Defining specialist practice through competencies: the notion of the general and specialist children’s nurse.

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A thesis submitted in partial fulfilment of the requirements of South Bank University for the degree of Doctor of Philosophy

July 2001
Declaration

This is my own original and unaided work. Where appropriate I have fully referenced and acknowledged the work of others.

Signed……………………………………………………………………

Dated……………………………………………………………………..
Abstract

Two issues have been consistently debated since the introduction of nurse registration in 1919 and the establishment of the General Nursing Council: whether nurses caring for children require a different educational preparation and whether the nature of nursing sick children was generalist or specialist. Whilst there is evidence in the literature supporting the continuation of a children's nursing qualification, the distinction between generalist and specialist nursing is insufficiently comprehensive to distinguish children's nursing from other branches of nursing. This has resulted in implications for policy, practice, education and management, and more importantly, for children who continue to be cared for by nurses without the appropriate qualification.

The principle intention of this study was to define children's nursing from experts in the field. A multi-method comparative design incorporating a case study approach was used that included a nominal group technique, focus groups, a Delphi survey and semi-structured interviews. Two phases of data collection were undertaken concurrently with children's nurses (n=146) and specialist children's nurses (children's cancer nurses, n=37) from a number of centres.

The holistic competencies developed following data collection exposed characteristics of knowledge, skills, abilities, values and qualities displayed within the context of professional work for both groups of nurses. A classification of competencies was inductively developed from the data by the researcher and an independent researcher. The resulting hierarchy of competencies and sub-competencies illustrates relationships between a children's nurse and specialist children's nurse. Although untested the classification provides a detailed definition of children's nursing and specialist children's nursing through the labelling, defining and ordering of competencies.

The relationship between the two types of children's nurses leads to the following conclusions. There is a significant common element in these two areas of nursing practice and that generalist preparation is the foundation of specialist practice. In addition, generalist knowledge and skills are expanded in specialist practice. There is also evidence of speciality practice that is beyond the scope of general nursing practice. Evidence provided through the data collected successfully addresses and resolves the debate that children need appropriately educated nurses and that this education needs to begin at the level of generalist children's nursing preparation. The focus of further work will be to design suitable studies to support or refute the definition and through testing to confirm that a relationship does exist between general and specialist children's nursing.
Acknowledgements

There are so many people who have helped me to get to this point, below are mentioned just a few.

First, I would like to thank all the study participants; without them this work would not have been possible. I would also like to thank my work colleagues and friends who have asked about my work and not asked at all the right times. All of my co-researchers deserve a mention for their enthusiastic commitment to the aims of the study. Louise Soanes and Judy Zur deserve a special mention for their continuous support. In addition as a fellow children's cancer nurse Louise Soanes has given much to this study in terms of time, ideas and passion. Lynne Meek, Imelda Charles-Edwards and Juliette Greenwood have all played a very important part in enabling me to complete this work. Thank you also to Fiona Blackwell for her meticulous proof reading skills. At a personal level thanks are due to Ivan, who has also lived with this study. His untiring support and encouragement has been invaluable throughout. He acts as a sounding board, proof reader and IT technician, which means that he knows more about children's nursing than many other husbands. Finally, I would like to thank my supervisors Professor Margaret Fletcher, Dr Jenny Littlewood and Anne Casey. Together they have been critical and supportive in all the right places.
**Notations and abbreviations**

All the interviews and focus groups were transcribed verbatim. Facilitative sounds, such as 'uhuh' were not included, neither were 'errs' and 'ums'. The following notations were used in direct quotations:

- **FG1** Refers to a particular focus group in Phase I, numbered 1-8
- **P1** Refers to a particular participant in a focus group
- **FGe1** Focus group with expert children's nurses
- **FGe2** Focus group with expert children's cancer nurses
- **D1** Delphi survey round 1
- **D2** Delphi survey round 2
- **……** Indicates a pause in the participants response
- **(…..)** Indicates where a section of the participants response has been edited

Abbreviations have been kept to a minimum:

- **NGT** Is the abbreviation used for Nominal Group Technique

To facilitate ease of reading throughout this thesis the terms parent and children have been used. For this the reader must read parent or carer/children or young people.
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Chapter 1 Introduction

"It may be questioned, is there such a difference between the adult and the child, as to require special study on the part of the doctor, and special training on the part of the nurse? Undoubtedly there is" (Wood 1888a p268). As far back as 1888 Catherine Wood was in no doubt that there was a difference between caring for adults and caring for children in hospital. The extent of her conviction stretched to advocating that such differences must be supported with separate training pathways. Such conviction established the now widely held view amongst health professionals that children are not small adults. Their physiology and metabolism are significantly different and this difference varies through childhood from the neonate to the adolescent. In addition children's emotional, intellectual and social needs are fundamentally different from those of adults, a difference that varies as the child grows and develops (Royal College of Nursing (RCN) 2000a). These two core principles alone dictate the need for different educational preparation for nurses who are responsible for caring for children.

The above references, 100 years apart, share the belief that nurses who care for children require special education. This is probably based on two premises. Firstly, that children are different to adults, and that each child is a unique individual, an integral part of the family. Hence the concerns of children's nursing are:

♦ The child within the family;
♦ The health and health problems of the child;
♦ The holistic management of the effects of health problems and their treatment on the child and family.

(RCN 2000a)

Secondly, that general (adult) nursing education does not provide appropriate education for nurses who care for children.

Since the introduction of nurse registration in 1919 there has been a separate education pathway for children's nurses. The fact that these pathways are still in existence has led to an assumption that there are specific qualities, knowledge, skills and attitudes in nurses, which distinguish the different registrations (Price 1999). Therefore the need for different
educational preparation is a requirement. Price (1993) points out that children's nurses have had to consistently debate the value of their profession, arguing for special training and the need for children to be cared for by appropriately qualified nurses. Over the years there have been recurring pleas for a single, generalist nurse training, leaving post-registration training as the only route available for preparing children's nurses (Atherton 1993, Clark 1994).

This research is timely as it follows a stated recommendation in a recent UKCC (United Kingdom Central Council for Nursing, Midwifery and Health Visiting) publication (1999a) that the current programme model for nurse education, that includes a separate pathway for children's nurses, should be reviewed in the light of changing health care needs. As Chapter 2 will discuss more fully, children's nursing is once again being challenged by two key questions:

1. Do children need specially educated nurses?
2. If children do need specially educated nurses, how and when should their education be provided?

It is the implications of these questions that have beleaguered children's nursing. These were the same questions that Wood was responding to in her published papers in 1888. These points have since been returned to by Moncrieff (1944), and more recently by Glasper (1995a). The fact that these questions are once again being posed would suggest that children's nurses have been unsuccessful in stating a clear case in response to these questions, and as a result in ending the debate. This circular debate, represented in Chapter 2, would seem to rest on defining general children's nursing as a distinct sphere of clinical practice from general adult nursing and specialist children's nursing. Such a definition would:

♦ Differentiate between nurses who care for adults and those who care for children and influence the maintenance of two generalist education pathways;
♦ Distinguish between a general and specialist children's nurse and provide evidence that general children's nursing education is generalist;
♦ Clarify specialist children's nursing as a continuum from generalist children's nursing and thus influence the content of specialist educational programmes.
The principle intention of this study is to attempt to define children's nursing. Using an holistic approach to the development of competencies this study will develop a definition of children's nursing and describe knowledge, skills, abilities, values, and qualities displayed within the context of professional work. This study will also seek to make explicit the relationship between a children's nurse and a specialist children's nurse, clarifying similarities and differences in relation to knowledge, skills, abilities, values, and qualities. The development of competency-based standards for the generalist and specialist children's nurse will provide explicit statements of what people need to be able to do, to know and be in order to practice successfully as a professional within children's nursing. Having a clear sets of standards will help to remove misunderstandings both inside and outside the profession (Gonczi et al 1990) and re-affirm children's nursing as a distinct and separate entity within nursing. It may result in clarifying nursing values and principles shared with other nurses in different spheres of nursing practice, such as nurses who care for adults.

There are four reasons for affirming the unique attributes of the children’s nurse and defining their role using competencies:

♦ To ensure fitness for practice;
♦ To identify the nursing contribution;
♦ To conclude the generalist/specialist debate;
♦ To ensure the delivery of safe, quality care taking into account the needs of children.

First is the need to support 'fitness for practice', a notion recently examined in terms of pre-registration education by the UKCC (1999a). Pre-registration education has moved to an outcome-based competency approach in which qualified children’s nurses need to have an understanding of what constitutes competence in order to give direction to education programmes and facilitate assessment of practice and theory. Likewise, an understanding of competence will be needed to contribute to the UKCC's pilot work related to 'A higher level of practice' (1999b) in order to ensure that the knowledge and skills specific to a children's nurse are made explicit up to a higher level. The concept of what constitutes
competence at initial registration and at higher levels in children's nursing requires further exploration. This has already begun with a new pre-registration education programme (UKCC 1999a) and a new regulatory framework for post-registration clinical practice (UKCC 1999b). Both initiatives have the potential to make explicit the knowledge, skills and expertise of the children’s nurse based on clinical competence. In meeting the agenda of Clinical Governance (Department of Health (DoH) 1998a, RCN 1998), an agreed definition of competence and role function described in terms of competencies will be a crucial element in ensuring that children’s nurses have the appropriate education, training, skills and competence to deliver the care needed by patients.

Secondly, definitions are required as part of what Salvage (1993) refers to as the ‘New Nursing’. Characteristics of the New Nursing include attempts to redefine the role of the nurse in order to assert its singular contribution to healing. It challenges assumptions about nursing's subordination to medicine and the notion of replacing what has been historically perceived as a bureaucratic occupation with a profession (Salvage 1993). Children’s nurses need a strong unified voice to clarify the uniqueness of the role and attributes of a children's nurse that makes it distinct from other branches of nursing and other health professions. A number of issues have intensified the need to describe this unique function. For example, the boundaries between health care professionals have become blurred with the introduction of nurse practitioners and advanced nurse practitioners (Barton et al 1998, Gibson 1999). In addition to this an increasing amount of care that was previously the domain of the qualified nurse has been delegated to health care assistants (Boyes 1995). Defining the role, activities and characteristics of a children's nurse will help in clarifying these boundaries and make explicit the nature of professional work that is the domain of the qualified nurse.

Thirdly, as the debate surrounding the introduction of a 'generic' nurse periodically returns, it will be essential that children’s nurses are ready for future debates and can articulate their unique qualities. Swanwick and Barlow (1993) stress the need for children’s nurses "to argue that specialist skills, plus knowledge of the developing child’s physiological and psychological needs, are required for quality and excellence in paediatric nursing care"
It is these characteristics that make children’s nurses distinct and different, requiring specific education and preparation for practice. This assumption, which has yet to be proved, was a starting point for this research.

Finally, the overall purpose and fundamental goal of this thesis, is to ensure the delivery of safe, quality care taking into account children's unique needs and rights in the context of their family and society is safeguarded. This is achieved by clarifying definitions which can then be tested in practice and against which standards can be set. The most important investment for the future is the investment made in the health and well being of children. Both the Children Act (Department of Health 1989a) and the UN Convention on the Rights of the Child (General Assembly of the United Nations 1989) set out principles for providing services for children in which:

- The child has rights;
- The welfare of the child is paramount;
- Services meet the needs of the child and are provided in partnership with parents and carers;
- All staff work with and support families;
- The views of the child, parents and carers are taken into account.

By defining children's nursing practice the goals and focus of practitioners work and the parameters of their work, caring for children and young people, will be made more explicit.

The chapters of this thesis are organised into four parts. In Part 1 the contextual information significant to this study is developed and expressed in regards to the evolution of the children's nurse, the general nurse and the specialist nurse. Examples of how nursing has been defined and how nurses have articulated a view of general nursing and children's nursing are explored in Chapter 2. Chapter 3 introduces the theme of nursing competence and competencies. This is an important chapter as it seeks to justify the researcher's preference for clinical competencies to define nursing. The problem of definition, explored in Chapter 2, is returned to in Chapter 4 where the complexities of terminology and naming of concepts, crucial if an unambiguous definition is to be
developed, are looked at. This chapter focuses on the nature of classifications that can label, define and order concepts, and proposes this approach as the conceptual framework for this study.

Part 2 begins with Chapter 5, which introduces the approach taken in this study to define children's nursing and specialist children's nursing reported as the design of this research. The main ethical issues of the study are also addressed in this chapter. Chapters 6 and 7 together present the methodology of the two phases of data collection. The layout of both chapters is unusual in that the method, analysis and results are reported in a linear style, reflecting the repeated process of data collection and data analysis that formed the design of this study. This approach to presenting data provides an audit trail from data collected to the list of competencies.

Part 3 presents the process by which the competencies were then labelled, defined and ordered, culminating in the development of a classification of competencies (Chapters 8 and 9).

The final part of this thesis reflects on the classification developed and how far it has accomplished the principal intention of this study: to define children's nursing. Chapter 10 probes into the classification to examine what it reveals about the relationship between the general and specialist children's nurse. The pathway to defining children's nursing that includes a critique of the study design and methods used is explored in this chapter. This chapter draws some conclusions about the appropriateness of using competencies to define nursing and concludes this thesis by stating and appraising the definition developed.
PART 1
SETTING THE SCENE
Chapter 2 Generalist and specialist nursing

2.1 Introduction

Since the introduction of nurse registration in 1919 and the establishment of the General Nursing Council (GNC), the debate surrounding whether the nature of nursing sick children was generalist or specialist has raged. This debate, yet to be resolved, has taken place in an environment devoid of a precise definition of generalist and specialist nursing. Storlie (1970) argued that nursing must never be defined, letting its mystery and beauty stand-alone. Her argument was based upon the fact that definitions themselves have required further definitions in order to clarify terms used. In order to resolve the debate regarding generalist and specialist nursing a clear and unambiguous definition is required. A definition would delineate, without necessarily dividing, the epistemological foundation of both areas of nursing practice. As a result it would make explicit the nature of the discipline, give direction to the educational preparation of professionals and delineate the sphere of nursing practice. Ultimately a definition should prove useful in stimulating theory generation for guiding research, the findings from which would aim to improve practice (Schlotfeldt 1987). According to Donaldson and Crowley (1978 p113), a discipline is characterised by "a unique perspective, a distinct way of viewing all phenomena which ultimately defines the limits and nature of its inquiry". This unique perspective would be made known through a process of defining; revealing the scope and boundaries within which a discipline may be studied, practiced, defended or promoted, providing a general direction for the art and science of the profession (Grossman and Hooton 1993).

As a background to the main discussion this chapter begins with a brief synopsis of the history and development of the children's nurse, the general nurse and the specialist nurse. The intention is to provide contextual information as opposed to a chronicle of events, hence the brevity of this section. The discussion will however highlight how changes in health care delivery and the needs of society have influenced developments in nursing, leading to the establishment of nursing specialities, such as children's cancer nursing. The main arguments that fuel the generalist and specialist nursing debate, and the tensions that
underline that debate, are summarised in order to provide a rationale for defining generalist and specialist children's nursing. The chapter proffers some examples of how nursing has been defined and how nurses have articulated a view of general nursing and children's nursing. A conceptual framework is proposed to provide the focus of the study in which the hypotheses are embedded.

2.2 Evolution of the profession of children's nursing

Reflections on the history and development of children's nursing have been documented by an increasing number of authors (Miles 1986a,b, Fradd 1992, Darbyshire 1993, Bradley 1999). The sick children's nurse per se emerged only in the 19th century and coincided with the opening of special hospitals for children (Miles 1986a). Prior to this period it is assumed that children were cared for at home. Children of the upper classes were cared for by their nanny or helper (untrained nurse) while the majority were cared for by their mother or by female members of the extended family. The first dispensary for children was founded in 1769 by Dr George Armstrong who was opposed to the admission of children to hospital on the grounds of separation from their family or untrained nurse (Besser 1977). Such an opinion and attitude, coupled with the poor survival rates affecting fund raising, influenced most physicians against in-patient care. It was not until 1852, later than in the rest of Europe, that the first hospital opened its doors to children in the United Kingdom (UK). The Hospital for Sick Children in London was founded by Dr Charles West who was convinced of the need for hospitals to provide in-patient care to children (Besser 1977), and that the proper care of sick children was felt to require special services and skilled staff (West 1854).

These two apparently opposing views of home care versus hospital care have re-emerged in recent years. Although profoundly sick children are admitted to hospitals for 'high tech' care, length of admission is becoming much shorter and for those children who are less ill, short-stay admissions with follow-up care at home is introduced whenever feasible (Audit Commission 1993). Over the years the care of the sick child has moved from being almost
exclusively the responsibility of the hospital towards the community, resulting in community health care providing for a much broader range of needs (Whiting 2000).

Three themes dominate the literature pertaining to the role of a children's nurse: education, registration, values/approach to caring for children and their families. Each of these themes will be considered in order to trace the evolution of the children's nurse and provide context for the ensuing discussion on whether children's nursing has a future.

2.2.1 Educating the children's nurse

The training of children's nurses began at the Hospital for Sick Children in London ten years before general nurse training at the Nightingale School of St Thomas' Hospital, also in London (Miles 1986b). Catherine Wood (1888a p268) the first Lady Superintendent of the Hospital for Sick Children noted at that in the past it was “considered quite unnecessary to provide a Trained Nurse for a sick child, unless the illness was infectious, or the strength of the mother was unequal to the task of Nursing”. Thus the nurse, who had received no special training, undertook a useful motherly role in the community. (Wood 1888b) argued that this role was untenable, she stated two propositions: "first, that sick children require special nursing, and second, that sick children's nurses require special training” (p507). Working alongside Charles West, Catherine Wood designed a scheme for training nurses built upon an apprentice system, where nurses were trained and educated through observing and delivering care to children, as well as through some formal teachings (Miles 1986b). Two of the initial aims for establishing the hospital were to provide instruction of students in the department of medical knowledge and to educate and train women in the special duties of children's nursing (Besser 1977).

Continuing on from those early years, and re-affirmed by the maintenance of the supplementary register established in 1919, there has been a separate educational path for children's nurses (Barlow and Swanwick 1994). Since that time, however, arguments have raged concerning the parity of children's nursing with general (adult) nursing. The central argument is that all nurses should hold a general registration and that children's nursing
education is specialist and therefore should be provided following registration. This was the position taken by the Horder Committee as far back as 1942 (RCN 1942). In response to which, Moncrieff (1944) argued that children’s nursing was not a speciality, but general medicine and surgery at a special age period and therefore constituted general nursing. Moncrieff (1944) presents evidence to maintain a similar basic training for all nurses that would educate nurses to care for sick children at the level of initial training and registration. This argument will be returned to later in the thesis.

Glaser (1995a) records the education routes that have been available over the years:

♦ From the outset a three-year training programme was undertaken leading to the single qualification of a Registered Sick Children's Nurse (RSCN);

♦ Following implementation of the recommendations from the Horder Committee (RCN 1942) the single qualification was gradually phased out in England and Wales, the RSCN qualification was thereafter obtained following initial registration as a general (adult) nurse;

♦ The large children's hospitals counter-attacked the Horder recommendations by introducing a combined children's and adult integrated course (SRN/RSCN) in 1955;

♦ Project 2000 was introduced in the UK at pilot sites in 1986;

♦ Scotland and Northern Ireland maintained direct entry and a single qualification until the introduction of Project 2000 in 1989;

♦ The Project 2000 course (UKCC 1986) was structured around a common foundation programme of 18 months with the remaining time spent in the child branch. Despite ongoing arguments about the requirement to hold two qualifications and the nature of specialist practice, Project 2000 re-introduced direct entry with the establishment of the child branch.

Early evaluation of Project 2000 courses raised concerns that the supposed common foundation course was focused on the nursing care of adults (Elkan and Robinson 1995). It seemed that although children's nurses were exiting with one qualification, curricula
were preparing them for more than one area of clinical care. In addition the change to a more academic focused education raised questions about preparation for clinical practice. Recent changes have aimed to redress the balance by reducing the common foundation programme to one year, increasing the emphasis on the student's chosen branch in the common foundation and introducing an outcome-based approach to assessing clinical practice (UKCC 1999a). Along with other recommendations, this new approach to education and training aims to prepare children's nurses who are able to adapt and meet new and changing health care needs.

2.2.2 Registration

The Register of Sick Children's Nurses was set up in 1919 as an Act of Parliament. Although many have presumed that this was in recognition of the special nursing needs of children, parliamentary papers recorded during that protracted debate indicate something quite different. Comments reveal that it was to enable nurses who trained in children's hospitals to be recognised alongside their adult colleagues training in adult hospitals. According to one MP it was to prevent nurses who had trained in children's hospitals appearing as 'masquerades' (Parliamentary Debates 1919). This set the scene and established a way of thinking that persists. Today children's nurses still find it difficult to maintain an equal status with colleagues on the general nursing register.

The title of Registered Sick Children's Nurse (RSCN) remained until the introduction of Project 2000. Children's nurses completing child branch are now entered onto Part 15 of the UKCC register and are usually referred to as RN (registered nurse) child. Children's nurses who complete a pathway after qualifying as an adult nurse are entered onto Part 8 or Part 15 of the register. The move away from 'sick children' in the title was important in signifying the changing health care needs of children and emphasising a focus on health as opposed to illness. This change also reflected the changing role of the nurse that was no longer exclusive to caring for sick children in hospital.
2.2.3 Values and approach to the care of children and their families

The health needs of children are different to those of adults. This has never been cause for debate, among those who care for children. In contrast, the contemporary view that children are part of a family and are dependent on their parents for physical and emotional care and support took much longer to be accepted. The prevailing orthodoxy in the early 20th century was mechanistic and regimented care which regarded the health care professional's relationship with children as firm, cold and detached. Up until the 1950s it was a commonly held belief that children settled more easily in hospital without the presence of their parents, and that nurses knew better than mothers about how to cope with a sick child. These notions can be traced back to the reporting of the care of children by Wood (1888b) regarding the value of 'mothering' and the role of parents to deliver their sick child to hospital where they would be cared for by skilled and knowledgeable staff. The holistic needs of children and their families were not recognised at this time.

Darbyshire (1994) refers to the work of Bowlby (1953) and Robertson (1970) as the 'watershed events' that changed views about how children should be cared for in hospital. With evidence from these two publications and numerous other studies, pressure was mounting for a change in attitudes towards the care of children in hospital. The Platt Committee was set up in 1959 to make a study of children in hospital and formulate recommendations for how best to meet their needs (Swanwick 1983). The work of NAWCH (National Association for the Welfare of Children in Hospital 1984, 1987) ensured that the effects of hospitalisation and separation on children were taken into the public domain. NAWCH is a parent pressure group established initially to deal with the failure to implement the recommendations of the Platt Report (Ministry of Health, Central Health Services Council 1959). NAWCH has recently re-titled as Action for Sick Children to reflect the changing nature of work, which increasingly includes community care. Both professional and public awareness of the specific needs of children was raised by publications, and the activities and national profile of NAWCH. It was recognised that the child's emotional, physical, psychological, intellectual and social needs were
intertwined, and that deprivation of any of their needs could affect the child's health in both the short and the long term.

Such changes in knowledge, attitudes and approaches to caring for children have resulted in parental involvement and parents staying overnight with their children slowly becoming the norm. Nurses caring for children in hospital not only recognised the value of parents being with their child, but also of them being involved in their care (Coyne 1995). Parental involvement in care has since become an accepted feature of the care of hospitalised children. The children's nurse who is the professional partner in the child's hospital care complements this role (Burr 1989, Fradd 1992).

2.2.4 Does children's nursing have a future?
Children's nursing has evolved from the mothering, nurturing, obedient, doctor's assistant type role as described by West (1854) and Wood (1888b), to that of an independent, reflective, flexible and creative practitioner who provides holistic care to children and their families in collaboration with the multi-disciplinary team (Burr 1989, Fradd 1992). The nurses' love for children and the need to be educated and skilful in the art of caring for children, sentiments embodied in the work of Wood (1888b), are as important today. However, since 1919 there have been consistent endeavours, in the face of many challenges, to defend the integrity of children's nursing as a distinct sphere of practice. Arguments have been won and lost, and some previously thought to have been won periodically recur.

Both the separate educational preparation and the need for a separate Register have been questioned. Direct entry to education established and valued by Charles West and Catherine Wood was threatened by the recommendations of the Horder Committee (RCN 1942), the Briggs Report (Briggs 1972) and the Judge Report (RCN 1985). Although these reports reflect very different points in time in relation to society, health and the status of the nursing profession, they all conclude that there should be only one qualification leading to registration. The future of the children's nursing qualification remains in the
spotlight. A slight reprieve was won with the introduction of Project 2000 in 1989 with support for a four-branch structure, which included children's nursing. This was only slight because in 1999 the UKCC suggested that there should be a review of the structure of four branches as initial preparation for nursing. The survival of direct entry to child branch education will depend on the resolution of the recurrent generalist/specialist nurse debate.

Similarly, the future of registration hangs in the balance. The initial feeling of success that children's nursing was seen as equal to general (adult) nursing with the preservation of child branch waned with the concurrent disappearance of the title of RSCN. Glasper (1995a) states that referring to children's nurses as either 'Part 15' or 'registered nurse brackets child' did little to maintain the status of children's nursing. A registered children's nurse title might carry more authority and weight. With the introduction of Project 2000 and the continuation of children's nursing as generalist education the argument may have been considered won (Barlow 1986). The career pathway of children's nurses was however initially limited in some directions because of a lack of an adult nursing registration (Fradd 1992). Today children's nurses have expanded opportunities at clinical level, however EEC (European) directives still limit their access to shortened midwifery courses.

Preserving children's nursing could very well rest on retaining direct entry to educational preparation and raising the status of the title RN Child. Presenting a case in support of children's nursing relies on the difference between nurses who care for adults and nurses who care for children. This difference must be articulated more clearly and made more visible, which requires consideration of the nature of general (adult) nursing.

2.3 Evolution of the profession of nursing

Insights into the history and development of the nursing profession, shared by general (adult) nursing and children's nursing, have been documented by a number of authors (Abel-Smith 1960, Dingwall et al 1988, Baly 1995, Rafferty 1996). Nursing, including
children's nursing, has its roots in the Victorian era, a period where women constituted an oppressed group in terms of their social and economic life. The ideology of motherhood kept many women out of the mainstream of social activity as society exerted control, demanding respectability and hence condemned any deviations from the norm. Although there had been religious orders that dedicated themselves to the sick, the antecedents of the nursing profession were domestic servants, amounting to little more than a specialised form of charring (Abel-Smith 1960). Until the early nineteenth century nurses were untrained and were considered of 'low character'.

Caring for the sick was a logical extension to the performance of 'good works' already sanctioned by the church. At this time more stress was laid on personal qualities than educational preparation. Nursing came to be seen as 'woman's work'. Class divisions were still apparent in Nightingale's era with the ordinary bedside nurse a member of the 'servant class', and the ward sister usually coming from the 'middle' or 'upper classes'. This resulted in probationers and lady-pupils, the former being paid during training and the latter who paid for their training. Although the image of the nurse at this time was more pleasing, it retained notions that would continue to cause conflict. At the close of the nineteenth century the image of the nurse according to Palmer (1983), was that of subordinate, servile, domestic, humble, and self-sacrificing and not too learned an individual.

