comparisons between cohorts are acknowledged.

9.2 Findings

9.2.1 Future Intentions

Participants were asked which AFC band they aspired to in five years. The two most common responses were Band 5 (n = 19; 20.9%) and Band 6 (n = 25; 27.5%). When asked which AFC Band they aspired to in 20 years the mode was Band 7 (N = 23; 25.3%). The next most popular responses were Band 6 (n = 11; 12.1%), Band 9 (n = 7; 7.7%) and Band 8 (n = 6; 6.6%).

Participants were asked if they intended to remain in the NHS on completion of the Flying Start NHS programme. A large number (n = 80; 89.9%) stated they did intend to remain, with a small number reporting they did not intend/did not know (n = 9; 10.1%). Participants were also asked if they intended to remain in the NHS for at least one year after completing Flying Start NHS. A large number (n = 78; 88.6%) stated they did intend to remain and a small number did not intend/did not know (n = 10; 11.3%).

9.2.2 Knowledge Skills Framework

Participants were asked at which level in four KSF core dimensions they were aiming to achieve at this point in their career. Within each dimension there were responses across all four levels, with level 3 the most cited level in all dimensions with the exception of service improvement (Table 9.1).

Table 9.1 KSF Core Dimension Aspiration Levels for Participants

Dimension	Level 1 N	Level 2 N	Level 3 N	Level 4 N
Health & Safety	9	12	36	25
Service Improvement	11	35	20	15
Quality	7	28	31	16
Equality Diversity	7	20	34	18
	24	95	121	74

Participants were asked to rate the quality of career advice they had received to date. The potential responses went from 1 (very poor) to 10 (excellent). Scores ranged from 1-10 with a mean of 5.30 (2.65), a mode of 5.00 and median of 5.00. There were 48 (55.8%) participants who rated the quality of advice on or below the median.

9.2.3 Self-Report Competency

The Shortened Nursing Competency Questionnaire showed a mean score for the sample of 62.39 (SD 7.45). There was no significant difference between participants exiting their pre-registration programme with a diploma or degree ($t = -0.412$, $df = 82$, $p = 0.678$).

9.2.4 Self-Efficacy

General Perceived Self-Efficacy mean scores for the sample was 30.60 (SD 3.72). There was no significant difference in self-efficacy between those participants who exited their pre-registration programme with a diploma or degree ($t = 1.152$, $df = 87$, $p = 0.252$). There was a moderate positive correlation between self-report competency and self-efficacy ($r = 0.406$, $p = 0.001$).

9.2.5 Job Demands

Psychological job demand was positively associated with support from supervisors ($r = 0.284$) ($r = 0.145$, $p = 0.02$) (Table 9.2). These supervisors were likely to be ward charge nurses or their equivalent in the community. Self-report competency was significantly associated with skill discretion ($r = 0.290$), supervisor support ($r = 0.227$) and self-efficacy ($r = 0.414$). Co-worker support was positively associated with decision authority ($r = 0.390$) and supervisor support ($r = 0.302$). With the exceptions of self-efficacy and self-report competency (moderate) significant correlations were low.

Table 9.2 Associations between Job Demands, Self-Efficacy and Competency

	Skills Discretion	Decision Authority	Psychological Job Demand	Supervisor Support	Co- Worker Support	Self- Efficacy	Competency
Skills Discretion	1						
Decision Authority	.385**	1					
Psychological Job Demand	.068	-.003	1				
Supervisor Support	.161	.151	.284**	1			
Co-Worker Support	.283**	.390**	-.145	.302**	1		
Self-Efficacy	.134	.213**	-.072	.293**	.291**	1	
Competency	.290**	.154	-.104	.227*	.118	.414**	1

** $p \leq .01$, * $p \leq .05$

There was a significant difference between degree and diploma exit-point participants in the skill discretion sub-scale ($t = 2.150$, $df = 83$, $p = 0.034$).

9.3 Predicting Self-Report Competency in Newly Qualified Nurses

The self-report competency model with skill discretion, supervisor support, co-worker support, psychological job demands, decision authority, self-efficacy and pre-registration exit point as predictor variables was significant ($F = 3.777$, $df = 7$, $p = 0.002$) and accounted for 23.9.% of the variance in self-reported competency ($\text{adj } r^2 = 0.239$). Self-efficacy and skill discretion were the only significant predictors. A second CATREG was performed with self-efficacy and skill discretion entered as predictor variables. The second model was significant ($F = 12.657$ $df = 2$, $p = 0.001$) and accounted for 22.8% of the variance in self-reported competency ($\text{adj } r^2 = 0.228$). Pratt's test of importance indicates that self-efficacy (0.669) was twice as important a predictor than skill discretion (0.331). Tolerances were satisfactory for both variables before and after transformation

9.4 Perceptions and Experiences of Flying Start NHS

Data on Flying Start NHS were also collected during interviews with mentors, managers and senior charge nurses. Participants were asked questions on their perceptions and experiences of Flying Start NHS. This section will report data from these interviews, which directly relate to Flying Start NHS. The main themes emerging from this data were 'supporting students', 'providing time and resources', 'interface between Flying Start NHS and in-house development', and 'Flying Start NHS is valued'.

9.4.1 Supporting Students

In this theme several distinct but inter-related forms of support were identified. The main group involved in guiding the early implementation appear to be PEFs. As the programme develops, it is likely that mentors will feature more prominently. The role of PEFs in supporting the development of newly qualified nurses and midwives undertaking the programme was evident. Their role is becoming more visible in promoting the programme to mentors, managers and charge nurses. This has clear parallels with the important role PEFs play in pre-registration education described in earlier chapters. A nurse manager commented:

again the practice education facilitators have a big push on it and certainly have done a lot in terms of building up the sisters and charge nurses support because these obviously, these guys are key to giving the newly qualified staff and their

mentors protected time for that type of activity so yes so I think there's been a reasonable uptake but I think its quite a lot of work but again its just one of the many competing priorities for the newly qualified.

We had a PEF come down to the A & E to explain what Flying Start was.
(Mentor)

PEFs also appear to have a wider co-ordinating role for this course and the requirements of pre-registration education according to a nurse manager:

What I have done is, within that education group I have made sure that core group of people knew what that Flying-Start was, we got a couple of them away on the whole day, I make sure they link up with X the PEF so that he can keep them on the right track of what they are supposed to be doing, their taking responsibility and make sure they get the time-out booked on the off-duty to be with their students, they have permission to do that they don't need me to do that. Initially they were finding that hard and I think they felt they shouldn't really being doing that but I have reinforced that. We have had about three or four on it.

Other individuals in particular Health Boards have a specific role in relation to new appointments and this includes advice on Flying Start NHS. A midwifery manager noted:

...we've got a practice development midwife and she sees all the new starts when they come and points them in the direction of this and says to them now they you know that this is here, this is how you access it and we expect you to access it, your team leader will know that you will be doing this and will try and give you time out to support you. Now what we haven't done is gone back..... But it is part of our philosophy that we will tell then about it and encourage them to do it ...

9.4.2 Providing Time and Resources

The time and effort required to support Flying Start NHS students appeared to be considerable, but was undertaken without much dissent and the need to invest in newly qualified staff was seen as a worthwhile activity. This intent is seen in the following comment by a nurse manager:

They (newly qualified) would spend significant amount of time with them and there would be some resource to fall back on because that's important as well and then it depends on the individual how well they are doing and how comfortable they are in this area and once they feel competent and are assessed as competent then they would carry on doing that in other areas, they would get additional support both the mentor and the student.

A lead nurse in primary care makes a similar point:

I would like to think so but as I say in community there are mainly two years post reg and on our other CHPs in this are they have had some Flying Starts and my understanding is that they have been working very positively as a team, had very positive feedback about it, its just I didn't have opportunity myself in my area to actually have a Flying Start but I hope in time to apply for a post. I hadn't had any vacancies to take a Flying Start but I hope in time it is going to be better because I think the mechanism and structures that go with that are very robust and I had very positive feedback both from managers and colleagues about how well Flying Start is doing with appropriate support.

Charge nurses tasked with supporting Flying Start NHS students whilst delivering a service were very flexible in their planning. This flexibility was needed to balance the competing staffing demands, including demands related to Flying Start NHS. Two senior charge nurses observed that:

Yes we started that just this year and I have tried to allocate a study day a month for them because it is two hours a week so eight hours, but because I have six newly qualified staff nurses that time out is really difficult as well. I managed it for a little while but I have not managed it the last off duty but again with the shift patter there will be a bigger overlap so they may have to start taking it in chunks of hours instead as opposed to the long day but I don't know that that is sufficient because you cant get a big piece of work done.

Yes it is and we are supposed to facilitate two hours per week but given our overlaps we have found it easier to actually factor in one day a month

One perhaps unanticipated consequence of implementing Flying Start NHS has been to put increased pressure on the number of mentors available for pre-registration students. For each nurse undertaking the course there may also be a mentor allocated which reduces the mentor pool according to one senior charge nurse:

...but we have had a lot of movement from senior people just as they have progressed in their career and I currently, have four staff-nurses who are doing the Flying Start and there are others who are still very junior, so when you take into account you have actually got quite a junior pool that are needing support themselves, it is difficult for them then to support students.

9.4.3 Interface between Flying Start NHS and In-House Development

Flying Start NHS did not emerge in a vacuum and there were a raft of existing CPD, mentorship and other educational and training opportunities already in place. Senior charge

nurses were able to work out how best to combine Flying Start NHS with in-house provision:

Newly qualified we employ are mentored for the first six months. They work under close supervision – also acts as a role model for them. They have a two day hospital induction before commencing (newly qualified) two day training on moving and handling with a third day at a later date. All the mandatory we try and give them very quickly.

It was clear that participants had a sophisticated understanding of how to achieve a balance of more general knowledge and skills and speciality-specific knowledge and skills in midwifery. This is put succinctly by one midwifery manager:

We have programmes that carry the newly registered midwife that is like, ante-natal, post-natal, new born, objectives that they have got to achieve and we try a rotation programme to support them as well and also we allocate a midwife to look after them while they are going through.

There was some evidence that Flying Start NHS was impacting on community nursing. Again considerable thought had been given to how this course would need to be supplemented by other community nurse specific skills and knowledge according to a nurse manager:

...so, we are starting to look at Flying Start for them and that's new for us in community as well and personally I have never had a nurse in my year on Flying Start but there is one or two starting from the Community. If a newly qualified nurse, you know, for example a nurse is coming to work...she is spending two weeks on days so that she gets a feel for the area because she doesn't work within our area currently, so, if someone didn't work we would put in an induction programme for them and try to make sure that they had achieved the basic levels of procedures of Child Protection, handling of Anaphylaxis and that's part of our Induction

This flexibility extends to the ways in which Flying Start NHS interfaces with existing in-house educational provision. Senior charge nurses and other managers were able to understand how best to support staff in navigating through both the in-house and more formal Flying Start NHS materials:

...we have got the clinical skills pack as well and if they are doing them they do not have to duplicate the work in Flying Start so there are certain elements of it that they will pick up and some that will do the clinical skills programmes , but one of the staff nurses I have brought in to go over her folder with her to engage in some reflection , I think the good thing is that she has undertaken a lot of reflective practice and there

are some reflective summaries on incidents which may not have been undertaken had she been on a formal programme so I think that is very good.

They are usually given a two week supernumerary status but they are all also put on to the new NHS Flying Start programme which they will be given one study day a month to work through and then there are some core competencies that they are expected to achieve as part of an orientation pack.

9.4.4 Flying Start Is Valued

The general consensus about Flying Start NHS was that it is a positive development. Not only did senior qualified nurses and midwives value Flying Start NHS, but also they believed that the robust and satisfactory way in which it was implemented made it a valued resource for newly qualified staff:

Have appointed newly qualified and they are doing Flying Start. Makes a difference to their competence and confidence. They are mentored by a Charge nurse. Programme seems to fill in gaps for example skills acquired, phlebotomy. Great idea. Flying Start is compulsory. No formal time off just depends on workload and if C/N can give them time.

I think Flying Start is good for that because obviously we are a tiny hospital so we don't have we've got all our I think 18 newly qualified practitioners across the board and maybe there's about 13 of those that are nurses so we don't have a big in house community of newly qualified OT's that can all sit and have an OT discussion and things so they tend to have a wee bit more.

Once again the role of PEFs features and is linked to the continued success of the course. A nurse manager commented that:

Oh yes very much so, I think it is a very good system and I think it is very useful for newly qualified in the community and would like more of it but if it is just me it depends on the resources and staff turnover for that to happen and the PEFs has got the role there as well in supporting the mentor and the Flying Start as well.

Although the majority of responses were positive there were a small number of negative perceptions. These invariably related to what were perceived as high intensity clinical areas such as ITU according to a senior charge nurse:

We don't tend to take a lot of brand new starts especially as Flying Start has raised its head. Flying Start is mandatory by the Trust and I have problems with that due to

steep learning curve entering ITU with this added pressure of academic work. Priority should be to make the nurse safe to practice in this new environment

9.5 Discussion

The variation of responses within KSF core dimensions suggests that they may be poorly understood or do indeed reflect very different objectives across what are relatively simplistic range of outcomes. This needs to be explored in more depth. Variations may also suggest that core dimensions may be viewed as having different levels of complexity or achievability for newly qualified nurses and midwives. Whilst several students appeared to get good career advice, over half rated advice given on the poorer half of the scale. It is unclear who has the responsibility for career advice and career development support for newly qualified nurses and midwives. Given the emphasis placed on career development and especially development in the early stages of the career trajectory this may give rise to some concerns.

As expected, a large proportion of participants intended to remain in the NHS for at least one year after completion of Flying Start NHS. Whilst only around 1 in 10 would not give that commitment and these may not convert into leavers, it remains a concern and potential loss of staff and loss of what amount to three years pre-registration and one year post-registration investment in education.

Participants reported high levels of self-report competency. These were higher than those reported by students in an earlier chapter. This was interesting given the ceiling effects of the SNCQ and may suggest an increase in skills (or greater exposure to learning experiences) of a greater scale than evident in this data. There were no significant differences in self-report competency and self-efficacy between those who exited their pre-registration programme with a diploma or a degree.

Self-report competency was predicted by self-efficacy and skill discretion. The relationship between self-report competency and self-efficacy was also found in the survey of pre-registration students and provides support for social cognitive theory in relation to self-report competency. Skill discretion items have many similarities to notions of good ward

learning climate described by Fretwell (1983). Surprisingly, given the long believed importance of the ward sister in creating good learning climates (Orton 1981) supervisor support was not a significant predictor. Nevertheless, the importance of the workplace as a learning environment-community allied to fostering a sense of efficacy in the newly qualified nurse and midwife, are the core elements in promoting learning in the post-qualifying period.

Flying Start NHS was seen as a valued initiative and this is further support for the conclusion that emerged in earlier chapters, that nursing and midwifery have become mature professions. The idea of continued education and career development through education appears firmly embedded.

PEFs emerged as the potential key to the implementation and future development of Flying Start NHS. This role is increasingly becoming pivotal to education for nurses in the NHS. Managers and senior charge nurses had a relatively sophisticated understanding of education for professional practice. They managed to effect a *de facto* integration of formal courses such as Flying Start NHS and in-house provisions at the level of the individual practitioner. They managed education in the sense of the effective use of resources to support education and also at the level of promoting educational activity in seeking to achieve a balance of core and specific skills and knowledge for their particular specialty.

Support for Flying Start NHS and the ways in which this is seen as part and parcel of the career trajectory for a modern profession, is further evidence in support of the proposal that nursing and midwifery are now mature professions

9.6 Conclusions

Nursing and midwifery managers and senior charge nurses play an active role in managing resources to support Flying Start NHS. How this resource balancing act impacts in the longer terms needs to be monitored. The majority of participants want to stay in the NHS although a small, but potentially significant number did not indicate they would remain in

the NHS one year after completing the course and to this extent one of the aims of Flying Start NHS to address retention is justified.

Participants see themselves progressing up the career bands. Participants were evenly split in terms of satisfaction with career advice. There may be merit in the provision of more formal career advice at appointment and again at the end of the Flying Start NHS course. There were wide variations in levels in the core dimensions of the KSF participants aspired to achieve.

Self-rated competence shows increases post-qualification. There was no significant difference between diplomates and graduates in self-report competency. Skill discretion (ward learning climate) remains important in competency development post-registration. An important and emerging role was evident for PEFs in Flying Start NHS. Arguably, the key finding in this element of the evaluation was the value NHS staff placed on Flying Start NHS. This also lends support to the view that nursing and midwifery have matured as professions over the last 15 years.

Chapter 10 Discussions and Recommendations

10.1 Introduction

This large scale evaluation was the product of an active collaboration between three universities from Scotland and England, NHS Scotland, lead links in each Scottish Department of Nursing and Midwifery, students, practitioners and service-users and carers. The evaluation is arguably the most comprehensive and methodologically complex yet undertaken in the UK. In one sense this is an historical exercise as Scotland has now moved on to another curriculum model, albeit one which incorporates many ideas that emerged from Fitness For Practice. The evaluation was designed in such a way as to overcome this problem by addressing questions about both Fitness For Practice curricula and also providing answers and insights into more general educational issues that continue to have relevance to nursing and midwifery curricula.