The need for nursing care and the need for nurses increased with the introduction of more voluntary hospitals as well as a need for nurses to work in the homes of the sick. Domiciliary nurses prevailed and any woman could be called a nurse, leaving the public unaware of who was caring for them. At a time of crisis few families would ask for qualifications, many received good homely service from nurses employed by charitable bodies (Abel-Smith 1960). Two issues were apparent: firstly, families were being deceived if they thought they were always receiving care from a qualified nurse, and secondly, there was exploitation of some nurses. There was a need to raise the status of the nursing profession and to standardise and organise education.
2.3.1 Educating the nurse

The first training school for general nurses was established in the UK in 1860 and nursing as a career for gentlewomen soon became popular. By the end of the 19th century all the larger voluntary hospitals in England had their own nurse training schools. The public image of nursing as a superior form of domestic service was replaced by that of a vocation, a proper occupation that attracted respectable members of society. However the schools failed to train sufficient nurses to meet the demand, leaving workhouse nursing to be delivered by un-trained woman described as 'delivering inadequate and incompetent nursing' (Abel-Smith 1960). Additionally, the increased demand for nurses to work in the home led to abuse with private agencies established solely for commercial reasons employing untrained nurses. Training was available for some however there was no consistency between education programmes and rivalry between institutions delivering programmes was high. This established a situation of parochial interest and widely varying standards.

A national three-year syllabus for the education of nurses was attempted and a state examination introduced in 1919 after the GNC was established. The GNC was responsible for standards and prescribed a scheme for education and training by attempting to impose a unified foundation on the various special branches of the occupation. Furthermore, the council aimed to limit the number of training institutions to facilitate a general standard of teaching and supervision. Discussion amongst matrons and sister tutors at this time revealed tensions which led to questions about the role and content of pre-registration courses (The Nursing Times 1921):

♦ The high entry requirements;
♦ The need to balance time spent in practice with teaching time;
♦ The lack of suitable teachers;
♦ The shortage of staff to offer appropriate supervision;
♦ The unanimous feeling that the syllabus was too full.
A second gate of entry was introduced to meet the shortage of nurses after the Second World War. Thus, in response to health service organisation and funding, the GNC revised the syllabus to encompass the role of assistant nurse. The problem of recruitment prompted an agreement in 1943 that these assistant nurses should be entered onto a 'Roll', enabling them to become State Enrolled Nurses, referred to as pupil nurses during training. This resulted in a two-year programme for pupil nurses and three years for student registered nurses, which began in 1949. The GNC remained responsible for education standards until the UKCC was established in 1982 after the Nurses, Midwives and Health Visitors Act in 1979. This act replaced many of the autonomous statutory bodies creating the national bodies, such as the English National Board (ENB).

In May 1986 the UKCC published proposals for reform to current education: Project 2000 - a new preparation for practice. The main objectives for the new curriculum were a focus on health as well as disease, preparation of nurses who could work equally effectively in hospital and the community, and student status for trainee nurses. With the introduction of this new programme there was gradual cessation of second-level nurse training. The new programme introduced direct entry of training into four branches of general nursing, that is adult, mental health, children and learning disability. The curriculum was developed on the premise that all four branches shared some knowledge and skills. There was recognition at this time that all nurses regardless of their area of clinical practice had something in common. What was common, however, was inadequately articulated and therefore very quickly evaluations of the new curriculum identified problems when implementing the shared component of the programme leaving both nurse educators and students dissatisfied with the process and outcome (Allen 1990, Watkins 2000).

2.3.2 Registration

The battle for nursing registration was eventually successful following the lobbying of Bedford Fenwick from 1904-1914 (Miles 1986a). She led the first professional organisation, the Royal British Nurses Association (Abel-Smith 1960), but her goal for a register of nurses was strongly opposed by Nightingale. The debates raging internal and
external to nursing are succinctly recorded by Abel-Smith (1960). The opposition came from Nightingale who objected to the style of registration that favoured examination to test knowledge. Nightingale herself favoured personal qualities more than intellectual capacity. Other opposition came from the medical profession in its pursuit to retain the faithful carriers of doctor's orders. Two bills were eventually presented to Parliament, one from the Royal British Nurses Association, the second from the College of Nursing. The College of Nursing had been introduced to provide a national standard of training. Agreement between the two organisations could not be reached on the content of the bill, and eventually the government brought in its own bill. Royal assent for the bill was received in 1919 and established the General Nursing Council (GNC). The first state final examination was held in 1925, and the first nurses were admitted to the Register following examination.

2.3.3 The future of general (adult) nursing
The evolution for general nursing advanced from a position of domestic, obeying, untrained, indefinable and resembling 'nothing like a self-determined occupation' as described by Abel-Smith (1960) and Dingwall et al (1988), to a broad, definable, self-determined profession whose members are educated, assertive, autonomous and expert, as described by Henderson (1978). The education of nurses advocated by Nightingale was focused on adult patients. Since that time general nursing has held a privileged position with a number of reports on education strongly in favour of general (adult) nursing as a foundation for all other branches of nursing. The future of general (adult) nursing is secure. The title of registered nurse endorses the perception that there is only one type of registered nurse, as did the common foundation of the Project 2000 programme. What was intended to be a common pathway was developed and taught by mainly general (adult) nurses who had little or no understanding of the other branches of nursing. The foundation of shared learning has instead become an introduction to the care of sick adults. This traditional dominance may persist because general (adult) nurses make up the largest number of trained nurses but there are growing questions about whether the general (adult) nurse is meeting the nursing needs of the population.
With a growing elderly population in the UK, there is recognition of the particular needs of this group. At a recent meeting at the RCN Annual Congress, nurses called for a 'care of the elderly' branch to be established to properly educate nurses to meet the special needs of this vulnerable group (RCN 2001). Perhaps in the future general (adult) nursing may well be a minor branch. In addition, there is growing recognition that a significant number of adult patients have mental health needs, and that many mental health patients have a physical illness. So the future for general (adult) nursing may look quite different.

2.4 Differentiating between general (adult) and children's nurses

The advancement of two separate routes to an initial nursing qualification, adult and children's nursing, has been shaped by changes in health care need, changes in service delivery, needs of society and health care policy. These changes have simultaneously influenced developments in general (adult) nursing and children's nursing. Underpinning the evolution in children's nursing, nurses have consistently needed to advocate for children and demand that children should be cared for by specially educated children's nurses (Fradd 1992, Price 1994). Likewise parents, through the activities of NAWCH have also been insisting that their children should be cared for by specially educated children's nurses (NAWCH 1984). At the same time there are huge pressures to justify children's nursing being different from the nursing of adults.

But what is the real issue here? It is not whether professionals can agree on what generalist or specialist nursing means, whether one type of nurse is generalist or specialist or whether different kinds of educational preparation are a good idea, the fundamental issue is the nursing needs of the people cared for by nurses. What are the health care needs of infants, children, young people, adults or the elderly? It is these needs that dictate the spheres of practice for nursing from which the required education of nurses is drawn. If there are different spheres and different educational paths, then there should be recognition of that difference so that the public can identify and be assured that the appropriately qualified nurse is caring for patients. At the moment this recognition is provided through different registrations with the statutory body.
Up to this point in the thesis there are noted to be three features that distinguish one type of nurse from another:

- Sphere of clinical practice;
- Educational preparation;
- Registration.

When these features are considered together the process leading up to different registrations makes perfect sense, as outlined in Figure 2.1 below.

**Figure 2.1 Sphere of practice, education and the need for a separate register for children's nurses**

- **Sphere of Practice**
  - Children and adults are different
  - Children have different health needs specific to their age group
  - They need to be cared for by nurses who understand their different health needs
  - To understand those needs nurses need specific education
  - Specially educated nurses must be entered onto a different part of the register
The routes leading to a different registration would imply that the competencies required to be entered onto the Register should be different for a children's nurse and a general (adult) nurse. In reality this has not been the case. Rule 18 (DoH 1983) from The Nurses, Midwives and Health Visitors Rules Approval Order stipulates nine competencies, which are required before nurses can be entered onto parts 1 to 8 of the Register, that includes children's and general (adult) nursing. These competencies were reviewed in 1989 to accommodate changes in education resulting from the introduction of Project 2000 (DoH 1989b). This review resulted in Rule 18a, which comprises 13 competencies to be achieved for entry onto parts 12-15 of the Register. These competencies stipulated as Rule 18 and Rule 18a, have remained generic to all branches of nursing and could be argued to be so broad that they fail to reflect the nuances of practice of a children's nurse. For example, in the statement 'the use of appropriate channels of referral for matters not within her sphere of competence'. As 'sphere of competence' is not made explicit application to practice within children's nursing may remain vague. Therefore, application of the competencies to sphere of practice by inserting 'child and young person' into all the statements is required if the competencies are to be relevant to children's nursing. The failure of the UKCC and the national boards to articulate outcomes of education and requirements for entry onto parts of the Register that distinguish types of nurses from each other, has left the question 'why are children's nurses different' unanswered.

Returning to the three distinguishing features, it can be argued that if the sphere of practice and the educational preparation is different, then the result must be different in terms of outcomes and competencies. So has there been reluctance by the professional bodies to differentiate these two types of nurses, or was the process of differentiating recognised to be too difficult? A cynical view would be that it has not been in the best interests of the professional bodies to distinguish between the two. Economic influences prevail and therefore children continue to be cared for by general (adult) nurses and hence the generic competencies of Rule 18 and 18a remain appropriate. But avoiding distinguishing between types of nurses creates a number of problems:
The exact nature of either sphere of practice is not articulated, leaving the scope and boundaries within which the practice may be studied, practiced, defended or promoted vague or undetermined;

- Shared and unshared knowledge and skills are not made explicit, making joint teaching difficult to operationalise, resulting in shared learning in Project 2000 courses focusing on general (adult) nursing;

- Qualities and traits shared by all nurses and those that may be different remain unexplored. This leaves the selection process for the different branches intuitive which then leads to nurse learner wastage or the employment of 'unsuitable nurses';

- Differentiating between generalist and specialist practice within branches is more difficult. Therefore, identifying knowledge and skills that are complex, advanced and beyond the scope of initial preparation for practice remains a challenge.

It is this latter point, which is further explored below to provide the context for later chapters that seek to define and differentiate generalist and specialist children's nursing.

### 2.5 Nature of specialist nursing

Up until the 1960s nurse education in the UK was preparing generalist nurses in four branches of nursing: general (adult) nursing, mental health, learning disability and children. There was a separate Register for fever nursing until 1967 that was discontinued due to changes in sickness patterns. With the introduction of the Joint Board of Clinical Nursing Studies in 1970 the need for post-registration courses was recognised in response to a growing demand from nurses who were caring for patients in specialised areas of clinical practice, such as, intensive care, orthopaedic nursing or neonatal nursing. Since that time specialist areas of practice have continued to proliferate, with corresponding, although slower, development in post-registration specialist nurse education.

The International Council of Nurses (ICN 1985) list the following reasons as to how specialisation in nursing occurred:

- The need for more effective use of nurse manpower;

- The changing sociological, cultural and economic factors affecting health;
♦ Advances and changes in medical practice;
♦ The specific health needs of a population;
♦ Developing national priorities in health care.

The process of this development however, was not determined in a systematic way, and was often perceived to parallel developments in the disease-focused model of medical specialities (RCN 1988). Problems and issues with increasing specialisation were recognised by the ICN. Concerns revolved around the benefits of specialisation and the forces driving them. The ICN was also concerned about the qualifications of nurses working in specialist areas, and their place within the structure of the occupation and the health care system as a whole. One of the potential outcomes, if developments continued in a disorderly fashion, was thought to be fragmentation of nursing care and the splintering of the profession (Styles 1989). Dalziel (1990) reinforced the concern about these potential outcomes and advocated the need for nurses to define the specialities in nursing before government and other care workers would seize that opportunity and impose frameworks more reflective of a medical than nursing model.

As early as 1965 Peplau identified ten possible areas for nursing specialisation:

1. Organs and body systems, e.g. renal, cardiac;
2. Age of the client, e.g. premature, adolescent;
3. Degree of illness, e.g. acute, chronic;
4. Length of illness, e.g. short or long term;
5. Nursing activities, e.g. medicine nurse, insulin nurse;
6. Fields of knowledge, e.g. behaviourist nurse;
7. Sub-roles, e.g. counsellor, health teacher;
8. Clinical services, e.g. obstetrics, paediatrics;
9. Professional goal, e.g. infection control;
10. Area of practice, e.g. psychiatry.

Peplau (1965) offered a number of routes to describe the boundaries of specialist practice. It is surprising that disorderly development was seemingly the norm given that nurses have
taken opportunities to describe nursing specialities. It may have been that the areas described by Peplau (1965) were not considered appropriate, as some seem more reflective of a medical model. Yet today, in the UK, recognised specialities remain broadly reflective of these ten areas, with a number encompassing more than one area. For example, the title 'child and adolescent mental health nurse' is specific to the age of the client and indicates an area of practice. Current specialities have become even more defined, for example distinguishing between hospital and community, and in-patient, day care or ambulatory care. Using children's nursing as an example Table 2.1 presents a point in time of some recognised specialist areas of practice in children's nursing.

Table 2.1 Example of clinical nursing specialisation in children's nursing (the list of specialist groups in the RCN Children and Young People Field of Practice)

<table>
<thead>
<tr>
<th>Speciality</th>
</tr>
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<tbody>
<tr>
<td>Adolescent Health</td>
</tr>
<tr>
<td>Children and Young People Mental Health Nursing</td>
</tr>
<tr>
<td>Children’s Surgical Nursing</td>
</tr>
<tr>
<td>Community Children’s Nursing</td>
</tr>
<tr>
<td>Community Paediatric Oncology Nursing</td>
</tr>
<tr>
<td>Children with Disability Nursing</td>
</tr>
<tr>
<td>Neonatal Intensive Care</td>
</tr>
<tr>
<td>Paediatric Ambulatory Care</td>
</tr>
<tr>
<td>Paediatric Intensive Care</td>
</tr>
<tr>
<td>Paediatric Oncology Nursing</td>
</tr>
<tr>
<td>Paediatric Bone Marrow Transplant Nursing</td>
</tr>
<tr>
<td>Paediatric Diabetes Nursing</td>
</tr>
<tr>
<td>Paediatric Urology Nursing</td>
</tr>
<tr>
<td>Paediatric Nephrology Nursing</td>
</tr>
<tr>
<td>Accident and Emergency</td>
</tr>
<tr>
<td>Paediatric Palliative Care Nursing</td>
</tr>
</tbody>
</table>

The identification of specialties in nursing has served a number of purposes. In terms of expanding nursing knowledge and expertise, specialisation has implied and in some cases made explicit a deeper level of knowledge and skill, and a narrower focus in a particular area of clinical practice than that which is acquired during generalist training (RCN 1988). Specialisation has reinforced the need for specialist education that builds on general education. There are recognised benefits of specialisation for patients that include
improved quality of care by nurses who have a restricted but more intense focus of care (ICN 1991). Specialisation provides a focus for teaching and research. For nurses, mastery of knowledge and skills has the potential to increase job satisfaction, develop expert competence and increase autonomy both in the work environment and in decision-making (American Nurses' Association {ANA} 1980). These benefits are apparent in current nursing practice but what remains less clear is whether specialities contribute to nursing science, particularly in the area of theory development (inductive and deductive) and testing (Murphy and Hoeffer 1983).

Although there are noted benefits of specialisation, fragmentation of the profession continues to be a concern. In response to their growing concerns and with the express aim of assisting the profession to develop a systematic means for designating specialities, the ICN (1991) discusses ten essential features for orderly development of specialisation:

1. The speciality defines itself as nursing and subscribes to overall purpose, functions and ethical standards of nursing;
2. The speciality practice is sufficiently complex and advanced, it is beyond the scope of general nursing practice;
3. There is both demand and a need for the speciality service;
4. The focus of the speciality is a defined population which demonstrates recurrent problems and phenomena that lie within the discipline and practice of nursing;
5. The speciality practice is based on a core body of nursing knowledge, which is being currently expanded and refined using research. Mechanisms exist for reviewing and disseminating research;
6. The speciality has established educational and practice standards which are congruent with those of the profession and are set by a recognised nursing body or bodies;
7. The speciality adheres to the registration requirement for the general nurse;
8. Speciality expertise is obtained through a professionally approved advanced education programme, which leads to a recognised qualification. The educational programme preparing the specialist is administered by a nurse;
9. The speciality has a credentialing process determined by the profession.
10. Practitioners are organised and represented within a specialty association or a branch of the national nurses' association.

The ICN (1991) suggested that such orderly development would play a critical role in expanding nursing knowledge and expertise, strengthening the profession and enhancing the career opportunities available to nurses. Therefore the general public would have clear evidence that a nurse who claimed to be specialist did indeed have relevant expertise in a given specialty (ANA 1980).

Career opportunities were enhanced through structured development of specialties in nursing. Since the appointment of the first infection control sister in 1974 the role of the clinical nurse specialist (CNS) in nursing specialties has grown (Tiffany 1976, Humphris 1994). These roles have developed out of existing structures because of recognised patient need for more expert and specialised care, and by nurses who wanted to stay in a direct relationship with patients (Castledine 1998). Clarifying the role of the Clinical Nurse Specialist (CNS) remains an area of ongoing research and debate as many authors describe this multifaceted role and attempt to identify its many components and defining characteristics (Redekopp 1997, Bamford and Gibson 2000). Alongside clarification of the role of the CNS, the profession is currently faced with the added challenge of elucidating the roles of nurse practitioner, advanced nurse practitioner and consultant nurse (Bamford and Gibson 1998, Read 1998, Shewan and Read 1999).

Defining the boundaries and practice of roles is seen as only one element of specialist practice. Following the publication of the report titled: The Future of Professional Practice - the Council's Standards for Education and Practice Following Registration (UKCC 1994) a definitive statement on the nature and standards for specialist practitioner status was revealed (UKCC 2001) and has since caused great confusion in the UK (Wallace 1998). Specialist practitioner status can be awarded by the UKCC where a practitioner has undertaken a programme at degree level of four months or more in one of the educational programmes approved by the ENB that meets the UKCC standards in the four key areas of: clinical nursing practice, care and programme management, clinical practice...
development, and clinical practice leadership. The UKCC distinguishes between practicing within a speciality and holding a UKCC recordable qualification of specialist practitioner. The UKCC have determined specialist practice as exercising higher levels of judgement, discretion and decision-making in clinical care. The focus of debate in the UK has been the nature of specialist practice. Level versus area of clinical practice/role, the need for regulation, a need for explicit practice outcomes or competencies, and agreed curriculum content have yet to be agreed (UKCC 1997). This debate has yet to be resolved. The UKCC is continuing to undertake work on defining specialist practice as a level of practice that is distinct from a named specialist role.

2.6 Children's cancer nurse: a worked example of specialist practice

The establishment of the United Kingdom Children's Cancer Study Group (UKCCSG) in 1977 precipitated the development of specialist centres for the treatment of childhood cancer. This centralisation of treatment was undertaken for three reasons:

♦ To maintain an appropriate level of expertise which would require sufficient exposure to maintain the expert practice of all health care professionals;
♦ To improve survival rates as patients had been shown to benefit from centralised care that made available the latest advances in treatment;
♦ To use resources more effectively by concentrating care in designated areas. (Clinical Standards Advisory Group 1993).

There are currently 21 UKCCSG centres in the UK and one in Eire. This approach to the organisation of care gives the family of the child with cancer access to the best medical treatment, supported by specialist nursing care (Gibson and Williams 1997). There are a number of published documents that outline the standards required to offer a quality service to children with cancer (UKSSCG 1997a, 1997b, Expert Advisory Group on Cancer 1995, Royal College of Pathologists 1996), all of which refer to the need for appropriately qualified and experienced nursing staff. In all, however, there is a distinct lack of detail regarding the role and training of a children's cancer nurse.
In the absence of any published work detailing the process of developing practice, the Paediatric Oncology Nurses Forum (PONF) of the RCN initiated project work, which resulted in the publication of a document entitled 'A framework for developing practice in paediatric oncology nursing' (Gibson and Hooker 1999, RCN 2000b). This document addresses nursing role development and outlines the defining characteristics of children's cancer nursing as regards the notion of:

- Labels and titles: description of the role;
- Dimensions of the role: values and focus;
- Area of speciality: specialist role;
- Level of expertise: expert and advanced practice;
- Medical and nursing models of care: expanded roles.

With reference to this document and the ICN (1991) list of 'essential features of a designated speciality' examples of the defining characteristics of this area of specialist practice in nursing will be mapped. Analysis of these two policy documents resulted in the following description of children's cancer nursing.

1. *The speciality defines itself as nursing and subscribes to overall purpose, functions and ethical standards of nursing.* The framework (RCN 2000b) reaffirms the equal value of general and specialist knowledge and skills and points to the fact that core abilities and qualities are shared by all nurses and by all children's nurses. The PONF framework (RCN 2000b) recommends that the word nurse or equivalent, for example, sister/charge nurse be included in any title used by a children's cancer nurse.

2. *The speciality practice is sufficiently complex and advanced, it is beyond the scope of general nursing practice.* Although cancer and cancer nursing are represented in pre-registration curricula, the level of knowledge shared added to the limited, and for some absent, clinical practice for children's nurses equips nurses with a very rudimentary knowledge and understanding of the area of practice. Further knowledge and skills of this complex area of care was initially acquired 'on the job' with children's cancer nurses learning from role models and in-house training. It
was soon recognised that this, although meeting local needs, was insufficient. Post-registration programmes were therefore developed to expand specialist knowledge and skills to complement core knowledge of child health and beliefs of how to care for children with cancer and their families.

3. **There is both demand and a need for the speciality service.** Childhood cancer is a rare disease in the UK with an incidence rate for children under 15 years of only 110-130 per million per year. The referral to regional paediatric centres ensures that families receive care from health care professionals who are familiar with their specific needs. The holistic requirements posed by toxic and complicated treatment regimens demands a specialist service.

4. **The focus of the speciality is a defined population, which demonstrates recurrent problems and phenomena that lie within the discipline and practice of nursing.** Nursing focuses on the effects that cancer and its various treatments have on the individual family, observing side effects and managing symptoms. There is an understanding that nurses do undertake medical work, which is appropriate, but within the context of nursing. The therapeutic work of nursing is being developed throughout the speciality.

5. **The speciality practice is based on a core body of nursing knowledge, which is being currently expanded and refined using research.** Mechanisms exist for reviewing and disseminating research. The charting of nursing knowledge within the speciality has been slow when compared to colleagues in the USA who established the Journal of Association of Pediatric Oncology Nurses (JAPON) in 1984. Nevertheless a core body of nursing knowledge is now being expanded through uni-discipline, multi-disciplinary, multi-centre and collaborative research. There is increasing evidence of nurses publishing and disseminating their work through both popular and academic nursing and medical journals.

6. **The speciality has established educational and practice standards, which are congruent with those of the profession and are set by recognised nursing body or bodies.** The ENB currently regulates education programmes and the UKCC records specialist education. In contrast to colleagues in the USA, who set up standards of practice in 1979 and re-affirmed in 2000 (Association of Pediatric
Oncology Nurses 2000), there are no nationally agreed published standards in the UK. Nonetheless standards of care in the form of guidelines are being produced and are endorsed in textbooks that detail the care of children with cancer.

7. *The speciality adheres to the registration requirement for the general nurse.*
Registration as a children's nurse is required as the first step to becoming a children's cancer nurse.

8. *Speciality expertise is obtained through a professionally approved advanced education programme, which leads to a recognised qualification.*  *The educational programme preparing the specialist is administered by a nurse.*  The first specialist programme was a short programme developed in 1985. Longer ENB courses developed soon after to include a clinical component alongside theory (Casey 1989). Since that time nurse educators have introduced different and creative approaches to ongoing education. Linking with adult oncology courses, introducing theory only courses and producing short courses aimed at nurses in shared care centres have been ways of providing access to core knowledge to as many children's cancer nurses as possible (Gibson and Langton 1998).

9. *The speciality has a credentialing process determined by the profession.*
Registration as children's nurses and certification as children's cancer nurses are forms of credentialing.

10. *Practitioners are organised and represented within a speciality association or a branch of the national nurses association.*  Since 1984 PONF, a forum of the RCN has represented children's cancer nurses. The diverse areas of practice, such as direct clinical care, education, management and research are represented in the forum. The forum provides a venue for communication where nurses can exchange new and alternate methods of nursing care provision, consider creative approaches to continuing education, and identify a focus for research. All of these ultimately have an impact on improving the care for children and their families.

The nature of practicing in a speciality is that specialist knowledge and skills continually evolve to meet the changing needs of patients. This influences developments in nursing
roles, changes to service delivery, changes to education programmes, increasing need to
develop an evidence base for practice and new approaches to nursing practice.

Specialist practice is at the growing edge of the profession and therefore its nature and
scope will change as new knowledge develops (ANA 1980). Specialist practice has
evolved from changes in health care and can be defined as practice that is complex and
advanced, beyond the scope of general preparation. Children's cancer nursing is just one
example of specialist practice that has evolved out of the general area of children's nursing
in response to specific health needs that require specialist knowledge and expertise. Just as
the common and different elements between general (adult) nursing and children's nursing
are poorly described (Section 2.4) so the shared and different elements between general
and specialist children's nursing are poorly described.

2.7 Generalist, generic and specialist: a note on terminology

Generalist and generic are terms that are used interchangeably throughout the nursing
literature. Both terms have been used to refer to a nurse who has completed a broad based
initial preparation. There is an assumption that generalist (or generic) preparation enables
the nurse to work with competence in a variety of clinical settings. The World Health
Organisation (WHO 1988) has described the role and functions of a generalist nurse,
referred to as a 'Health for All Nurse'. The WHO description distinguishes between
generalist and specialist, identifying the generalist nurse as needing a sound, broad-based
basic education in nursing where it was possible for a nurse to advance into a specialist
field. A more recent use of the term 'generalist' by the ICN (2001a) implies a broad-based
training enabling a nurse to care for individuals of all ages and communities. Generalist in
this sense has become the preferred term, rather than generic.

In the UK, the term 'generalist' has also come to mean a nurse prepared at the basic
professional level in a branch of nursing, i.e. adult, children’s, mental health or learning
disability nursing. Children's nurses argue that the initial qualification to enter children's
nursing is generalist (Glasper 1995b). There is nothing in the WHO (1988) description of
a 'Health for All Nurse' that could not be undertaken by a nurse in any of the four branches of nursing. In the same way that an adult branch course cannot prepare a nurse to work in all the specialities of adult nursing, children's nurses may also be required to specialise by undertaking post-qualifying education programmes. If initial education were to become generalist, as advocated by a number of nurses from a background of caring for adults (Clark 1994, Pearson 1994), children's nursing would then become the exclusive domain of post-qualifying courses and considered as specialist rather than generalist (Whiting et al 2001). Whenever such changes are discussed in the future, there needs to be explicit clarification of the precise meaning of generalist (or generic) and specialist within nursing, in addition to debates about the practical, financial, professional and quality of service implications of such changes.

The previous discussion indicates that generalist nurse can be used to mean:

- A nurse who has been prepared in one of the four branches of nursing;
- A nurse who has been prepared to care for all patients of all ages at a basic level.

Similarly, there does not seem to be consistent meaning of the word 'specialist' in the context of nursing. The previous discussion indicates that specialist nurse can be used to mean:

- A nurse prepared in one of the four branches of nursing;
- A nurse at a certain level of practice, linked to education above basic, generalist nursing;
- A nurse in a specialised area of care or undertaking a specialist role.