The generally positive responses and active support for the project is indicative of the sense of partnership in the delivery of nursing and midwifery education that exists in Scotland. There is strong evidence of good partnerships, joint responsibility and a shared vision between the NHS and HEIs in delivering Fitness For Practice Curricula. The plural curricula is used in preference to curriculum as each HEI has developed a unique set of programmes based on the broad framework outlined in Fitness For Practice proposals.

A key finding of this detailed and comprehensive national evaluation is the predominant opinion of stakeholders that newly qualified nurses and midwives are perceived as being fit for practice at the point of registration. Students themselves also consider that they are fit for practice at the point of registration. This is a fundamental shift from the findings of earlier studies. New registrants' awareness of their accountability, expressed as a lack of confidence (self-efficacy), may be misunderstood to be a lack of competence. Evidence presented in this study demonstrates that this awareness is a necessary recognition of the importance of safe practice and can be viewed as a positive incentive for continued learning. The study demonstrates the degree to which registrants are more aware than ever of their considerable legal and professional accountability for care, which may

manifest as a lack of confidence, but through which they can be supported by good mentorship and further professional development. This development includes Flying Start NHS. Consequently pre-registration education and Flying Start NHS are a continuation of competence and confidence development in the initial four years of a nursing or midwifery career. This fits well with an emerging consideration by key stakeholders that fitness for practice and fitness for purpose are not the same, whereby developments such as employer induction programmes and Flying Start NHS offer further building up of skills and knowledge already attained in the pre-registration programmes.

The recognition by practising nurses and midwives that pre-registration education is only the start of a lifelong educational journey was a strong theme in the data. This is indicative of professions that have matured since the fears about the de-skilling effect of a university education that surrounded the Project 2000 curriculum. There is no expectation that newly qualified nurses or midwives should be the 'complete package' and that competence and confidence were part of a journey with various landmark stations *en route* and not a fixed end point.

The involvement of carers and service users in the planning and delivery of curricula is patchy, but some good practice was evident. Students need to be exposed to the experiences of carers and service users both in their practice and in the university learning, but just as important is to build these insights around a self-care and self-management framework. Carer and service user involvement in the curriculum is essential if the NHS is to fully realise the potential of self-care and self-management approaches. One approach identified as part of the carer and service user consultation process would be to construct a learning module on self-management and self-care in which carers and service users are core contributors.

There is an ever-changing context, both in relation to higher education and health care generally, that impacts on students, practitioners, managers, educators and the carers and service users they serve. In the background is the current NMC consultation on pre-registration nursing preparation and the outcomes of the consultation regarding midwifery.

Designing curricula to prepare nurses and midwives to practise and, hopefully, to excel in this ever-changing environment may not be best served by the four to five year curriculum review cycle we have witnessed since 1992. This cycle requires curricula to be changed even before the lessons from previous curricula are fully recognised. A more organic and evidence-based approach is needed. This could use the principles of rapid change which may be at once more responsive to the increments in the educational evidence-base and also to a fast moving health, social and political environment. This would have the added advantage of not requiring large academic resources to be devoted to root-and-branch curriculum upheaval on such a regular basis, but that would nevertheless require some investment in providing the evidence-base around key areas, as well as identifying best practice which could then be shared across the education providers in collaboration with service. To some extent this is already being actively pursued by NES as this project and others clearly demonstrate, but it may require a parallel investment by the higher education sector in relation to teaching and learning related research which impacts on the health sector programmes.

Mentor support was on the whole positively evaluated by students, but not as highly as family and friends and peer support, as evidenced in Phase 1 of the study. Mentor preparation varied, although the new national approach to mentor preparation in Scotland, which builds on the NMC Standard to Support Learning and Teaching in Practice (NMC 2006c) should partially address this problem. Nevertheless there was a sense that mentors had to undertake their role often with little practical support and on occasions this meant fulfilling the mentor role in their own time. Whilst the commitment of individual mentors is in many ways exemplary, students' experience of consistent high quality mentoring is not sufficiently uniform. Mentors naturally see patient care as their first priority. Given their pivotal role in pre-registration education, mentors should not have to make choices between patient care and supporting the learning of students. Potentially the biggest advance in the quality of pre-registration education may come from greater investment in mentors and the clinical learning environment as a whole. It is clear that the mentor, especially when demonstrating excellent role model skills, is pivotal to the successful attainment of the students' fitness for practice.

Resources and opportunities for developing teaching and learning are, in relative terms, overwhelmingly provided to HEIs who in turn support the development of academic staff through government funding. The preparation for teaching and learning in the classroom and skills laboratory stands in stark contrast to the limited preparation offered to support clinical learning. Although curricula have a headline figure of 50% practice and 50% theory, a significant amount of theory hours are self-directed learning often away from the HEI and which may not be hugely resource intensive for HEIs. Consequently, considerably more than 50% of on-site and directly supported learning is provided in clinical practice. Therefore, the bulk of on-site teaching and learning in pre-registration education is directly provided by the NHS. The provision of skills laboratories across the HEIs is, however, variable. This has implications for the uptake of the NMC option regarding utilisation of 300 hours of practice experience in a simulated skills environment.

There is much variation in programme practice hours and student assessment load which, despite the need for distinctiveness at programme or department level, may not always be justified and certainly warrants further research. Students undertaking degree programmes had more assessments to complete and had more theory hours to undertake. There is no significant difference in self-report of competency between diplomates and graduates. The difference in the amount of learning expected between diploma and degree programmes may be exaggerated as these amount to no more than 60 Scotcat points (300 vs 360), a few more assessments and some additional theory hours. The use of two exit points may offer more flexibility for course designers, but offer little in the way of increases in self-report competency and observed competency. HEIs show large variations in the proportion of students who exited with diplomas and degrees and for which we could find no obvious explanation. Consequently, a more ambitious degree exit target could be set nationally, whilst retaining the flexibility the diploma exit offers. This would go some way to meeting the professions' desire for degree level entry whilst not increasing the risk of attrition due to academic failure by having limited opportunities for diploma level exit. This suggestion may become redundant if significant increases are evident in the number of high quality applicants to each HEI occur as a consequence of the planned publicity campaign (SGHD 2008).

The outcome of the recent consultation on pre-registration nursing and an all-graduate profession will be significant in relation to this issue (NMC 2007a), with midwifery having already made a decision to this effect. Entry qualification is only one measure of quality. Some of the many variations in placements and theory assessments, whilst in practice, also result in excessive workloads for students, service areas and the workload of mentors. The additional responsibility for mentors having to manage the practice assessment process with often complex assessment documents may be adding to this pressure.

The extent to which programmes remain primarily acute care-oriented needs much attention to meet future care needs. Project 2000 aimed to produce practitioners who could work in both community and acute settings. It may be the right time to explore whether curricula can alter the balance of clinical placements offered in line with the proposed shift in the balance of care in Scotland. In this matter we believe the NMC were correct to raise this issue in their recent consultation.

The teaching and practice of specific skills is very variable across institutions, but the definition of these should widen to include communication skills and dealing with emotions. Although drug administration and numeracy remain a constant worry for many stakeholders, progress is being made with programmes like 'Authentic World' and other similar developments within Scotland's HEIs.

Scotland has recently seen significant increases in the number of refugees and immigrants from both within and outside the European Union. Education on the theory and practice of care in the increasingly diverse multicultural community is not yet evident as a strategic direction across departments and programmes. Exposure to different cultural groups is, however, variable across both rural and urban communities.

Opportunities for interprofessional education in pre-registration nursing and midwifery programmes are very variable even where benefits might be potentially significant, such as in child protection. The evidence-base in support of interprofessional education is, however,

not strong and further research with robust research designs, more sophisticated educational interventions and with clearer outcomes is needed.

The management of unfitness for practice would benefit from the further development of and support for mentors. It is acknowledged that PEFs and university departments have made some positive progress in this respect. The role of PEFs has been well received and can be seen as a positive and innovatory example of Scottish Government Health Directorate-led change. Scotland has seen other innovations at national level (such as Flying Start NHS), which may in time come to represent good practice.

Flying Start NHS is valued and even at this early stage appears to be making an impact. Mentorship is important, but the additional resource implications of providing support to both pre-registration students and newly qualified nurses and midwives undertaking Flying Start NHS needs to be monitored.

10.2 Study Limitations

The study brief was to focus on NHS nursing and midwifery, but, given the evolution of the health and social care services the views of wider non-NHS stakeholders such as the nursing home sector, private health care and social care agencies would be a useful area for further study.

The research questions did not focus directly on the current or future branch structure of nursing education, and so (in the context of the current NMC consultation) it would be unwise to draw many conclusions in this respect. What is clear is that in the view of key stakeholders the Fitness For Practice curricula are meeting their key objective to produce nurses and midwives who are fit for practice.

The use of an online questionnaire for Flying Start NHS was unsuccessful inasmuch as very low response rates were achieved. The sample for both Flying Start phase and the sub-sample who participated in the OSCEs and paper-and-pencil test, were effectively

convenience samples and generalisations should be made with caution. Nevertheless, these phases should be placed in the context of the study as a whole.

In the discussion of the numeracy paper-and-pencil test, numerical competence may have been conflated with drug calculation competence and drug administration competence. These skills, whilst linked to some extent, require different competencies and performance on a numeracy test may not reflect performance in drug calculation and drug administration testing.

10.3 Recommendations

Given that one of the overarching aims of this project focused on the way in which the two key stakeholders, the NHS and HEIs worked in partnership to deliver Fitness For Practice programmes in Scotland, it is anticipated that these recommendations will be considered in a collaborative way. They have been organised around major themes in the report. Although the findings of this study are specific to a Scotland context many may resonate with practice in England, Ireland and Wales.

Preparation for Practice

1. Consideration should be given to a revised definition of fitness for practice with equivalent meaning for all stakeholders.
2. Given the NMC's emphasis on 'character', further thought and research should be devoted to the core values and attitudes (and altruistic behaviour) which should characterise good nursing and midwifery practice in the modern context.
3. Recruitment and selection approaches should ensure that, if possible, potential entrants are not lost to the profession by reason of competition for places.
4. Opportunities to practice drug administration vary considerably across programmes. Work should be done to determine the optimal preparation in this important respect, bearing in mind the key risk management principles.

5. Further work is needed on policies regarding recruitment and testing of students to detect problems in the skills in basic arithmetic operations necessary for midwifery and nursing practice. Work is also needed on the most effective means of improving and maintaining these skills.
6. Acknowledgement should be given to excellent work in Scotland in relation to assessment and development of numeracy skills in both nursing and midwifery education.
7. The extent to which students' peers offer important support should be more formally investigated and recognised.
8. Work needs to be undertaken to ensure that the provision of education in responding to the needs of the increasingly ethnically diverse community develops consistently to meet local needs.
9. Whilst some good practice exists, opportunities to involve carers and users in the planning and delivery of education could be further exploited, but greater thought needs to be given to proper reward and remuneration or support for this.
10. A more explicit linking of self-management and self-care to carer and service user involvement should be considered for development as a core module in new curricula.
11. Consideration should be given to evaluating how the current provision of simulated clinical learning will be developed in response to the NMC guidance on inclusion in assessment of clinical practice, in particular given the very varied opportunities for students across the different HEIs in relation to access of high quality provision.
12. Consideration should be given to the rationale and differences in non-traditional skill acquisition, such as venepuncture, between nursing and midwifery professions.

Being in Practice

13. Care should be taken not to confuse an apparent lack of confidence in some newly qualified practitioners with a lack of competence, where this is, in fact, self-awareness of accountability.
14. There remains a need to evaluate the current clinical learning experiences fully in terms of balance, length and quality. In particular, there is possibly too great attention on acute care given the future of the health economy and the shift in the balance of care from acute to community. A study of placement experiences, learning outcomes as they relate to the quality of in-practice teaching and learning and first destinations would be instructive.
15. Efforts should be made to include a suitable mechanism for including carer and service-user feedback on student performance.
16. Consideration should be need to be given to length and purpose of clinical placement learning in the light of the NMC recommendations for the future of pre-registration nursing and midwifery education.
17. Consideration should be given to how students can develop a work ethic that is possibly not being developed as a result of supernumerary status, but balanced with the need to ensure that students are not compromised in their learning by being given tasks to undertake to complete the expected work rota.
18. Consideration should be given to how HEI lecturers with nursing and midwifery registration can be involved in practice education, given that the PEFs have clearly in many cases taken over the mediation role between HEIs and practice and also mentor support in the student learning experience.
19. Acknowledgement should be given to the excellent support, in the majority of cases,

being provided to students by practitioners, either as named mentors or members of a mentor team. This, however, appears to be at a cost to mentors, in terms of balancing their responsibilities to their patients/clients with the responsibility to students.

20. Consideration should be given to how (primary) mentors can be given support in relation to time and professional development to undertake their role more effectively and with enhanced skills and knowledge.
21. There is a need to develop a more flexible model of practice-based mentorship roles.
22. Consideration should be given to establishing a common approach across the HEIs to meeting the NMC standards of proficiency for pre-registration nursing and midwifery in the practice assessment documents, acknowledging the need, however, for the HEIs to ensure their own fitness for award.

Partnership Working

23. Education providers and commissioners should consider the extent to which competence over a set of traditional (such as drug administration) or 'advanced' (such as venepuncture) skills should be mandatory in each programme. In determining essential skills, those of communication and emotional labour need to be fully recognised in all aspects of midwifery and nursing. Partnerships in which the teaching of clinical skills could be undertaken by current clinicians need to be more thoroughly investigated.
24. Consideration should be given to moving from a four to five year cycle of major curriculum reviews to an organic process in which change is built into the curriculum model. Changes in the curriculum must reflect new evidence on teaching and learning, stakeholder feedback and changes in care delivery. A Scotland-wide structure led by HEIs and involving SGHD, carer and service user groups and NES could contribute to this process. HEI curriculum development processes may benefit from the rapid change event methods currently employed in promoting evidence-based change in the NHS in

Scotland.

25. Mentor functions will grow and consequently consideration needs to be given to the selection of mentors. Mechanisms to provide incentives for mentors, perhaps through honorary positions with the HEIs should be considered. Mentors may benefit from a longer and more in-depth programme of preparation which would include assessment and dealing with 'failure'.
26. Funding models for pre-registration education should explicitly recognise the major role played by mentors, PEFs and the NHS as a whole.
27. Research in nursing and midwifery education tends to be project-led and does not provide the cumulative and theoretically informed approaches that would optimise advances in the development of evidence-based teaching and learning. A sustained and science-led major programme of research to inform teaching and learning would provide Scotland with a world-leading capacity in nursing and midwifery education research. Given the limited education research capacity in Scotland this programme would be based within the Scottish HEI sector, but should involve the main internationally recognised researchers from across UK.

References

- Ahern KJ (1999) The nurse lecturer role in clinical practice conceptualised: helping clinical teachers provide optimal student learning. *Nurse Education Today* 19, 79-82,
- Alinier G, Hunt WB, Gordon R (2004) Determining the value of simulation in nurse education: a study design and initial results. *Nurse Education in Practice* 4, 200-207.
- Amos D (2001) An evaluation of staff nurses role transition. *Nursing Standard* 16, 36-41.
- Anderson EE, Kiger AM (2007) I felt like a real nurse-student nurses out on their own. *Nurse Education Today*. In Press, doi:10.1016/j.nedt.2007.07.013.
- Anderson M, Stickley T (2002) Finding reality: the use of objective structured clinical examination (OSCE) in the assessment of mental health nursing students' interpersonal skills. *Nurse Education in Practice* 2, 160-168.
- Andres L, Carpenter S (1997) Today's higher education students: issues of admission, retention and attrition in relation to changing student demographics. The British Columbian Council on Admission and Transfer, Vancouver BC.
- Andrews GJ, Brodie DA, Andrews JP, Wong J, Thomas BG (2005) Place(ment) matters: students' clinical experiences and their preferences for first employers, International Council of Nurses. *International Nursing Review* 52, 142-153.
- Andrews M, Roberts D (2003) Supporting student nurses learning in and through clinical practice: the role of the clinical guide. *Nurse Education Today* 23, 474-481.
- Arthur D (1999) Assessing nursing students' basic communication and interviewing skills: the development and testing of a rating scale. *Journal of Advanced Nursing* 29, 658-665.
- Aston L, Molassiotis A (2003) Supervising and supporting students in clinical placements: the peer support initiative. *Nurse Education Today* 23, 202-210.
- Audit Commission (1998) *A Fruitful Partnership, Effective Partnership Working*. Audit Commission, London.
- Ball J (2006) *Responses to the NMC Consultation on Proposals arising from a Review of Fitness for Practice at the Point of Registration: Report for the Nursing and Midwifery Council*. NMC, London.
- Bandura A (1977) Self-efficacy: toward a unifying theory of behavioural change. *Psychology Review* 84, 2, 191-215.
- Bandura A (1986) *Social Foundations of Thought and Action: A Social Cognitive Theory*. Prentice Hall, Englewood Cliffs NJ.

Banks P (2002) Partnerships under Pressure. A Commentary on Progress in Partnership-working between the NHS and Local Government. King's Fund, London.

Banning M (2003) Pharmacology education: a theoretical framework of applied pharmacology and therapeutics. *Nurse Education Today* 23, 459-466.

Barr H, Koppel I, Reeves Hammick M, Freeth D (2005) Effective Interprofessional Education: Assumption, Argument and Evidence. Blackwell, London.

Barrlow EJ, Lyte G, Butterworth T (2002) An evaluation of problem-based learning in a nursing theory and practice module. *Nurse Education in Practice* 2, 55-62.

Bartlett H, Westcott L, Hind P, Taylor H (1998) An Evaluation of Pre-registration Nursing Education: A Literature Review and Comparative Study of Graduate Outcomes. Oxford Centre for Health Care, Research and Development, Oxford Brookes University, Oxford.

Beers GW (2005) The effect of teaching method on objective test scores: problem-based learning versus lecture. *Journal of Nursing Education* 44, 305-309.

Bell S (2000) Involving the public, it's not just for Christmas. *British Journal of Healthcare Management* 6, 272-273.

Bendall E (1975) So You Passed, Nurse. Royal College of Nursing Research Series, London.

Bradshaw A (2001) The Project 2000 Nurse. Whurr, London.

Brasler ME (1993) Predictors of clinical performance of new graduate nurses participating in preceptor orientation programs. *Journal of Continuing Education in Nursing* 24, 158-165.

Brennan AM, Hutt R (2001) The challenges and conflicts of facilitating learning in practice: the experiences to two clinical nurse educators. *Nurse Education in Practice* 1, 181-188.

Briggs A (1972) Report of the Committee on Nursing. HMSO, London.

Briggs SR, Cheek JM (1986) The role of factor analysis in the development and evaluation of personality scales. *Journal of Personality* 54, 106-148.

Brodie D, Andrews G, Andrews J, Thomas B, Wong L, Rixon L (2005) Working in London hospitals: perceptions of place in nursing students employment considerations. *Social Science & Medicine* 61, 1867-1881.

Brown B, O'Mar L, Hunsberger M, Love B, Black M, Carpio B, Crooks D, Noesgaard C (2006) Professional confidence in baccalaureate nursing students. *Nurse Education in Practice* 3, 3, 163-170.

Burke LM (1994) Preceptorship and post-registration nurse education. *Nurse Education Today* 14, 60-66.

Burns I, Patterson IM (2004) Clinical practice and placement support: supporting learning in practice. *Nurse Education in Practice* 5, 1, 3-9.

Cahill HA (1997) What should nurse teachers be doing? A preliminary study. *Journal of Advanced Nursing* 26, 146-153.

Calman L, Watson R, Norman I, Redfern S, Murrells T (2002) Assessing practice of student nurses: methods, preparation of assessors and student views. *Journal of Advanced Nursing* 38, 516-523.

Carlisle C, 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, 1256-1264.

Casteldine G (2001) Clinical teaching is the key to improved practice. *British Journal of Nursing* 10, 1307.

Cave I (2005) Nurse teachers in higher education – without clinical competence, do they have a future? *Nurse Education Today* 14, 394-399.

Cerinus M, Ferguson C (1994) Preparing nurses for preceptorship. *Nursing Standard* 8, 36, 34-38.

Chacko SB, Huba ME (1991) Academic achievement among undergraduate nursing students: the development of a causal model. *Journal of Nursing Education* 32, 6, 255-259.

Chalmers H, Swallow VM, Miller J (2001) Accredited work-based learning: an approach for collaboration between higher education and practice. *Nurse Education Today* 21, 597-606.

Chang EM, Hancock KM, Johnson A, Daly J, Jackson D (2005) Role stress in nurses: review of related factors and strategies for moving forward. *Nursing and Health Sciences*, 7, 57-65.

Chapple M, Aston ES (2004) Practice learning teams: a partnership approach to supporting students' clinical learning. *Nurse Education in Practice* 4, 143-149.

Clark T, Holmes S (2007) Fit for practice? An exploration of the development of newly qualified nurses using focus groups. *International Journal of Nursing Studies* 44, 1210-1220.

Clarke CL, Gibb CE, Ramprogus V (2003) Clinical learning environments: an evaluation of an innovative role to support pre-registration nursing placements. *Learning in Health and Social Care* 2, 105-115.

Clifford C (1993) The clinical role of the nurse teacher in the United Kingdom. *Journal of Advanced Nursing* 18, 281-289.

Clinton M, Murrells T, Robinson S (2005) Assessing competency in nursing: a comparison of nurses prepared through degree and diploma programmes. *Journal of Clinical Nursing* 14, 82-94.

Cloonan M, Canning R (2000) Completion rates of Scottish Vocational Qualification (SVQ) courses: a research study. *Scottish Educational Review* 32, 1, 55-67.

Colquitt JA, LePine JA, Noe RA (2000) Toward an integrative theory of training motivation: a meta-analytic path analysis of 20 years of research. *Journal of Applied Psychology* 85, 678-707.

Combined Interprofessional Universities Learning Unit (CUILU) (2006) Combined Interprofessional Learning Unit Final Report. Sheffield Hallam University, Sheffield.

Cooney AT (1992) An orientation program for new graduate nurses: the basis of staff development and retention. *Journal of Continuing Education in Nursing* 23, 216-219.

Corlett J (2000) The perceptions of nurse teachers, student nurses and preceptors of the theory-practice gap in nurse education. *Nurse Education Today* 20, 499-505.

Cowan DT, Norman IJ, Coopamah VP (2005) Nurse competency: a project to establish a skills competency matrix for EU nurses. *British Journal of Nursing* 14, 613-617.

Craig A, Corrall S (2007) Making a difference? Measuring the impact of an information literacy programme for pre-registration nursing students in the UK. *Health Information and Libraries Journal* 24, 118-127.

Davies C, Stilwell J, Wilson R, Carlisle C, Luker K (2000) Did Project 2000 nurse training change recruitment patterns or career expectations? *Nurse Education Today* 20, 408-417.

Deary IJ, Watson R, Hogston R (2003) A longitudinal study of burnout and attrition in nursing students. *Journal of Advanced Nursing* 43, 71-81.

Department of Education, Science and Training (2002) Our duty to care: National review of nurse education. Department of Education, Science and Training, Canberra.

Department of Health (1999) Making a Difference: Strengthening the Nursing and Midwifery Contribution to Health and Health Care. DH, London.

Department of Health (2001) Working Together – Learning Together. DH, London.

Department of Health (2003) The NHS Knowledge and Skills Framework (NHS KSF). DH, London.

Department of Health (2007) Creating an Interprofessional Workforce – an Education and Training Framework for Health and Social Care in England. DH, London.

Department of Health Nursing Division (1989) A Strategy for Nursing. DH, London.

Dewey J (1938) Experience and Education. New York NY, Macmillan.

Donaldson JH, Carter D (2005) The value of role modelling: perceptions of undergraduate and diploma nursing (adult) students. *Nurse Education in Practice* 5, 353-359.

Drennan J (2002) An evaluation of the role of the clinical placement co-ordinator in student nurse support in the clinical area. *Journal of Advanced Nursing* 40, 4, 475-483.

Drennan V, Andrews S, Sidhu R, Peacock R (2007) Attracting and retaining nurses in primary care. *British Journal of Community Nursing* 11, 242-246.

Driver J, Campbell J (2000) An evaluation of the impact of lecturer practitioners on learning. *British Journal of Nursing*. 9, 292-300.

Duffin C (2005) Compulsory maths tests considered. *Nursing Standard* 20, 5, 8.

Duffy K (2003) Failing students: a qualitative study of factors that influence the decisions regarding assessment of students' competence in practice. Glasgow Caledonian University, Glasgow & Nursing and Midwifery Council, London.

Duffy K (2006) Weighing the balance: a grounded theory study of the factors that influence the decisions regarding the assessment of students' competence in practice. PhD. Glasgow Caledonian University, Glasgow.

Duffy K, Docherty C, Cardnuff L, White M, Winters G (2000) The nurse lecturers role in mentoring the mentor. *Nursing Standard* 15, 6, 35-38.

Duffy K, Hardacre J (2007a) Supporting failing students in practice 1: assessment. *Nursing Times* 103, 47, 28-29.

Duffy K, Hardacre J (2007b) Supporting failing students in practice 2: management. *Nursing Times* 103, 48, 28-29.

Duffy K, Watson HE (2001) An interpretive study of the nurse teacher's role in practice placement areas. *Nurse Education Today* 21, 551-558.

Elcock K, Curtis P, Sharples K (2007) Supernumerary status – an unrealised ideal. *Nurse Education in Practice* 7, 4-10.

Ellerton M, Gregor F (2003) A study of transition: the new nurse graduate at 3 months. *Journal of Continuing Education in Nursing* 34, 103-107.

Elliott M, Joyce J (2004) Mapping drug calculation skills in an undergraduate nursing curriculum. *Nurse Education in Practice* 5, 225-229.

Elliott M, Wall N (2007) Should nurse academics engage in clinical practice? *Nurse Education Today* (In Press) doi:10.1016/j.nedt.2007.09.015.

Evans K (2002) Rotational programmes for newly qualified nurses. *Nursing Times* 97, 50, 42-44.

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, 97-103.

Farrell M (2006) Learning differently: e-learning in nurse education. *Nursing Management* 13, 6, 14-17.

Fealey GM (2005) Sharing the experience: interdisciplinary education and interprofessional learning. *Nurse Education in Practice* 5, 317-319.

Fear T (2004) Community placements for pre-registration nurses. *Journal of Community Nursing* 18, 5, 32-34.

Fereday J, Muir-Cochrane E (2006) The role of performance feedback in the self-assessment of nursing competence: a research study with nursing clinicians. *Contemporary Nurse* 13, 1, 10-15.

Feij JA, Whiteley WT, Peiro JM, Taris TW (1995) The development of career enhancing strategies and content innovation – a longitudinal study of New Yorkers. *Journal of Vocational Behaviour* 46, 231-256.

Ferguson C, Cerinus M (1996) Students in employment: learning and working. *Nurse Education Today* 16, 373-375.

Field DE (2004) Moving from novice to expert – the value of learning in clinical practice: a literature review. *Nurse Education Today* 24, 560-565.

Fillion L, Fortier M, Goupil RL (2005) Educational needs of palliative care nurses in Quebec. *Journal of Palliative Care* 21, 1, 12-18.

Finnerty G, Graham L, Magnuson C, Pope R (2006) Empowering midwife mentors with adequate training and support. *British Journal of Midwifery* 14, 187-190.

Fisher M (2005) Exploring how nurse lecturers maintain clinical credibility. *Nurse Education in Practice* 5, 21-29.

Foster-Turner J (2006) *Coaching and mentoring in health & social care: the essentials of practice for professionals and organisations* Radcliffe Publishing, Oxford.

Fowler J (1996) The organisation of clinical supervision in the nursing profession: a review of the literature. *Journal of Advanced Nursing* 23, 471-478.

Freidson E (1970) *Profession of Medicine*. Dodd Mead, New York NY.

Fretwell JE (1980) An enquiry into the ward learning environment. *Nursing Times Occasional Papers* 76, 69-75.

Fretwell J (1983) Creating a ward learning environment: the sister's role. *Royal College of Nursing Occasional Papers* 79, 21-22.

Fulbrook P, Rolfe G, Albarran J, Boxall F (2000) Fit for practice: Project 2000 student nurses' views on how well the curriculum prepares them for clinical practice. *Nurse Education Today* 20, 350-357.

Gerrish K (2000) Still fumbling along? A comparative study of the newly qualified nurse's perception of the transition from student to qualified nurse. *Journal of Advanced Nursing* 32, 473-480.

Giroit EA (2000) Assessment of graduates and diplomates in practice in the UK – are we measuring the same level of competence? *Journal of Clinical Nursing* 9, 330-337.

Glaister K (2007) The presence of mathematics and computer anxiety in nursing students and their effects on medication dosage calculations. *Nurse Education Today* 27, 341-347.

Glossop C (2002) Student nurse attrition: use of an exit-interview procedure to determine students' leaving reasons. *Nurse Education Today* 22, 375-386.

Goldenberg D, Andrusyszyn M, Iwasiw C (2005) The effect of classroom simulation on nursing students' self-efficacy related to health teaching. *Journal of Nursing Education* 44, 310-314.

Grandell-Neimi H, Hupli M, Puukka P, Leino-Kilpi H (2006) Finnish nurses' and nursing students' mathematical skills. *Nurse Education Today* 26, 151-161.

Grau R, Salanova M, Peiro J (2001) Moderator effects of self-efficacy on occupational stress. *Psychology in Spain* 5, 1, 63-67.

Gray M, Smith L (1999) The professional socialization of diploma of higher education nursing students (Project 2000): a longitudinal study. *Journal of Advanced Nursing* 29, 639-647.

Gray M, Smith L (2000) The qualities of an effective mentor from the student nurses perspective: findings from a longitudinal study. *Journal of Advanced Nursing* 32, 1542-1549.

Greenberger H, Reches H, Riba S (2005) Do new graduates of registered nursing programs in Israel perceive themselves as technically competent? *Journal of Continuing Education in Nursing* 36, 133-140.

Grundy L (2001) Pathways to fitness for practice: national vocational qualifications as a foundation of competence in nurse education. *Nurse Education Today* 21, 260-265.

Gurpinar E, Musal B, Aksakoglu G, Ucku R (2000) Comparison of knowledge scores of medical students in problem-based learning and traditional curriculum on public health topics. *BMC Medical Education* 5, 1, 7.

Haigh J (2007) Expansive learning in the university setting: the case for simulated clinical experience. *Nurse Education in Practice* 7, 95-102.

Hall JC (2002) Retention and Wastage in FE and HE: a review. Society for Research in Higher Education, London.

Hall W (2006) Developing clinical placements in times of scarcity. *Nurse Education in Practice* 6, 319-325.

Hammond C, Feinstein L (2005) The effects of adult learning on self-efficacy. *London Review of Education* 3, 265-287.

Hancock J (2003) Learning for life. *Nursing Standard* 17, 60.

Hanson B, Mitchell DP (2001) Involving mental health service users in the classroom: a course of preparation. *Nurse Education in Practice* 1, 120-126.

Harden RM, Gleeson FA (1979) Assessment of clinical competence using an observed structured clinical examination. *Medical Educator* 13, 41-47.

Hartshorn JC (1992) Evaluation of a critical care nursing internship program. *Journal of Continuing Education in Nursing* 23, 42-48.

Harvey V, McMurray N (1994) Self-efficacy: a means of identifying problems in nursing education and career progress. *International Journal of Nursing Studies* 31, 471-485.

Heath V (2001) Accreditation of prior (experiential) learning: making the difference. *Nurse Education Today* 21, 496-500.

Hickie S, Lyttle CP, Harris LE (2007) Structured learning for newly qualified nurses. *Nursing Times* 103, 37, 28-29.

Hickey G (2000) Newly qualified in the community. *Paediatric Nursing* 12, 9, 30-33.

Higher Education Funding Council England (2000) Performance Indicators in Higher Education. Higher Education Funding Council England, London.

Hilton PA, Pollard CL (2005) Enhancing the effectiveness of the teaching and learning of core clinical skills. *Nurse Education in Practice* 5, 289-295.

HLSP (2007a) University of Paisley: Working in Partnership. Nursing and Midwifery Council, London & HLSP, London.

HLSP (2007b) Queen Margaret University: Working in Partnership. Nursing and Midwifery Council, London & HLSP, London.

Hockley J (2006) Developing high quality end of life care in nursing homes: an action research study. In Department of Nursing, PhD University of Edinburgh Library, Edinburgh.

Holland K (1999) A journey to becoming: the student nurse in transition. *Journal of Advanced Nursing* 29, 229-236.

Holland K (2005) Partnerships and Collaboration in Education. Keynote paper, 3rd Annual Developments in Nurse Education Conference, University of Salford.

Hughes SJ (2004) The mentoring role of the personal tutor in the 'Fitness for practice' curriculum: an all-Wales approach. *Nurse Education in Practice* 4, 4, 271-278.

Humphreys A, Gidman J, Andrews M (2000) The nature and purpose of the role of the nurse lecturer in practice settings. *Nurse Education Today* 20, 311-317.

Ioannides AP (1999) The nurse teacher's clinical role, now and in the future. *Nurse Education Today* 19, 207-214.

Israel BA, House JS, Schurman SJ, Heaney C, Mero RP (1989) The relation of personal resources, participation, influence, interpersonal relationships and coping strategies to occupational stress, job strains and health: A multivariate analysis. *Work & Stress* 3, 163-194.