For the purposes of this thesis, in the absence of agreed definitions:

- ‘Generalist nurse’ is one prepared to care for all patients of all ages at a basic level (ICN 2001).
- 'Generalist children’s nurse' (referred to in this thesis as a children's nurse) has undertaken a broad-based education in children's nursing.
'Specialist children’s nurse’ is a children's nurse working in a specialist area of clinical care that meets all the essential features of specialisation listed by the ICN (1991).

2.8 Summarising the tensions in nursing: rationale for definition

The previous discussion has highlighted what is currently known about a generalist and a specialist nurse and identifies children's nursing as generalist alongside general (adult) nursing. What currently distinguishes children's nursing and general (adult) nursing is education preparation, registration and sphere of clinical practice. There are a number of hypothesised reasons why children continue to be cared for by nurses who do not have children's nursing education preparation and registration. Some of these are listed below:

♦ Failure to recognise the special needs of children and young people;
♦ Failure to recognise the health care rights of children and young people;
♦ Successive governments that have not been committed to ensuring that the interests of children are spoken for in the health service;
♦ Failure by successive governments to monitor the implementation of guidance from commissioned reports;
♦ Inadequate numbers of qualified children's nurses;
♦ Inadequate number of specialist children's nurses;
♦ A belief that children are simply small adults;
♦ A lack of a coherent strategy for children's health in the UK.

The current status has consistently produced tensions in nursing that are frequently debated in the literature.

2.8.1 What questions need to be answered by a definition?

This thesis seeks to provide a definition of children's nursing and specialist children's nursing. Such a definition is required to help answer major questions facing this branch of the profession related to policy, practice, education and management. As yet there are no definitions with the scope and detail to begin to answer such questions as those below:
Practice - development and research requires answers to the questions: What is the scope of practice now, how does it change over time? What are the legitimate areas of enquiry for nursing research? The definition will change as practice changes but the scope needs to be mapped in some detail at a point in time to enable comparisons and as a basis for role definitions, role expansions, etc.

Education scope, content and direction - definition required to support decisions on what students to recruit, curriculum content and practical experience, assessment strategies, competency frameworks, etc.

Management - requirements for a definition of children's nursing encompass all the above but in particular for recruitment, support of role development and personal development, remuneration schemes and skill mix.

Educational policy - there are two main questions here: Do children need specially educated nurses? If children do need specially educated nurses, how and when should their education be provided? It is around these two fundamental questions that a number of assumptions exist which are the primary focus for the tensions referred to earlier. These will be explored in some detail as evidence for the need of a definition.

As Clark and Lang (1992 p109) state "if we cannot name it, we cannot control it, finance it, research it, or put it into public policy".

2.8.2 Do children need specially educated nurses?
To answer this question four assumptions that pervade the adult nursing literature will be explored:

- Children are small adults;
- Children can be cared for in any environment;
- A children's nurse is no different from any other nurse;
- Parents deliver nursing care to children so it must be easy.

One of the assumptions that exists in today's health care system is that a nurse educated and trained to care for adults can also care for children, as occurs in clinical areas such as accident and emergency and theatres. This premise is based on an unfounded belief that
children are simply small adults, and therefore application of knowledge is appropriate (Hanton 1981). This belief fails to acknowledge that children have unique needs. Children have needs specific to their age, and those involved in their care should be alert to the fact that these change in response to circumstances that may require different needs (Price 1994). Understanding the changing physiological and psychological development of children from birth to adolescence is specific to children's nursing. A programme to educate nurses who care for adults would not necessarily encompass this knowledge in any great detail or with practical exposure.

A lack of understanding of the needs of children and adolescents has resulted in both of these groups of patients receiving care in inappropriate settings despite the fact that there has been a call for improved services for children since the Platt report in 1959. Consistent themes through government reports have been to push service providers to consider appropriate hospitalisation, reduce hospital stay, increase community services, improve facilities for live-in parents, improve coordination between the services, and develop separate services for young people. Evidence to the Health Select Committee in 1997 (House of Commons Health Committee 1997) reveals that these issues remain a point for concern. It remains a consistent failing in the health service to recognise that children and young people are a defined client group with specific needs (Aynsley-Green et al 2000). The fact that those needs are best met in an environment separate from adults is well explored in the literature, however the reality of practice is quite different. In a study of hospital services the Audit commission (1993) identified that even where there were separate facilities in a hospital to care for children, children were still to be found on adult wards. They identified that surgeons preferred to treat children in adult wards dedicated to their speciality because they perceived a need for nurses trained specifically to deal with the procedures carried out in their particular speciality. This confirmed results from an ENB survey (ENB 1992) where over a quarter of the 174 health authorities and NHS Trusts surveyed were providing ENT (Ear, Nose and Throat) and ophthalmic services without children's nurses. There is no lack of evidence in relation to the suitability of environments. Yet reports show that some of the basic well-established principles in the health care of children are ignored and that government has failed to monitor existing
guidance on the care of children in hospital and at home (House of Commons Health Committee 1997).

Is there evidence that appropriately trained children's nurses will provide children with a better quality of care? Hutt reported in 1983 that some nurse managers who did not hold a children's nursing qualification (RSCNs) were dismissive towards the need for it, thought it of little importance and felt that anybody with an adult nursing qualification could look after children. Similarly, although not reported, there is a perception that an adult trained nurse who has children of their own can nurse children. These life skills are important but can they replace specific education programmes? At present there is no authoritative body of research to substantiate the assumption that there is a difference in the quality of care given to sick children by children's nurses. Castle (1990) argued that this was because a description of quality care still eludes concrete measurement. However, an unpublished observation study by Barlow and Swanwick (1994) suggested that quality of care was more apparent in the care given by qualified children's nurses than a Registered General Nurse (RGN) working with children. This difference persisted even when the general nurse had some experience in children's nursing. This was a small study: the final sample was comprised of 49 RGNs and 55 RSCNs. This study needs replicating and extending, and would need to be published to contribute evidence that not every nurse can care for children. Until that evidence is reported in the professional domain the perception may remain that any nurse can care for children.

There is an assumption that caring for children must be easy, requiring minimal skills as parents often provide basic and technical care. A belief held by many children's nurses is that any skill can be taught to a parent (Casey 1995). In expressing this belief children's nurses may have inadvertently implied that what they do is easy. What has failed to be noted is the complexity of care that results from true partnership nursing. 'Doing' is one thing, but teaching an unqualified carer, who may have no knowledge of, for example pharmacology, physiology, or child development is a different matter. Children's nurses are experts at teaching parents but not at communicating to nurses outside of the field how this multifaceted aspect of their role works in practice. Nurses outside of the field
generally appear to have no understanding of partnership as it is applied in children's nursing and the skills required to work with parents in the delivery of care.

2.8.3 If children do need specially educated nurses, how and when should their education be provided?
To answer this question two further assumptions will be explored:

♦ Greater value is placed on the adult branch of nursing;
♦ Children's nursing is a specialist qualification.

Hutt (1983) identified that the children's nursing qualification held a lower status and that children's nurses were made to feel like second-class nurses. Without a dual qualification, career opportunities were limited and there was a deliberate policy of selecting Registered General Nurses above children's nurses for some positions. Although the premise of Project 2000 was that in theory, children and those who chose to nurse them are of equal status to adults and those who nurse them, in practice this is not the case (Burr 1994). For example, occupational health nursing is concerned with adults, it is logical therefore that only a nurse who is educated to care for adults can opt for this career pathway. In contrast, school nursing is concerned only with children and can be accessed by nurses from all four branches that include adult and children. This is illogical and discriminatory. Although Project 2000 successfully rectified the problem of previously needing an adult qualification to enter management positions or to become a health visitor, the possession of a children's nursing certificate alone excludes access to a number of clinical areas. For example, children's nurses find themselves refused posts in accident and emergency departments where both adults and children are cared for because they are not qualified to care for physically ill adults. This is despite childhood accidents accounting for about a quarter of patients attending an accident and emergency department (British Paediatric Association, British Association of Paediatric Surgeons and Casualty Surgeons Association 1988). What Project 2000 also failed to do was to offer equal weighting of theory and practice between the four branches in the common foundation part of the programme. The emphasis remained on physically ill adults with Allen (1990) noting that the experience of children's needs was hardly mentioned.
There is support for a generic three-year training, which is commonplace elsewhere in Europe, to replace the UK focus on four branches. It is argued that specialisation should follow initial registration, and that includes children's nursing (Clark 1994). This argument is founded on the assumption that the children's nursing qualification is a specialist qualification. The content of courses leading to Part 8 and Part 15 of the register provides nurses with the essential basis of knowledge, skills and values in caring for children 0-16 in health and illness. This includes the relationship of normal childhood development to physical and mental illness. Should children's nursing qualifications become specialist and thus the domain of post-qualifying courses, children currently cared for by specialist nurses would be again, in the future, increasingly cared for by nurses with only a basic understanding of their abilities and needs (Barr and Sines 1996). Added to which children's nurses working in specialist areas of practice would not receive the foundation of generalist knowledge. The belief that a generalist nurse can provide for all the needs of all people is a view in direct conflict with the emphasis placed on individuality within nursing care. Historical evidence remains pivotal to refuting this assumption, where Moncrieff (1944) argued that paediatrics was not a speciality, but general medicine and surgery at a special age period and therefore constituted general nursing.

In conclusion, the tensions outlined above have had a consistent presence since the early days of registration. It would seem that children's nurses have needed to justify their existence and argue that what they do is different. Defining the nature of children's nursing would seem to be an appropriate way to end the debates and eradicate the tensions. Definitions of nursing already exist, and these need to be explored to reveal the reasons why they have failed so far to delineate the discipline of children's nursing.

2.9 Definitions of nursing

From the time of nursing's existence as an identifiable occupation, individual nurses have articulated conceptualisations concerning the nature of nursing (Schlotfeldt 1992). A number of definitions have been described, many of which were used principally to confer professional identity and to guide nursing curricula (Meleis 1997). Some examples of how
general nursing has been defined are given below to illustrate consistent themes explored over the years and to identify the various approaches to definitions that have been used.

2.9.1 Personal reflections

1. Nursing, to Nightingale was "to put the patient in the best condition for nature to act upon him" (Nightingale 1859 p75). Nursing focused on hygiene as the goal and environmental changes to achieve that goal (Meleis 1997). Nursing activities were broad and encompassed maintenance of health, prevention of infection and injury, recovery from illness, health teaching, and environmental control (van der Peet 1995).

2. Peplau (1988 p16) defined nursing in 1952 as "a service for people that enhances healing and health by methods that are humanistic and primarily non-invasive". More specifically, nursing was a "significant therapeutic interpersonal process which functions cooperatively with other human processes that make health possible for individuals". Peplau (1988) produced the first articulated concept as an interpersonal relationship with components of interpersonal processes central to nursing needing to be explored and analysed.

3. Two years after Peplau had published her work Henderson, concluding that a statement of nursing function was "still unfinished business", defined the nature of nursing (Henderson 1991 p6) as "the unique function of the nurse is to assist the individual, sick or well, in the performance of those activities contributing to health and its recovery (or to a peaceful death) that he would perform unaided if he had the necessary strength, will or knowledge. And to do this in such a way as to help him gain independence as rapidly as possible" (p21). The message given by both Peplau and Henderson was that nursing has a specific and unique function, and that this function has some order and organisation that can be communicated (Meleis 1997).
4. Life rhythms and their relationship to environmental rhythms were reflected in the writings of Rogers in 1970. People and their world were described as a focus for nursing. Rogers (1970) defined nursing as the science of unitary human beings, where she was concerned with the life process described as being irreversible along a space-time continuum. The purpose of nursing was "to promote human betterment wherever people are" (Rogers 1992 p33).

5. Patient needs were the focus of Orem's work. In 1971 Orem (1991 p41) defined nursing by its unique focus, "a specialised health service necessitated by an adult's inability to maintain the amount and quality of self-care that is therapeutic in sustaining life and health, in recovering from disease or injury, or in coping with their effects. In the case of a child or a dependent adult, it is a service necessitated by the inability of the parent or caretaker to maintain for the child or dependent adult the amount and quality of care that is therapeutic".

6. In 1980 the American Nurses' Association (ANA 1980) definition reflected this point of view, "nursing is the diagnosis and treatment of human responses to actual or potential health problems" (p9). Reminiscent of earlier definitions, this definition differentiates the scope of nursing practice from that of medical practice, and demonstrates the development of the independent role for nursing.

The above definitions (1-6) reflect the three themes described by Donaldson and Crowley (1978) as being consistent in describing the core of nursing:

1. Concern with principles and laws that govern the life process, well being, and optimum functioning of human beings - sick or well (e.g. Nightingale).
2. Concern with the patterning of human behaviour in interaction with the environment in critical life situations (e.g. Rogers).
3. Concern with the processes by which positive changes in health status are affected (e.g. Peplau).

The definitions of nursing are constant and illustrate the orientation of nurses to the provision of care and nurturing of sick and well people (ANA 1980). The central theme of
what nursing is - "caring for individuals in relation to their health, promoting, maintaining, or restoring their behavior" (Barnard 1984 p3), is confirmed in all the above definitions. The definitions are evidence of an evolving profession, reflective of societal issues at that time (Brooks and Kleine-Kracht 1983). On the whole the definitions examined resulted from personal reflections and provide a broad perspective on general, adult focused nursing.

Nurse theorists continue to debate and offer their personal reflections on the nature of nursing but as Henderson in 1991 argued that since her deliberations in 1966, the profession was no nearer a consensus. Although the published reflections and definitions begin to explore the nature of nursing knowledge, they fail to provide specifics, which would:

♦ Distinguish nurses from other carers;
♦ Differentiate roles;
♦ Make explicit what is to be taught;
♦ Clarify what is to be assessed;
♦ Enable the nursing contribution to be evaluated, and therefore rewarded and valued;
♦ Guide research and lead to improvements in care.

2.9.2 Classifications
Another approach to definition has been to state what it is that nurses do rather than what is the focus and nature of nursing. Clear, explicit and detailed definitions, describing 'what nurses do' aims to make visible the nursing contribution. Naming nursing phenomena, that are describing what nurses do, has been dismissed by most nurses as not relevant to actual nursing practice as it is perceived as theorising (Clark and Lang 1992). However, Saba et al (1991) argue that describing what nurses do helps define the field of nursing.

The Omaha System is the oldest classification naming and describing what nurses do (Martin and Scheet 1992). There are three components to the classification: problem
classification scheme, the intervention scheme and the problem rating scale for outcomes (Martin and Scheet 1992). The system was developed with practitioners from actual client data, and involved revision, refining, field-testing and pilot studies to reach agreement on the final product. The classification provides the language and structure to define the practice of nursing in the community setting. The essence of community nursing is captured in four intervention categories, which encompass 62 nursing interventions. These categories are: health teaching, guidance and counselling, treatments and procedures, case management and surveillance. Moorhead et al (1993) argue that the classification has focused on problem identification at the expense of detailing interventions and outcomes. Nonetheless for the purpose of this thesis, the classification offers a different approach to defining what nurses do. The purpose here is not to judge the usefulness of the classification but to demonstrate that nursing can be articulated beyond single statements and that the act of nursing can be labelled, ordered and defined. The classification focuses solely on adult community nursing, it may therefore be considered as an example of specialist and not generalist adult nursing. A number of other classifications of nursing practice have been developed, including the international classification for nursing practice which aimed to cover all areas of nursing and are currently undergoing testing (ICN 2001b [http://www.icn.org/icnp/] accessed on 14/1/01).

2.9.3 Research based listing of nursing activities/tasks
In contrast to the personal reflections on nursing that have historically been developed as definitions of nursing and the classification schemes of the kind developed by Martin and Scheet (1992), Benner (1984) used paired descriptions of clinical incidents, interviews and participant observation to produce seven domains of clinical competencies. Similar to the Omaha System, Benner has used actual patient data to describe nursing, but, in contrast to the Omaha System, Benner used nurses’ narratives of patient care episodes through which she identified 31 competencies that were then classified into seven domains of nursing practice. The list of competencies Benner argues is non-exhaustive within the seven domains. The domains include: the helping role, the teaching and coaching function, the diagnostic and patient monitoring function, effective management of rapidly changing situations, administering and monitoring therapeutic interventions and regimens,
monitoring and ensuring the quality of health care practices, and organisational and work-role competencies. These domains describe what nurses do and therefore offer a further approach to developing a comprehensive definition of nursing. However, they were developed in the main with critical care adult nurses. It may therefore be argued that they offer a definition of specialist as opposed to generalist practice in the branch of adult nursing.

The UKCC (1999c,d) developed competencies to describe nursing as a statement for entry to the Professional Register, similar to Benner (Benner 1984). These competencies were described using input from an expert panel. The UKCC detail four domains (or classes) of practice in which are embedded a number of competencies. These competencies increase the level of detail in defining nursing by specifying professional and ethical practice, care delivery, and care management and personal/professional development. They clarify which aspects are to be assessed, and leave it up to individual institutions to interpret outcomes as to what is taught on specific programmes. As a consequence of their intended aim, (entry to the Professional Register as a Registered Nurse), they fail to distinguish between the areas of practice of the four branches. As a result the competencies are broad, and generalist, and need to be further refined to be made relevant to different client groups in order to be of any use in defining the nature and scope of nursing practice in the four branches. The notion that these competencies are broad, and refer to a generalist nurse is evidenced by work currently circulated for comment by the ICN (2001), in which the competencies of a generalist nurse are described using the four classes expressed by the UKCC.

2.9.4 Key defining concepts
Definitions of nursing have varied from single statements to comprehensive lists of competencies and classifications of nursing diagnoses, nursing interventions and nursing outcomes. This brief reflection has identified a number of conclusions:

1. Personal reflections on nursing have had an important part to play in defining nursing.
2. In the current climate of evidence-based practice, listing nursing competencies and classifying nursing practice based on research (such as dialoguing with nurses) seem appropriate ways to approach defining nursing.

3. Definitions to date generally define adult focused nursing.

4. Definitions that currently exist fail to capture the complexity of caring for children in any setting.

Some defining key concepts of general (adult) nursing identified from the various definitions described in this section are listed in Table 2.2 below.

**Table 2.2 General (adult) nursing: key defining concepts**

<table>
<thead>
<tr>
<th>Maintenance of health</th>
<th>Counsellor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevention of infection and disease</td>
<td>Meeting universal health needs</td>
</tr>
<tr>
<td>Recovery from illness</td>
<td>Substitute self-care agent</td>
</tr>
<tr>
<td>Health teaching</td>
<td>Supporter</td>
</tr>
<tr>
<td>Environmental control</td>
<td>Educator</td>
</tr>
<tr>
<td>Resource</td>
<td>Case management</td>
</tr>
<tr>
<td>Leader</td>
<td>Surveillance</td>
</tr>
<tr>
<td>Surrogate</td>
<td>Care delivery</td>
</tr>
<tr>
<td>Stranger</td>
<td>Care management</td>
</tr>
<tr>
<td>Patient monitoring</td>
<td>Administering interventions</td>
</tr>
</tbody>
</table>

2.10 Towards a definition of general children's nursing

In the early years West (1854) and Wood (1888a,b) offered descriptions of children's nursing. Additionally, definitions could be inferred from educational curricula for children's nursing programmes (RSCN and child branch), found in textbooks and publications in professional journals. Similar to general (adult) nursing personal reflections on the nature of nursing, research and listing of activities/tasks and classifications have played a significant part in defining children's nursing.
2.10.1 Personal reflections

In 1988 Casey developed a model of nursing which began the process of describing the role of a children's nurse and influenced the care of children. In terms of caring in partnership with families she identified four core activities of the children's nurse:

- Carries out family care and nursing care to help meet the child's needs so that they may achieve full potential;
- Supports the child and family by helping them to cope and continue to function;
- Teaches knowledge and skills to help the child and family towards independence from the health care team;
- Refers the child/family to, and consults with, other members of the caring team when appropriate.

This model does not identify the specifics of nursing care leaving the assessment component abstract to allow for application to different areas of clinical practice. Thus the role of the children's nurse is defined broadly in terms of nursing activities. Similar to the definitions of adult general nursing, Casey (1993) traces the development of this definition, in the form of a nursing model, to a private image of nursing held in her head, but one that was also shared by other nurses. The model emanated from a philosophy of nursing, followed by a process of defining the concepts central to nursing and describing the relationships between them. These concepts were then analysed and evaluated against existing models of nursing, before testing the model in practice. The success of the model depends upon children's nurses being able to identify clearly what their role is (Farrell 1992). The model offers only a brief description of that role, as the focus is more on partnership in care as opposed to describing in detail the role of a children's nurse.

2.10.2 Classification

Related to the Omaha System (Martin and Scheet 1992) referred to earlier (Section 2.9) a classification scheme has been developed in the UK for children's nursing (Lyte and Jones 2001). This system was developed by a group of children's nurses and has been refined over time. Here 40 nursing diagnoses are identified to provide consistent language for collecting, sorting, classifying, documenting, and analysing data about children and their
health needs. Nursing diagnoses provide the basis for selection of nursing interventions. Unlike the Omaha System, the children's nursing classification is not limited to one part of the service, that is community nursing. The list of diagnoses reflect hospital and community care, in general and specialist fields of practice. In contrast to defining children's nursing through skills and tasks, the identification of nursing diagnoses provides a definition based on a typology of diagnoses that outline the domain of nursing practice.

2.10.3 Research based listing of nursing activities/tasks
Another route to definition is to identify the skills and the tasks children's nurses perform. Lawrence (1998) sought to identify which practical skills are believed to be essential or desirable on qualifying as a children's nurse. This study was instigated in response to the widely held perception that on qualifying from the branch diplomats lacked the practical skills of traditionally trained nurses. Lawrence (1998) along with a group of senior nursing colleagues produced an inventory listing paediatric nursing skills. The resulting questionnaire was distributed to experienced children's nurses whom were asked to indicate which skills were essential or desirable. Skills were grouped under headings of described needs that included: child safety, respiratory and circulatory, hydration and nutrition, elimination, and temperature control. In total, 74 practical nursing skills are described out of which 47 skills were believed to be essential and 24 desirable. Of the 74 skills, there was 100 per cent agreement on seven skills being essential, these being: hand washing, calculating drug dosages, measuring height and weight, observing and recording pulse, respiratory rate and apex beat, the ward testing of urine and measuring oral temperatures. The focus is on psychomotor and technical skills. The aim here was not to present a comprehensive definition of children's nursing, but to complement the theoretical component of an education programme. The purpose, to make explicit the skills that students needed to focus on and develop competence in practice, has dictated the outcome of a list of nursing interventions. As such they define activities that children's nurses perform.

Similar to Lawrence (1998) and in response to the UKCCs defined competencies for entry onto the Register (1999c,d) the National Board for Nursing, Midwifery and Health
Visiting for Scotland (NBS 2000) produced a booklet outlining core and desirable skills for children's nursing. This profile of skills aims to remedy the perception concerning the skills deficit of newly qualified nurses and endorses the fact that nurses who care for children require specific skills. In this document, skills are grouped under headings of, giving direct clinical care, managing and organising, communication, teaching, teamwork, and professional skills and attributes. The profile is very detailed and encompasses the variety of nursing work. There is a focus on psychomotor skills and technical skills, such as to 'pass a nasogastric tube' and to 'use a pulse oximeter'. Few attributes, however, are mentioned and the nature of nursing knowledge specific to children's nurses remains implicit rather than explicit. This is an example where purpose has dictated the outcome.

The aim of this document was not to present a detailed definition of children's nursing but was to detail skills, that could be used as evidence on registration of a safe and acceptable level of performance. They complement the UKCC (1999c,d) broad categories by offering an application to children's nursing, indicating specific taught content of programmes and make explicit skills essential to be able to perform competently.

The key roles of a children's nurse were explored in a study by Long (1991). Long (1991), highlighted ten categories that define the specific function of children's nurses. Similar to Casey (1988), he highlighted teaching and the delivery of family care as key roles. Additionally, he identified advocacy, psychological care, screening, and problems peculiar to children, awareness, interpersonal skills, family dynamics, and ethical awareness. Based on research findings Long (1991) provides examples of practice that illustrate these key roles in relation to the care of children and thus draws attention to the specific functions of a children's nurse. This was a small (n=12), local study (three health districts) intended to identify the unique contribution of children's nurses to patient care and did not have a primary aim of defining children's nursing. Nonetheless, this small study provides a genuine reflective view of children's nursing, and as such adds to the body of knowledge.

In contrast to the identification of roles and activities Price (1999) and Price and Hicks (2000) described the inherent qualities, knowledge, and skills required to meet the needs of children. The initial plan for their study was to undertake a postal survey to identify what
qualities educators looked for when interviewing for the Dip.H.E. (Nursing), however because their questionnaire yielded large amounts of data they focused on the responses related solely to child branch students. Their study identified that at the point of selection educational institutions did not have the same expectations of their candidates. Some institutions used the same criteria for all four branches. Psychomotor and observational skills were not listed, neither was the ability to work with people of all ages. What was listed was a wide range of personal qualities, many of which were applicable to all four branches. Price and Hicks (2000) concluded that although there is evidence in the literature supporting the fact that nurses who care for children require specific skills and qualities, this is not reflected in the selection process. Their findings suggest a lack of essential, specific criteria, which could assist the selection process, a problem also identified by Harding (1999/2000), where a search of the literature and a survey of five institutions admitting child branch students, identified a lack of consistency in approach to selecting students. Harding (1999/2000), comparable to Price and Hicks (2000), was able to outline criteria supported by consistent themes that emerged from analysis of the survey questionnaires. These criteria are not detailed and rely on the interviewer exploring with the interviewee their experiences of working with children and then extrapolating those to the role of nursing children.

2.10.4 Consumer views
Generally, it is professionals who have described children's nurses and the activities they perform. Bradding and Horstman (1999) used the 'draw and write' technique with children to further knowledge about children's views thoughts, perceptions and emotions related to hospitals, health care professionals and health information needs. Children's nurses emerged as significant health care professionals to the children in their study. Children focused on qualities and role. Descriptions concerned the friendliness of the nurse and how important that was. Their pictures usually depicted nurses who were happy, smiling, a welcoming individual who could reduce the child's anxiety and make them feel at home. Humour was seen as an essential way of interacting and distracting them from the seriousness of the situation. Finding out about them as individuals was important, as was the need for nurses to give honest and truthful accounts about treatment that may be
painful or distressing. Other qualities were, kind, comforting, helpful and sympathetic. Qualities appeared significant and were reflected in judgements of performance and outcome, interpreted personally by the children in the study. It is these qualities that are referred to in papers describing what makes a children's nurse. They may also represent the qualities that interviewers instinctively look for in child branch students. The question is do these qualities differentiate children's nurses from other nurses? If not, then it remains for children's nurses to articulate their role to be considered alongside these qualities in order to present a comprehensive definition of children's nursing.