Johnson M, Haigh C, Yates-Bolton N (2007) Valuing of altruism and honesty in nursing students: a two-decade replication study. *Journal of Advanced Nursing* 57, 366-374.

Jones DJ, Watson BC (1990) High risk students and higher education: future trends. ERIC Clearinghouse on Higher Education, George Washington University, Washington DC.

Jones RA (2005) Prioritising to safeguard the integrity of nurse education. *Nursing Times*, 101, 34, 26-27.

Jones DD, Cohen L, Drew N, Haunold S, Pike L. and Young A (2001). Addressing attrition: Why we need a unified approach to transition issues. In A. Herrmann and M. M. Kulski (Eds), *Expanding Horizons in Teaching and Learning*. Proceedings of the 10th Annual Teaching Learning Forum, 7-9 February 2001. Perth: Curtin University of Technology. <http://lsn.curtin.edu.au/tlf/tlf2001/darlaston-jones.html>

Joy R, Nickless LJ (2007) Revolutionising assessment in a clinical skills environment – a global approach: the recorded assessment. *Nurse Education in Practice* (In Press) doi:10.1016/j.nepr.2007.11.001.

Jukes L, Gilchrist M (2006) Concerns about numeracy skills of nursing students. *Nurse Education in Practice* 6, 6 192-198.

Karasek R, Brisson C, Kawamaki N (1988) The job content questionnaire (JCQ): an instrument for internationally comparative assessments of psychosocial job characteristics. *Journal of Occupational Health Psychology* 3, 322–355.

Kelly AV (1999) *The Curriculum: Theory and Practice*. Paul Chapman, London.

Kenny G (2004) The origins of current nurse education policy and its implications for nurse educators. *Nurse Education Today*. 24, 84-90.

Kilcullen NM (2007) Said another way: the impact of mentorship on clinical learning. *Nursing Forum* 42, 95-104.

Klein CJ (2006) Educational innovation: linking competency-based assessment to successful clinical practice. *Journal of Nursing Education* 45, 379-383.

Lambert V, Glacken M (2005) Clinical education facilitators: a literature review. *Journal of Clinical Nursing* 14, 6, 664-673.

Laschinger HK, Tresolini CP (1999) An exploratory study of nursing and medical students health promotion counselling self-efficacy. *Nurse Education Today* 19, 408-418.

Last L, Fulbrook P (2003) Why do students leave? Suggestions from a Delphi study. *Nurse Education Today* 23, 449-458.

Lathleen J, Burgess A, Coldham Gibson C, Herbert L, Levett-Jones, Simons L, Tee S (2006) Experiences of service user and carer participation in health care education. *Nurse Education Today* 26, 732-737.

Lauder W (1993) Liberal education and the purchaser-provider link. *Senior Nurse* 13, 4, 39-41.

Lauder W (2004) Higher Academic Entry to Nurse Education. Curriculum Development Conference, NHS Education Scotland, Carnoustie.

Lauder W, Cuthbertson P (1998) The course-related financial and family problems of mature students. *Nurse Education Today* 18, 5, 419-425.

Lave J (1988) *Cognition in Practice: Mind, Mathematics and Culture in Everyday Life*. Cambridge University Press, Cambridge.

Lee D (1996) The clinical role of the nurse teacher: a review of the dispute. *Journal of Advanced Nursing* 23, 1127-1134.

Leigh J, Howarth M, Devitt P (2005) The role of the lecturer practitioner: an exploration of the stakeholders and practitioners perspective. *Nurse Education in Practice* 5, 258-265.

Levett-Jones T, Lathlean J (2007) Belongingness: a prerequisite for nursing student's clinical experience. *Nurse Education in Practice* 8, 103-111.

Levinson AJ, Weaver B, Garside S, McGinn H, Norman GR (2007) Virtual reality and brain anatomy: a randomised trial of e-learning instructional designs. *Medical Education* 41, 495-501.

Lim G, Honey M (2006) Integrated undergraduate nursing curriculum for pharmacology. *Nurse Education in Practice* 6, 163-168.

Long T, Asbury J (2000) A tripartite approach to assessing practice. *Journal of Child Health Care* 4, 35-38.

Long T, Hale C, Sanderson L, Tomlinson P, Carr K (2003) Evaluation of educational preparation for cancer and palliative care nursing for children and adolescents. Research report to the Department of Health for England. University of Salford, Salford.

Lord M (2002) Making a Difference: the implications for nurse education. *Nursing Times* 98, 20, 38-40.

Luker K, Carlisle C, Riley E, Stilwell J, Davies C, Wilson R (1996) Project 2000 Fitness for Purpose: Report to the Department of Health. University of Warwick and University of Liverpool, Warwick.

MacLeod-Clark J, Maben J, Jones K (1996) Project 2000: Perceptions of the Philosophy and Practice of Nursing. English National Board for Nursing, Midwifery and Health Visiting, London.

Major DA (2005) OSCEs – seven years on the bandwagon: the progress of an objective structured clinical evaluation programme. *Nurse Education Today* 25, 442-454.

Malinauskiene V, Theorell T, Grazuleviciene R, Malinauskas R, Azaraviciene A (2004) Low job control and myocardial infarction risk in the occupational categories of Kaunas men, Lithuania. *Journal of Epidemiology and Community Health* 58, 131-135.

Mallik M, Aylott E (2005) Facilitating practice learning in pre-registration nursing programmes – a comparative review of the Bournemouth Collaborative model and Australian models. *Nurse Education in Practice* 5, 152-160.

Mann DD, Eland DC (2005) Self-efficacy in mastery learning to apply a therapeutic psychomotor skill. *Perceptual and Motor Skills* 100, 1, 77-84.

Mavis B (2001) Self-efficacy and OSCE performance among second year medical students. *Advances in Health Sciences Education* 6, 93-102.

May N, Veitch L, McIntosh J, Alexander M (1997) Preparation for Practice: Evaluation of Nurse and Midwife Education in Scotland. Glasgow Caledonian University, Glasgow.

May N, Veitch L (1998) Working to learn and learning to work: placement experience of Project 2000 nursing students in Scotland. *Nurse Education Today* 18, 630-636.

McAllister M (2001) The competing interests of assessment: an Australian overview. *Curriculum and Teaching* 14, 45-62.

McArthur GS, Burns I (2007) An evaluation, at the 1-year stage, of a 3-year project to introduce practice education facilitators to NHS Tayside and Fife. *Nurse Education in Practice* Article (In Press) doi:10.1016/j.nepr.2007.04.008.

McCallum J (2007) The debate in favour of using simulation education in pre-registration nursing adult nursing. *Nurse Education in Today* 27, 825-831.

McCaughan E, Parahoo K (2000) Medical and surgical nurses' perceptions of their level of competence and educational needs in caring for patients with cancer. *Journal of Clinical Nursing* 9, 420-428.

McGowan B (2006) Who do they think they are? Undergraduate perceptions of the definition of supernumerary status and how it works in practice. *Journal of Clinical Nursing* 15, 1099-1105.

McKenna LG, Wellard SJ (2004) Discursive influences on clinical teaching in Australian undergraduate nursing programmes. *Nurse Education Today* 24, 229-235.

McMillan J (2005) Course Change and Attrition from Higher Education. Research Report 39, Australian Government Department of Education, Science and Training, Victoria.

McVay A, Lynch M (2002) The Online Educator: a Guide to Creating the Virtual Classroom. Routledge, London.

Meakin S (2003) Education to save midwifery. MIDIRS Midwifery Digest 13, 157-160.

Meerabeau L (2001) Back to the bedpans: the debates over pre-registration nursing education in England. Journal of Advanced Nursing 34, 427-435.

Melia K (1987) Learning and Working: the Occupational Socialisation of Nurses. Tavistock Publications, London.

Mersch J, Nekimken S (2005) Mentorship program guides new hires. Stanford Nurse 25, 1, 14-15.

Moeti MR, van Niekerk SE, van Velden CE (2004) Perceptions of the clinical competence on newly qualified registered nurses in the North West Province. Curationis: South African Journal of Nursing 27, 3, 72-84.

Mole LJ, McLafferty IHR (2004) Evaluating a simulated ward exercise for third year student nurses. Nurse Education in Practice 4, 91-99.

Moore D (2005) Assuring Fitness for Practice: a Policy Review. Nursing and Midwifery Council Task and Finish Group, London.

Morrison-Griffiths S, Snowden M, Pirmohamed M (2002) Pre-registration nurse education in pharmacology: is it adequate for the roles that nurses are expected to fulfil? Nurse Education Today 22, 447-456.

Murray C, Borneouf A, Vaughan J (2005) Working collaboratively towards practice placements. Nurse Education in Practice 5, 127-128.

Murray C, Thomas M (1998) How can the clinical credibility of nurse lecturers be improved? British Journal of Nursing 7, 8, 490-492.

Murrells T, Robinson S (2005) Job satisfaction in nursing: validation of a new instrument for the UK. Journal of Nursing Management 13, 296-311.

National Assembly for Wales (1999) Realising the Potential: a Strategic Framework for Nursing, Midwifery and Health Visiting in Wales in the 21st Century. National Assembly for Wales, Cardiff.

National Board for Nursing, Midwifery and Health Visiting for Scotland (2000) Partnerships in Development and Delivery. Fitness for Practice – Implementation in Scotland. NBS, Edinburgh.

National Health Service Scotland HDL (2006) The Education and Training Policy Statement for NHS Scotland. Scottish Executive, Edinburgh.

National Patient Safety Agency (2004) Ready, Steady, Go! The Full Guide to Implementing the Clean Your Hands Campaign in Your Trust. National Patient Safety Agency, London.

Neary M (2000) Teaching, Assessing and Evaluation for Clinical Competence: a Practical Guide for Practitioners and Teachers. Nelson Thornes, Cheltenham.

Nelson L, Sadler L, Surtees G (2005) Bringing problem based learning to life using virtual reality. Nurse Education in Practice 5, 103-108.

Nettleton P, Bray L (2008) Current mentorship schemes might be doing our students a disservice. Nurse Education In Practice 8, 3 205-212

NHS Education for Scotland (2002a) The Development of Quality Standards for Practice Placements. NHS Education for Scotland, Edinburgh.

NHS Education for Scotland (2002b) Preparation for Practice: Clinical Skills (Nurse Education). NHS Education for Scotland, Edinburgh.

NHS Education for Scotland (2005) The Right Preparation. NHS Education for Scotland, Edinburgh

NHS Education for Scotland (2006) Perinatal Mental Health Curricular Framework. NHS Education for Scotland, Edinburgh.

NHS Education for Scotland (2007a) National Approach to Mentor Preparation for Nurses and Midwives. NHS Education for Scotland, Edinburgh.

NHS Education for Scotland (2007b) NHS Education Scotland: Supporting Numeracy Skills in the Scottish Healthcare Workforce. NHS Education for Scotland, Edinburgh.

NHS Education for Scotland (2007c) The Capability Framework for Community Health Nursing. NHS Education for Scotland, Edinburgh.

NHS Health Scotland (2006) Race Equality Scheme. NHS Health Scotland, Edinburgh

NHS Information Authority (2003) National Health Informatics Competency Survey (2002) www.nhsia.nhs.uk/nhid/pages/resource_informatics/Competency%20Survey

Nicol M, Glen S (eds) (1999) *Clinical Skills in Nursing: the Return of the Practical Room?* Macmillan, London.

Nightingale F (1980) *Notes on Nursing*. Churchill Livingstone, Edinburgh.

Nkosi ZZ, Uys LR (2005) A comparative study of professional competence of nurses who have completed different bridging programmes. *Curationis: South African Journal of Nursing* 28, 1, 6-12.

Nolan M, Grant G (1993) Service evaluation: time to open both eyes. *Journal of Advanced Nursing* 18, 1434-1442.

Norman IJ, Watson R, Murrells T, Calman L, Redfern S (2002) The validity and reliability of methods to assess the competence to practice of pre-registration nursing and midwifery students. *International Journal of Nursing Studies* 39, 133-145.

Nursing and Midwifery Council (2004a) *Standards of Proficiency for Pre-registration Midwifery Education*. NMC, London.

Nursing and Midwifery Council (2004b) *Standards of Proficiency for Pre-registration Nursing Education*. NMC, London.

Nursing and Midwifery Council (2004c) *The NMC Code of Professional Conduct: Standards for Conduct, Performance and Ethics*. NMC, London.

Nursing and Midwifery Council (2005) *Consultations on Proposals arising from a Review of Fitness for Purpose at the Point of Registration*. NMC Circular 31/2005. NMC, London.

Nursing and Midwifery Council (2006a) *NMC announces Simulation and Practice Learning Project*. Press release 38/2006, July 2006. NMC, London.

Nursing and Midwifery Council (2006b) *Advanced information regarding Essential Skill Clusters for Pre-registration Nursing Programmes*. NMC Circular 35/2006, 10th October 2006. NMC, London.

Nursing and Midwifery Council (2006c) *Standards to Support Learning and Assessment in Practice*. NMC, London.

Nursing and Midwifery Council (2007a) *Consultation on the Future of Pre-registration Nurse Education*. NMC, London.

Nursing and Midwifery Council (2007b) *Guidance for the Introduction of the Essential Skills Clusters for Pre-registration Nursing Programmes*. NMC circular 07/2007, Annexe 1. NMC, London.

Nursing and Midwifery Council (2007c) Introduction of Essential Skills Clusters for pre-registration midwifery education. NMC circular 23/2007. NMC, London.

Nursing and Midwifery Council (2007d) Simulation and Practice Learning Project: Outcome of a Pilot Study to Test the Principles for Auditing Simulated Practice Learning Environments in the Pre-registration Nursing Programme. NMC, London.

Nursing and Midwifery Council (2007e) Supporting Direct Care through Simulated Practice Learning in the Pre-registration Nursing Programmes. NMC Circular 36/2007. NMC, London.

Nursing and Midwifery Council (2008) Fitness to Practice: Changes to the Council's Register 01-31 January 2008 <http://www.nmc-uk.org/aFrameDisplay.aspx?DocumentID=3728> (accessed 7th March 2008).

O'Conner SE, Pearce J, Smith RL, Voegli D, Walton P (2001) An evaluation of the clinical performance of newly qualified nurses: a competency based assessment. *Nurse Education Today* 21, 559-568.

O'Neil A (2003) Preparation for Practice: Clinical Skills (Nurse Education) Project Report. NHS Education for Scotland, Edinburgh.

O'Neill-Hewlett P, Bleich MR (2004) The re-emergence of academic-service partnerships: responses to the nursing shortage, work environment issues, and beyond. *Journal of Professional Nursing* 20, 273-274.

Orton HD (1981) Ward learning climate and student nurse response. *Nursing Times Occasional Papers* 77, 65-68.

Ousey K (2003) The first year of a problem-based learning curriculum. *Nursing Standard* 17, 22, 33-36.

Page K, McKinney A (2007) Addressing medication errors – the role of undergraduate nursing education. *Nurse Education Today* 27, 219-224.

Pajares F (1996) Self-efficacy beliefs in academic settings. *Review of Educational Research* 66, 543-578.

Pajares F, Kranzler J (1995) Self-efficacy beliefs and general mental ability in mathematical problems solving. *Contemporary Educational Psychology* 20, 426-443.

Pajares F, Miller D (1994) Role of self-efficacy and self-concept beliefs in mathematical problem solving: a path analysis. *Journal of Educational Psychology* 86, 193-203.

Pankaj V (2004) Current Status of Cultural Competency Training in NHS Scotland. National Resource Centre for Ethnic Minority Health, Glasgow.

Parahoo K (1999) A comparison of pre-Project 2000 and Project 2000 nurses' perceptions of their research training, research needs and of their use of research in clinical areas. *Journal of Advanced Nursing* 29, 237-245.

Parker SK, Sprigg CA (1999) Minimizing strain and maximising learning: the role of job demands, job control, and proactive personality. *Journal of Applied Psychology* 84, 925-939.

Pembrey S (1980) *The Ward Sister – Key to Nursing. A Study of the Organisation of Individualised Nursing*. Royal College of Nursing, London.

Pfeil M (2003) Assessing the clinical skills performance of nursing students. *Journal of Child Health Care* 7, 191-205.

Philips T, Schostak J, Tyler J (2000) *Practice and Assessment in Nursing and Midwifery; Doing it for Real*. English National Board, London.

Philpin S (1999) The impact of 'Project 2000' educational reforms on the occupational socialization of nurses: an exploratory study. *Journal of Advanced Nursing* 29, 1326-1331.

Pintrich PR, De Groot EV (1990) Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology* 82, 3340.

Pollard K, Sellman D, Senior B (2005) The need for interprofessional working. In: *Interprofessional Working in Health and Social Care – Professional Perspectives*. Palgrave Macmillan, Basingstoke, 7-17.

Pulsford D, Boit K, Owen S (2002) Are mentors ready to make a difference? A survey of mentors' attitudes towards nurse education. *Nurse Education Today* 22, 439-446.

Purdie A, Sheward L, Gifford E (2008) Student nurse placements take a new direction. *Nurse Education in Practice* (In Press) doi:10.1016/j.nepr.2008.01.001.

Quality Assurance Agency (2001) *Code of Practice for the Assurance of Academic Quality Standards in Higher Education: Placement Learning*. Quality Assurance Agency, London.

Rabb G (1998) *Participation in Higher Education in Scotland*. Scottish Higher Education Funding Council, Edinburgh.

Redfern S, Norman I, Calman L, Watson R, Murrells T (2002) Assessing competence to practice in nursing: a review of the literature. *Research Papers in Education* 17, 51-77.

Reeves S (2001) A systematic review of the effects of interprofessional education on staff involved in the care of adults with mental health problems. *Journal of Psychiatric Mental Health Nursing* 8, 533-542.

Ridley J, Jones L (2001) User and Public Involvement in Health Services: a Literature Review. Partners in Change, Edinburgh.

Ritch SK, Keim RG, Shuler CF (2005) Problem-based learning versus a traditional educational methodology: a comparison of preclinical and clinical periodontics performance. *Journal of Dental Education* 69, 649-62.

Roberts D, Ousey K (2004) Problem based learning: developing the triggers. Experiences from a first wave site. *Nurse Education in Practice* 4, 154-158.

Rong JR, Chung UL (2006) The challenge facing nurse education: to develop clinical performance examination strategies in nursing practice. *Hu Li Zo Zhi* 53, 1 17-21.

Rosser M, Rice AM, Campbell H, Jack C (2004) Evaluation of a mentorship programme for specialist practitioners. *Nurse Education Today* 24, 596-604.

Rowbotham A (1991) The use of credit and experiential learning in nurse education. Exciting opportunities for student and tutor alike. *Nurse Education Today* 11, 467-473.

Roxburgh M, Watson R, Holland K, Johnson M, Lauder W, Topping K (2008) A review of curriculum evaluation in United Kingdom nursing education *Nurse Education Today*, 28, 7, 881-889

Royal College of Nursing (2005) Guidance for Mentors of Student Nurses and Midwives. An RCN Toolkit. Royal College of Nursing, London.

Ruiz JG, Candler C, Thomas A (2007) peer reviewing e-learning: opportunities, challenges, and solutions. *Academic Medicine* 82, 5, 503-506.

Runciman P, Dewar B, Goulbourne A (1998) Employers' Needs and the Skills of Newly Qualified Project 2000 Staff Nurses in Scotland. Queen Margaret College, Edinburgh.

Runciman P, Dewar B, Goulbourne A (2002) Newly qualified Project 2000 staff nurses in Scottish nursing homes: issues for education. *Nurse Education Today* 22, 593-601.

Rush B, Barker JH (2006) Involving mental health service users in nurse education through inquiry-based learning. *Nurse Education in Practice* 6, 254-260.

Sabin M (2001) Competence in Practice-based Calculation: Issues for Nursing Education. A Critical Review of the Literature. Learning and Teaching Support Network (LTSN) for Health Sciences and Practice, London.

Saks AM (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.

- Salomon G, Perkins D (1988) Teaching for transfer. *Educational Leadership* 46, 1, 22-32.
- Sandwell M, Carson P (2005) Developing numeracy in child branch students. *Paediatric Nursing* 17, 9, 24-26.
- Schoening AM (2006) Simulated clinical experience: nursing students perceptions and the educators role. *Nurse Educator* 31, 253-258.
- Scholes J, Freeman Gray M, Wallis B, Robinson D, Matthews-Smith G, Miller C (2004) Evaluation of nurse education partnership. www.brighton.ac.uk/inam/research/projects/partnerships_report.pdf (Accessed 9th April 2007).
- Scholz U, Gutiérrez-Doña B, Sud S, Schwarzer R (2002) Is perceived self-efficacy a universal construct? Psychometric findings from 25 countries. *European Journal of Psychological Assessment* 18, 242-251.
- Schunk D (2004) *Learning Theories: an Educational Perspective* (4th ed). Pearson, Upper Saddle River NJ.
- Schwarzer R (1994) Optimism, vulnerability, and self-beliefs as health-related cognitions: a systematic overview. *Psychology and Health: An International Journal* 9, 161-180.
- Schwarzer R (1995) GPES. In *Measures in Health Psychology: a User's Portfolio. Causal and Control Beliefs* (Weinman et al eds). NFER-Nelson, Windsor.
- Schwarzer R, Born A (1997) Optimistic self-beliefs: assessment of general perceived self-efficacy in thirteen cultures. *World Psychology* 3, 177-190.
- Scotland Partnerships for Palliative Care (2007) *A Guide to using Palliative Care Frameworks*. Scotland Partnerships for Palliative Care & NHS Education for Scotland, Edinburgh.
- Scott-Wright M (1968) *Student Nurses in Scotland: Characteristics of Success and Failure*. Scottish Home and Health Department, Edinburgh.
- Scottish Executive Health Department (2001) *Caring for Scotland: The Strategy for Nursing Midwifery in Scotland*. The Stationery Office, Edinburgh.
- Scottish Executive Health Department (2002) *Facing the Future*. The Stationery Office, Edinburgh.
- Scottish Executive Health Department (2005) *Building a Health Service Fit for the Future*. The Stationery Office, Edinburgh.

Scottish Executive Health Department (2006a) Rights, Relationships and Recovery – the Report of the National Review of Mental Health Nursing in Scotland. The Stationery Office, Edinburgh.

Scottish Executive Health Department (2006b) Visible, Accessible and Integrated Care: Report of the Review of Nursing in the Community in Scotland. The Stationery Office, Edinburgh.

Scottish Executive Health Department (2006c) Pilot Project to Support New Staff Nurses into Primary Care. The Stationery Office, Edinburgh.

Scottish Executive Health Department (2006d) Delivering Care: Enabling Health. The Stationery Office, Edinburgh.

Scottish Executive Health Department (2006e) Modernising Nursing Careers: Setting the Direction. The Stationery Office, Edinburgh.

Scottish Executive Health Department (2006f) One-year Development Programme for all Newly Qualified Nurses and Midwives. The Stationery Office, Edinburgh.

Scottish Executive Health Department (2007) Senior Charge Nurse Review and Clinical Quality Indicators for Nursing and Midwifery Project. The Stationery Office, Edinburgh.

Scottish Government Health Department (2007a) Recruitment and Retention: Report of the 'Facing the Future' Sub-group & Working Groups. The Stationery Office, Edinburgh.

Scottish Government Health Department (2007b) Better Health, Better Care: Planning Tomorrow's Workforce Today. Scottish Government, Edinburgh.

Sellman D (2007) On being of good character: nurse education and the assessment of good character. *Nurse Education Today* 27, 762-767.

Selwyn N, Robson K (1998) Using e-mail as a research tool. Social Research Update 21, 1-4.

Sewell AM, St George AM (1999) 'I'll have a go at that!' Developing efficacy beliefs in the classroom. AARE-NZARE Conference Global Issues & Local Effects: The Challenge for Educational Research, 29 November - 2 December 1999.

Shelton JN, Sellers RM (2003) The role of racial identity in perceived racial discrimination. *Journal of Personality and Social Psychology* 84, 1079-1092.

Smith A, Chalker NJ (2005) Preceptor continuity in a nurse internship program: the nurse intern's perception. *Journal for Nurses in Staff Development* 21, 2, 47-54.

Smith G, Cantley C (1985) *Assessing Health Care: a Study of Organisational Evaluation*. Open University Press, Milton Keynes.

Smith M, Beazley M (2000) Progressive regimes, partnerships and the involvement of local communities: a framework for evaluation. *Public Administration* 78, 855-878.

Snow T, Harrison S (2008) Carter to raise nurse education concerns with university heads. *Nursing Standard* 22, 21, 8.

Speers J (2008) Service user involvement in the assessment of a practice competency in mental health nursing – stakeholders' views and recommendations. *Nurse Education in Practice* 8, 112-119.

Spouse J (2001) Workplace learning: pre-registration nursing students' perspectives. *Nurse Education in Practice* 1, 149-156.

Spouse J (2002) Bridging theory and practice in the supervisory relationship: a sociocultural perspective. *Journal of Advanced Nursing* 33, 512-522.

Squires A (2002) New graduate orientation in the rural community hospital. *Journal of Continuing Education in Nursing* 33, 203-209.

Taris TW, Feij JA (2004) Learning and strain in newcomers: a three-wave study on the effects of job demands and job control. *Journal of Psychology* 138, 543-563.

Taris TW, Kompier MAJ, de Lange AH, Schaufeli WB, Schreurs PJG (2003) Learning new behaviour patterns: a longitudinal test of Karasek's active learning hypothesis among Dutch teachers. *Work and Stress* 17, 1-20.

Taylor PJ, Russ-Eft DF, Chan DWL (2005) A meta-analytic review of behaviour modelling training. *Journal of Applied Psychology* 90, 692-709.

Taylor R, Pearson A (1994) Total quality management in research and development. *The TQM Magazine* 6, 1, 26-34. In: Luker K Carlisle C Davis C Wilson R (1996) *Project 2000 Fitness for Purpose: Report to the Department of Health*. University of Warwick and University of Liverpool, Warwick.

The United Kingdom Parliament (2001) *Education and Employment - Sixth Report* Education and Employment Committee Publication. The United Kingdom Parliament, House of Commons.

Thiest KM, Ayers LR (2004) Community-based student practice: a transformational model of nursing education. *Nursing Leadership Forum* 9, 1, 3-12.

Thompson DR, Watson R (2001) Academic nursing – what is happening to it and where is it going? *Journal of Advanced Nursing* 36, 1-2.

Thompson DR, Watson R (2005) The state of nursing in the United Kingdom. *Journal of Clinical Nursing* 14, 1339.

Topping KJ (2001) *Thinking Reading Writing: a Practical Guide to Paired Learning with Peers, Parents & Volunteers*. Continuum International, London.

Topping KJ (2003) Self and peer assessment in school and university: reliability, validity and utility. In *Optimizing new modes of assessment: in search of qualities and standards* (Segers MSR, Dochy FJRC, Cascallar EC). Kluwer Academic Publishers, Dordrecht.

Topping KJ, Peter C, Stephen P, Whale M (2004) Cross-age peer tutoring of science in the primary school: influence on scientific language and thinking. *Educational Psychology* 24, 57-75.

United Kingdom Central Council for Nursing, Midwifery and Health Visiting (1986) *Project 2000: the Final Proposals*. UKCC, London.

United Kingdom Central Council for Nursing, Midwifery and Health Visiting (1999) *Fitness for Practice: The UKCC Commission for Nursing and Midwifery Education*. UKCC, London.

United Kingdom Central Council for Nursing, Midwifery and Health Visiting (2000) *Revised Standards for the Preparation of Teachers of Nursing, Midwifery and Health Visiting*. UKCC, London.

United Kingdom Central Council for Nursing, Midwifery and Health Visiting (2001) *Fitness for Practice and Purpose: the Report of the UKCC's Post-Commission Development Group*. UKCC, London

van der Vleuten CPM, van Luijk SJ, Beckers HJM (1989) A written test as an alternative to performance testing. *Medical Educator* 23, 97-107.

Victoria Department of Human Services (2002) *Graduate Nurse Program Guidelines*. Victoria State Government, Melbourne.

Wakefield A, Cooke S, Boggis C (2003) Learning together: use of simulated patients with nursing and medical students for breaking bad news. *International Journal of Palliative Nursing* 9, 1, 32-38.

Walsh P, Jones K (2005) An exploration of tripartite collaboration in developing a strategic approach to the facilitation of practice learning. *Nurse Education in Practice* 5, 49-57.

Wandelt MA, Stewart DS (1975) *Slater Nursing Competencies Rating Scale*. Appleton-Century-Crofts, New York NY.

Wanless D (2002) Securing our Future Health: Taking a Long Term View. HM Treasury, London.

Wanless D (2004) Securing Good Health for the Whole Population. HM Treasury, London.

Ward H, Wills A (2006) Assessing advanced clinical practice skills. *Primary Health Care* 16, 3, 22-24.

Watson N (1999) Mentoring today – the students' views. An investigative case study of pre-registration nursing students' experiences and perceptions of mentoring in one theory/practice module of the common foundation programme on a Project 2000 course. *Journal of Advanced Nursing* 29, 254-262.

Watson R, Norman IJ, Draper J, Jowett S, Wilson-Barnett J, Normand C, Halliday D (2005) NHS cadet schemes: do they widen access to healthcare study? *Journal of Advanced Nursing* 49, 276-282.

Watson R, Hogston R, Norman I, Stimpson A, Sanderson D, O'Reilly J (2004) Quality assurance in UK nursing education: public protection in the era of streamlined assessment. *Nurse Education Today* 25, 49-55.

Watson R, Calman L, Norman I, Redfern S, Murrells T (2002a) Assessing clinical competence in student nurses. *Journal of Clinical Nursing* 11, 554-555.

Watson R, Stimpson A, Topping A, Porock D (2002b) Clinical competence assessment in nursing: a systematic review of the literature. *Journal of Advanced Nursing* 39, 421-431.

Watson R, Thompson DR (2001) Recent developments in UK nurse education: horses for courses or courses for horses? *Journal of Advanced Nursing* 32, 1041-1042.

Watson S (2000) The support that mentors receive in the clinical setting. *Nurse Education Today* 20, 585-592.

Watson S (2004) Mentor preparation: reasons for understanding the course and expectations of the candidates. *Nurse Education Today* 24, 30-42.

Wells M (2003) An epidemiologic approach to addressing student attrition in nursing programs. *Journal of Professional Nursing* 19, 230-236.

Welford AT (1987) On rates of improvement with practice. *Journal of Motor Behaviour* 19, 401-415.

Welsh Assembly Government (2006) All Wales Access and Entry Policy. Cardiff

White J, Williams RW, Green BF (1999) Discontinuation, leaving reasons and course evaluation comments of students on the Common Foundation Programme. *Nurse*

Education Today 19, 142-150.

Williamson A, Valentine E (2000) Quantity and quality of musical practice as predictors of performance. *British Journal of Psychology* 91, 353-376.

Williamson GR, Webb C (2001) Supporting students in practice. *Journal of Clinical Nursing* 10, 284-292.

Wilson A (1989) A new role for staff nurses: the effect of supernumerary students. *Nurse Education Today* 10, 355-359.

Wilson A (2003) Nurses' maths: researching a practical approach. *Nursing Standard* 17, 47, 33-36.

Wimpenny P, Gault B, MacLennan V, Boast-Bowen L, Shepherd P (2005) Teaching and learning about culture: a European journey. *Nurse Education Today* 25, 398-404.

Wong FWH (2000) Learning group: facilitating the adaptation of new nurses to the specialty unit. *Journal of Continuing Education in Nursing* 31, 209-212.

Wright K (2005) An exploration into the most effective way to teach drug calculation skills to nursing students. *Nurse Education Today* 25, 430-436.

Wright K (2007) Student nurses need more than maths to improve drug calculating skills. *Nurse Education Today* 27, 278-285.

Wright K (2008) Can effective teaching and learning strategies help student nurses to retain drug calculation skills? *Nurse Education Today* (In Press) doi:10.1016/nedt.2008.01.002.

Zimmerman BJ, Bandura A, Martinez-Pons M (1992) Self-motivation for academic attainment: the role of self-efficacy beliefs and personal goal setting. *American Educational Research Journal* 29, 663-676.