Clearly both professional and non-professional views are important to the development of a complete definition. Darbyshire (1994) detailed another non-professional view of children's nursing, alongside a professional view. Parents in this study spoke of both the role nurses perform and the individuals who perform that role. When describing nurses' work the majority of parents he interviewed mentioned the technical aspects of care, such as, taking temperatures, pulses, and the basic mothering tasks, such as, washing, feeding and changing children. These were not considered to be particularly skilled activities by parents. What parents valued most were nurses who valued them, and who were patient, unhurried, and interacted with them and their child, were understanding of children's behaviour, were warm and friendly, and helped them to express their emotions in an accepting and non-judgmental atmosphere (Darbyshire 1994). A persistent theme throughout this study was the view that the professional and personal qualities of a nurse could not be artificially separated, as they are bound together. As an in-depth study involving parents (n=30) and nurses (n=27) with reference to interviews, observation, conversations and field notes, this study provides a rare account of the role and functions of a children's nurse. However, this study was local, taking place in two wards within a large paediatric hospital in Scotland. The intention of this qualitative study was not to generalise, but to offer a model of working that could be interpreted by children's nurses everywhere. The descriptions of roles and qualities are explored within the context of examining the lived experiences of parents who decide to live-in with their child, and the experiences of nurses who cared for these families. The primary aim was not to develop a
definition of children's nursing, but nonetheless a description of role and qualities was revealed through interpretations of care and caring.

2.10.5 Key defining concepts
The selected descriptions are evidence of children's nurses articulating a perception of what a children's nurse is. The literature would suggest that both children and parents know what they want when in the care of children's nurses, what is less clear is whether the profession can articulate this sufficiently to influence selection of appropriate nurses to child branch and thereafter to describe comprehensively the education required to prepare general and specialist children's nurses. An additional concern is for children's nurses and stakeholders to agree on a definition to be used as the basis for selection, education and the other purposes listed in Section 2.8. This brief reflection has identified a number of conclusions:

1. Personal reflections on nursing have had an important part to play in defining children's nursing.
2. Research based listings of activities/tasks and classifying nursing practice seem to be appropriate ways to define children's nursing.
3. Children and parents have made an important contribution in defining children's nursing;
4. Definitions to date generally lack detail and fail to reflect the changing face of current practice;
5. Definitions have not differentiated between general and specialist children's nursing.

Some key defining concepts of generalist children's nursing identified from the various definitions described above is listed in Table 2.3 below.
Table 2.3 Generalist children's nursing: key defining concepts

<table>
<thead>
<tr>
<th>Carry out family care</th>
<th>Support child and family</th>
<th>Carry out nursing care</th>
<th>Teach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organise</td>
<td>Refer</td>
<td>Communicate</td>
<td>Manage</td>
</tr>
<tr>
<td>Practical skills</td>
<td>Personal attributes</td>
<td>Advocate</td>
<td>Screening</td>
</tr>
<tr>
<td>Psychological care</td>
<td>Interpersonal skills</td>
<td>Professional skills</td>
<td>Team worker</td>
</tr>
</tbody>
</table>

2.11 Defining nursing: conclusions

As previous discussions have outlined, broad definitions of general and children's nursing are available that can guide practice, education, research and policy, however they lack detail and fail to reflect the changing face of current practice. On the whole these definitions are not considered sufficient or specific enough to link curriculum content to outcome. In relation to pre-registration education the UKCC (1999a) have recommended that such a link is important in ensuring fitness for practice. They recommend that this can be achieved through the introduction of an outcomes-based competency approach to education.

Attempts by the UKCC and the Scottish Board are examples of role descriptions produced by considered 'experts' to represent a consensus. As an approach to developing evidence the method of involving experts has an accepted position where no research exists (McMahon 1998). The development of competencies has occurred at a point in time where the government is recommending a national career and pay system based around competence and competencies (DoH 1999a). It would seem timely, therefore, to undertake research with children's nurses to describe the competencies of both generalist and specialist children's nurses in order to:

- Provide a precise definition of generalist and specialist children's nursing;
- Influence the debate that will assure the place of education preparation for children's nurses remains at pre-registration level;
♦ Make explicit the continuum from generalist to specialist practice;
♦ Provide criteria to inform the selection and recruitment process to child branch;
♦ Provide criteria against which to measure continuing performance;
♦ Identify and facilitate career progression.

If a method were used which combined thoughts and reflections on the nature of nursing with research based lists of activities/tasks of general and specialist children's nursing, which were then developed as a classification, this might lead to a definition that was sufficiently detailed to also answer the questions in Section 2.8.

2.12 Conceptual framework

This chapter has explored the relationship between the general nurse, the children's nurse and the specialist children's nurse. The general nurse has not been defined, but differs from the above definitions of the generalist nurse. Both historically and presently, in the UK at least, ‘general nurse’ refers to the nurse prepared to care for adults.

The literature has revealed three models, which order this relationship:

1. General nursing (read adult)  
   Children' nurse  
   Specialist children's nurse

2. General nursing (read adult)  
   Specialist adult nurse  
   Specialist children's nurse

3. Common foundation of nursing  
   Children' nurse  
   Specialist children's nurse

In tracing the evolution from one to another, it can be seen that developments have clearly been driven by the specific needs of patients, and the need for care to be given by a nurse with the appropriate knowledge and skills. However at this point in the thesis the only features that consistently distinguish one from another is the education pathway, registration, and sphere of clinical practice. The many definitions of nursing are
inadequate to distinguish between types of nurses. As can be seen in Table 2.2 and Table 2.3, apart from the words 'child' and 'family' there is little to distinguish these concepts. Although these tables provide examples from only a limited range of definitions it can be seen that the kinds of expressions used do not convey sufficient detail to distinguish between the types of nurses.

This study proposes that a relationship does exist between a nurse, children's nurse and specialist children's nurse. One approach to delineating this relationship is through classification.

Using classification theory (explained in Chapter 4) a hypothetical, simplistic classification of nursing specialisms was first developed as the framework for this study. The approach used the method of genus and difference where a concept is defined by specifying the broader class of objects to which it belongs (its genus) and the characteristics that distinguish it from all other members of the genus (other species) (Buchanan 1979). This results in a hierarchy, a kind of network of relationships. Categories that are higher in the hierarchy dominate and are referred to as superordinate to the lower level categories, which are referred to as subordinate (Murphy and Lassaline 1997). In a hierarchy, the properties that are generally true of a category are also true of its subordinates; as a result, the more specific categories have the same features as the more general categories, with one or more additional features (Murphy and Lassaline 1997).

This conceptual framework proposes a generic relationship between nursing and the various fields within nursing. For example, a children's nurse (a species) and a mental health nurse (a species) are types of nurse (the genus). Nurse is the superordinate term, and the species are the lower or subordinate terms. In this division, children's nurse has all the characteristics of the superordinate concept plus at least one differentiating characteristic in that the sphere of nursing practice is the child. A children's cancer nurse is a sub-type of children's nurse, is a sub-type of nurse. A children's cancer nurse inherits all the characteristics of children's nurse, and nurse. In the hypothesised classification, a children's cancer nurse has all the characteristics of the species that are superordinate with
the addition of one differentiating feature in that the sphere of nursing practice is the child with cancer. Figure 2.2 presents a mono-axial classification where there is a single principle of division i.e. specialisation. By using this method, meaning is granted to the concept by its position in the classification. But what are the characteristics that give each concept its position and that are inherited by subordinate concepts? These characteristics can be specified in a number of ways as the section on labelling and defining (Chapter 4) describes. For the reasons articulated in Section 2.11 these characteristics will be defined in terms of competencies.

**Figure 2.2 A hierarchical classification of fields within nursing**

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1 The dotted line (------------ above) indicates incomplete classification.
and Grove 1997), which is the relationship between a children's nurse and specialist children's nurse.

2.13 Hypotheses

The conceptual framework implies a relationship between a children's nurse and children's cancer nurse. According to its position in the hierarchy the children's cancer nurse inherits all the characteristics of a children's nurse, and has some additional features. The detail of the inherited characteristics and additional features are implicit to the profession but not formalised through any process, such as published definitions. The focus of this thesis was to generate from practitioners the preferred model of the order of relationships between a children's nurse and specialist children's nurse.

This study evolved out of a recognised need for a definition of children's nursing and specialist children's nursing, in the context of national requirements for competency based education and performance measures. Therefore three research questions are posed:

1. Can children's nursing be defined using competencies?
2. What are the competencies of a general children's nurse and specialist children's nurse?
3. What are the commonalities and differences between the generalist and specialist children's nurse?

Realising this goal will resolve the following two hypotheses:

♦ Hypothesis 1: there is a significant common element in these two areas of nursing;
♦ Hypothesis 2: the differences between the general children's nurse and the specialist children's nurse are exclusively related to medical and nursing specialist knowledge.

2.14 Summary

This chapter has presented many arguments in support of defining general and specialist children's nursing. Personal reflections, research based listings of activities undertaken by
nurses, and classifications were approaches to defining nursing. The chapter that follows explores the nature of competence and competencies and justifies their use to define general and specialist children's nursing.
Chapter 3 Competency and nursing

3.1 Introduction
"Everybody is talking about competence", states Norris (1991 p331) in his much quoted article 'The Trouble with Competence'. "Everybody" encompasses not just those in the arena of education, from whom Norris writes, but many other professional groups, such as, health care professionals, lawyers, architects, surveyors etc. The reason for the interest is clear. Within any profession there is a personal desire, alongside a professional requirement, to maintain standards and ensure competence, to perform efficiently and effectively. The public expects that a qualified professional, from whatever area of work, will be competent in carrying out normal professional tasks and duties (Eraut 1994). Public statements declare such requirements, as do codes of practice. Specific to nursing 'The Code of Professional Conduct' (UKCC 1992) makes explicit the need to maintain and improve professional knowledge and competence. Additionally there is a requirement to acknowledge any limitations in knowledge and competence and decline to perform duties unless able to perform them in a safe and skilled manner (UKCC 1992).

The issue that is presumed but not made explicit is what makes this standard of competence: how is nursing competency judged? (Bradshaw 1997). Reflecting on her own return to nursing Bradshaw (2000a) writes, "I had no objective measures or standards by which to judge what I knew, what I should know, and most importantly, what I did not know" (p319). She argues that difficulties must therefore arise for nurses in accepting responsibility for their own competence when the meaning and nature of professional competence is still being debated.

A recent edition of the Journal of Clinical Nursing highlights the current debates in nursing around competence. Bradshaw (2000a) identified recurring themes through the articles that appear in the journal as:

♦ A lack of consensus about competence;
♦ No clear definition;
♦ No consensus about how competencies are formed;
Variation in perception of attainment;
Difficulties in measurement.

She concludes that the reason that competence has become so problematic for nursing is that the purpose of nursing has become indistinct. What is needed, she argues, is a precise definition of the purpose of nursing practice, and what it constitutes, at its various levels (Bradshaw 2000a).

Competencies have been used to define areas of professional practice (Gonczi et al 1990, Winter and Maisch 1996). However, given the complex and dynamic nature of professional work, combinations of tasks, attributes and contexts need to be examined to describe overall competence. This study will use competencies to describe and define children's nursing and children's cancer nursing. This chapter will justify the use of competencies to define professional practice and present the meaning of competency used throughout this thesis. The discussion reflects on contrasting uses of the term and the origins of the use of competency throughout various professions, with an emphasis on nursing, in order to make explicit the researcher's understanding and as a consequence use of the term within this study. Through much of the discussion the terms used to describe competence i.e. competence, competencies, competences, and competency, will be used interchangeably, as is reflected in the literature. The summary of this discussion will conclude by making explicit the terminology to be used throughout the remainder of this thesis.

3.2 Background and history of the competency movement

The origins of competency-based education and training can be traced to the 1920s (Adams 1995). The modern competency movement is said to have started in the late 1960s and early 1970s. The current popularity of competency can be traced to the pioneering work carried out by an American consultancy firm, McBer, over 30 years ago. The principal leader at that time was McClelland who argued that traditional academic exams failed to predict job performance or success in life and suggested that researchers should be looking for ways to identify other variables - 'competencies' (McClelland 1973). Along with his colleagues, McClelland devised a technique called behavioural event
interviewing, based on a critical incident method, which used narrative detail to reveal the characteristics of the people who did a job well (Adams 1997/98). Behavioural indicators resulting from the interviews were clustered together into 'competencies' that differentiated average and superior performance. The model was validated, the end result being a generic model of managerial competency (Adams 1995). A number of businesses internationally have implemented and refined competencies based on this generic model. For example Avon Cosmetics (Martin 1998) used a competence-based approach to identify factors that differentiated superior performance at board-level and below in order to realise the potential of individuals to reach a senior level. They applied their findings to internal development, promotion and external recruitment. This resulted in flatter structures and broader roles with complex demands placed on staff being challenging for some, but introducing a level of discomfort for others.

In parallel with this initiative, competence-based education was widely used in the development of initial teacher training in the USA in the 1980s, in response to a 'back to basics' movement (Eraut 1994). This approach relied on task/behaviour analysis based on structured observation to derive specifications of competency (Eraut 1994). Emphasis was placed on individualised mastery learning approaches to the delivery of teacher-education programmes, which required specific behavioural objectives.

It was not until the 1980s that the UK moved towards a competence-based model of education and training, which also relied on task/behaviour analysis. The critical decisions were taken in 1986 when the National Council for Vocational Qualifications (NCVQ) was set up following a national review of vocational education and training. The publication in 1986 of the White Paper 'Working Together - Education and Training' (UK Government 1987) accelerated the process of encouraging representative bodies to develop occupational performance standards by 1991. The thrust for this movement arose from concern over demographic changes, increased unemployment, demands for labour mobility and reduced skills (Black and Wolf 1990). The central concept was one of 'occupational competence', which was referred to throughout the White Paper: as the performance required of individuals to do their work successfully and satisfactorily (UK...
Government 1987). The remit of the NCVQ was to establish a coherent national framework for vocational qualifications in England (NVQ) which would define national standards for an occupation (Storey 1998); a separate framework for Scotland was also envisaged (SCOTVEC) (Le Var 1996).

Occupational standards are the basis of NVQs and SVQs. The development process has been employer-led using job orientated functional analysis which involves group and individual interviews, workshops, questionnaires etc. to gather information on the knowledge and skills that are required in a particular occupation (The Scottish Office 1998). National occupational standards have been developed in a wide range of occupational areas, and at a number of different levels (Eraut 1994, Field 1995, Storey 1998). In further and adult education competence-based education and training strategies are well established (Chown and Last 1993). They have been in existence in health care since 1992 (Le Var 1996, NHS Executive 1998, Mitchell et al 1998) and more recently they have been extended into the area of professional qualifications (Jowett and Wellens 2000, Flanagan et al 2000). For example, Jowett and Wellens (2000), in response to the need for an outcome-based curriculum, describe the development process used to identify more specifically the common levels of knowledge, skills and competencies across the professional disciplines caring for people with learning disabilities. They sought to devise benchmarks against which to assess skills, attitudes and knowledge in order to produce a knowledgeable practitioner in nursing. The authors conclude their work by affirming a future role for occupational standards in health care.

The competency movement has moved in two different directions. In the USA the McClelland approach focused on people and superior performance. In contrast the NVQ movement in the UK has focused on the job and minimum performance. In the USA competencies outline the characteristics that underpin performance, whereas in the UK competencies provide a description of performance. Even the terminology is different. Common to both approaches is the idea of competence as someone’s demonstrated ability being more important than knowing what they know. Other than that, these are two diverse approaches, and as a consequence they have been developed using different
methods. It is the divergence of these approaches that has resulted in confusion. Having recognised the merits of both there have been attempts in the UK to bring the two together with disastrous results (Adams 1995, 1998). Therefore the conclusion must be that the intended purpose must define the approach.

3.3 Defining terms and exploring the concepts
 Terminology appears to be a major stumbling block to the understanding of competence assessment in nursing (Bartlett et al 2000), and in other professions, such as pharmacy (Grussing 1984) and medicine (Burg et al 1982). Knowles (1997) argues that the competency language is the "pivot around which the concept is turned into reality" (p32). But as Mansfield (1999) argued, baffling jargon and misconceptions about the use of the concept have led to widespread confusion. A clear understanding of the concept of competence has proved to be problematic (Coit Butler 1978, Alspach 1992, Ashworth 1992, Nagelsmith 1995, Bradshaw 1997, Eraut 1998, Lillyman 1998). Short (1984 p207) concluded, "the notion of competence itself is not a very useful conceptual tool for the task for which it has been intended." The debates highlight that the concept of competence has been given several meanings, made even more complex by the fact that the UK and USA movement spell the words differently: the UK's competence and competences are the North American competency and competencies (Wilson 97/98). These terms are often used interchangeably in the UK without explanation.

The question of meaning and definition are neither trivial nor purely academic (Hyland 1995). Clarifying the conceptual meaning of competency is justified in order to reveal and agree labels as well as increase understanding (Nagelsmith 1995). Without a clear definition of competence, assessment will remain difficult (Girot 1993).

Dictionary definitions, usually considered to be a helpful place to start, are noted in this case to be insufficient to define competence in the real world of performance (Grussing 1984, Mansfield 1999, McAleer and Hamill 1997). Dictionary definitions of 'competence' stress ability, fitness, and capacity, efficient, effective, suitable, sufficient, legally qualified and legitimate. As Mansfield (1999) states, there is plenty of scope for ambiguity. When
viewed according to these definitions, the concept of competence is often judged as a continuum and measured against incompetence (Lillyman 1998). It tends to focus on the learner's aptitude for performance without considering the nature and the quality of the performance itself (Grussing 1984). 'Suitable' and 'sufficient', for example, imply bare acceptability, and are used when referring to threshold competence (Mansfield 1999). This has led authors such as Eraut (1994) to use the term capability, suggesting a level of skill greater than competent, a term that encompasses evidence not directly derived from performance.

There are two senses in which competence can be defined, as described by Miller et al (1988). Firstly competence equates with performance, describing the ability to perform a nursing task. Secondly, competence can be seen as a ‘psychological construct’ meaning a person's ability to integrate cognitive, affective and psychomotor skills when delivering nursing care. Benner (1982) goes further to emphasise that competence in nursing refers to the ‘real world’ of practice, distinguishing different levels from novice or beginner nurses to experts. Alspach (1991) agrees with Miller et al's (1988) second definition of competence that focuses on a person’s potential capability to function in a particular situation, but distinguishes that from competency, which she equates with performance. Competence when viewed as a prerequisite of competency is indeed closely related but not synonymous, using Alspach’s (1991) definitions. Competency is thus a combination of attributes underlying professional performance, performance is what is directly observable, whereas competence is not directly observable: rather it is inferred from performance (Gonczi et al 1993).

It is the ambiguity of the relationship between knowledge and competence that remains problematic. Coit Butler (1978) states that both skill and knowledge are identified as interrelated components of competence. Competency is about performance; knowledge and understanding must then be inferred from observable behaviour. But, by concentrating only on the knowledge thought to underpin competent performance, much is missed in terms of the relationship between theory and practice, which limits transferability of knowledge and skills. The literature reveals ongoing and yet to be
resolved concerns regarding performance and evidence, leading Mansfield (1990) to assert that knowledge must be recognised as a source of evidence along with performance evidence. In an attempt to sort out this confusion Eraut (1998) uses the term 'capability evidence', which provides evidence of knowledge needed for practice as well as evidence of professional thinking.

For the purpose of this study the meaning of the terms used are stated in the following definitions by Gonczi et al (1993 p5-6): "the competence of professionals derives from their possessing a set of relevant attributes such as knowledge, skills and attitudes. These attributes, which jointly underlie competence, are often referred to as competencies. So a competency is a combination of attributes underlying some aspect of successful performance." The emphasis on the relationship between competence and performance is considered important. Competencies, on the other hand, may be demonstrable in contexts other than professional performance (Eraut 1998), thus allowing for capability evidence to reveal knowledge and understanding that underpins professional practice. This suggests "combining an individually situated definition of competency with a socially situated definition of competence" (Eraut 1998 p134), assessing and validating competence against described performance criteria, an approach that was felt appropriate for this study.

3.4 Different conceptions of the nature of competence
There are three ways in which the nature of competence has been conceptualised in the literature: task based or behaviourist, generic focused on general attributes, and integrated or holistic focused on cognitive potential. These approaches are summarised in Table 3.1 with a more detailed description in Appendix I.
Table 3.1 Conceptualising the nature of competence

<table>
<thead>
<tr>
<th>Approach</th>
<th>Features</th>
<th>Definition of competency</th>
<th>Techniques used in development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behaviourist</td>
<td>Identifies discrete behaviours associated with atomised tasks.</td>
<td>The ability to perform the activities within an occupation of function to the standards expected.</td>
<td>♦ Functional analysis</td>
</tr>
<tr>
<td>Generic</td>
<td>Identifies general attributes thought to be crucial for effective performance.</td>
<td>An underlying characteristic of an individual, which is causally related to effective or superior performance.</td>
<td>♦ Behavioural event interviewing ♦ Critical incident analysis ♦ Repertory grid</td>
</tr>
<tr>
<td>Holistic</td>
<td>Identifies both task and the attributes for effective performance.</td>
<td>Knowledge, skills, abilities and attitudes displayed in the context of a carefully chosen set of realistic professional tasks.</td>
<td>♦ Nominal group technique ♦ Search conference ♦ Functional analysis ♦ Interview ♦ Competencies interview ♦ Critical incident analysis ♦ Delphi survey ♦ Observation</td>
</tr>
</tbody>
</table>

3.5 The current debates
Competency-based approaches to education and training are well established in some professions and new to others. Since the introduction of NVQs and SVQs and the recommendation in the White Paper ‘Working Together - Education and Training’ (UK Government 1986) that all sectors should have occupational performance standards in place by 1991, there has been significant debate surrounding the notion of competence as a model of outcome. Some of the debates are summarised below:

Competence versus performance. While (1994) argues that competence and performance often get confused. Her argument stems from a concern that competence has often focused on skills alone, within a narrow range of clinical situations from limited
observation, thus failing to provide a clear picture of a student nurse's overall 'performance'. While (1994) advocates that the performance of the practitioner in the real-life situation should be the focus so that nurses who do not perform adequately, despite their apparent competence, can be identified.

**Competencies are atomistic.** Hager et al (1994) argue that atomistic is one of the most overused terms in the debate about the use of competencies. Competencies have been criticised for reducing a role to individual functions leading individuals to complete tasks in a highly reductionist way, so that the whole becomes less than the sum of its parts (Hodkinson and Issit 1995). It is argued that competence involves more than a summation of specific competencies (Gonczi et al 1990). The holistic approach to competency development would seem to offer an approach to overcome this problem.

**Dealing with knowledge and understanding.** Assessment in N/SVQs has emphasised the need to measure performance as evidence of competence. Some authors have argued that this focus was at the expense of making explicit the role of knowledge and understanding (Barnett 1994). The N/SVQs movement spoke of knowledge and understanding underpinning performance; hence knowledge being perceived as a substitute for performance (Mansfield 1990). Debate has since raged in the quest for clarity as to what was meant by 'underpinning performance'. Attempts to build knowledge into statements of competence or performance criteria have failed because they are at variance with the competence model of N/SVQ (Jessup 1990). Integrating such attributes as knowledge, interpretive skills and problem solving skills in the holistic approach to competency development is clearly a significant advantage of this approach in making explicit knowledge and understanding relevant to performance.

**The question of level and competence.** In practice the specification of level has been found to be vague (Ashworth and Saxton 1990). The N/SVQ model emphasis on minimum standards has been criticised for failing to reflect progression, and superior performance. Where levels have been specified there has been confusion between the level of one competency and its combination with other competencies (Ashworth and
Morrison 1991). Additionally, there is a dilemma in nursing in respect of the outcome of different academic awards and whether a difference can be measured in practice (Gerrish et al 1997).

Assessing competencies. A number of issues have been debated around the process of assessment. The N/SVQ model has been criticised for producing weighty assessment procedures to accommodate multiple tasks within any one role. Commentators debate whether competencies need to be assessed in the real-life situation or through simulations. The role of questioning to assess underpinning knowledge as situational understanding, although in common practice, has also been debated. Central to successful assessment is the assessor, who needs similar knowledge and understanding of a situation to be reliable and objective (Eraut 1990). The main concern surrounds resources and the need for reliable methods of assessment that can distinguish levels of practice. This is a real challenge for any assessment process where objectivity as a goal may be unrealistic.

Competencies and career frameworks. The approach taken to conceptualise competence that will enhance as opposed to suppress career progression requires considerable thought, and has not been universally welcomed. There are concerns that the N/SVQ route currently favoured in the UK is too reductionist, and with its focus on completion of tasks fails to promote personal professional growth and the development of real expertise (Hodkinson and Issitt 1995). Reflecting on the approaches identified previously, behaviourist, generic and holistic, the holistic approach would seem to be the most appropriate because of its focus on knowledge, skills and attitudes in the context of professional practice. Models of competence tend to fail to recognise that competency can develop on the job and that the model can be applied to career progression (Eraut 1994). There are however suitable models available (Elkin 1990).
3.6 The nature of competence in nursing

3.6.1 Competence to Register

Competence is a term that is widely used within nursing. From the earliest days and the Nurses' Registration Act of 1919, training for competence was specified by standards that were explicit, defined, achievable and measurable (Bradshaw 2000b). Up until the GNC was disbanded in 1977, the training syllabus reflected the formal curriculum specified by the statutory body to communicate occupational standards. Although this syllabus changed over time in terms of subjects and specified practical skills, the notion of competence remained the same with the training programme having a clearly defined purpose: "the production of the bedside nurse, whose function was to care for the sick person" (Bradshaw 2000b p328). During this period, assessment of competence was dominated by two approaches, an examination and practical assessment. The practical assessment, which was based on tasks to be mastered, began as a nurse's chart which was completed by the ward sister who indicated when the nurse had been taught and was proficient, this was followed by four ward based summative practical assessments which were in place until the 1980s (Watkins 2000). At this time competence to practice was identified as observable behaviour, which involved a strong interpersonal component, designed to ensure individual achievement, and hence competence (Bradshaw 2000b). Many pre-registration curricula used taxonomies such as that developed by Bloom (1956, 1964) to measure performance and identify the level of practice, from the nurse observing skills to performing skills. Failure to achieve these levels meant incompetence and non-registration. Competence in nursing was assumed to be the end point of pre-registration training (Lankshear et al 1996). It was perceived as predetermined, with formal curricula and objective clinical assessment prescribing the routes to success.

A change in educational policy that moved nursing away from hierarchy, prescriptions, rules and examinations towards a collegiate, self-reliant, flexible, and self-directed method of learning, led the profession to be less confident about assessment of competence. The notion of competence became more nebulous (Bradshaw 1998). In the late 1980s the adoption of continuous assessment to measure competency in students provided nurse educationalists with problems of objectivity, validity and reliability (Gerrish et al 1997,
Chambers 1998). This resulted in many creative approaches to assessment in the search for a comprehensible and objective method for assessing practice that enabled clear distinctions in levels of competence (Girot 1993, Hill 1998, Buckingham 2000, Long and Asbury 2000). Competence to be entered on to the Register was assessed against statutory competencies for nursing stated in Rule 18, which have been in place since 1983 (DoH 1983). These stand as the stated professional competence to practice as a nurse, midwife or health visitor. Rule 18 was revised in the light of Project 2000 to accommodate preparation for entry onto parts 12, 13, 14 and 15 of the register, and became Rule 18a (DoH 1989). It was argued earlier in this thesis that these competencies are too broad and have failed to reflect the nuances of practice of a children’s nurse (Section 2.4). The notion of competence being a one off achievement at the point of registration has now been disputed (NHS Executive 1999). According to Eraut (1995) professional competence is developmental and must be linked to life-long learning.

3.6.2 Continuing competence

Life-long learning encompasses pre-registration and post-registration education and training of nurses, about which the literature in the UK reveals two common themes around the notion of competence. Firstly, there is the criticism that nurse education has produced nurses who, at the end of three years have limited clinical ability because of the reduced emphasis on practical skills in favour of classroom theory (Macleod Clark et al 1996, Bjork 1999). In relation to the notion of fitness for practice at pre-registration the debate regarding differences between diplomats and graduates remains a challenging concept (Girot 2000). Secondly, responsibility for competence after registration has been devolved from the professional organisations of the ENB and UKCC to the individual nurse with the advent of PREPP-Post Registration Education and Practice Project (UKCC 1990). In response to these criticisms the UKCC have taken action in two ways. In answer to the uncertainty of clinical competence at the point of registration the UKCC established a Commission to examine a way forward for pre-registration education (UKCC 1999a) and instigated a consultation exercise to revise the regulatory framework for post-registration clinical practice (UKCC 1999a). Both initiatives have culminated in the
development of national statements of clinical competencies. At the level of pre-
registration, the approved competencies distinguish between the levels of a nurse entering
branch, and the point of registration (UKCC 2000). For post-registration the pilot
standards clarify a 'higher level of practice' (UKCC 1999b).

The approach to the development of clinical competencies in both cases was undertaken
using 'expert' panels. Higher education institutions in collaboration with service providers,
are currently implementing a process to assess competencies at pre-registration level.
Collaboration has been important to develop the generic competencies described by the
UKCC, so that they are branch specific and reflect the specifics of professional work.
Evaluation of their application to practice and the expected outcome of a nurse that is fit
for practice following a period of supervised clinical practice have yet to be seen.
Likewise the standards to assess a higher level of practice are still in the pilot phase. The
move from implicit to explicit assumptions about clinical competence is welcomed. By
this response the UKCC have clearly resumed responsibility for ascertaining nursing
competence that will hopefully introduce structure and be a step nearer the development
and acceptance of national standards. Further debate, however, must be expected within
the profession, as an outcome-based approach will raise questions about the role of higher
education and a perceived retrograde step to a dominant focus on practical skills. The
challenge will be to develop an approach to the nature of competence that deals with skills
and qualities needed in maturely, reflectively and expertly dealing with patients and their
needs (Ashworth and Saxton 1990, Ashworth and Morrison 1991). The holistic approach
to competence (referred to previously) would seem to impose the least limitations and do
justice to the full complexity of professional work in nursing (Gonczi et al 1990).

The unresolved issues for many are how can a person demonstrate or be judged as
competent to nurse, and how can superior performance be identified so that others can be
helped to improve? Clearly the behavioural approach to clinical practice assessment of the
pre-1980s is inadequate. The question yet unanswered is whether the UKCC's purported
holistic approaches truly reflect the skills and qualities required to care for the full range of
client groups? In the absence of an evaluation of the UKCCs described competencies at pre and post registration levels, a number of issues remain unanswered:

♦ Can there be agreement about a definition of competence?
♦ Can competencies describe and define the complex world of professional practice?
♦ Can competencies be truly holistic and reflect knowledge, skills, values, critical thinking, clinical judgement and attitudes in the context of realistic professional practice?

3.7 Parties influencing development of competencies in nursing

Eraut (1998) recognised three parties that are involved in defining professional practice: professional bodies, providers of education and training, and the government. All of these parties have a role to play in defining what constitutes a competent nurse and how she/he is prepared for their professional role. Safety and protection of the public, and assuring and improving quality are the remit of all three parties.

Professional and education bodies, namely the GNC the UKCC, the National Boards (representing all four countries) and the RCN have all played a part in attempting to interpret and influence nursing competency. Their respective roles revolved around assessment of competence for the purposes of qualification, registration and membership of professional bodies. What is apparent from the literature is that until recently neither the UKCC nor the National Boards explicitly defined competency (Bradshaw 1997). Many professions have yet to produce documents designed to communicate occupational standards (Eraut and Cole 1993). This leaves the responsibility for professional standards up to individual practitioners, making it difficult to find out what qualified people are competent to do and to judge the validity of their assessment systems (Eraut 1994, Gerrish et al 1997).

In its quest to reassure the public, increase the public’s confidence in health care professionals, and place emphasis on the quality and outcomes of clinical care the government has placed the concept of clinical competency high on its agenda (DoH 1997, Donaldson 1999). Clinical governance places a duty on all health care professionals to
ensure that care is satisfactory, consistent and responsive (Swage 1998). Three elements lie at the heart of the quality agenda: the concept of quality, which is being pursued, the methodologies used to assure or improve quality, and the measures, which are used to assess it (Donaldson 1999). When applied to the view of competence, the concept 'competence' needs to be defined, assessment measures need to be put in place, and minimum and superior performance standards need to be agreed. The setting, promotion and assessment of occupational standards are therefore central to the principle aims of clinical governance.

Who should be involved in developing competencies? Professional organisations, education bodies and the government clearly have a very important role, but it could be argued that their main role lies in the monitoring of standards. Competency-based standards provide explicit statements of what people need to do to be able to successfully practice as a professional. They define the nature of that practice and establish criteria against which an individual's performance can be judged. Who is in a better position to define the nature of practice and develop competencies than the practitioners themselves, by reflecting on the nature of their practice? Practitioners are best placed to describe competencies for the following reasons:

- They possess the expert knowledge;
- They are aware of changing practice and innovations;
- They are involved and understand the complex and multi-layered nature of clinical practice;
- They are aware of the practicalities to be considered when deciding which elements and performance criteria are the most critical to measure competence;
- They need to have a sense of ownership.

3.8 Defining children's nursing and specialist children's nursing using competencies

To ensure fitness for practice, it would seem logical that education and clinical experience should be specific to the needs of children’s nurses. Pre-registration education has moved to an outcome-based competency approach in which children’s nurses need to have an understanding of what constitutes competence in order to give direction to education
programmes and facilitate assessment of practice and theory. Likewise, an understanding of competence is needed to contribute to the UKCCs pilot work related to 'A higher level of practice' (UKCC 1999b) and ensure that the knowledge and skills specific to a children's nurse are made explicit through the standards. Defining children's nursing is an essential first step in influencing the nature of competency of practitioners in training and as an ongoing prerequisite for continued professional development.

In turn, the development of competency-based standards has a pivotal role in defining children's nursing and describing the specific nature of the area of professional practice. Articulating competencies as a way of conceptualising nursing has been seen as valid. The UKCC (1999c,d, 2000) have used competencies to define the role of a nurse at pre-registration and post-registration level. Benner (1984) used them to define nurses' work in terms of expert clinical performance. The focus of both of these activities is generic with an emphasis on nurses who work with adult patients as opposed to children.

3.9 Summary
There can be no doubt that professional competence is an issue that continues to dominate the nursing profession today (Hogston 1993). An emphasis on quality assurance in health and other caring professions together with a national investigation into vocational education and training has maintained a focus on the nature of professional competence as a key factor in the production of a quality service (Ellis 1988). Although the importance of clinical competence is reasserted by the professional organisations and in many professional publications, the notion of what competence is in terms of judging someone as competent to practice is recognised to be difficult to define (Ashworth 1992, While 1994, Bradshaw 1997, Flintham 1997). Bradshaw (1997) states however, that a universal agreement of the notion of competence is essential for determining advanced practice, extended practice and specialist practice in nursing. It may be considered a better way to define nursing than traditional methods mentioned in 2.9. Figure 3.1 below makes explicit the terminology related to professional competence to be used throughout this thesis.
A **competent** professional has the attributes necessary for job performance to the appropriate standards.

**Competencies:**

- Knowledge
- Skills
- Attitudes
- Other attributes

Demonstrated in performance and other ways, judged against performance criteria.

**Competency:**

Is a combination of attributes underlying aspects of successful professional performance.

**Competence:**

Focused on performance or a set of tasks.

A set of **competency-based standards** for a profession sets out performance criteria for a range of key activities within the practice of that profession.

The problem of definition, explored in Chapter 2, is returned to in Chapter 4 where the complexities of terminology and naming concepts, crucial if an unambiguous definition is to be developed, are detailed. The nature of classification that can label, define and order concepts are explored. The chapter proposes this approach as the conceptual framework for this study.
Chapter 4 The nature of classification: labelling, defining and ordering

4.1 Introduction

This thesis has argued that competencies can be used to describe the nature and scope of professional practice and provide a detailed definition of the practice of children's nursing. Previous definitions were considered to lack detail, were unsuccessful in expressing the complex nature of practice, and failed to show the relationship between generalist and specialist nursing practice. The intent of this study is to propose a classification of competencies of children's nurses that will contribute to, in the words of Aydelotte and Peterson (1987 p8), "an organised account of the discipline". This is similar to the ongoing work that is taking place internationally to classify nursing practice and nursing outcomes (ICN 1996, Nielsen and Mortensen 1997 and 1998). Using a classification scheme to underpin theory development will enable a definition of children’s nursing to be clarified and will make explicit any relationship between the children's nurse and the specialist children's nurse.

This chapter begins with a discussion on labelling, and the reasons why there is a need to define and order objects. This will be followed by an introduction to the nature of classification, prior to outlining the principles and considering some of the approaches to classification from a range of disciplines, including nursing. This chapter concludes by highlighting some of the documented advantages and disadvantages of using classification schemes.

4.2 Labelling concepts, defining and ordering

Concepts are the ideas of things, as distinguished from the names of things (Buchanan 1979). Concepts are abstract ideas, often described from a mental picture carried 'inside' the head of someone. Murphy and Lassaline (1997) argue that this is a useful ability as it allows humans to think of the same thing in different ways, thereby allowing access to different kinds of knowledge about an object. However, the problem with using concepts to refer to objects is that the same concept may have many different names, as well as
different meanings for different people. A further problem arises in that these different concepts must be distinguished and stored in memory with the right one used at an appropriate time (Murphy and Lassaline 1997). In other words, the concept needs a label that clarifies and makes explicit the idea or object (referent) being referred to. This can be expressed in the following triad (Figure 4.1).

**Figure 4.1 Relationship between concept and symbol based on language**

![Diagram]

What the triad depicts is the relationship between an idea or object in the real world (referent) which corresponds to a concept (thought) within personal knowledge structures, which is in turn represented by a symbol (label): where the symbol refers to the label expressed in words or pictures (Gilchrist 1994). In order for the concept to be shared or communicated to other people the concept needs to be expressed. Only by explaining and making clear the meanings (defining) that are attached to words can there be an understanding that the words used have been properly understood (ICN 1996). The success of this meaning being made clear, however, relies on two things. There needs to be agreement about the names being used and this agreed nomenclature must then be consistently applied. Confusion arises where consistency in application is lacking, as in the case described by Cole (1984) in which he describes the problems of distinguishing between different species of closely related organisms in the field of zoology, namely grey tree frogs, where modern techniques have identified that *chrysoscelis* and *versicolor* are names that apply to the same type of frog. Cole (1984) considers that names have been
changed at a whim resulting in nomenclature instability and ultimately affecting communication between zoologists.

However, labelling is only the first step in ensuring understanding. As mentioned previously, several different labels may be used to describe a single concept, for example when describing a particular time at which a meal is taken the following can be used, dinner, supper, and lunch; where lunch is clearly a meal taken at mid-day, but can be confused with dinner, and where dinner can indicate a meal taken in the evening but can also be referred to as supper. However, using the term evening meal clearly indicates at what time of day a meal is being taken, but how often is the term evening meal used in everyday language? It becomes important to standardise vocabularies to select one term as the preferred term, not hugely important when communicating times at which meals are taken but crucial when developing a nursing classification, for example, where each concept must be analysed to identify its precise meaning. That is, the term/label needs to be defined.

One method of definition is by genus and difference used in zoology (Buchanan 1979); another is by using a helpful sequence within groups used in library classification (Ranganathan 1959). Another is by levels of abstraction and patterns as used by NANDA (North American Nursing Diagnosis Association) (Kim et al 1994, Porter 1986) to develop nursing diagnoses. The method of defining will depend on the use or purpose of the nomenclature. Using the method of genus and difference, a concept is defined by specifying the broader class of objects to which it belongs (its genus) and the characteristics that distinguish it from all other members of the genus (other species) (Buchanan 1979). This results in a hierarchy, a kind of network. Categories that are higher in the hierarchy dominate and are referred to as superordinate to the lower level categories, which are referred to as subordinate (Murphy and Lassaline 1997). In a hierarchy, the properties that are generally true of a category are also true of its subordinates; as a result, the more specific categories have the same features as the more general categories, with one or more additional features (Murphy and Lassaline 1997). The only relation allowed between category members is the 'set inclusion relation’. For
example, the set of animals includes the set of fish, which includes the set of trout, which includes the set of rainbow trout. Set inclusion is often referred to as IS-A relation, because the subordinate category 'is a' kind of superordinate (Collins and Quillian 1969). In the example used by the ICN (1996), woman (a species) IS-A type of human being (the genus). The species woman can be distinguished from another species of the same genus called man. The genus is the superordinate term, and the species is the lower or subordinate term. In this division from genus to species, the concepts are said to be connected by a generic relation. That is, woman has all the characteristics of the superordinate concept plus at least one differentiating characteristic (female). The principle of division is sex (Figure 4.2). By using this method, meaning is granted to the term in two ways, by definition and also by its position in the classification: that is ordering. Thus the process of classification can allow immediate access to knowledge about new entities even where there has been no direct experience.

Figure 4.2 Relationship between genus and species

Human Being
   (Genus)
      Superordinate concept

Man
   (Species)
      Subordinate concept

Woman
   (Species)
      Subordinate concept

2 An alternative presentation of the classification would be to indent subordinate concepts e.g.: Human being
   Man
   Woman
Using the method of genus and difference, concepts can be clarified and labelled with meaning granted to terms by both definition and order in the hierarchy.

4.3 What is classification?

"Classification is the systematic arrangement of entities or categories according to their relevant features or properties. It assumes recognition of similarities as a basis of grouping or clustering and assigning entities into categories" (Kritek 1984 p77). This automatically implies the separation of unlike features or properties (Hunter 1988).

It is worth distinguishing classification from taxonomy to guard against any confusion that may arise where similar terms are used in the literature. Sokol (1974 p1116) defines classification as a "process during which objects or phenomena are ordered into groups or sets on the basis of their relationships". These similarities can be based on observable or inferred properties. Classification systems are the products of this process whereas taxonomy is the science of how to classify and identify (Aydelotte and Peterson 1987). The term taxon is defined as any taxonomic grouping that occurs as a result of a particular technique of classifying; it is used as a set of objects recognised in a classificatory system (Fleishman 1982). In other words, a taxonomy is a system that involves identifying, naming, describing, stating critical attributes, and then classifying essential phenomena into an ordered category system (Bircher 1975). An appropriate taxonomic system would have a purpose, a principle of order and discrete categories for classification of entities (Porter 1986). Classifications make explicit natural systems and achieves economy of memory and ease of handling, making it possible to organise, characterise and assimilate what is known about concepts (Sokal 1974).

The purpose of classification is to describe the properties and relationship of the constituent objects to each other, and to similar objects, in such a way that their true relationships could be displayed and general statements can be made about classes of objects (Sokal 1974). Thus objects or events are ordered and arranged according to certain
criteria. These criteria may then be inductively developed and then specified as the rules, principles and procedures for classifying within a particular system.

4.4 Principles of classification

The science of classification goes back to the writings of the ancient Greek philosophers. Fleishman (1982) describes this earlier work beginning with the work of Plato, who divided classificatory systems into two types:

♦ Classifications based on visible things or their images;
♦ Classifications based on concepts or ideas.

Aristotle then went on to classify according to what he referred to as their 'essence' (Fleishman 1982). Both these early approaches used an 'all or nothing' approach, an approach that has since been considered as too simple, in that although it enabled predictions and generalisations to be made, few objects (individually) fit exactly a type (Fleishman 1982).

Problems arise in the original specifications of the classes and in the subjectivity inherent in many classifications (Michner and Sokal 1951). All in all, there is no single correct way of approaching the development of classifications. However, clear consistency to which its 'rules' are applied, and reference to the use of some of the basic principles of classification as outlined by Hunter (1998), will introduce rigour into the process.

The ICN (1996) summarises the development of a classification in three steps:

1. Identify the concepts that are to be classified and agree on the words to be used to express the concepts. A concept is a unit of thought, an abstract idea, which exists in the mind of an individual, but in order for it to be communicated to others it has to be expressed in words. The words used need to be precise, and ordered in such a way that others can accurately understand them.

2. Group the concepts according to common characteristics. In order to do this, distinctions need to be made to bring together groups that are alike and separate out unlike things. How decisions are made in the establishment of classes and how
similarities and dissimilarities are to be dealt with must be transparent (Aydelotte and Peterson 1987).

3. *Arrange the groups into a logical hierarchy, the classification:* A hierarchical classification is a series of classes or groups in successive subordination, built on a process of division, according to certain characteristics (Hunter 1998) - for example Figure 4.3.

**Figure 4.3 Example of a hierarchical classification**

```
                Literature
                   |
                  Fiction         Non-fiction
                   |
                Novel     Poetry     Autobiography     Biography
```

As the process of division continues in this example (Figure 4.3) the hierarchical classification lists or enumerates more detailed subjects, and each subject should only have one place where it fits into the system (Hunter 1998). All the lower classes include all the characteristics of the superordinate term, in this case literature. Classification schemes of this kind are referred to as 'enumerative' (Buchanan 1979).

The structure of any classification is governed by certain rules, architectural principles that are detailed in Table 4.1.
Table 4.1 Architectural principles of classification

♦ One single governing principle of division provides the framework for the whole classification;
♦ The concepts are arranged in a hierarchy according to their generic relationships;
♦ The characteristics of the concepts at every level are inherited from the concepts at every higher level;
♦ Concepts are identified and differentiated from other concepts at the same level by their specific characteristics;
♦ The concepts are thus not totally separate, but are systematically related to one another;
♦ The principle of division, which divides the concepts at one level from the concepts at the level above must be clear and unambiguous, the divisions and the principles of division should reflect the overall purpose of the classification;
♦ The classes or categories should be exhaustive, that is, they should cover all of the species belonging to a particular genus;
♦ The classes or categories should be exclusive, that is, there should not be any overlap between them.
(ICN 1996)

Using the principles of classification and applying them to the example given in Figure 4.3 it can be seen that each entity falls into a subgroup of a larger group (for example fiction), which in turn forms part of an even larger group (for example literature). Literature can be seen to be the one single governing principle, referred to as the top term, where the principle of division is by literature types. Although this looks straightforward, problems can arise for example, where in the hierarchy would you locate an autobiographical novel?

Each governing principle of division is referred to as an axis of that classification (Nielsen and Mortensen 1997). The relationship in Figure 4.3 is referred to as mono-hierarchy because it only makes use of one type of characteristic as the principle of division (one axis) that is types of literature. To move from a mono-hierarchy to a
multi-hierarchy implies an increase in the detail and expressiveness of classifications. Introducing multiple axes results in a multi-dimensional classification. By allowing combinations between the axes, combinations as opposed to sub-divisions are the result, avoiding an explosion in the number of levels in the mono-hierarchy. For example literature could be divided further by language, author and publication date resulting in a multi-dimensional classification where there is more than one principle of division (multiple axes). Applying this approach to nursing competencies, in a multi-hierarchy classification where the top term is monitoring vital signs, this could be made multi-dimensional by introducing further axes, for example types of intervention, timing of intervention, equipment required or recording.

4.5 Uses of classification

The term classification would, by many people, be associated with shelf arrangements and hence the domain of librarians. However, classification is one of the basic tools of logic and the learning process (Bernstein 1971, Murphy and Lassaline 1997). The main reason for biological classification is to define the discipline that is clarifying 'our field of study, our knowledge'. The general purposes of engaging in classification, regardless of the field under study are to:

♦ Establish a system that enables information to be summarised economically;
♦ Retrieve information quickly;
♦ To make it easy to use;
♦ Describe relationships between the parts of it;
♦ Lead to generalisations;
♦ Generate hypotheses.

(Aydelotte and Peterson 1987)

Library science is not the only field to make use of classification. Classifications have been developed, applied and studied in a variety of disciplines, such as botany, chemistry, medicine, psychology, and social science as well as nursing. One reason given for the flourishing interest in classifying systems in health care is the
development of information systems and the use of computer programmes used, for instance, to computerise patient records (Goossen et al 1996). These systems rely on unified terminology and classification system, for example 'The Unified Medical Language System' (Lindberg et al 1993), which aims to facilitate health care professionals to retrieve and integrate electronic biomedical information from a variety of sources, such as bibliographic databases, patient records and expert systems.

At this point it might be helpful to consider some of the ways in which classifications have been used, as evidence of how systematic order can be achieved to meet the purposes detailed above.

4.5.1 Examples of major classification schemes

1. Libraries use a classification system in order to arrange books in a helpful sequence, help in the correct replacing of books returned after use, and to find the most helpful place for a newly added book among those already in the library (Ranganathan 1959). There are a number of classification systems in use; all are based on principles of division and notations that reflect the dominant pattern of thinking at that time (first editions of library classification appeared in 1876). The schemes vary in their ability to be flexible and accommodate complex and new categories. For example, the Colon System uses colons to create complex combinations of categories, using additional or omissions of colons to allow further expansion of detail. For example, the category of dental surgery symbolised as L 214:4:7, is created by combining the letter L for medicine, the number 214 for teeth, the number 4 for diseases, and the number 7 for surgery. This approach to classification is referred to as a faceted scheme, whereby concepts are analysed and grouped together into facets, which can in turn be combined or synthesised as necessary to form more complex subjects. This can be contrasted with The Dewey Decimal Classification system where subjects are divided hierarchically and referred to as an enumerative scheme (Buchanan 1979). The introduction of multi-axis is a
feature in both classification systems, which allows for increasing levels of
detail to be added.

2. The British Census of Population has been asking questions about ethnicity since it
began in the early 1800s (Sillitoe and White 1992). The results of the census are
used for planning services, monitoring the distribution of ethnic minority groups in
relation to social provision, and in combating racial inequality. The main problem
in identifying and agreeing a classification of ethnicity has been a shift in
terminology to describe different concepts. What was once an acceptable term
such as 'coloured' has since become unacceptable. The principle of division has
also created problems. The relevance and suitability of characteristics such as,
country of birth, nationality, language spoken at home, parents' country of birth in
conjunction with country of birth, skin colour, national/geographical origin, terms
which have all been used in a Census at some time, have been vigorously debated
(Bulmer 1995). In the 1991 Census more than one characteristic (axis) was used,
skin colour (White, Black), national origin (Caribbean, African, Indian, Pakistani,
Bangladeshi), and race (Chinese) (Sillitoe and White 1992).

3. The Standard Occupational Classification (Office for National Statistics 2000) first
introduced in 1990, is maintained by the Occupational Information Unit of the
Office of National Statistics. The purpose and use of this classification has been in
client-orientated applications that are job placement and vocational guidance, as
well as a basis for labour market statistics. This classification system uses a
hierarchical scheme where broad occupational categories are designed to bring
together occupation groups that are similar. The principles of division in this
system are multiple, the level of skill and/or experience and/or formal
qualifications which are required to carry out competently the work activities
typically involved in that occupation and the nature of the work activities (Office
4. One of the most well known classification systems used in health care is the 'International Classification of Diseases' (ICD) (WHO 1993). The original use for this classification system was to classify causes of morbidity that were recorded at the time of death. This was subsequently extended to include diagnosis in morbidity. It is a statistical classification system that allows for different levels of detail by making use of an enumerative scheme. The purpose of the ICD is to facilitate the systematic recording, analysis, interpretation and comparison of mortality and morbidity data collected in different countries or areas at different times. It does this by translating diagnoses of diseases and health problems from words into alphanumeric codes, which permits easy storage, retrieval and analysis of data (WHO 1993). The ICD is a multi-axial classification using a single coded list of three-character categories, each of which can be divided into up to ten four-character subcategories. In addition various notations are used, such as parentheses, colon, dagger and asterisk to exploit the classification to its full advantage allowing for increasing levels of detail to be added (WHO 1993). For example, E10-E14 is the code used to identify a diagnosis of diabetes mellitus which can be described further using a four-character subcategory and the notation of dagger and asterisk, E14.2† and NO8.3*, used to code unspecified diabetes mellitus with renal complications.

5. In contrast to this well-established system in medicine, nurses have been struggling to classify nursing diagnoses only since the 1970s (Pridham and Schutz 1985, Kritek 1986). This work originated in North America (the North American Nursing Diagnosis Association) in an effort to move the art, science and theoretical basis of nursing forward. Of this struggle, it has been said, "we have no common language to describe precisely what nurses do, for what sort of problems or patient conditions, and with what results" (Clark 1999 p42). The most powerful imperative in the United States of America (USA) for the development of nursing classifications has been the systems of reimbursement derived from the insurance system (Lang and Marek 1990). However, the USA system of nursing education has also developed the notion that nursing as a science is grounded in defining the
discipline (Bircher 1975, Callista Roy 1975). It is these twin drivers that have produced several nursing language projects. The latest and most inclusive of these is the Unified Nursing Language System within the Unified Medical Language System (UMLS) (ANA 1993). A further example of classifications in nursing is The International Classification for Nursing Practice Project (Wake et al 1993) which provides a vocabulary, a new classification for nursing and a framework into which existing vocabularies and classifications can be cross-mapped to enable comparison of nursing data collected using other nursing vocabularies and classifications. Clark and Lang (1992) state four reasons why nursing needs to develop its own system of classification:

- Computerisation in health care: which requires clear rules for defining and categorising input;
- Cost constraints: which relies on the systematic deployment of resources based on sound and reliable information;
- Increasing importance of medical classifications: for example the ICD (discussed previously) is being used to organise information on healthcare and thus leads to decisions for health care delivery;
- Nursing's goal to control its own work and its own practitioners.

Ultimately nursing data should identify human responses to actual and potential health problems and the ways in which nurses respond to these problems (Clark and Lang 1992). Thus, the primary components of a classification system for nursing would include three important elements: patient's need, nursing actions and patient outcomes. 2005 is the date given to expect a working version of this classification.

4.6 The issues surrounding classification schemes

The previous discussion has demonstrated the breadth of the uses of classification. Classification theory as presented has many uses but the overarching purpose would seem to be to offer structure, enable retrieval of information and describe relationships between parts: ultimately defining the discipline, assisting communication and facilitating a shared
understanding. Because of this, specifically in nursing, classification systems have implications for nursing research, clinical practice, education, administration, and health policy (Clark 1999). Although there are many benefits of classification schemes they have been criticised in the nursing literature on a number of concepts, namely failure to use the classification for the purpose it was intended (Hogston 1997), for being reductionist (Clarke 1999), and for lacking in detail (Lützén and Tishelman 1996).