Glossary of Terms

Access to Nursing Courses	Access courses are designed to prepare students who do not have standard entry qualifications for higher education courses
Alumnae	Graduates from the University
Atheoretical	Without a theoretical basis. Engagement with theory is absent
Student Attrition	The gradual reduction of the size of the student body that is lost through such means as exam failure or personal circumstance
Competence	The ability to do something well, measured against a standard, especially ability acquired through experience and/or education
Community Health Nurse	A qualified nurse whose main occupation is meeting the health needs of a local community
COREC	Central Office for Research Ethics Committees (now part of National Research Ethics Service –NRES)
Credit accumulation	Arrangements within institutions which determine student progression towards defined learning outcomes, including formal qualifications, and recognition of these arrangements between institutions to facilitate the transfer of students
Curriculum	The subjects or elements of a subject taught at an educational institution, or the topics taught within a subject
CFP	Common Foundation Programme which all students of nursing undertake in their first year of study before going into their branch specific programme
E-learning	The acquisition of knowledge and skill using electronic technologies such as computer- and Internet-based courseware and local and wide area networks
DOH	Department of Health
Fitness For Practice	Being assessed as competent to practice as a registered nurse or midwife following a planned programme of theory and practice experience as a student
Fitness For Purpose	Suitability of somebody or something for a particular purpose , such as having the skills , knowledge and attitude to work as a nurse in a surgical ward at the point of registration
Flying Start NHS	Scotland-wide initiative for newly qualified nurses, midwives and allied health professionals practicing in the NHS in Scotland to support the transition from student to newly qualified health professional by enhancing the practitioner's learning in everyday practice through a range of (primarily online) learning activities
HEFCE	Higher Education Funding Council England
HEI	Higher Education Institution
HNC	Higher National Certificate
Longitudinal study	Research study which is repeated over a period of time e.g. 10 years
Long Term Conditions Alliance Scotland	Over-arching body of voluntary and community organizations across Scotland
Mentor	Qualified nurses specifically prepared to teach , supervise and support students during their practice placement experiences
NHS	National Health Service
NMC	Nursing and Midwifery Council – Professional Regulatory Body for the UK

NES	NHS Education Scotland – Special Health Board to support education of all Health Disciplines in Scotland
NRES	National Research Ethics Committee
NVivo	Soft –ware package for managing qualitative data
OSCE	Objective structured clinical examination
Post registration	After qualifying and registering as a nurse or midwife with the Professional body
Preceptorship	Where more senior and experienced qualified member s of staff have a special remit to induct (newly) qualified nurses into positions of greater responsibility
Pre-registration	Before qualifying and applies to student nurses and midwives who are undertaking a planned period of study/practice to becoming qualified
Problem-based learning	A learning/teaching strategy that encourages students to develop self-directed learning and critical thinking skills, usually carried out in small groups and focusing on a ‘problem –based ‘ scenario which necessitates whole group involvement in learning
Project 2000	The result of a project which resulted in the transfer of nurse training into higher education , within a university setting
SEHD	Scottish Executive Health Department
Self-efficacy	Capable of performing in a certain manner or attaining certain goals
Self-report competence	Individual’s own perception and reporting of their competence level
Social inclusion	Positive action taken to include all sectors of society in planning and other decision-making
Social mobility	Ability to change social status
Stakeholders	A person or group with a direct interest, involvement, or investment in something- for example a stakeholder in a midwifery programme would be the pregnant mother and the midwife caring for her
SQA	Scottish Qualification Authority
SCQF	Scottish Qualification Framework
Theoretical framework	Based on theory
Tripartite	Involving, made between, or ratified by three parties
UKCC	United Kingdom Central Council (Now NMC)

Students' Views on Fitness for Practice Questionnaire

The purpose of this short questionnaire is to find out how you perceive your confidence and your views on being able to undertake certain aspects of your every day work as a nursing or midwifery student. It should take less than 10 minutes to complete.

There are no right or wrong answers to any of the non-factual questions; the important thing is how you feel about them. Please try and answer all questions as best you can.

This information is confidential.

Thank you for taking the time to participate in this important study.

Professor William Lauder on behalf of the project team

Website: www.p2pevaluation.org.uk

Section One – Information about your course

Please tick as appropriate:

1. What branch are you undertaking?

- Adult ☐
Mental Health ☐
Child ☐
Learning Disability ☐
Midwifery ☐

2. Which year did you start training as a student nurse/midwife?

2004 ☐

2005 ☐

3. What qualifications did you have to gain entry to the course?

5 Standard grades or more ☐

Access to Nursing Course ☐

Other ☐

Section 2 – Quality of Support

In this section we wish to ask you a number of questions on the level of support you receive from various sources. Support can come in many forms and we would ask you to give an overall rating of support although we understand that this may vary from time to time and source to source. There are no right or wrong answers. Please try and answer all questions as best you can. Circle the most appropriate response.

4. How would you rate the quality of support you have received from supervisors/mentors during your course?

Very Poor 0 1 2 3 4 5 6 7 8 9 **Very good**

5. How would you rate the quality of support you have received from the University/College during your course?

Very Poor 0 1 2 3 4 5 6 7 8 9 **Very good**

6. How would you rate the quality of support you have received from fellow students during your course?

Very Poor 0 1 2 3 4 5 6 7 8 9 **Very good**

7. How would you rate the quality of support you have received from friends and relatives during your course?

Very Poor 0 1 2 3 4 5 6 7 8 9 **Very good**

Section 3 – Responding to situations

In this section we wish to ask you a number of questions on how you solve problems. There are no right or wrong answers. Please try and answer all questions as best you can. Don't spend too much time thinking about each question.

	Not at all true	Hardly true	Moderately true	Exactly true
8. I can always manage to solve difficult problems if I try hard enough				
9. If someone opposes me, I can find the means and ways to get what I want.				
10. It is easy for me to stick to my aims and accomplish my goals				
11. I am confident that I could deal efficiently with unexpected events.				
12. Thanks to my resourcefulness, I know how to handle unforeseen situations				
13. I can solve most problems if I invest the necessary effort				
14. I can remain calm when facing difficulties because I can rely on my coping abilities				
15. When I am confronted with a problem, I can usually find several solutions.				
16. If I am in trouble, I can usually think of a solution.				
17. I can usually handle whatever comes my way				

Section 4 – Clinical Practice

In this section we wish to understand how you feel about the work you undertake in clinical practice at this point in your course. Again there are no right or wrong answers. Please tick the box which best sums up your view.

	Always	Usually	Occasionally	Never
18. I give emotional support to clients in need				
19. I strive for optimal standards of care				
20. I recognise legal responsibilities in clinical practice				

21. I adopt an individualised approach in planning care				
22. I provide a rationale for thoughts and behaviour when questioned				
23. I communicate concise and appropriate client information as necessary to members of the health care team				
24. I demonstrate a working knowledge of equipment				
25. I consider psychosocial aspects of any illness or disability when planning care				
26. I demonstrate knowledge about the condition of clients assigned to me				
27. I establish clinical priorities in relation to total patient needs				
28. I use time and resources effectively and efficiently				
29. I revise care as necessary, based on accurate evaluation of client's condition and response to care				
30. I anticipate teaching needs of clients				
31. I make accurate clinical judgements based on assessment data				
32. I apply resources in a creative manner to solve clinical problems				
33. I identify and use community resources in the delivery of care				
34. I use appropriate teaching methods and materials for different audiences				
35. I plan and implement health teaching for clients when necessary				

Section 5 – Demographic Information

36. What is your current age in years?

37. What is your home address Post Code?

(This is the post code of your permanent home address, if you live in term time accommodation please put your permanent or your parents address)

38. What is your marital status?

Married/partnered ☐
Single ☐
Divorced ☐

Thank you for completing this questionnaire. The information you have given will be treated in the strictest confidence

Once you have completed the questionnaire, could you please return the questionnaire in the pre-paid envelope to
Ms Agnieszka Behr, School of Nursing and Midwifery, University of Dundee, 11 Airlie Place, Dundee, DD1 4HN

AN EVALUATION OF PRE-REGISTRATION FITNESS FOR PRACTICE PROGRAMMES, NHS FLYING START IN SCOTLAND & THE DEVELOPMENT OF A DATA PLATFORM FOR FUTURE EVALUATION

Phase 1: Clinical Scenario

Communication skill OSCE tool

HEI..... Matriculation No.....

	Skill	Not done	Done	Done well
1	Demonstrates SOLER Sits forward Open posture Leans forward Eye contact Relaxed	1 1 1 1 1	2 2 2 2 2	3 3 3 3 3
2	Introduces self	1	2	3
3	Uses empathic statements	1	2	3
4	Leads interview with non-threatening statements	1	2	3
5	Expresses reasonable warmth or friendliness	1	2	3
6	Asks key questions	1	2	3
7	Finishes with appropriate statement	1	2	3
	Total Score (11-33)			

Communication Skills (Adapted from David Arthur, 1999, Assessing nursing students' basic communication and interviewing skills: the development and testing of a rating scale. Journal of Advanced Nursing, 29, 658-665)

Definition of terms

- Empathic statements – Empathy involves the process of conveying to another person that a person understands, and feels what another person's experience is like. Empathy demonstrates an emotional understanding of another person and not just a factual understanding" (Centre for Mental Health Services). Examples of these might include 'You look anxious' or 'you must be worried about how you will cope at home'
- Key questions – These questions are part of the assessment process and lead the nurse to making a diagnostic or intervention decision. Examples include 'how do you feel?' or 'How long have you felt this way?'
- Reasonable warmth or friendliness –The student will appear positively disposed and helpful to the simulated patient but not overly friendly and recognises the boundaries to patient-nurse relationship
- Finishes with an appropriate statement – Leaves the patient knowing that the conversation is over and that they will follow up the situation

Communication Scenario

You enter the television area in the ward you are currently working in and you notice a patient sitting on their own. As you approach them it is obvious they are upset and anxious. This encounter will last 5-10 minutes.

Instructions for researchers

1. The room should be set out as follows. Two chairs in line each facing in same direction. The simulated patient is sitting in one chair and is upset and anxious. They are about to leave hospital and go home after a short period in hospital. Their partner is working away from home and there is no social support for them on discharge. They are worried about how they will manage at home.
2. The student should be told they are working on a ward and are about to enter a room to ask a patient about their lunch menu preference. They will be told they have 5 minutes to complete this task.
3. The simulated patient will rate the student performance using the OSCE scoring scheme.

AN EVALUATION OF PRE-REGISTRATION FITNESS FOR PRACTICE PROGRAMMES, NHS FLYING START IN SCOTLAND & THE DEVELOPMENT OF A DATA PLATFORM FOR FUTURE EVALUATION

Phase 1: Numeracy Test

HEI..... Matriculation No.....

This questionnaire has been designed to explore math calculations and math calculations as they may apply to drug administration. Please try and answer each question and respond on the dotted line.

Please note that drug names are fictitious.

1. What is:
 - a) 10% of 100
 - b) 2.5% of 100
 - c) 10% of 1000
 - d) 15% of 200
 - e) 40% of 4000

2. If adax ampoules always contain 1gram in 1000 millilitres, answer the following:
 - a) How many grams of adax in 500ml?
 - b) How many millilitres would you need to have 5 grams of adax?
 - c) If you had a 10 millilitres ampoule, how many grams of adax would it contain?
 - d) If you needed 0.05grams adax, how many millilitres would you need?

3.
 - a) What is $\frac{1}{4}$ of 100 millilitres?
 - b) What is $\frac{1}{4}$ of 1000 millilitres?
 - c) What fraction is 250 millilitres of 1000 millilitres?
 - d) 33.3333' is what fraction of 100?
 - e) What is $\frac{1}{2}$ of $\frac{1}{4}$?

4. What is:

- a) $1000 \div 10?$
- b) $500 \times 100?$
- c) $25 \div 1000?$
- d) $0.0125 \times 100?$
- e) $0.025 \div 100?$

5.

- a) John requires 75milligrams of pesos. The pesos ampoules contain 100 milligrams in 2 millilitres. How much would you give?
- b) Jane has been prescribed 1000 millilitres over 10 hours. How many millilitres per hour would her infusion run?
- c) Zalam ampoules contain 20milligrams in 2 millilitres. You require 5milligrams. How much would you draw up?
- d) John requires 1gram of cetamol. Cetamol tablets are 500milligrams. How many would you give?
- e) Stacey has been prescribed 0.25milligrams of fox. The fox tablets are 62.5micrograms. How many would you give?

Thank you for completing this numeracy exercise.

Tool adapted and permission to use, from work by Kerri Wright, Senior Lecturer, University of Greenwich

AN EVALUATION OF PRE-REGISTRATION FITNESS FOR PRACTICE PROGRAMMES, NHS FLYING START IN SCOTLAND AND THE DEVELOPMENT OF A DATA PLATFORM FOR FUTURE EVALUATION

Phase 1: Clinical Scenario

Hand Decontamination

HEI..... Matriculation No.:.....

	Unobserved/unsatisfactory	Observed/satisfactory
Used continuously running water at appropriate temperature throughout practice (<i>EPIC Standard statement 9</i>)	0 point	1 point
Apply one metered dose of liquid soap to wet hands (<i>Gould & Brooker 2000</i>) ii. (<i>EPIC Standard statement 7 & 9</i>)	0 point	1 point
Rubs hands together vigorously for minimum of 10 seconds (<i>Gould & Brooker 2000</i>) ii. (<i>EPIC Standard statement 9</i>)	0 point	1 point
Used friction on all surfaces, in the recognized six steps(<i>Ayliffe et al 1978</i>)	0 point	1 point
Hands positioned to avoid contamination from unwashed surfaces(<i>ICNA 2002</i>)	0 point	1 point
Rinsed hands thoroughly (all surfaces) (<i>EPIC Standard statement 9</i>)	0 point	1 point
Dried hands thoroughly (all surfaces). (<i>EPIC Standard statement 9</i>)	0 point	1 point
Turned off tap with a clean dry paper towel or use of elbow(s) (<i>Gould & Brooker 2000</i>)	0 point	1 point
Avoided splashing of clothing and floor. (<i>EPIC Standard statement 9</i>)	0 point	1 point
Disposed of used towels in appropriate container without contaminating hands. (<i>Gould & Brooker 2000</i>)	0 point	1 point

Total out of 10 points.....

Acknowledgement:

This assessment tool is adapted from the work of Denise Major, Salford University and the School of Nursing & Midwifery, University of Dundee. Permission to use has been sought from both parties.

References

Ayliffe G.A...J. et. al (1978) A test for hygienic hand disinfection. *Journal of Clinical Pathology* 31, p 923
 Ayliffe G.A.J. et al (1992) *Control of Hospital Infection – A practical Handbook*. London. Chapman and Hall
 Gould D, Brooker C., (2000) *Applied Microbiology for Nurses*. London. MacMillan Press Ltd.
 Infection Control Nurses Association (2002) *Guidelines for Hand Hygiene*. Edinburgh. ICNAPratt et. al. (2001) *The Epic Project: Developing National Evidence-based Guidelines for Preventing Healthcare Associated Infections. Journal of Hospital Infection* 47 (supplement) (Intervention 2, standard statements 5 –11)

**Phase 1: Curriculum Analysis Proforma
May 2006 – Final Version**

HEI DETAILS.....

Entry to Programme

What % of students came in by these routes?

5 standard grades or more %for 2004 %.....for 2005

ACCESS %.....for 2004 %.....for 2005

Programme Breakdown via entry route

5 standard grades or more MH....% Adult...% LD...% Child...% Midwif...%

ACCESS MH....% Adult...% LD...% Child...% Midwif...%

Exit from Programme

In 2006 what % of Students exited with Diploma.....% Degree....%

Programme Breakdown via exit route

DIPLOMA MH....% Adult...% LD...% Child...% Midwif...%

DEGREE MH....% Adult...% LD...% Child...% Midwif...%

Total Number of Hours for Programme.....

Theory Hours.....Practice Hours.....

Placements

What is the total number of placements per academic year that each student experiences?

MH: YR1..... YR2 YR3.....

ADULT: YR1..... YR2 YR3.....

Child: YR1..... YR2 YR3.....

LD: YR1..... YR2 YR3.....

Midwifery: YR1..... YR2 YR3.....

What is the total number of **practice hours** in each academic year?

MH: YR1..... YR2 YR3.....

Adult: YR1..... YR2 YR3.....

Child: YR1..... YR2 YR3.....

LD: YR1..... YR2 YR3.....

Midwifery:YR1..... YR2..... YR3.....

How many **primary care** placements will the student experience during their programme (*Primary care placement being a placement outwith a Teaching hospital, DGH, or Ambulatory & Diagnostic Treatment Centre*)

MH: YR1..... YR2 YR3.....

Adult: YR1.....YR2 YR3.....

Child: YR1..... YR2 YR3.....

LD: YR1.....YR2 YR3.....

Midwifery:YR1..... YR2 YR3.....

How many hours in **primary care** per academic year will the student experience?

MH: YR1..... YR2 YR3.....

Adult: YR1..... YR2 YR3.....

Child: YR1..... YR2 YR3.....

LD: YR1..... YR2 YR3.....

Midwifery: YR1..... YR2 YR3.....

How many **secondary care** placements will the student experience (*Secondary care placement being a placement within a Teaching hospital, DGH, or Ambulatory & Diagnostic Treatment Centre*)?

MH: YR1..... YR2 YR3.....

Adult: YR1..... YR2 YR3.....

Child: YR1..... YR2 YR3.....

LD: YR1..... YR2 YR3.....

Midwifery: YR1..... YR2 YR3.....

How many hours in **secondary care** per academic year will the student experience?

MH: YR1..... YR2 YR3.....

Adult: YR1..... YR2 YR3.....

Child: YR1..... YR2 YR3.....

LD: YR1..... YR2 YR3.....

Midwifery: YR1..... YR2 YR3.....