All classification schemes must have a purpose, a principle of order and discrete categories for classification of entities. The principle of division needs to suit the intended purpose and the classification must use terminology that is accurate and meaningful. This should result in the classification scheme only being used for the purpose for which it was intended. Patient dependency scoring illustrates that intended purpose could be distorted in use. Hurst (1993) identifies 40 methods of classifying dependency of patients. Patient dependency is defined as "the extent to which the patient's level of functional capacity dictates the time required for personal, technical, supportive and educative……nursing care" (Durand 1989 p55). The two main approaches to classify patient dependency are by aggregating scores and simple patient classification (Hurst 1993). When aggregating scores a patient is given a score that indicates level of independence in carrying out activities of daily living, the sum of the scores places the patient in a hierarchically arranged category consisting of a unique range of scores. The second approach uses professional judgement and broad indicators of nursing care to classify patients. Problems have arisen where practitioners and managers have interpreted the dependency categories differently. The practitioner interprets a score to indicate nursing care required and the manager interprets the score to indicate staffing levels, both are intended purposes of the classification. But the different needs have an effect on how the users interpret the final score.

'Reductionist' is a label that has been attached to the attempts in nursing to classify nursing diagnoses (Webb 1992). The initial aim of this classification scheme was to provide a standard taxonomy of diagnostic labels that convey the same meaning to all nurses: a process that would structure, standardise and systemize nursing care (Kritek 1978). Over
the years NANDA have refined and expanded the list of accepted diagnoses. The use of nursing diagnosis is now widespread in North America, Europe and a few areas in the UK. The classification scheme identifies clusters of signs, symptoms and behaviours that can be recognised on assessment. So, instead of nurses using vague and imprecise definitions, they can select the most appropriate term from the list of nursing diagnoses. Such classifications have received many criticisms. According to critics, by reducing a patient's need for nursing care to a standard list the uniqueness of each patient may be lost. Such classification schemes are seen to be reductionist because they fail to capture the complex activity of nursing (Lützén and Tishelman 1996).

Classification schemes have been criticised for failing to include sufficient level of detail for their use. Classification of ethnicity illustrates this point (Section 4.5.1.2). One of the main problems of the current scheme is the failure to capture a meaningful degree of detail for its purpose, added to this, ethnic grouping is subjective to the person concerned. The 1991 Census listed 235 different responses, which indicates that the respondents completing the census form could not fit their perception of their ethnic grouping into the categories already listed. For example commentators have pointed out that the survey did not permit respondents to identify themselves as being of mixed ethnic origin. A number of respondents recorded 'Irish' instead of ticking 'White'; clearly the level of detail was insufficient for those who responded in that way.

These criticisms were noted and used to inform the development of a classification scheme in this study.

4.7 Summary
This chapter has outlined the nature and purposes of classification systems. It is hypothesised that by classifying competencies into a hierarchical structure the relationships between a children's nurse and children's cancer nurse (an example of a specialist children's nurse) will be apparent. A classification will describe the characteristics, knowledge and skills of a children's nurse and children's cancer nurse (concepts labelled),
define a children's nurse and specialist children's nurse (concepts defined), and show clearly the relationship between the two (concepts ordered). In Chapter 5 the research design details the approach used to derive the competencies.
PART 2
RESEARCH DESIGN,
COLLECTION AND
ANALYSIS OF DATA
Chapter 5 Research Design

5.1 Introduction: researching competencies

In Chapter 2 the evolution of a general and a specialist nurse was outlined. The exploration culminated in a conceptual framework depicting a hypothesised relationship between nursing and the fields within nursing. The framework implied a relationship between a general (adult) nurse, a general children's nurse and a specialist children's nurse. However at this point in the thesis the only consistent features that distinguish one from another is the education pathway, registration, and sphere of clinical practice. Definitions of nursing that currently exist contained insufficient detail to discriminate between types of nurses or make explicit the relationships between one another, such as the one depicted in the framework. For all the reasons explored in Section 2.11 these characteristics will be defined in terms of competencies.

Competencies have been used by other disciplines to define areas of professional practice (Ellis 1988, Gonczi et al 1990, Winter and Maisch 1996). In nursing, identification of competencies has been used to encapsulate the essential qualities of effective nursing (Whittington and Boore 1988), and to attempt to reveal assumptions about professional knowledge (Eraut 1994). The ability to recognise and measure the competency of a qualified children’s nurse is crucial for the safety of children, young people and their families and the protection of the nurse. However, asserting the difference between competence and incompetence is one thing; describing the essential features of best practice is rather different (Norris 1991).

To describe the features of best practice competence must be deconstructed into individual competencies, as Chapter 3 concluded (Ellis 1988). In turn, these competencies need to be expressed in observable performance criteria in order to clarify different levels of practice. Then they must be related to client outcomes and thus clinical effectiveness (Manley and Garbett 2000). The challenge is to define competencies, which are broad enough to reflect the complex world of the children's nurse while acknowledging that this is a difficult and subjective undertaking (Ashworth 1992, While 1994, Bradshaw 1997, Flintman 1997). If
at the same time, these broad competencies can stand as a definition of children's nursing, then the requirement mentioned in Chapter 2 to establish the unique attributes of children’s nurses and define their complex role, will be met. This is necessary, not only to support pay review and performance management, but to ensure that future nurses are adequately educated, valued and rewarded (Casey 2000). There is an opportunity to integrate what has been previously perceived as two different agendas - the professional agenda and the pay and career agenda (Manley and Garbett 2000).

Although little has been written about approaches used to derive competencies (Adams 1997/8), examination of the literature revealed a number of different approaches used by health care professionals, including:

- Questionnaire (Duffield et al 1995);
- Use of an expert panel (Percival et al 1994);
- Delphi survey (McGee et al 1987, Elder and Nick 1995, Fitch et al 1996);
- Functional analysis (Winter and Maisch 1996);
- Group process such as nominal group technique (Davey 1995);
- Focus groups (Scribante et al 1996, Jowett and Wellens 2000).

In addition to these approaches Adams (1997/98) describes three methods that have more recently come to prominence in the business arena, namely critical incident technique, behavioural event interviews, and the repertory grid. The approach used tended to reflect reasons for development and potential utilisation. Irrespective of the variations, all approaches included one common theme - that of consultation with the professional group.

There were a number of other recurring themes within the literature:

- Involving as many of the target audience as possible;
- Harnessing the insight of appropriate experts;
- Being comprehensive but giving quick results;
- Ensuring rigour by using a number of different methods;
- Introducing a number of validation steps to test the resulting competency.
To assist in choosing an appropriate methodology as well as in selecting techniques for data collection these points were all considered when designing this study. These would assist in the development of competencies to define children's nursing and specialist children's nursing. As a result the research design became very complex, with multiple points of data collection using different techniques to collect the data. Data collection was linear, with data being collected, analysed and results identified before moving onto the next stage of data collection. The natural history of the research study will be revealed in the sections that follow presented as a chronology of data collection.

5.2 Overview of design

The research problem and hypothesis have been outlined and described in detail in Chapter 2. The goal of the study is to answer three questions:

1. Can children's nursing be defined using competencies?
2. What are the competencies of a general children's nurse and a specialist children's nurse?
3. What are the commonalities and differences between the generalist and specialist children's nurse?

Realising this goal will resolve the following two hypotheses:

♦ Hypothesis 1: there is a significant common element in these two areas of nursing;
♦ Hypothesis 2: the differences between a general children's nurse and a specialist children's nurse are exclusively related to medical and nursing specialist knowledge.

To address these hypotheses, the research methodology was conceptualised in two phases undertaken concurrently using a multi-method comparative design incorporating a case study approach. One phase focused on children's nurses, whilst the second phase focused on specialist (cancer) children's nurses.

In the first phase descriptions of children's nursing were obtained from relevant professional groups. These descriptions were developed into competency statements and then classified. The second phase led to the development of a classification of specialist
children's nursing competencies, derived from competency statements developed and tested with children's cancer nurses (children's cancer nurses were chosen as a case study to represent specialist children's nursing practice). The two competency classifications were then compared to identify similarities and differences (Figure 5.1).

Figure 5.1 Overview of the study design
5.3 Case study approach

A case study is defined as a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within it’s real life context using multiple sources of evidence (Yin 1994). Yin considers it "the preferred strategy when how and why questions are posed" (pxiii), and where the boundaries between phenomenon and context are not clearly evident. Case study research describes a 'real' situation where researchers gain a rich picture associated with a single unit of analysis (Pegram 1999/2000). Case studies are particularly helpful when studying a "unique situation in great depth, and where one can identify cases rich in information - rich in the sense that a great deal can be learned from a few exemplars of the phenomenon in question" (Patton 1990 p54). One of the many distinguishing features about case studies is that the numbers are invariably small, as the cases are intensively explored in-depth using multiple research methods to investigate fully complex situations (Bowling 1997). As Stake (1995) proposes "we study a case when it itself is of very special interest" (pxi).

Case studies have acquired varied definitions and usages in the literature (Woods 1997), leading to misunderstanding among contemporary researchers (Meier and Pugh 1986). This may be due to its varied origins in psychology, medicine, law and experimental research, leaving case study research fraught with confusion as to whether it constitutes a research design or a research method (Pegram 1999/2000). Much of the research that appears in academic journals claiming to use the design fails to either define the author's interpretation, or offer a rationale in support of it's use (Woods 1997). Despite the multiple meanings however, there are some recognised common features of case studies (Bryar 1999/2000):

♦ Provides an in-depth description of a particular case (or cases);
♦ Uses various methods that may generate qualitative and/or quantitative data;
♦ The case is located in its social and historical context;
♦ The research is either descriptive, exploratory or explanatory;
♦ An inductive or deductive approach is taken to generate theory.

When choosing the case study, Sandelowski (1996) argues that researchers are not making a methodological choice, but rather a choice of object to study, namely a case. This study
has some similarities with a case study approach where a range of data collection methods was used to provide a description of general and specialist children's nursing.

5.3.1 Defining the case
A 'case' can be a person, a group, a community or some other unit (Stake 2000). Yin (1994) asserts that the 'case' or 'unit of analysis' should be related to the initial research question. In this study the case was the children's cancer nurse - a single unit of analysis representing a specialist children's nurse.

The conceptual framework described in Chapter 2 proposed a generic relationship between nursing and the specialities within nursing. The general children's nurse is a distinct and vital entity, and was identified as a sub-type of nurse. Education is at the level of pre-registration and prepares a nurse to care for children with different needs in a range of clinical settings. The specialist children's nurse was identified as a sub-type of generalist children's nurse. Education is at the level of post-registration and prepares a nurse to care for children and young people with cancer.

The ICN (1991) outlines ten features that describe the nature of specialist nursing practice. Children's cancer nursing mirrors all of the features delineated by the ICN (1991) (see Section 2.6) and was chosen as a case to represent specialist children's nursing for the following reasons:

♦ Children's cancer nursing practice, is well recognised as a distinct sub-speciality within children's nursing.
♦ The experience of the child being treated for cancer will include periods of intensive/acute care as well as times of mirroring the experience of a child with a chronic and/or life limiting condition. Children's cancer nursing therefore reflects many specialist areas of children’s nursing.
♦ The researcher is a children's cancer nurse and understands the domain of practice, and has an intrinsic interest in this area of study.
5.4 Overview of methods of data collection

Methods are specific research techniques, the choice of which depends on their fit with the theories and methodologies being used and the hypothesis being tested (Silverman 2000). Multiple techniques were used to collect data in this study which were consistent with the case study approach. Drawing on knowledge from previous studies in relation to the development of competencies, the study used decision-making and problem solving approaches involving group work to collect data. These were the most appropriate approaches to test the hypotheses because they enabled groups of general and specialist children's nurses to generate, validate and evaluate competency statements related to their areas of professional practice, therefore making explicit the relationship between their areas of practice. In total, four techniques were used to collect data, some of which were used in both phases of the study (Figure 5.2):

- Nominal group technique (Phase I and II);
- Semi-structured interviews (Phase II);
- Focus groups (Phase I and II);
- Delphi survey (Phase I).

The process model detailed in Figure 5.2 outlines each step of data collection in the two phases. For each step within the phase, the method used is coupled with the outcome of that step. For example in Phase I the nominal group technique was used to identify questions for the focus groups, the focus groups were used to generate statements about the role of the children's nurse and so on resulting in a final set of children's nursing competencies. In Phase II the nominal group technique was used to generate a list of competencies, the semi-structured interviews refined the list of competencies and so on resulting in a final set of children's cancer nursing competencies.
Figure 5.2 Detailed process model of methods of data collection

PHASE I General Children’s Nurse

Nominal Group Technique
Questions for the focus groups.

Focus Groups with Healthcare Professionals
Initial statements about the role of the children’s nurse.

Delphi Survey
Refined statements about the present and future role of the children’s nurse.

Focus Groups with Children’s Nurses
Validated statements about children’s nurse, present and future roles.

Final set of children's nursing competencies.

Develop classification

Theory generation

PHASE II Specialist Children’s Nurse (Children's Cancer Nurse)

Nominal Group Technique
List of competencies.

Idea generation

Test Competencies
Refined list of competencies.

Idea generation and Synthesis

Semi-structured Interviews with Children's Cancer course members
Refined list of competencies and competency statements.

Synthesis and evaluation

Focus Groups with Children’s Cancer Nurses
Validated list of competencies.

Final set of children's cancer nursing competencies.

Assimilation

Develop classification

Develop classification
The approaches taken to define children's nursing aimed to combine personal thoughts and reflections, with research-based listings of nursing activities/tasks and classifications of nursing practice. Individually these approaches have held a prominent position in defining nursing (Section 2.9 and 2.10). This study sought to exploit the strengths of these three approaches by accommodating all three in the research design. Although the two phases shared a common outcome, the approach taken to reach that outcome varied. In Phase I data collection proceeded from broad to specific, from general statements of a children's nurse to a generated list of competencies. In contrast, Phase II data collection proceeded from specific to broad, from a generated list of competencies to general statements about a children's cancer nurse. This approach was deliberate, to test whether the different starting points and the different focus had any effect on the final outcome which was the development of comprehensive statements about a general children's nurse and specialist children's nurse.

5.5 Access and ethical issues

5.5.1 Access

Negotiating access to participants in both phases of the study was straightforward. As a children's nurse and as a children's cancer nurse the researcher has a role that reflects research, practice and education, and as a result has contacts in many areas, both local and nationally. This personal knowledge, added to the contacts of colleagues, increased opportunities of gaining access. Three of the four parts of the data collection were undertaken at the researcher's place of work. Extensive knowledge of the environment facilitated easy access. Professional networks enabled access to nurses external to the researchers place of work for the focus groups and the Delphi survey. The researcher has a nationally recognised role in a number of professional organisations that make available membership lists. These were used to make contact with potential participants.

Ease of access should not imply that access was taken for granted, or that coercion to participate took place. Coercion can result where there is a relationship with potential
participants, particularly where there are line relationships between them, in this case, the researcher and course members.

5.5.2 Ethical issues

In its broadest sense, research ethics involves being clear about the nature of agreement entered into with research participants (Blaxter et al 1996). Ultimately, it is about ensuring the integrity and dignity of research subjects and avoiding any conflict of interests between the researcher's needs and demands and those of research subjects (Brykczyńska 1998). Codes of ethics exist to guide researchers and offer protection to potential research subjects regardless of whether research is therapeutic or non-therapeutic. Application of the *prima facie* ethical principles of respect for autonomy, non-maleficence, beneficence and justice (Beauchamp and Childress 1989) will be explored to reveal issues relevant to this present study. It will make explicit how the researcher ensured that the research was ethical, prior to and during this study.

*Informed consent*

Commitment to individual autonomy insists that research subjects give informed consent. This requires the fulfilment of two important criteria; that subjects must agree voluntarily to participate, and that agreement must be based on full and open information about the nature and consequences of the research (Christians 2000). In all stages of data collection the researcher incorporated written information. This was complemented with verbal information prior to the semi-structured interviews. This information was comprehensive and gave full details of the research, reasons for the research, the commitment required of the participants as well as outlining any potential outcome. To ensure consent was given voluntarily the written information also advised individuals that they did have a choice, and that they could refuse to participate at any point without any fear of reprisal.

It was made clear that agreement to participate would be taken as consent. In addition, the research protocol was sent to the Director of Nursing and Family Services (hospital) and Head of School (education), as well as being registered with the Hospital Research and
Development Office. For potential participants not employed at the researcher's place of work (for focus groups and Delphi survey) the voluntary nature of the study was made explicit in the letter requesting their involvement, and once again agreement to participate was taken as consent. In all stages of data collection potential participants were allowed time to reflect on the information given. In most cases this time was in terms of weeks as opposed to days. Telephone contact numbers were always supplied with the information letters, inviting questions and the opportunity to clarify any concerns.

Mathews and Venables (1998) highlighted the problems that arise in educational research where students' feared reprisals if they do not agree to participate, and thus bring into question the nature of volunteering. Although the course members on the paediatric oncology course knew the researcher in the capacity of a lecturer, there was no course leader/course member relationship and therefore no perceived opportunities in finding favour with the researcher. The use of an informal meeting with the course members clarified the relationship and made it absolutely clear that their experience on the course would not be changed in any way if they refused to participate in the study.

Deception

In emphasising informed consent, codes of ethics overtly oppose deception. For the researcher this entails making explicit their obligation to maximise benefits and to minimise harm; referred to as beneficence and non-maleficence. Benefits were thus perceived and shared with participants as broad in terms of guiding future education and professional development.

Resulting from the discussion with colleagues, the role of participants in the focus groups was made clear in the letter of invite, and reinforced at the start of each group. The expectation that they would participate and share their views was made apparent and that an environment that would value all contributions would facilitate this was made explicit. It was explained that being involved in an interactional approach participants may experience a level of stress following the event if they have contributed personal
experiences to the group, challenged other members of the group through discussion, or expressed a diverse opinion (Morgan 1993, Smith 1995). The social context of an individual's input exists and must be considered as a potential risk. The role of the moderator and second moderator was to observe for potential problems, and if needed provide individual support following the focus group. As well as this, at the end of each focus group there was an opportunity to debrief informally. Smith (1995) proposes that this risk is more of a problem where sensitive issues are being discussed. Although this was not the case in the focus groups used in the present study, the focus groups with experienced children's nurses and children's cancer nurses did present the researcher with some concerns in relation to a potential discussion that could reveal individuals' views to their peers. But, while individuals did challenge and express divergent views the discussion remained supportive with no evidence of tension.

In avoiding deception the researcher must be very clear on inclusion and exclusion criteria for the study, these must be made plain in the research protocol and any resulting reports (Mathews and Venables 1998). Justice requires that there must be an indication of fairness in the selection of the sample group identified. In the present study the use of purposeful and networking sampling techniques could be seen as a potential source of bias. However, as Morse (1991) points out random sampling violates the qualitative principle of selecting the most knowledgeable informants for a study. It was important in this study to clarify the inclusion criteria prior to each data collection method, thus making explicit the experience and knowledge of the participants that was relevant to a specific stage of data collection. This was most important for the Delphi survey where the literature is generally controversial on the notion of expert and who makes up the panel (Reid 1988).

Privacy and confidentiality

Respect for participant's privacy was made plain through all stages of data collection. Confidentiality was assured as the primary means of safeguarding any unwanted exposure. This was stated in each letter of invite and reinforced at the start of each focus group. Complete anonymity only exists where the researcher is unaware of the identity of the
participants (Burns and Grove 1997), which was not the case in the present study. The use of a code number, keeping a master list of participant's names separate from the code number and all original data following data entry into the computer kept in a secure place, were all methods employed by the researcher in maintaining confidentiality.

Smith (1995) draws attention to certain difficulties with confidentiality in relation to focus groups; that of over disclosure of personal information and the resulting stress that this may cause. He suggests a number of approaches to minimise this risk. Sensitive use of the tape recorder, erasing names from transcriptions, and informing the group about the disposal of notes, transcripts and tapes, may relieve some of their concerns. In addition, requesting participants not to share any of the discussion with outside individuals may assist in ensuring confidentiality. These suggestions were enacted by the researcher, and were stated at the start of each focus group.

**Accuracy**

One of the cardinal principles of codes of ethics is ensuring that data is recorded accurately. Fabrications, omissions, fraudulent materials, plagiarism and contrivances are considered unethical (Burns and Grove 1997, Christians 2000). The use of a tape recorder in the focus groups and semi-structured interviews ensured an accurate and detailed record of data. The use of member checks, which entailed randomly selecting a member to send a copy of the transcript to following focus groups in Phase I, was another method of checking accuracy of data following transcription of tapes. Feedback to participants was not only important to check accuracy during the study but also on completion to maintain accuracy and to fulfil the obligation to keep participants informed of the results. Ultimately it was the responsibility of the researcher to conduct, report and publish work honestly.

**5.6 Summary**

This section has provided an overview of the research design and a general introduction to the multiple methods of data collection used. Ethical issues pertinent to the research and
methods of data collection have also been explored. The research design has detailed the intent of this study as proposing a classification of competencies of a children's nurse. The methods used to collect the data to generate the lists of competencies are explored in detail within their respective phase of data collection, in the following two chapters. Each method will be discussed briefly in relation to its use as a research tool, prior to detailing the use of the method within the present study; indicating rationale for selection, the population sample, the procedure, the outcome and the trustworthiness of the data in relation to the specific aims of each stage of the research.
Chapter 6 Children's nursing competencies: method, analysis and results

6.1 Introduction

In this phase descriptions of children's nursing were obtained from relevant professional groups. These descriptions were developed into competency statements and subsequently classified. A number of methods of data collection were used to achieve the final outcome. Brief descriptions of each of the methods used are provided here to contextualise the approach taken and provide a clear audit trail. Discussion will also detail the population sample, the procedure, and the outcome. Each section concludes with discussion on the trustworthiness of the data.

The simultaneous process of data collection and data analysis, the approach taken to analyse data, and the results will be presented in the linear style in which the research was approached (Table 6.1). This began with a nominal group technique, which resulted in a list of prioritised statements about the role of a children's nurse. These were then used to develop questions for the focus groups, the results of which were used to develop the questionnaire for the Delphi survey. Analysis of data resulting from the focus groups and Delphi survey produced descriptions of the role of a children's nurse. Categorisation of this data resulted in competency statements and descriptors. The competency statements were refined and validated further through a focus group with expert children's nurses. This chapter concludes with a presentation of these final categories, referred to as competency statements and related descriptors.
### Table 6.1 Summary of the process and outcome of data collection: Phase I

<table>
<thead>
<tr>
<th>Process</th>
<th>Analysis</th>
<th>Outcome 1</th>
<th>Outcome 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Group Technique</td>
<td></td>
<td>List of prioritised statements about role of the children's nurse, present and future</td>
<td>Questions for focus groups</td>
</tr>
<tr>
<td>Focus Groups with health care professionals</td>
<td>Transcripts</td>
<td>Questions for the Delphi survey</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Themes extracted into overview grid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delphi survey</td>
<td>Descriptive Statistics</td>
<td>Refined statements about the role of the children's nurse, present and future</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thematic coding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-visited data from focus groups with health care professionals</td>
<td>Content analysis</td>
<td>Descriptors of roles</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Categorisation and re-formulation of competency statements</td>
<td></td>
</tr>
<tr>
<td>Re-visited data from Delphi survey</td>
<td>Content analysis</td>
<td>Descriptors of role</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Categorisation and re-formulation of competency statements</td>
<td></td>
</tr>
<tr>
<td>Focus Group with 'expert' children's nurses</td>
<td>Content analysis</td>
<td>Refined competency statements</td>
<td></td>
</tr>
</tbody>
</table>

### 6.2 Nominal Group Technique

The nominal group technique (NGT) is "a structured meeting which seeks to provide an orderly procedure for obtaining qualitative information from target groups who are most closely associated with a problem area" (Van de Ven and Delbecq 1972 p338). It was originally developed in the 1960s from an analysis of group decision making in aerospace, environmental and industrial fields. However, the original authors, Van de Ven and
Delbecq (1972), also noted that the process could be applied to other settings such as health care and health policy.

As a planning and problem solving process (Hall 1983), it has been used in curriculum planning (O’Neil and Jackson 1983), for identifying researchable problems (Thomas 1983, Gallagher et al 1993, Carney et al 1996), training needs assessment (Scott and Deadrick 1982), and programme evaluation (O’Neil 1981). The technique has also been found to be beneficial in structuring meetings and conferences (Butterfield 1988). Van de Ven and Delbecq (1971) describe it as an effective technique for providing greater structure in the decision-making phase of a committee's work. Of specific relevance to this study, the use of nominal group technique (NGT) has been used as a single method (Davey 1995), and combined with other data collection methods (Fitch et al 1996), to develop competencies.

The process for undertaking a NGT and the rationale for use are detailed in Appendix II with a comparison to other decision-making processes summarised as evidence of choice provided in Table 6.2 below.
Table 6.2 Comparisons of Nominal Group Technique, Brainstorming and Delphi Survey

<table>
<thead>
<tr>
<th>Factors compared</th>
<th>Nominal Group Technique</th>
<th>Brainstorming</th>
<th>Delphi Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Format</td>
<td>Structured, sequential steps followed</td>
<td>Largely unstructured</td>
<td>Structured, requires numerous rounds of interaction</td>
</tr>
<tr>
<td>Group activity</td>
<td>Initial silent interaction with later discussion</td>
<td>Open discussion</td>
<td>No personal interactions, input is anonymous</td>
</tr>
<tr>
<td>Time</td>
<td>Can be conducted in one session</td>
<td>Can be conducted in one session</td>
<td>Takes place over 3-4 rounds of data collection and analysis</td>
</tr>
<tr>
<td>Preparation</td>
<td>Little preparation or understanding required, easy to conduct</td>
<td>Little preparation or understanding required, easy to conduct</td>
<td>Requires coordination of responses and can be time consuming</td>
</tr>
<tr>
<td>Influences</td>
<td>Peer influence likely only in the discussion phase</td>
<td>Possible influence of results by peer pressure</td>
<td>Little peer pressure noted</td>
</tr>
<tr>
<td>Phase of decision-making</td>
<td>Fact-finding and idea generation</td>
<td>Fact-finding and idea generation</td>
<td>Idea generation, synthesis and evaluation</td>
</tr>
<tr>
<td>Generation of ideas</td>
<td>Generates minority opinions and unique ideas, better quality ideas than brainstorming</td>
<td>Promotes more ideas than individuals alone</td>
<td>Promotes many high quality ideas, less unique ideas than NGT</td>
</tr>
<tr>
<td>Participant satisfaction</td>
<td>Feelings of closure, high accomplishment and interest in future work</td>
<td>Feeling of lack of closure, low accomplishment and low interest in future work</td>
<td>Moderate sense of closure and accomplishment, feelings of detachment</td>
</tr>
</tbody>
</table>

6.2.1 The sample population

As the NGT is an approach used with groups of people who have a specific insight into a particular area of interest (Gallagher et al 1993), the area of interest will often dictate the sample, in this case children's nursing. The NGT was undertaken to collect data to develop questions for the focus group. The purpose of the NGT was to generate ideas considering children's nursing within a range of settings. The sample for the NGT was selected from
the hospital and university where the researcher was based and reflected the various clinical environments in which children are cared for. This drew upon the experience and knowledge of children's nurse practitioners within those settings, thus a purposeful sample was selected reflecting the needs of the study (Morse 1991).

Butterfield (1988) suggests that the NGT works best with a group made up of approximately 7 to 10 members. Reasons for this are not stated, however when consideration is given to the final stage of ranking and discussion, clearly this could be very time consuming and more time would be required with a larger group. However, the NGT can be more accommodating of a larger group than conventional interacting decision groups. It was presumed therefore, that the researcher should determine the sample size. A letter requesting participation in this stage of the research was sent to a total of 15 children's nurses. This number was considered sufficient to allow for some participants being unable to be involved, still leaving an adequate sample. The nurses approached were known within the hospital for their ability to clearly articulate issues about children's nursing. The sample reflected the areas of management, education (clinical and university), as well as a range of clinical specialities. Out of the 15, all responded to the request but only 6 were able to participate. The reasons for nine nurses being unable to participate were either annual leave, a day off or otherwise engaged. The researcher knew all 6 of the participating nurses. This might be considered to be a disadvantage in many research techniques, such as interviewing, where what Bowling (1997 p278) refers to as "social desirability bias" occurs because respondents want to give the answers they feel are expected of them. This was not felt to be the case with the NGT as the purpose of the group to generate ideas was shared with participants at the start of the procedure which made the request for their personal ideas very clear.

The final sample of participants were all children's nurses, only one of whom was a newly qualified nurse. As the other five had been qualified for some years it may be inferred that they held a general (adult) qualification in addition to a children's nursing qualification. The sample included:
♦ Lecturer practitioner in nephro-urolgy;
♦ Theatre sister;
♦ Senior staff nurse from haematology/oncology;
♦ Senior lecturer;
♦ Senior staff nurse from out patients department;
♦ Staff nurse from investigation unit.

6.2.2 The procedure

The steps of the procedure outlined by Butterfield (1988) (Table 6.3) were followed:

<table>
<thead>
<tr>
<th>Number</th>
<th>Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduce nominal group process to the group</td>
</tr>
<tr>
<td>2</td>
<td>Silent generation of ideas in writing</td>
</tr>
<tr>
<td>3</td>
<td>Round-robin listing ideas</td>
</tr>
<tr>
<td>4</td>
<td>Discussion of ideas on to a flip chart</td>
</tr>
<tr>
<td>5</td>
<td>Rank ordering ideas</td>
</tr>
<tr>
<td>6</td>
<td>Total rankings</td>
</tr>
<tr>
<td>7</td>
<td>Discussion</td>
</tr>
<tr>
<td>8</td>
<td>Conclusion</td>
</tr>
</tbody>
</table>

Table 6.3 Steps in the Nominal Group Process

Potential participants were sent a copy of the Butterfield (1988) paper in preparation. Although this was not required as part of the procedure, the researcher considered that this might allay any anxieties participants had concerning their role in the group and the activity itself.

The NGT task statement was developed and piloted with a group of children's nurses who were employed within the researcher's university. As it was the question that was being piloted and not the process, the participants were requested to see if they could answer the question, noting if the question itself caused them any problems. Piloting of the question was very beneficial. As Polgar and Thomas (1995) point out this is essential to improve
the clarity of questions; and clarity was clearly a problem. As a result of the pilot the question was changed from, 'as a paediatric nurse what sort of abilities will you require to meet the needs of ill children in the future' to, 'as a children's nurse what will you require to meet the needs of children in the future?' The word 'paediatric' was felt by all the participants to be an unacceptable term, selecting the term children's nurse as this was felt to be the considered and established term in everyday use. 'Abilities' caused some participants problems as it was felt to imply talent. The term 'skills' was inappropriate as it could focus NGT members on tasks and preclude a more comprehensive view of the total role. The final word that was removed was 'ill'. This was felt to be too narrow a focus on illness and thus hospital, and avoid the role of the children's nurse with well children in hospital and the community.

The NGT was undertaken at the participant's place of work in a classroom designated for teaching students, a room which was familiar to all participants. Chairs were arranged in a semi-circular position. The procedure followed an identical format to the steps identified by Butterfield (1988). The facilitator introduced the process to the group and outlined the eight steps that needed to be completed in 90 minutes (Table 6.3). The roles of the facilitator and moderator were detailed. The moderator distributed the 'nominal group task statement' to participants, while the facilitator instructed participants to spend the next 15 minutes working in silence listing factors related to the task. The listing of their ideas onto flip chart paper was undertaken by the moderator and recorded as close to verbatim as possible, using only familiar abbreviations. A round-robin style was used where participant's contributed one idea at a time from their list until all participants had exhausted their list. Participants took advantage of the opportunity to 'hitchhike' ideas where an idea from a fellow participant stimulated the addition of further items onto their list. When a piece of flip chart paper was full it was taped onto the facing wall so that all ideas generated could be seen by the participants. A discussion of ideas on the flip chart paper was then facilitated, which through a process of elaboration and clarification resulted in some items being grouped together. Participants grouped items that had a similar meaning. This discussion lasted 30 minutes after which participants were asked to
independently list onto a card the ten most critical ideas from the new list, assigning ten to the most critical, nine to the next and so on. Butterfield (1988) recommends that eight votes should be allocated to the group members, although he does not actually comment on why this exact number of votes is felt to be appropriate. Nominating ten votes as opposed to eight was introduced during the process as a result of discussion between the moderators. It was felt that the group needed this increased number of votes to increase the number of priority areas, as it was clear from the discussion that all were considered important and therefore the decision-making process would have been difficult to undertake. Each of the participants then read out their list and its assigned ranking which was written next to the item on the flip chart paper using a different colour marker pen to distinguish between the numbers of the item and how the item was ranked. The rank orders were then totalled and written out on to a new piece of flip chart paper for all the participants to see. Participants had a further opportunity to discuss the new list and re-consider the final score. The discussion although animated did not challenge the final list, resulting in no changes to the final score and therefore the process ended with group consensus.

6.2.3 Data analysis
Organising data involved collecting together all the flip chart paper, and labelling each one with the date and identifier for the NGT session. The final step in the process involved the researcher transcribing the items listed on the flip chart paper. Additional to the tally rankings undertaken during the NGT no further analysis of data was required.

6.2.4 Results from the nominal group technique
The NGT generated 49 ideas. The voting process resulted in ten priority areas (Table 6.4).
Table 6.4 Rank order of ten critical ideas

<table>
<thead>
<tr>
<th>Votes awarded</th>
<th>Idea</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>Clearer definition of nursing, the boundaries set by nurses</td>
</tr>
<tr>
<td>20</td>
<td>Research skills</td>
</tr>
<tr>
<td>20</td>
<td>Collaborating with members of the multi-professional team and other departments</td>
</tr>
<tr>
<td>19</td>
<td>Ability to use epidemiological and demographic information to plan care and change the service</td>
</tr>
<tr>
<td>19</td>
<td>Understanding of year 2000 child, not children and how they were in the past</td>
</tr>
<tr>
<td>18</td>
<td>Specialist training in area of work</td>
</tr>
<tr>
<td>17</td>
<td>High standards</td>
</tr>
<tr>
<td>17</td>
<td>Recognition and acceptance of professional status and accountability</td>
</tr>
<tr>
<td>16</td>
<td>Management and organisational skills</td>
</tr>
<tr>
<td>16</td>
<td>Equipment and knowledge of its use</td>
</tr>
<tr>
<td>14</td>
<td>Ability to write in a number of genres, e.g. reports, funding applications etc</td>
</tr>
<tr>
<td>13</td>
<td>Ability to assess, plan, implement, and evaluate care</td>
</tr>
<tr>
<td>9</td>
<td>Good communication skills</td>
</tr>
<tr>
<td>9</td>
<td>Environment suited to care for children and young people</td>
</tr>
</tbody>
</table>

Within the NGT participants referred to the need for a clearer definition of children’s nursing that would allow boundaries of practice to be set by nurses. They articulated specific skills that a children’s nurse would require, such as research, the ability to work as a team, management and organisation skills. They expressed the need for knowledge and understanding to be able to care effectively for children and their families. Alongside developing expertise, which was described as being important to be able to plan effective care, the ability to develop and maintain high standards of nursing care, and be efficient at communicating that care to others was also required. Ultimately, participants requested that in the future there would need to be recognition and acceptance of professional status and accountability. To provide quality care Ashworth and Morrison (1994) stress that the key areas of skill, knowledge and expertise need to be emphasised within a competence model that fosters holistic patient care. It would seem that even at this early stage of the research these key areas were beginning to be described by children’s nurses.
6.2.5 Trustworthiness of the data
By following the well-described steps of undertaking a NGT consistency was assured. Identical steps would be used if the process was repeated, however this could not guarantee the same results, even if the process was undertaken with the same participants. This has something to do with the time and context but more to do with an individual's ability to generate the same ideas in repeated NGTs. Neutrality was achieved through the facilitator and moderator controlling group processes, collecting ideas and not interpreting results.

6.2.6 Outcome from the nominal group process
The data from the NGT was used to produce the focus group questions. A group of nurse academics, facilitated by the researcher, undertook the challenging process using the top voted responses from the NGT to develop a series of questions. This involved grouping the priority areas from the NGT and agreeing themes. The focus of the questions was around the following:

- Role of the children's nurse;
- Perspectives on children's health care;
- The needs of children/young people in the future;
- Range of settings required to care for children/young people;
- Practical skills of a children's nurse;
- Process of acquiring knowledge and skills.

The discussion resulted in the development of four questions with relevant probes (Appendix III).

6.3 Focus groups with health care professionals
The origins of focus groups have largely been credited to the work of Merton (see Merton and Kendall 1946), however Kitzinger (1994) traces their use back to the 1920s (Bogardus 1926) but still acknowledges that their use was further developed by Merton in the 1950s to examine people's reactions to wartime propaganda. Since then focus groups have traditionally been used in market research, and have recently gained acceptance within the
field of social science (Morgan 1993a). The technique was originally developed in market research in reaction to the sample polling techniques which, provided lots of numbers, but, according to Basch (1987) failed to capture the richness of what was actually going on behind the numbers. Regardless of their origins there are numerous examples of their extensive use in many disciplines.

With roots in market research it is not surprising that the aim of focus groups is to gain an honest consumer perspective, while valuing individual views and concerns, with interaction within the group being fundamental (Kitzinger 1994). In nursing research focus groups have also attracted increasing attention, with the literature revealing intensity in their use only in the last ten years (Howard et al 1989, Nyamathi and Shuler 1990, Lankshear 1993, MacIntosh 1993, Millar et al 1996, Thornton 1996, Gulanick and Keough 1997, McElroy 1997 Clarke 1999). Other disciplines where the use of focus groups is fairly widespread include communication studies, education, and public health.

The process for undertaking a focus group and the rationale for use are detailed in Appendix II, with a summary of the rationale provided in Table 6.5 below.

**Table 6.5 Rationale for selecting focus groups as a method for data collection**

| ♦ Can be used to develop survey questions. |
| ♦ Can provide breadth and depth when using a follow-on survey. |
| ♦ Less time consuming than individual interviews. |
| ♦ Can gather broader data more quickly than individual interview. |
| ♦ Allows for and encourages participant interactions. |
| ♦ The researcher is able to check responses with group members to confirm or contrast opinion. |
| ♦ The researcher is able to probe answers and note group reactions to participant's opinions and views. |
| ♦ Strength of opinion, contradiction and argument can be revealed through interpersonal dialogue. |
6.3.1 The sample population

Sample size has been noted to be didactic stating that the group should consist of between 10-12 participants (Kitzinger and Barbour 1999). Market researchers now have a preference for six to eight participants as opposed to a previous optimum number of between eight and ten (Greenbaum 1998). Justification for reducing the size of the group is that it allows for different opinions to stimulate discussion, without making each participant compete for the time to talk (Morgan 1998). It must be noted that this number arises from texts that emanate from market research, the number stated would be considered too large for many sociological studies where samples are reported to be as small as three (Mitchell 1997, Green and Hart 1999). Krueger (1995) declares that the requirement to have between 10-12 participants is a myth; the nature of the study should dictate sample size. Krueger (1995) encourages a smaller size where the topic of discussion is complex or when participants have expertise on a topic.

Alongside the sample size, the criteria for membership into the group must also be considered. Participants in focus groups all share some common characteristics however the nature of the study will determine the make-up of the groups. Nyamathi et al (1990) suggests that selecting members on the basis of their common experience encourages discussion and interaction within the group. This is determined to be an intuitive rationale as there is little systematic methodological research to test this assumption (Knodel 1993). Homogeneity is only one element when deciding on participants. Knodel (1993) distinguishes between two types of defining characteristics, those that differentiate groups from each other (break characteristics) and those that are common to all groups (control characteristics). The former defines how subsets of different groups are defined, and the latter dictates the common uniform composition of a group (Knodel 1993). Clarifying these differences at an early stage enabled comparisons between the groups possible during the analysis stage. This approach to sampling was only used with the focus groups undertaken in the early stages of Phase I.
The eight focus groups undertaken in the early stage of Phase I used a network sampling technique where the researcher selected to use professional contacts to nominate potential participants (Burns and Grove 1997). The aim was to gather statements about the role of a children's nurse, and thus the sample needed to encompass a range of children's nurses as well as other health care professionals that they most often came into contact with (Table 6.6). In addition to which the researcher felt it important to include staff from the hospital who were currently involved in predicting how the future service should look, and this included hospital managers, nurse managers, and education staff. They are referred to in the study as 'predictors of the service' (Focus Group 6). A further group was made up of clinical nurses who had been involved in established groups whose aims were to give direction to the future role of the children's nurse within the hospital. As they had already given some considerable thought to the issue of the role of the children's nurse their developed thinking would add to the overall findings. They are referred to in the study as 'members of clinical project teams' (Focus Group 7). The final group included D and E grade children's nurses from a district general hospital (Focus Group 8). This group was included to balance the perceived specialist nature of the hospital where the researcher was undertaking the majority of the focus groups. The common characteristics were that they were all health care professionals who cared for children and young people. The break characteristics that defined the subsets were nurse or other health care professional, stage in professional career, experience and specific nursing role undertaken. These distinguishing features culminated in the establishment of 8 focus groups, see Table 6.6.

<table>
<thead>
<tr>
<th>Focus Group</th>
<th>Break characteristics</th>
<th>Contacted</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Student nurses</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Doctors and professions allied to medicine</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>F and G grade nurses</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>D and E grade nurses</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>Clinical nurse specialists</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>Predictors of the service</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>Members of clinical project teams</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>D &amp; E grade nurses (district general hospital)</td>
<td>8</td>
<td>5</td>
</tr>
</tbody>
</table>
Unlike the size of a focus group Morgan (1998) is less prescriptive about the number of groups required, stating that there is no hard and fast rule other than being flexible and focused on the desired outcome of the study. Initially in Phase I the technique was used to generate ideas and thus a number of focus groups were required to produce the wealth of data required. The more diverse each group is in relation to break characteristics, the more groups will be needed. Morgan (1996) recommends as a guide that most projects consist of four to six groups, after this data becomes 'saturated' and little new information emerges. Although in this study break characteristics fell into eight groups, they shared a common characteristic of all being health care professionals, the diversity of participants was not considered to be so great as to require multiple groups representing the same break characteristics.

6.3.2 The procedure
Prior to the focus groups the researcher piloted the questions with a group of nurse academics from the university. Focus groups are not "free-wheeling conversations among group members, they have a focus and a clearly identifiable agenda" (McElroy 1997 p146). Their success depends on the quality of the questions (Krueger 1994). In addition to the devised questions a brief outline introduction was prepared. The purpose of this was to provide background for the participants to ensure that the questions were set in the context of the study. This introduction also ensured that all the groups received identical information, additionally helping to guide the researcher, who took the role of moderator in some groups, and assistant moderator in others. The introduction statement was also piloted. No changes of either the questions or introductory statement were felt necessary.

Running the focus groups the researcher used the same format for each. Chairs were arranged in a circular position with the microphone placed on a low table in the centre of the circle. The group moderator sat within the circle, whilst the assistant moderator was seated slightly outside of the group.
Once all participants had arrived the moderator read through the introductory statement before beginning the audio taped discussion. The introductory statement introduced the role of the second moderator, emphasising written notes as an invaluable supplement, particularly in the case of potential tape recorder failure. This role was clarified as being non-participant, recording observation of the group and providing a summary at the close of the discussion. Anonymity was clarified, and although first names were used through the discussion the assistant moderator assigned numbers to each participant. These numbers were used for identification in the transcripts.

The role of moderator was also clarified at this point. In all of the focus groups the researcher chose to take a structured approach to the role in relation to the questions and group dynamics. For each group there was a standard series of questions and probes, however participants were also encouraged to follow a line of thinking that arose from their discussion as opposed to only focusing on the pre-determined questions. In controlling group dynamics the moderator encouraged all participants to contribute, and used body language as well as direct questioning to draw participants in who gave the impression that they had something to say. This relied on well-tuned observation skills.

Each group lasted approximately 90 minutes. Focus group 2 and focus group 5 were only 70 minutes due to the late arrival of participants. At the end of each focus group the assistant moderator offered a summary of the discussion. This provided an opportunity for participants to add any final comments or to clarify any points made, prior to confirming that the summary was complete. Verification by the participants was one of the systematic procedures introduced to improve data analysis (Morgan 1993a). Two other processes were added to improve this. Following each focus group the moderator and assistant moderator debriefed, continuing to record their impressions in terms of how the group proceeded, types of contributions made, the content of the discussion, particular noteworthy quotes, comparison to previous groups, as well as an evaluation of their respective roles. Secondly, the final transcripts were sent to a randomly selected
participant from each focus group, a technique known as ‘members check’ (Morgan 1993a).

All tapes were copied and the originals sent to be professionally transcribed.

6.3.3 Data analysis
Data from all of the eight focus groups were handled in the same way. This involved labelling each cassette tape with the date, time, location and focus group identifier. The transcribed material was labelled and photocopied. The moderator notes, contained in one notebook, were also labelled. The researcher stored all cassette tapes, discs and hard copy of transcribed material and the moderator notebook.

Carey (1995) states a range of techniques is available to analyse data, acknowledging that no single method of analysis has gained universal approval: approach taken will depend on the circumstances and desired outcome. A number of different approaches were used in this present study, reflective of the required outcome. At this preliminary stage, analysis of data resulting from the focus groups was undertaken in order to develop the questionnaire for the Delphi survey. For this purpose the researcher chose to use a combination of different approaches.

The process began by reading the transcripts at least twice and making notes. One of these occasions entailed listening to the tape at the same time in order to fill in gaps in the transcript as well as pick up on any nuances. Sadly due to background noise the transcribers had had some difficulties in producing a perfect text. Listening to the tapes was therefore crucial and enabled the researcher to re-visit the experience and be reminded of the social context of each group. Also useful were the moderator's notes, some more detailed than others, and the discussion between the moderators which had been taped (and thus transcribed) after the focus group had concluded.
In the first instance an overview grid was constructed which provided a descriptive summary of the content of the discussion (Knodel 1993). This was used to establish group consensus on issues in order to distinguish individual views expressed in spite of, or in opposition to, the group (Kitzinger 1995). The grid was constructed with questions asked on one axis and focus group session identifier on the other. As well as giving a brief summary of the content, the cells included information such as extent of consensus, number of participants expressing that opinion, overall impression and quality of information gained, and noteworthy quotes. In addition to the overview grid, based on the transcripts, particular words and phrases were listed and grouped together on the basis of similarity. The concepts expressed were listed in the margin of the transcript. These concepts were then grouped into categories by their similarity. The categories were evaluated across all the transcripts to determine the range as well as dominant themes. The overview grid was also useful in identifying emerging themes.

This process part mirrored the approach taken by O'Brien (1993). This was felt to be appropriate as the outcome of developing a survey from data resulting from focus groups was the expressed aim in both studies. As in O'Brien's study, the frequencies of themes were noted, use of particular words and phrases were also noted, and any new or divergent ideas emerging were highlighted. The overview grid, not used by O'Brien, was added in order to facilitate familiarity with the content and provided further insight into the level of discussion, as well as aiding inter-group comparisons. The concluding comments from moderators was also a useful addition as the discussion recorded first impressions, and a general discussion of the focus of the discussion, which was useful when considered alongside the overview grid.

6.3.4 Results from the focus group data
A brief summary of the content of the focus group discussions was revealed using the overview grid. It was possible to see at a glance the main focus of the discussion in each group and made possible inter-group comparisons. Focus group 5 is presented in Table 6.7 as an example of the results contained in the grid.
### Table 6.7 Example of section from the overview grid

<table>
<thead>
<tr>
<th>Focus group questions</th>
<th>Focus group 5</th>
</tr>
</thead>
</table>
| 1 Reflecting on your experiences how do you think children's health care has changed over the last 5 years? | ✦ Concern regarding focus of family centred care, now felt to be pressure on families to deliver care in hospital  
✦ Partnership/dumping assumption made by one participant  
✦ Felt basic education did not prepare children's nurses for their role  
✦ Preceptorship expensive, not creating people fit for purpose  
✦ The pressure to keep on adding more courses was not the answer  
✦ 'lots of gaps being plugged at the moment, like a plaster over a wound'  
✦ Sicker children in hospital  
✦ Increase in day cases  
✦ Lower threshold which parents seek help for children's health  
✦ Consumer demand greater  
✦ 'shifting case mix'  
✦ Discussion dominated by 4 participants |
| 2 Having reflected back can you now think ahead into the future, how will children's nursing need to change to meet future health care needs? | ✦ Service/education divide explored  
✦ Tension here between participants  
✦ Need for community and outreach work  
✦ Curriculum development did not encompass all care settings  
✦ Worry regarding service driving education  
✦ 'define what we need and tell the educators'  
✦ Debate about care provided at the hospital being too specialist and therefore provides nurses for a different role  
✦ 'you work with what we produce instead of defining what we need' |
### Table 6.7 Example of section from the overview grid (continued)

<table>
<thead>
<tr>
<th>Focus group questions</th>
<th>Focus group 5</th>
</tr>
</thead>
</table>
| 3 Can you be more specific and describe what practical skills a children's nurse of the future might need? | ✦ Need different skills in different areas  
✦ Difficult to meet general and specialist skills in one course  
✦ Tension between service participants and educationalists in terms of what should be provided  
✦ No consensus regarding skills required  
✦ Just make nurses more transferable  
✦ Agree need training for competence  
✦ Looking for leaders  
✦ Some negative participants |
| 4 How can nurse education help prepare children's nurses to advance their nursing practice? | ✦ Need better relationship between service and education  
✦ Who does what not clear, what is the role of clinical staff in university education?  
✦ Where should education take place  
✦ Practitioners should assess practice  
✦ Need to recognise ward sisters as role models  
✦ ? about what we are preparing nurses for  
✦ Thought that education might look very different in the future  
✦ Need life-long progression  
✦ Develop autonomous practitioner  
✦ Remained very much in the present time, focused on own personal agendas |

The emergent themes were:

✦ Context of care;
✦ Context of nursing work;
✦ Role expansion;
✦ Knowledge base of nurses;
✦ Role of nurse education;
✦ Lifelong learning.

These themes emerged from reading and coding of the transcripts. They were evaluated across all the transcripts to determine the range as well as dominant themes. These were compared with results contained in the overview grid.
**Context of care:** over the years children’s health care has seen many changes. When considering some of these changes a number of challenges facing children’s nurses in meeting future health care needs were identified by participants. They reflected on a variety of potential health care settings for which children’s nurses would require preparation, including day care, ambulatory care, and community. In addition it was felt that children’s nurses might need to be more flexible, having skills that are transferable enabling them to move easily between health care settings. Discussion across the groups was very similar. Focus group 3 (F and G grades nurses) concentrated their discussion on changes that had affected the role of the children's nurse, such as being 'more busy with sicker children', 'less staff' and therefore 'less time to play with children'. There was consensus between all the groups that children's nurses were less prepared for their role, less confident in hands on care but more knowledgeable overall.

Participants suggested that the **context of children’s nursing work** had continued to evolve to meet the changes that have occurred in children’s health care; meeting needs as they emerge with no real strategic planning. Care had become more complex, associated with an increased use of technology; the context of nursing work had changed. Participants referred to the notion of ‘fit for purpose’ and reflected on the range of nursing roles now in evidence, with the potential for more, for which educational preparation would be required. There was a suggestion that any new curriculum would need to be structured around clearly articulated and well-defined competencies of the children’s nurse with a clear education pathway reflecting prospective roles in education, management and clinical practice.

Other changes referred to by participants encompassed the notion of **role expansion.** Participants identified the need to respond appropriately to societal changes, however, they recognised that this did not always mean that nurses would passively comply with each and every call for changes to their role. The scope of practice for nurses was described as having a flexible boundary. The participants addressed role expansion that included the
acquisition of new skills such as cannulation, nurse prescribing and behavioural therapy, previously considered to be in the domain of medicine or other profession. The need for nurses to determine their repertoire of caring and technological skills was clearly articulated; participants considered an expanded role in the context of providing holistic care and not as a series of delegated medical tasks.

A knowledge base for practice was seen to be underpinning the described role. Nurse participants were able to describe the practical skills a qualified children's nurse of the future might need. An expansion of the knowledge base of nurses was considered to be essential to prepare children’s nurses for a potentially expanded role. Participants referred to nurses having a broad base from which they could choose to specialise; reference was frequently made to basic and specialist knowledge and the ability of nurses to apply their knowledge to practice. Knowledge that underpinned and informed all areas of current practice with the potential to advance nursing practice was considered to be relevant within post-registration education. For participants knowledge and understanding and thus effective application to practice were considered important elements in describing the children’s nurse.

The role of nurse education was clearly recognised to be important in preparing children’s nurses to progress in their nursing practice. Participants acknowledged, however, that not all knowledge could be formally taught. Those preparing children’s nurses must therefore consider a closer working partnership between education and the practice setting. The well-known phrase of the theory/practice gap was revisited with participants describing explicit examples of partnership between clinical practice, education and training. Participants discussed the most appropriate setting for defined learning and commented on the need to maximise the use of reflection and experiential learning within any education process.

A process of life-long learning was highlighted within the focus groups. Participants described a need to make explicit the outcome of any education process. A continuum of
role development was considered to be important with an education framework established for all nursing roles.

6.3.5 Trustworthiness of the data
In designing focus groups Morgan (1996) distinguishes between decisions that need to be made about the research project as a whole (project-level design issues) and those that apply to the conduct of a group (group-level design issues). Both can affect the quality of the data produced. Project-level design issues include standardisation of questions, sampling and number of groups. Balanced against the need to standardise questions to allow for comparability between groups is the need to allow sufficient freedom for the groups to explore issues around the subject area. The disadvantage of standardisation is that the researcher must live with the questions asked. The researcher took the 'middle ground' using pre-determined questions but allowed participants to explore issues around the questions. The researcher felt confident with the questions, as they had been developed from previous data. This resulted in the same questions being asked in each group, with additions in each group depending on the direction taken by participants. Comparing data between groups was possible. Consistency, however, cannot be confirmed, as the social context in each group was different. Sampling and the number of groups were directed by the needs of the study. The use of a network sampling technique may have introduced bias in relation to the nature of participants volunteered.

Group-level design issues include level of moderator involvement and group size. The achievement of successful interactions was not considered by the researcher to be easy at the outset and therefore structures to facilitate the process were put in place. The researcher used a more structured approach in the role of moderator with regard to asking questions and managing group dynamics. Both approaches limit the opportunity to truly explore issues with participants but maintain consistency within and between groups.
Three methods were introduced to ensure accuracy of information, members check, involving a second moderator to take notes and provide a summary at the end of each group, and debriefing at the end.

6.3.6 Outcome of focus groups with health care professionals
As a result of this process of data analysis the Delphi survey questionnaire was structured around the headings, which represented the emergent themes highlighted in Section 6.3.4.