Learning, Teaching & Assessment

What teaching methods are employed and the hours:

Year 1- CFP

PBLhrs CBL....hrs Lecture....hrs Small Group Teaching....hrs
Self Directed Learning....hrs Directed Learning....hrs E-Learning....hrs
Clinical Skills....hrs

Year 1- MIDWIFERY

PBLhrs CBL....hrs Lecture....hrs Small Group Teaching....hrs
Self Directed Learning....hrs Directed Learning....hrs E-Learning....hrs
Clinical Skills....hrs

By Individual Programme

Year 2- MH

PBLhrs CBL....hrs Lecture....hrs Small Group Teaching....hrs
Self Directed Learning....hrs Directed Learning....hrs E-Learning....hrs
Clinical Skills....hrs

Year 2- ADULT

PBLhrs CBL....hrs Lecture....hrs Small Group Teaching....hrs
Self Directed Learning....hrs Directed Learning....hrs E-Learning....hrs
Clinical Skills....hrs

Year 2- LD

PBLhrs CBL....hrs Lecture....hrs Small Group Teaching....hrs
Self Directed Learning....hrs Directed Learning....hrs E-Learning....hrs
Clinical Skills....hrs

Year 2- Child

PBLhrs CBL....hrs Lecture....hrs Small Group Teaching....hrs
Self Directed Learning....hrs Directed Learning....hrs E-Learning....hrs
Clinical Skills....hrs

Year 2- Midwifery

PBLhrs CBL....hrs Lecture....hrs Small Group Teaching....hrs
 Self Directed Learning....hrs Directed Learning....hrs E-Learning....hrs
 Clinical Skills....hrs

Year 3 - MH

PBLhrs CBL....hrs Lecture....hrs Small Group Teaching....hrs
 Self Directed Learning....hrs Directed Learning....hrs E-Learning....hrs
 Clinical Skills....hrs

Year 3 - ADULT

PBLhrs CBL....hrs Lecture....hrs Small Group Teaching....hrs
 Self Directed Learning.... hrs Directed Learning.... hrs E-Learning.... hrs
 Clinical Skills.... hrs

Year 3 - LD

PBL hrs CBL.... hrs Lecture.... hrs Small Group Teaching.... hrs
 Self Directed Learning.... hrs Directed Learning.... hrs E-Learning.... hrs
 Clinical Skills.... hrs

Year 3 - Child

PBL hrs CBL.... hrs Lecture.... hrs Small Group Teaching.... hrs
 Self Directed Learning.... hrs Directed Learning.... hrs E-Learning.... hrs
 Clinical Skills.... hrs

Year 3 - Midwifery

PBL hrs CBL.... hrs Lecture.... hrs Small Group Teaching.... hrs
 Self Directed Learning.... hrs Directed Learning.... hrs E-Learning.... hrs

Summative Assessment type**Year 1- CFP**

Number of academic assessments per academic year:

Essay Exam OSCE Clinical outcomes Reflective Diaries

Practice based portfolios

Others (please list and give numbers).....

Year 1- Midwifery

Number of academic assessments per academic year:

Essay	Exam	OSCE	Clinical outcomes	Reflective Diaries
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Practice based portfolios

Others (please list and give numbers).....

By Individual Programme

Year 2- MH

Number of academic assessments per academic year:

Essay	Exam	OSCE	Clinical outcomes	Reflective Diaries
-------	------	------	-------------------	--------------------

Practice based portfolios

Others (please list and give numbers).....

Year 2- ADULT

Number of academic assessments per academic year:

Essay	Exam	OSCE	Clinical outcomes	Reflective diaries
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Practice based portfolios

Others (please list and give numbers).....

Year 2- LD

Number of academic assessments per academic year:

Essay	Exam	OSCE	Clinical outcomes	Reflective diaries
-------	------	------	-------------------	--------------------

Practice based portfolios

Others (please list and give numbers).....

Year 2- Child

Number of academic assessments per academic year:

Essay	Exam	OSCE	Clinical outcomes	Reflective diaries
-------	------	------	-------------------	--------------------

Practice based portfolios

Others (please list and give numbers).....

Year 2- Midwifery

Number of academic assessments per academic year:

Essay	Exam	OSCE	Clinical outcomes	Reflective Diaries
-------	------	------	-------------------	--------------------

Practice based portfolios

Others (please list and give numbers).....

Year 3 - MH

Number of academic assessments per academic year:

Essay	Exam	OSCE	Clinical outcomes	Reflective Diaries
-------	------	------	-------------------	--------------------

Practice based portfolios

Others (please list and give numbers).....

Year 3 - Adult

Number of academic assessments per academic year:

Essay	Exam	OSCE	Clinical outcomes	Reflective Diaries
-------	------	------	-------------------	--------------------

Practice based portfolios

Others (please list and give numbers).....

Year 3 - LD

Number of academic assessments per academic year:

Essay	Exam	OSCE	Clinical outcomes	Reflective Diaries
-------	------	------	-------------------	--------------------

Practice based portfolios

Others (please list and give numbers).....

Year 3 - Child

Number of academic assessments per academic year:

Essay	Exam	OSCE	Clinical outcomes	Reflective Diaries
-------	------	------	-------------------	--------------------

Practice based portfolios

Others (please list and give numbers).....

Year 3 - Midwifery

Number of academic assessments per academic year:

Essay	Exam	OSCE	Clinical outcomes	Reflective Diaries
-------	------	------	-------------------	--------------------

Practice based portfolios

Others (please list and give numbers).....

**An Evaluation of Pre-Registration
Fitness for Practice Programmes, Flying Start NHS in
Scotland and the Development of a Data Platform for
Future Evaluation**

PHASE 2: Face to Face Interview Guide – Service & HEI Partners

Project Team Introductions:

Name, Position
Background and Study aims
Anonymity/confidentiality requirements
Reassure that interview can be terminated at any time by them, without incurring penalty
Thanks for participating

Instructions for participants

- Interview will be tape recorded
- Confidentiality when interviews transcribed and reported
- Time interview will take
- No right and wrong answer – team wish to explore what you think

Prompt Questions

1. **What do they understand by the term Fitness for Practice?**
2. **How do they deal with possible newly qualified nurses/midwives who may not be fit for practice as per NHS Division expectations (this will need careful phrasing)**
3. **Can you tell us and provide examples of the local partnership arrangements in place currently at a clinical level, operational level and strategic level.**
4. **In an ideal world what skills, knowledge and appropriate attitudes do they think students should have on qualifying and what determines this view?**
5. **What are their views about inter-professional education/working and how are they facilitating this in their organisations?**
6. **What do they consider to be the major influences on how student nurses/midwives are educated/trained in the future?**
7. **Do they think that all students should gain non-branch specific skills etc?**
8. **How are users and carers involved in strategic decisions regarding nursing/midwifery education?**

Addition – 26/3/07 what partnerships are in place to recruit and retain student nurses locally?

Added – 23/7/07

How confident and competent do newly qualified staff feel in drug administration on qualification?

A related skill is obviously numeracy. How confident and competent are newly qualified staff in performing arithmetic in relation to drug administration and other interventions?

AN EVALUATION OF PRE-REGISTRATION FITNESS FOR PRACTICE PROGRAMMES, NHS FLYING START IN SCOTLAND AND THE DEVELOPMENT OF A DATA PLATFORM FOR FUTURE EVALUATION.

PHASE 2: Realistic Evaluation of Fitness for Practice and the Contribution played by NHS-HEI Working Partnerships

Charge Nurse Telephone Interview Schedule

- 1. What do you understand by the term Fitness for Practice?**
- 2. What preparation do mentors in your clinical area receive for this role?**
- 3. What support do mentors in your clinical area get offered to fulfil this role?**
- 4. What do you see as your role in supporting student nurses in the clinical area?**
- 5. In an ideal world what skills, knowledge and appropriate attitudes do you think students should have on qualifying and what determines this view?**

Skills –

Knowledge –

Attitudes –

- 6. What do you consider to be the major influences on how student nurses/midwives are educated / trained in the future?**
- 7. What direct involvement do you have with your local Higher Education Institution where your students come from?**
- 8. How confident and competent do newly qualified staff feel in drug administration on qualification?**
- 9. A related skill is numeracy. How confident and competent are newly qualified staff in performing arithmetic in relation to drug administration and other interventions?**
- 10. How do you deal with possible newly qualified nurses/midwives who may not be fit for practice as per NHS Division expectations**

**An Evaluation of Pre-Registration
Fitness for Practice Programmes, Flying Start NHS in
Scotland and the Development of a Data Platform for
Future Evaluation**

PHASE 2: Focus Group Guide - Students

Project Team Introductions:

Name, Position

Background and Study aims (and info sheets)

Anonymity/confidentiality requirements whilst in the group

Confidentiality when interviews transcribed and reported

Reassure re leaving if they want to without incurring any penalty

Thanks for participating

Instructions for participants

- speak clearly into microphone
- do not talk across each other if possible
- noises/mobile phones
- no right or wrong answers – team wish to explore what you think

Prompt Questions

1. What do you understand by the term Fitness for Practice?
2. What kind of knowledge, skills and attitudes do you think you need to be fit for practice?
3. Tell us about one kind of experience you have had in practice as a student nurse/midwife that illustrates your fitness for practice?
4. How were you prepared for practice placement experience?
5. How did you link theory learnt in university with reality of practice?
6. Describe how lecturers/link tutors support you in practice
7. How did mentors help support you in practice placements? (explore other kinds of support and what makes a good mentor)
8. Did you learn any clinical skills before going out in practice?
9. What contact have you had with service users in the university?
10. How does the programme provide you with the skills to meet the needs of patients from a range of cultural and ethnic backgrounds?
11. Do you feel the programme is preparing you to work independently on qualifying? (explore issues of accountability – being adaptable)
11. Do you feel the programme has prepared you to work in a multi disciplinary team?
12. What do you consider to be the key attributes a student nurse/midwife should have on qualifying?
13. When you are on placement are you given supernumerary status?

**An Evaluation of Pre-Registration
Fitness for Practice Programmes, Flying Start NHS in
Scotland and the Development of a Data Platform for
Future Evaluation**

PHASE 2: Focus Group Guide - Mentors

Project Team Introductions:

Name, Position

Background and Study aims (and info sheets)

Anonymity/confidentiality requirements whilst in the group

Confidentiality when interviews transcribed and reported

Reassure re leaving if they want to without incurring any penalty

Thanks for participating

Instructions for participants

- speak clearly into microphone
- do not talk across each other if possible
- noises/mobile phones
- no right or wrong answers – team wish to explore what you think

Prompt Questions

1. Can you tell us what you understand by the term Fitness for Practice?
2. How were you prepared for supporting students in practice?
3. How do you undertake your mentor role with students (eg planned teaching programmes etc – explore)
4. How much time is allocated specifically to you undertaking the mentorship role with students
5. Describe how you facilitate the experience of working in a multi-disciplinary team for students?
6. What do you think makes a good mentor?
7. What do you consider to be the key attributes a student nurse /midwife should have on qualifying?
8. Do you think a student should be fit for practice on qualifying or later (explore issues of preceptorship)
9. Explore issues around assessment of students in practice and most importantly failing students in practice – what their criteria are and what do they consider to be 'not fit for practice'.
10. Describe to us how you link with HEI in terms of collaboration/partnership
11. Do you have involvement in teaching clinical skills in the HEI?
12. How do you manage the supernumerary status of your students?

Added – 23/7/07

How confident and competent do newly qualified staff feel in drug administration on qualification?

A related skill is obviously numeracy. How confident and competent are newly qualified staff in performing arithmetic in relation to drug administration and other interventions?

**An Evaluation of Pre-Registration
Fitness for Practice Programmes, Flying Start NHS in
Scotland and the Development of a Data Platform for
Future Evaluation**

PHASE 2: Focus Group Guide - Lecturers

Project Team Introductions:

Name, Position

Background and Study aims (and info sheets)

Anonymity/confidentiality requirements whilst in the group

Confidentiality when interviews transcribed and reported

Reassure re leaving if they want to without incurring any penalty

Thanks for participating

Instructions for participants

- speak clearly into microphone
- do not talk across each other if possible
- noises/mobile phones
- no right or wrong answers – team wish to explore what you think

Prompt Questions

1. What do you understand by the term Fitness for Practice?
2. Describe your role in preparing students for practice placements?
3. What do you expect from mentors in practice?
4. What do you teach students about multidisciplinary working and meeting diverse needs? (explore re curriculum)
5. How do you link with practice? (explore re student learning)
6. How involved are you in student experience in practice?
7. How do you receive feedback from students regarding the placement learning experience?
8. How were practitioners involved in curriculum development and delivery?
9. Explore issues of working in partnership with clinical practice at all levels.
10. How are users and carers involved in planning and delivery of student learning?

Addition – 26/3/07 what partnerships are in place to recruit and retain student nurses locally?

Added – 23/7/07

How confident and competent do newly qualified staff feel in drug administration on qualification?

A related skill is obviously numeracy. How confident and competent are newly qualified staff in performing arithmetic in relation to drug administration and other interventions?

**An Evaluation of Pre-Registration
Fitness for Practice Programmes, Flying Start NHS in
Scotland and the Development of a Data Platform for
Future Evaluation**

PHASE 2: Focus Group Guide - PEFS

Project Team Introductions:

Name, Position

Background and Study aims (and info sheets)

Anonymity/confidentiality requirements whilst in the group

Confidentiality when interviews transcribed and reported

Reassure re leaving if they want to without incurring any penalty

Thanks for participating

Instructions for participants

- speak clearly into microphone
- do not talk across each other if possible
- noises/mobile phones
- no right or wrong answers – team wish to explore what you think

Prompt Questions

How do you support student learning in practice?

How do you support mentors to support students in practice?

What links do you have with your local University?

Give examples of how you are involved with university regarding student learning?

What involvement do you have with students who fail/are potentially failing in clinical practice?

**An Evaluation of Pre-Registration
Fitness for Practice Programmes, Flying Start NHS in
Scotland and the Development of a Data Platform for
Future Evaluation**

Stakeholder Event: Carer and User Schedule

Prompt questions:

What experiences have you had of being cared for by nursing/midwifery students?

Can you describe an incident with a student nurse/midwife that sticks out in your mind?

How can users and carers be involved in planning and delivering future nurse/midwifery education?

THE EVALUATION OF THE FLYING START INITIATIVE FOR NEWLY QUALIFIED NURSES AND MIDWIVES

The purpose of this questionnaire is to measure the extent to which the structured programme for newly qualified nurses achieves the goals of the Flying Start NHS programme which will include increased confidence, socialisation into the role, increased competence and effective self-management in the context of the healthcare team.

There are no right or wrong answers to any of the non factual questions; the important thing is how you feel about them.
Please try and answer all questions as best you can.

This information is confidential.

Thank you for taking the time to participate in this important study.

Professor William Lauder on behalf of the project team

Please indicate the following:

Number of Units you have completed to date on Flying Start

Number of Units you expect to complete by September 2007.....

Section One – Information about your career

Please tick as appropriate:

1. Please specify at which point you exited pre-registration.

Diploma ☐
Degree ☐
Post-grad diploma ☐

2. Please specify what clinical setting you are working in?

Ward ☐
Theatre ☐
Community ☐
ACAD ☐
OPD ☐
A & E ☐

3. What part of the register did you qualify with?

Adult ☐
Mental Health ☐
Child ☐
Learning Disability ☐
Midwifery ☐

4. What NHS Division area you working in?

Dumfries & Galloway	<input type="checkbox"/>	Western Isles	<input type="checkbox"/>
Borders	<input type="checkbox"/>	Forth Valley	<input type="checkbox"/>
Ayrshire & Arran	<input type="checkbox"/>	Fife	<input type="checkbox"/>
Lanarkshire	<input type="checkbox"/>	Tayside	<input type="checkbox"/>
Lothian	<input type="checkbox"/>	Grampian	<input type="checkbox"/>
Glasgow	<input type="checkbox"/>	Orkney	<input type="checkbox"/>
Highland	<input type="checkbox"/>	Shetland	<input type="checkbox"/>

Section Two - Responding to situations

In this section we wish to ask you a number of questions on how you solve problems. There are no right or wrong answers. Please try and answer all questions as best you can. Don't spend too much time thinking about each question.

	Not at all true	Hardly true	Moderately true	Exactly true
5. I can always manage to solve difficult problems if I try hard enough				
6. If someone opposes me, I can find the means and ways to get what I want.				
7. It is easy for me to stick to my aims and accomplish my goals				
8. I am confident that I could deal efficiently with unexpected events.				
9. Thanks to my resourcefulness, I know how to handle unforeseen situations				
10. I can solve most problems if I invest the necessary effort.				
11. I can remain calm when facing difficulties because I can rely on my coping abilities				
12. When I am confronted with a problem, I can usually find several solutions.				
13. If I am in trouble, I can usually think of a solution.				
14. I can usually handle whatever comes my way				

Section Three – Future Career Plan

In this section we wish to obtain information about your future career. Please try and answer all questions as best as you can.

15. Do you intend to remain in post as a registered nurse/midwife on completion of the Flying Start Programme?

- Yes ☐
 No ☐
 I don't know ☐

16. Is it your intention to remain in post as a registered nurse/midwife in the UK for 12 months after completing the Flying Start programme?

- Yes ☐
 No ☐
 I don't know ☐

17. Within each core dimension, which level are you aiming towards at this time in your career?

Please indicate your answer by ticking one of the levels within each dimension.

* core dimensions taken from <http://www.nhs.uk/ksf/dimensions3.html>

Communication

Level 1	Level 2	Level 3	Level 4
Communicate with a limited range of people on day to day matters	Communicate with a range of a range of matters	Develop and maintain communication with people about difficult matters and situations	Develop and maintain communication on complex matters, issues and id complex situations

Personal and people development

Level 1	Level 2	Level 3	Level 4
Contribute to own personal development	Develop own skills and provide information to others development	Develop oneself and contribute to the development of others	Develop oneself and others in areas of practice

Health, safety and security

Level 1	Level 2	Level 3	Level 4
Assist in maintaining own and others' health, safety and security	Monitor and maintain health and security of self and others	Promote, monitor and maintain best practice in health, safety and security	Maintain and develop an environment and culture that improves health, safety and security

Service improvement

Level 1	Level 2	Level 3	Level 4
Make changes in own practice suggestions for improving service	Contribute to the improvement of services	Appraise, interpret suggestions, recommend directives to improve service	Work in partnership with others take forward and evaluate policies and strategies

Quality

Level 1	Level 2	Level 3	Level 4
Maintain the quality of own work	Maintain quality in own work encourage others to do so	Contribute to improve quality	Develop a culture that improves quality

Equality and diversity

Level 1	Level 2	Level 3	Level 4
Act in ways that support value diversity	Support equality and value diversity	Promote equality and value diversity	Develop a culture that supports equality and values diversity

18. How would you rate the quality of career advice you have received to date?

Very poor 1 2 3 4 5 6 7 8 9 10 excellent

19. Please have a look at the key elements of the career framework listed on the following website and specify at which level do you see yourself in 5 years from now and 20 years from now.

http://www.skillsforhealth.org.uk/careerframework/key_elements.php

In 5 years I see myself at level

☐

In 20 years I see myself at level

☐

Section Four - Clinical Practice

In this section we wish to understand how you feel about the work you undertake in clinical practice at this point in your course. Again there are no right or wrong answers. Please tick the box which best sums up your view.

	Always	Usually	Occasionally	Never
20. I give emotional support to clients in need				
21. I strive for optimal standards of care				
22. I recognise legal responsibilities in clinical practice				
23. I adopt an individualised approach in planning care				
24. I provide rationale for thoughts and behaviour when questioned				
25. I communicate concise and appropriate client information as necessary to members of the health care team				
26. I demonstrate a working knowledge of equipment				
27. I consider psychosocial aspects of any illness or disability when planning care				
28. I demonstrate knowledge about the condition of clients assigned to me				
29. I establish clinical priorities in relation to total patient needs				
30. I use time and resources effectively and efficiently				
31. I revise care as necessary, based on accurate evaluation of client's condition and response to care				
32. I anticipate teaching needs of clients				
33. I make accurate clinical judgements based on assessment data				
34. I apply resources in a creative manner to solve clinical problems				
35. I identify and use community resources in the delivery of care				
36. I use appropriate teaching methods and materials for different audiences				

37. I plan and implement health teaching for clients when necessary				
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In this section we wish to ask you a number of questions about your job.
We realize that you have only been in employment for a few weeks,
however, we ask you to consider all the questions and provide answers based on your experience.

Section Five – Job content questionnaire

	Strongly disagree	Disagree	Agree	Strongly agree
38. My job requires that I learn new things.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. My job involves a lot of repetitive work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. My job requires me to be creative.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41. My job allows me to make a lot of decisions on my own.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42. My job requires a high level of skill.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43. On my job, I have very little freedom to decide how I do my work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44. I get to do a variety of different things on my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45. I have a lot of say about what happens on my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
46. I have an opportunity to develop my own special abilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
47. My job requires working very fast.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48. My job requires working very hard.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
49. My job requires lots of physical effort.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50. I am not asked to do an excessive amount of work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51. I have enough time to get the job done.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
52. I am free from conflicting demands that others make.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
53. How steady is your work?				
Regular and steady	<input type="checkbox"/>			
Seasonal	<input type="checkbox"/>			
Frequent layoffs	<input type="checkbox"/>			
Both seasonal and frequent layoffs	<input type="checkbox"/>			

Other	<input type="checkbox"/>				
54. My job security is good.					
Strongly disagree	<input type="checkbox"/>				
Disagree	<input type="checkbox"/>				
Agree	<input type="checkbox"/>				
Strongly agree	<input type="checkbox"/>				
55. Sometimes people permanently lose jobs they want to keep. How likely is it that during the next couple of years you will lose your present job with your employer?					
Not at all likely	<input type="checkbox"/>				
Not too likely	<input type="checkbox"/>				
Somewhat likely	<input type="checkbox"/>				
Very likely	<input type="checkbox"/>				
		Not exposed	I am exposed but it is a slight problem	I am exposed and it is a sizeable or great problem	
56. Do you have a problem with exposure to dangerous chemicals in your job?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
57. Do you have a problem with exposure to air pollution from dusts, smoke, gas, fumes, fibres or other things on your job?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
58. Do you have a problem with exposure to things placed or stored dangerously on your job?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
59. Do you have a problem with exposure to dirty or badly contaminated areas at your workplace?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
60. Do you have a problem with risk of catching diseases on your job?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
61. Do you have a problem with dangerous tools, machinery or equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
62. Do you have a problem with exposure to fire, burns or shocks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
63. Do you have a problem with exposure to dangerous work methods on your job?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Strongly disagree	Disagree	Agree	Strongly agree	I have no supervisor
64. My supervisor* is concerned about the welfare of those under her/him.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
65. My supervisor pays attention to what I am saying.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

66. My supervisor is helpful in getting the job done.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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67. My supervisor is successful in getting people to work together.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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*** team leader/line manager**

	Strongly disagree	Disagree	Agree	Strongly agree
68. People I work with are competent in doing their jobs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

69. People I work with take a personal interest in me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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70. People I work with are friendly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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71. People I work with are helpful in getting the job done.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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72. How satisfied are you with your job?

Not at all	<input type="checkbox"/>
Not too	<input type="checkbox"/>
Somewhat	<input type="checkbox"/>
Very	<input type="checkbox"/>

73. Would you advise a friend to take this job?

Advise against	<input type="checkbox"/>
Have doubts about it	<input type="checkbox"/>
Strongly recommend	<input type="checkbox"/>

74. Would you take this job again?

Take without hesitation	<input type="checkbox"/>
Have second thoughts	<input type="checkbox"/>
Definitely not	<input type="checkbox"/>

75. How likely is it that you will find a new job in the next year?

Very likely	<input type="checkbox"/>
Somewhat	<input type="checkbox"/>
Not at all	<input type="checkbox"/>

76. Is this job like what you wanted when you applied for it?

Very much	<input type="checkbox"/>
Somewhat like	<input type="checkbox"/>
Not very much like	<input type="checkbox"/>

Section Six - Demographic Information

77. What is your current age in years?

78. What is your home address Post Code?

79. What is your marital status?

- | | |
|---------------------|--------------------------|
| Married | <input type="checkbox"/> |
| Living with partner | <input type="checkbox"/> |
| Single | <input type="checkbox"/> |
| Divorced | <input type="checkbox"/> |
| Separated | <input type="checkbox"/> |
| Widow/Widower | <input type="checkbox"/> |

80. What is your gender?

- | | |
|--------|--------------------------|
| Female | <input type="checkbox"/> |
| Male | <input type="checkbox"/> |

81. What is your current 'Agenda for Change' grade?

Thank you for completing this questionnaire. The information you have given us is anonymous and will be treated in strictest confidence

Once you have finished, could you please return the questionnaire in the pre-paid envelope addressed to
Ms Agnieszka Behr, School of Nursing and Midwifery, University of Dundee,
11 Airlie Place, Dundee, DD1 4HN

AN EVALUATION OF PRE-REGISTRATION FITNESS FOR PRACTICE PROGRAMMES

Mapping of Achievement in Scotland to the Fitness For Report (UKCC 1999) Recommendations
March 2008

Fitness for Practice Recommendations (UKCC 1999) (Abridged Recommendations)	Evidence of Achievement
1. Careers services should offer a breadth of advice, encouraging access for all	Not part of this study's remit
2. Recruitment and selection should be a joint responsibility between healthcare providers and HEIs.	8/11 HEI-NHS Partnerships recruit jointly to undergraduate programme. 3 HEIs do not interview for programmes
3. The good practice of organisations cooperating in providing entry through Access programmes to pre-registration preparation should be extended.	7 HEIs all offer this and work with FE colleges
4. AP(E)L should be introduced within the CFP.	SCQF Framework addressed
5. The CFP should be reduced to 1 year and should enable the achievement of a common level of competence. It should be taught in context of, and enable integration with, the branch programmes and should introduce clinical skills and practice placements early in the programme.	7 HEIs with Scottish Government contracts all comply with having a 1 year CFP. Clinical skills hours in CFP across curricula are higher and tail off during years 2 & 3. However across curricula there is significant variation in the hours allocated. Practice placements commence between 6-12 weeks into the programme
6. Students who leave having successfully completed at least year one of the CFP should be able to benefit by mapping their academic and practice credit against other credit frameworks.	SCQF Framework addressed
7. More flexibility should be introduced concerning the timing of branch programme selection.	Correspondence with programme managers and HEI link person details that all programmes with Scottish Government contract offer students the opportunity to move branch during the first year (CFP) thus complying with this recommendation.
8. There should be an expansion of graduate preparation.	With the P2000 curriculum only option was a Diploma. Therefore graduate preparation has increased however there is marked variance between proportions of students exiting with a degree or diploma between HEIs. Figures produced by NES for the project team in February 2008 based on the 2003 cohort demonstrate that just over 50% of students exit from programmes as graduates.
9. A common definition of attrition and a required minimum data set should be agreed.	Developed nationally Scottish Government Health Department (2007) Recruitment and Retention: Report of the 'Facing the Future' Sub-Group & Working Groups
10. The standards required for registration as a nurse should be constructed in terms of outcome competencies, should make the practice component transparent and specify consistent clinical supervision.	Although all but one curriculum details more hours than the minimum NMC requirement of 4600 these in the main are equally split between theory and practice components. Variation of consistency of mentoring
11. Benchmarking of subject specific standards should address outcomes which are core and specific to nursing and to midwifery, are transferable, and are consistent with the Quality Assurance Agency's threshold for degrees and diplomas.	Not part of this project's remit
12. Consideration should be given as to whether midwifery moves to a competency-based approach.	Midwifery addressed this recommendation but call these 'proficiencies' rather than 'competencies'

13. Students, Assessors and Mentors should know what is expected of them through specified outcomes and competencies which form part of a formal learning contract, give direction to clinical placements and are jointly negotiated between the healthcare providers and HEI.	Many of the HEIs have web-based / paper booklets making all this very clear to mentors/ assessors, students. However those HEIs who share the same practice placements do not share the same CAP documents and this is a real challenge for mentors in relation to time and understanding individual HEI outcomes. Across all Case studies placements are jointly negotiated. No formal Learning contracts have been identified. Of note is that assessor role has been integrated with mentor role.
14. The use of a portfolio of practice experience should demonstrate a student's fitness to practice and evidence of rational decision making and clinical judgment.	All 11 HEIs were asked to qualify their position in relation to this recommendation (March 2008). 7 HEIs responded. 4/7 complies with this recommendation. 1 HEI had portfolios but these are for developmental purposes of the students. 1 HEI does not utilise portfolios and a further 1 HEI advised that these have just been introduced into their new curriculum as of 2007.
15. The Portfolio should be assessed through rigorous practice assessment tools.	The 4 HEIs who utilised portfolios advise that these are assessed in line with other academic course work.
16. The sequencing and balance between theory and practice should promote an integration of knowledge, attitudes and skills.	This is not clearly obvious within the curriculum documents but as students detailed sometimes theory they have does not match up with practice placements. Only those in the smaller non Scottish Government contract Departments where the modules matched where they then went out in practice perceived this to promote the integration of theory and practice.
17. The current programme model of four branches of nursing should be reviewed in light of changing healthcare needs.	Following the Peach Report the UKCC (2001) undertook a post commission review of two main areas – the issue of inter professional learning and that of a review of branch and came up with 6 possible models – nothing was then done due to UKCC /NMC change until now and 4 possible options. In Scotland stakeholders interviewed in this study suggested that the CFP should be removed. Students should go directly into their respective programmes and across the 3 years there should be 'common shared learning'.
18. Practice placements should achieve agreed outcomes which benefit student learning and provide experience of the full 24 hour day and seven day per week nature of health care.	This is variable most notably due to students 'selecting' their shifts due to supernumerary status. Views of SCN that this poses difficulties in relation to their 'work readiness' when registered. However NMC requirement that all students have to work nights ie a set number in 3 years and there was no opt out. This has been superseded to some extent with Family Friendly work policies and disability legislation which allow for some adjustments to ensure exposure to elements of 24 hour care.
19. Interpersonal and practice skills should be fostered by use of experiential and problem based learning, increased use of simulation laboratories and access to information technology, particularly in clinical practice.	Variable due to some HEIs not having skills labs. Also variation in size and facilities available in those where they do have skills labs. Not all curricula use PBL as a learning and teaching strategy. Facilitation of access to IT when in clinical practice is predominately achieved through school and hospital library facilities.
20. There should be a period of supervised clinical practice of at least three months duration towards the end of the pre-registration programme.	Full compliance across all case studies.
21. All newly qualified registrants should receive a properly supported period of induction and preceptorship when they begin their employment.	Complied with, however again there is great variation in the length of time a newly qualified practitioner will be offered such support.
22. Programme changes should be systematically	Complied with across all HEIs through variety of systems

evaluated in respect of achieving fitness for practice.	i.e. external examiners, national monitoring by NES, HLSP, practice placement audits.
23. Healthcare providers and HEIs should continue to develop partnerships to support students, curriculum developments, implementation and evaluation, joint awareness and the development of service and education issues, and delivery and monitoring of learning in practice.	Strong evidence of this being achieved across all HEI-NHS Partnerships from Phase 2 data.
24. An accountable individual should be appointed by education purchasers to liaise with health care providers and HEIs to support the provision of suitable placements, staff and students during placements, the development of standards and specified outcomes for placements, and the delivery and effective monitoring of the contract.	All HEIs have a named individual with specific responsibilities to address this. Equally monitoring of the contract each HEI has a responsible individual. Strong evidence of this being achieved across all HEI-NHS Partnerships from Phase 2 data.
25. Health care providers and HEIs should work together to develop diverse teams of clinical and academic staff offering expertise in clinical practice, management, assessment, mentoring and research.	Variation across the Partnerships and the extent to which this is being achieved. Areas of good practice identified link to practice placement initiatives and learning in practice initiatives predominately, the introduction of PEFs, auditing of clinical placements jointly
26. Health care providers and HEIs should support time in education and practice for clinical and education staff respectively to enable competence and confidence.	Variation across the Partnerships and the extent to which this is being achieved. Notably, due to new roles evolving, blurring of role boundaries and the drive for partnerships
27. Formalised arrangements for access to practice and education should be adopted by health care providers and HEIs.	Variation across the Partnerships and the extent to which this is being achieved. Of note are the challenges that Academic staff experience in relation to requiring Honorary contracts from the NHS.
28. Health care providers and HEIs should formalise the preparation, support and feedback to mentors and preceptors.	All HEIs offer preparation programmes. However again there is great variation in the length of time and content of programmes. Most concentrate on their CAP booklet and how this should be completed. Very few develop the skills of learning, teaching and assessment of students. Of note is the recently developed National Mentorship Framework for Scotland (2007) which should standardise and formalise mentorship
29. Funding to support learning in practice should take account of the cost of mentoring, assessment by clinical staff, and lecturers having regular contact with practice	Historically with the move from a service contribution to supernumerary status and then on to higher education there was funding put into the NHS to make this happen. More recently though NHS are drawing on their CPD budgets to support these costs in practice. PEF initiative in Scotland does go some way to funding the support of mentors and their work in practice education and assessment. To date the PEFs (two types: those funded as part of the project originally by NES and others that are funded locally by NHS boards/HEIs) have largely concentrated on pre registration nursing support although this is expanding rapidly to embrace all students in a practice learning situation. Lecturers' having regular contact with practice is very varied. Where strong links are evident these are in the smaller Schools. For the larger SNM academics identify several factors which constrain achievement such as resources, new developments of teams and time.
30. To improve workforce planning for nursing, NHS requirements should increasingly be informed by comprehensive information from the private and independent sector.	Not part of this study's remit however Scotland has put into place Regional Workforce Planning teams to address and inform this recommendation.
31. The government departments concerned with	Not part of this study's remit.

health, social care and social services, education and employment should work collaboratively to ensure the preparation of health and social care assistants is based upon common standards of practice values.	
32. The health care professions should actively be encouraged to learn with and from one another.	As a direct result of the Fitness For Practice part of the post commission report made further recommendations which have some significance for this study – one being that IPE should be integral to nursing and midwifery programmes (Rec. 7) Rec. 8 focused on users being involved in the development of standards etc. for IPE. This current study has illuminated pockets of IPE occurring in HEIs although most tend to occur in the day-to-day of clinical practice learning.
33. Consideration should be given to the most appropriate methods of funding students of nursing and midwifery in the future.	Not part of this study's remit.