6.4 Delphi survey
The Delphi technique is a survey method of research that aims to structure group opinion and discussion using a multi-stage process. The Rand Corporation in California first developed the technique in the 1950s in an attempt to eliminate interpersonal interactions in decision-making (Dalkey and Helmer 1963). At this time the originators of the process reported a lack of reliability for the resulting opinion consensus. They concluded their experiment by suggesting that this may change over time as the use of the technique by other experts increases, resulting in the opinion consensus being acceptable where empirical evidence is lacking (Dalkey and Helmer 1963). This has proved to be the case as the technique is now used primarily to reach a consensus in the absence of a recognised body of knowledge or where there is a desire to gather opinion and initiate debate (Goodman 1987).

A useful definition is one given by Reid (1988), who believes the Delphi “to be a method for the systematic collection and aggregation of informed judgement from a group of experts on specific questions and issues” (p232). This approach is viewed by Linstone and Turoff (1975) more as an art than a science. The results of a Delphi exercise often beheld more in the nature of what Sackman (1975) called a 'structured brainstorming session', and Pill (1971) called 'picking the brains of a group', than a rigid positivistic scientific exercise (McKenna 1994). Its respectability as a pure research approach has clearly come into question. But Reid (1988) defending the Delphi stated it was never meant to be used as a scientific instrument. It can be concluded that if used for the purpose it was designed for,
that is "in situations which do not lend themselves to precise analytical solutions, or when a problem requires the contribution of thoughts from a group who cannot meet effectively face to face" (Dodge and Clark 1977 p58), the technique has a recognised role within the research arena. As Pill (1971 p62) states "the output is still, at best, an opinion, and must be treated as such". If that is what is required. This was the case in the present study and therefore the Delphi survey was the appropriate technique to choose. Reid (1988) points out, even if more scientific approaches were available to meet the aims of the research would these alternative approaches have the same high acceptability with the professions that the Delphi appears to have.

The process for undertaking a Delphi survey and the rationale for use are detailed in Appendix II with a summary of the rationale provided in Table 6.8 below.

**Table 6.8 Rationale for selecting Delphi survey as a method for data collection**

| ♦ Useful where there is a lack of empirical data. |
| ♦ Can facilitate 'grassroots' involvement through a 'bottom-up' approach. |
| ♦ Used to elicit subjective judgements and generate consensus opinion. |
| ♦ Avoids face-to-face contact, minimising cost and time where geographical spread is required. |
| ♦ Panel members have time to consider their responses. |

6.4.1 The sample population

The most difficult question when planning to undertake a Delphi survey is to determine the basis on which to include members on the panel (Duffield 1993). Strauss and Zeigler (1975) recommend using panels of experts for obtaining information or data. It is this use of so called ‘experts’ that is consistently criticised in the design of studies (Sackman 1974). The question of how an expert is defined remains largely unresolved and variously interpreted (Duffield 1993). Bond and Bond (1982) maintain that unlike other professions, no clearly identifiable clinical expert in nursing exists. It may therefore be more appropriate to follow Goodman’s (1987) suggestion to recruit individuals who have
knowledge of a particular topic and who are consequently willing to engage in discussion upon it without the misleading title of ‘expert’. What would seem to be of more importance is that the criterion for inclusion onto the panel is clearly specified in order to increase content validity (Goodman 1987). Yet Williams and Webb (1994) argue that this is rarely specified in reported studies. As the critique by Reid (1988) confers, decisions regarding the sample often appear arbitrary, with statements regarding professional role, length of experience and grade considered to be sufficient. She identified only one study that had used a sampling technique (Farrell and Scherer 1983).

Regardless of this, studies do seem to be deliberate in their choice of panel members, basing inclusion on participant's knowledge, professional experience, educational preparation, interest, willingness to devote time and energy to the study (for example Bond and Bond 1982, Hitch and Murgatroyd 1983, Proctor and Hunt 1994). Thus they are selected according to the needs of the study. They also meet the principles of a qualitative sample which Morse (1991 p127) describes as "appropriate - informants selected who can best meet the informational needs of the study, and 'good informant' - one who is articulate, reflective and willing to share with the interviewer".

In an attempt to avoid such criticism the criteria for inclusion onto the panel of this study was made explicit at the start. Reflective of the needs of the study nurses recruited fulfilled the following criteria:

♦ Caring for children or young people;
♦ From a range of clinical settings, hospital and community;
♦ Employed in either clinical practice, education, research, management/policy making;
♦ Known to express a view, or an interest in the issue being examined;
♦ Represent a geographical spread throughout the four UK countries.

There is no agreement regarding the size of a panel as Reid's (1988) critique of the Delphi identifies, listing 13 published studies where the sample size varied from 10-1685. A
network sampling technique was used to identify the panel, as described by Burns and Grove (1997). This approach to sampling takes advantage of social networks, and in this case professional networks. Once the panel criteria were identified colleagues of the researcher from the university were individually responsible for suggesting names of potential recruits.

One hundred and six nurses were identified using this process, all of which were contacted by letter requesting their involvement in this part of the study (Appendix IV). Out of this initial contact, ten failed to reply and one responded that she was unable to participate due to other work commitments.

6.4.2 The procedure
The Delphi questionnaire was divided into six sections. The questions were grouped in sections according to themes developed from the focus groups. The number of questions or statements in each section varied. All the questions included a five point Likert scale, with a rating of one meaning strongly disagree and a rating of five meaning strongly agree. This scaling technique was used in an attempt to minimise the influence of the midpoint, yet still allowing participants to select undecided while also encouraging diverse expressions of opinions (Farrell and Scherer 1983). In each section there was space for individual comment, with space allocated at the end of the questionnaire for final comments.

As is true with any technique, the results are only as good as the tools used, of importance in the Delphi is that questionnaires are clear and unambiguous (Sumsion 1998). Consequently, the questionnaire was piloted with five children’s nurses who reflected the determined sample encompassing clinical practice, education, research, and management/policy makers. The pilot was introduced to test the questionnaire and not the process, therefore to save time the five nurses were invited to attend a ‘one off’ meeting at the university. These nurses were asked to complete the questionnaire independently, this was then analysed and the median score calculated. The questionnaires were returned to
the pilot group followed by valuable discussion of the content and the wording of the questionnaire. Clarification and re-wording of some questions followed in addition to simplifying the instructions regarding the completion of the questionnaire and the respondent’s role in the process.

Discussion took place at this time in relation to the meaning of consensus. High face validity and high concurrent validity will be achieved by the Delphi when consensus is achieved in successive rounds. And yet, Williams and Webb (1994) note that consensus is poorly explained in many studies with many authors referring simply to a ‘high’ or ‘low’ level of consensus. The outcome of such studies is open to criticism, as it would be difficult to repeat the enquiry and compare consensus levels. Williams and Webb (1994) suggest that a more reliable method would be to assign a numerical level of consensus at the outset of a study. The level used will depend upon the sample numbers, the aim of the research and resources available (Hasson et al 2000). Drawing on Green et al’s work (1999) it was agreed for this study that where 80% of responses indicated either 4 or 5 (agree or strongly agree) or 1 or 2 (strongly disagree or disagree) this would indicate consensus. The existence of consensus however does not necessarily infer that the correct answer has been found (Hasson et al 2000) only that group opinion has been guided towards a final decision. The results of a Delphi survey merely help to identify areas that one group of respondents considered important in relation to the topic.

A questionnaire of six sections containing in total 41 questions was circulated to 95 participants (see Appendix V for a sample page). A letter accompanied the questionnaire, with three weeks given as the response time. A reminder notice was sent to any non-responders. Surveys were coded to allow identification of participants for the second round. Out of the 95 questionnaires distributed 87 were returned, a response rate of 91%.

Respondents were asked to indicate the degree of agreement or disagreement with each question on a scale of 1-5. Using Excel 97 software package, the responses were analysed to determine the median score for each question. Where 80% or more scored 4 or 5, this
indicated consensus. Where consensus had not been reached in round 1 these questions formed the questionnaire for round two, with further clarification of each question provided.

In addition, respondent’s comments were analysed by two researchers for the main themes and patterns. This resulted in the development of ten new questions. Round 2 therefore consisted of a new questionnaire, which was presented in two parts.

Part one-included all the questions from round 1 where consensus had not been reached. These questions were arranged using the same question numbers as previously, with an extra statement offering further clarification for each question. A statistical summary of responses in round one was provided in addition to the respondents own previous score. Space was provided for further comment.

Part two-included new questions generated from the comments. In addition, the appendix included all the questions from round one, which had agreed consensus.

Out of the 87 questionnaires distributed 84 were returned, a response rate of 96%. One reminder letter was sent. The questionnaires were again analysed by two researchers.

Respondents were asked to indicate degree of agreement or disagreement with each question. In the section containing the non-consensus questions from round 1 respondent's were asked to consider the median score and their individual previous score when making their decision. Consensus was agreed in all of the sections in part two, that is all of the new questions. In part one consensus was not achieved, however it must be noted that two respondents failed to return part one, and eleven respondents failed to complete any of the questions in part one. As agreed at the start of the study only two rounds were undertaken.

6.4.3 Data analysis
The questionnaires were identified according to round, and collated separately.
Data analysis was undertaken in two parts. Firstly the summary statistics from round one and two were re-examined and summary tables of data were produced. In round two questionnaires were analysed to identify if/where respondents shifted in their views from round 1. In addition, analysis highlighted any respondent who scored 2 or 1 (disagree or strongly disagree) noting also their comments. The aim of the analysis here was to quantify group characteristics by using descriptive statistics to describe the group as a whole and what it was tending to do. This is referred to as measure of central tendency, where statistics are used to express the most typical or average score in a distribution (Polgar and Thomas 1998). The questionnaires had incorporated Likert categories scaled from 1-5. These five discrete categories resulted in interval level data: data that has a value on a continuous scale but where there is no zero point (Black 1999). The questionnaires from both rounds were analysed by two researchers using Excel 97 to determine the median score for each question. The median score is appropriate to use for interval data that is not normally distributed. The median is the score which divides the distribution into half, that is, it is the number that divides the group into two, with half falling above this value and half falling below (Black 1999).

The comments made on the form generated a rich representation of participant’s views. These encompassed generalist and specialist settings and a range of comments from hospital to community practice. Respondent’s comments were analysed from both rounds. There was clearly a wealth of important data here, which was also to be represented in the analysis. Data were analysed using as a guide the steps identified by Strauss and Corbin (1998) and Dey (1993). This involved the following:

♦ Open coding and labelling phenomena;
♦ Creating categories;
♦ Assigning categories;
♦ Splitting and splicing to create subcategories;
♦ Axial coding.
6.4.4 Results of the Delphi survey

Group opinion and an aggregation of informed judgements from a group of children's nurses on the future direction of clinical practice emerged. Summary statistics and analysis of comments revealed perceptions, concerns, and uncertainties surrounding the role of the children's nurse. As a method used to refine statements about the present and future role of the children's nurse, the Delphi survey contributed findings about the context of care, context of nursing work, the expanded role of the nurse, knowledge required for practice, the role of nurse education and life-long learning in preparing nurses for their role. At this point in the thesis a synopsis of the findings will be provided with the detail appearing in Appendix VI and VII.

The findings confirmed data from the focus groups and when considered together (summary statistics and analysis of comments) the results offer a clear image of the developing role of the children's nurse, however this was often only considered within the context of present day. Respondents’ interpretation of the role was, on the whole broad. Clearly, the imagination to predict a view of a future role was difficult for many of the respondents. This may reflect the uncertainty surrounding child health care added to some trepidation in predicting what the future may look like.

Respondents were, however, able to consider the needs of children/young people and their families in their description and articulation of care settings. In terms of the health care setting, clearly it was felt that there would always be a need to admit children to hospital. However, appropriate early discharge would become more of a reality resulting in an increased need for children’s community nurses. In addition, nurses skilled to deliver care in an ambulatory setting, investigation units and day care facilities will be required. These settings already exist in some Trusts throughout the four countries, however, they are not yet the norm, and are therefore not available to all families. The need for a closer relationship between the primary health care team was felt to be required for this change of practice to have explicit benefits for families. Efficient liaison will be a necessity where children/young people receive their care in a number of different settings. Furthermore the
principles and practice of shared care will be essential if the most is to be gained from specialist services. Respondent's recognised that changes in health care delivery were often determined by external forces and trends, not always focused explicitly on the needs of children, therefore children's nurses were seen to have a future role in contributing actively to decisions concerning the suitability of the setting in which children/young people are cared for.

Although reference was made to the structure of a climbing frame for mapping career development, a pathway that would lead a children’s nurse, from initial registration, on their continuum to advance nursing practice remained elusive. To describe an end-point sounds terminal and fails to capture the notion of life-long learning. However to be able to describe a point or points to aim for in the career of a children’s nurse would be advantageous. What seemed to be revealed in the Delphi survey was a series of leaps not a continuum, with signposts along the way difficult to visualise and therefore grasp. The issue that there would be a generalist and specialist career pathway for children's nurses remained undecided. A clear definition of general and specialist practice was not articulated by respondents other than some concern regarding the development of a new hierarchy that could cause disintegration of professional cohesiveness.

Respondents clearly welcomed an opportunity to shape and clarify education and training that could influence the evolving role of the children’s nurse. However, the optimum way to prepare children’s nurses of the future proved difficult to articulate. Nonetheless the process of describing the essential role and distinct qualities of a children’s nurse has begun, thus offering some direction to prospective development. Fear of losing the identity of the children’s nurse was expressed, and suggests a real need to describe the professional roles and core values of children’s nurses. Nationally agreed core competencies, outcomes of nursing care that distinguish what nurses do from what others do (types of nurses, other health care professionals as well as non-trained carers) was the main conclusion reached by respondents.
6.4.5 Trustworthiness of the data

Although specifying the use of the term 'expert' in relation to a study can increase content validity, in terms of reliability, there is no evidence to suggest that the responses of experts are different to those received from a random sample (Williams and Webb 1994). Reid in 1988 maintained that no study has been reported that compares two different panels selected using the same criteria. A more recent study by Duffield (1993) however, has done just that. She undertook to compare results from two expert panels using a Delphi survey when identifying the competencies expected of managers. Although the findings report that the results of the first Delphi were validated by the second panel with 93% of the competencies retained or excluded by both panels, Duffield (1993) cannot confirm that this result reflects the reliability of the technique. It may simply reflect a lack of disagreement on the topic. The question of replicability still stands.

One of the reported limitations of the Delphi is that of a poor response in successive questionnaire rounds (McKenna 1994). Reid (1988) notes that the drop out rate is higher with larger panels. Therefore the validity of the results is subject to response bias (Williams and Webb 1994). The concern related to poor response rates is a real issue and in turn can affect the final outcome where attrition rates may alter the range of opinion from a professional group, bringing into question the validity of the results (Beretta 1996) and as a consequence the generalisability of the results (Reid 1988). In this study follow-up letters were used in order to minimise response bias, this resulted in the second round achieving a response rate of 96%.

6.4.6 Outcomes from the Delphi survey

Data were combined from the two rounds; statistical analysis as well as analysis of comments was possible. This resulted in descriptions of roles and boundaries of a children's nurse, discussion regarding the present and future context of care and care settings, as well as revealing implications for education and training of nurses, and forecast changes in clinical practice. The Delphi survey proved to be a useful method to seek the opinion, aggregate responses and reach a consensus about the future direction of the
practice of a children's nurse, and to begin to map the defining features of who a children's nurse is and what they do.

The Delphi survey was developed around broad questions about the role of the children's nurse, questions revealed initially in the focus groups and judged to necessitate greater discussion. The avoidance of including specifics and asking respondents to consider predetermined competencies gave respondents the opportunity to think freely and to include all aspects of the role that avoided a focus on 'tasks'. Thus responses encompassed the context of the role, education preparation, knowledge and attributes from which relevant features could be extracted for the development of competencies.

6.5 Competency development from focus groups with health care professionals
6.5.1 Secondary data analysis
The outcome of the analysis expected at this stage was a list of clinical competencies. In order to reveal these competencies the researcher sought an approach to analysis that would reveal patterns within the data. Faced with numerous pages of transcripts the researcher required a method that would reduce the data into meaningful segments, allowing for frequency of issues to be noted (pattern detection), as well as facilitating comparisons and explaining differences across the eight focus groups (interpretation). Initially content analysis was rejected due to the presumed nature of it being solely an approach to counting that results in a simplistic description of data (Cavanagh 1997). However, Morgan (1993b) details an approach that makes explicit the distinctions between quantitative and qualitative approaches to content analysis; an approach that was more suited to the needs of this study.

Krippendorff (1980 p21) defines content analysis as "a research technique for making replicable and valid inferences from data to their context". Equally, Weber (1990 p9) defines content analysis as "a research method that uses a set of procedures to make valid inferences from a text". There are no universal rules about how to use content analysis (Weber 1990), as the method has evolved over time to incorporate refinement of the
approach (Cole 1988). However, central to this approach is the representation, through analysis, of words into fewer content-related categories (Cavanagh 1997). Morgan (1993b) draws a clear distinction between quantitative and qualitative approaches to content analysis:

*Quantitative content analysis*
- Begins with predetermined codes;
- Locates these codes through mechanised search procedures;
- Treats the resulting counts as all that needs to be known about the data.

*Qualitative content analysis*
- Uses codes that emerge from the data;
- Applies these codes through careful readings of the data;
- Treats counting as the detection of patterns to guide the further interpretation of the data.

In the present study content analysis was used to note the frequency an idea appeared, thus revealing its measure of importance or emphasis given by participants in the focus groups. To facilitate this process, predetermined codes were used to provide a means of describing the phenomenon. In this case the codes used were derived from the literature, namely the three perspectives of competency debated by Ashworth and Saxton (1990):
- A description of human activity;
- A personal attribute;
- An outcome action.

The use of predetermined codes was not a characteristic of qualitative analysis, however this was considered to be helpful in locating patterns in the data (see Appendix VIII for an example of a coded transcript). Thus a combination of qualitative and quantitative approaches to content analysis was used. Once patterns had been located a further examination of the data to explore the reasons why these patterns occurred was undertaken. The steps of data analysis are found in Table 6.9.
Table 6.9 Steps taken to develop list of competencies

<table>
<thead>
<tr>
<th>Steps</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed the coding scheme:</td>
<td>Cole (1988) was particularly helpful in detailing these steps.</td>
</tr>
<tr>
<td>♦ Recording unit</td>
<td></td>
</tr>
<tr>
<td>♦ Categories</td>
<td></td>
</tr>
<tr>
<td>♦ Context unit</td>
<td></td>
</tr>
<tr>
<td>♦ Enumeration unit</td>
<td></td>
</tr>
<tr>
<td>Read transcripts and listened to tapes</td>
<td>Useful to listen to tapes at least once to ensure accuracy of transcript and to remember discussion and debate that took place.</td>
</tr>
<tr>
<td>Coded data using pre-determined codes:</td>
<td>Time consuming process that required a significant amount of concentration. The outcome action's were the most difficult to identify (Appendix VIII).</td>
</tr>
<tr>
<td>♦ Human activity</td>
<td></td>
</tr>
<tr>
<td>♦ Personal attribute</td>
<td></td>
</tr>
<tr>
<td>♦ Outcome action</td>
<td></td>
</tr>
<tr>
<td>Descriptors highlighted within the transcripts</td>
<td>This required a consistent approach; the researcher chose to highlight a descriptor only the first time it appeared in the text, as it was the frequency descriptors appeared across groups and not in groups, which was being noted.</td>
</tr>
<tr>
<td>Descriptors retrieved and filed under focus group session identifier</td>
<td>These were retrieved manually, reflective of a qualitative approach, and re-typed (Appendix IX).</td>
</tr>
<tr>
<td>Descriptors compared between focus groups, noting frequency and emphasis</td>
<td>Possible to combine a number of the descriptors where meaning was the same. Possible to identify different emphasis between the groups.</td>
</tr>
<tr>
<td>Descriptors indexed on cards, and linked according to similar features</td>
<td>Opportunity to think creatively about the data, and to ask the data questions in order to make links and explore why these patterns occurred.</td>
</tr>
<tr>
<td>Descriptor cards grouped and categorised, the categories recorded as competency statements</td>
<td>Another opportunity to ask the data questions to form categories. Process repeated by an independent researcher (Appendix X).</td>
</tr>
</tbody>
</table>

6.5.2 Results
Coding and linking the data (outlined in Table 6.9) enabled the researcher to abstract features that were most salient for the purpose (Dey 1993): that is the construction of a list of competencies. The number of descriptors retrieved from the data using the
predetermined codes varied, and was reflective of the quality of the information as well as the level of discussion between participants (Table 6.10).

Table 6.10 Number of descriptors from each focus group

<table>
<thead>
<tr>
<th>Focus group</th>
<th>Number of descriptors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>82</td>
</tr>
<tr>
<td>2</td>
<td>24</td>
</tr>
<tr>
<td>3</td>
<td>67</td>
</tr>
<tr>
<td>4</td>
<td>49</td>
</tr>
<tr>
<td>5</td>
<td>32</td>
</tr>
<tr>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>7</td>
<td>39</td>
</tr>
<tr>
<td>8</td>
<td>20</td>
</tr>
</tbody>
</table>

The researcher considered the counts to ask questions of the data about 'what' and 'how many'. Focus group 1 (Child Branch students) produced the most descriptors, 82 in total. It was the most animated of the discussions, even though there were only four participants. Focus group 2 (Professions Allied to Medicine) produced the least number of descriptors, 24 in total. Here again there were only four participants, the difference here was that they were more or less strangers to one another. Discussion between participants had been minimal, the moderators needed to use all their skills to maintain momentum and encourage discussion between participants. A similar number of descriptors were retrieved from focus group 8 (recently qualified RN [Child Branch] from District General Hospital), 20 in total, however in contrast to focus group 2, the discussion in the group had been animated with a level of debate between participants. The lack of a typed transcript and a poor quality tape failed to provide evidence of this, the researcher had to rely on the notes taken by the second moderator. Although these were quite detailed they were not an equal replacement for material lost.

Overall, the number of descriptors used to identify human activity greatly outnumbered descriptors for personal attribute and outcome action. This was not surprising, as the nature of the questions had directed the discussion towards describing practical skills.
Notwithstanding this direction, participants in all groups reflected on personal attributes when describing their perception of the role of the children's nurse. In order to make comparisons between the focus groups the highlighted descriptors were retrieved manually and re-typed (see example in Table 6.11).

<table>
<thead>
<tr>
<th>Descriptor</th>
<th>Human Activity</th>
<th>Personal Attribute</th>
<th>Outcome Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advise</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broad skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confident</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Counselling skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharge patients</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>General skills</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Give IVs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gives family nursing</td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Holistic</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Observation skills</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Practical skills</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Research skills</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Resource</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Supervise</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support nurses from DGHs</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Teach</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Uses knowledge</td>
<td></td>
<td></td>
<td>*</td>
</tr>
</tbody>
</table>

Retrieval and alphabetising of the data bits enabled the researcher to note frequency of descriptors at a glance. The researcher next considered counts in order to ask the data questions about ‘why’ and ‘how’. Although there were many similarities between the
groups, on the whole descriptors identified reflected the role and experience of the participants. For example, the descriptors 'leadership', 'management', 'mentoring', and 'maturity' were only found in focus group 5 (predictors of the service). This group consisted of managers and educationalists, who it may be argued might be most interested in describing future leaders and the skills they would require. In focus group 1 (Child branch students) descriptors centred around the role of direct care giver, and the complexities of balancing caring and technical aspects of the role. Their discussion reflected their current role and experience. Focus group 6 (Clinical Nurse Specialists) were the only group who referred to 'support nurses from DGHs', as the only group interviewed who currently were directly involved in outreach this was specific to their role. In focus group 2 (Professions Allied to Medicine) discussion centred around children's nurses being the bridge between families and the multi-professional teams, they described activities such as, 'translate information for families', 'dialogue with medics' and 'information to families'. These activities would be considered important to facilitate their own roles.

A number of descriptors appeared consistently in the focus groups with children's nurses, 'autonomous', 'communication skills', 'confident', 'discharge patients', 'holistic', 'give IVs', 'increased use of technical skills', 'learn by experience', 'negotiate with families', 'research based practice', 'support families', and 'teach junior staff'. These descriptors reflected activities both of the current and future roles of the children's nurse, and clearly define what children's nurses do.

The descriptors that resulted from the process of combining data from all the focus groups were indexed on cards and linked according to similar features. It was at this point in the data analysis that the researcher introduced a level of interpretation: as such the data was opened up to facilitate a level of interrogation, a process referred to by Coffey and Atkinson (1996) as complication. The process of linking involved identifying formal relationships between the descriptors, observing for similar and dissimilar features. These
features brought descriptors together and thus categories were developed (see Table 6.12 for two examples).

Table 6.12 Two examples of the outcome of linking and categorizing descriptors

<table>
<thead>
<tr>
<th>Category</th>
<th>Descriptors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undertakes effective and ongoing clinical assessment of child/young person</td>
<td>♦ Intervenes  ♦ Prescribing investigations  ♦ Examines patients  ♦ Monitoring skills  ♦ Observation skills  ♦ Takes histories  ♦ Diagnostic skills  ♦ Clinical assessment skills  ♦ Specialist skills</td>
</tr>
<tr>
<td>Takes an active role in professional development</td>
<td>♦ Life-long learning  ♦ Keep up to date  ♦ Learns through doing  ♦ Experiencing practice  ♦ Participates in multi-professional learning  ♦ Develops through practice  ♦ Willing to learn  ♦ Self-learning  ♦ Self-motivated  ♦ Reflective skills</td>
</tr>
</tbody>
</table>

This process resulted in the development of 14 categories (Table 6.13).
Table 6.13 Categories developed

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Undertakes effective and ongoing clinical assessment of child/young person</td>
</tr>
<tr>
<td>2</td>
<td>Considers immediate and continuing care needs of the child/young person</td>
</tr>
<tr>
<td>3</td>
<td>Cares for patients</td>
</tr>
<tr>
<td>4</td>
<td>Delivers technical care</td>
</tr>
<tr>
<td>5</td>
<td>Considers caring role from a holistic perspective</td>
</tr>
<tr>
<td>6</td>
<td>Analyses problems and makes clinical decisions</td>
</tr>
<tr>
<td>7</td>
<td>Bases practice on current evidence</td>
</tr>
<tr>
<td>8</td>
<td>Uses professional knowledge</td>
</tr>
<tr>
<td>9</td>
<td>Forms an effective bridge between families and the multi-professional team</td>
</tr>
<tr>
<td>10</td>
<td>Develops a professional and supportive relationship with families</td>
</tr>
<tr>
<td>11</td>
<td>Has effective communication skills</td>
</tr>
<tr>
<td>12</td>
<td>Demonstrates effectual personal attributes</td>
</tr>
<tr>
<td>13</td>
<td>Manages self and others</td>
</tr>
<tr>
<td>14</td>
<td>Takes an active role in professional development</td>
</tr>
</tbody>
</table>

A second researcher tested the categories identified at this stage: a step introduced to ensure rigour (Hickey and Kipping 1996). A replica copy of indexed cards was given to the researcher, who was familiar with the issues and who had participated as a moderator for the focus groups, but had not been involved in the coding. This researcher independently developed a set of categories that were compared with those identified by the researcher. There were few discrepancies noted. Although the process had resulted in an increased number of categories (19 in total), when compared to the original categories (14), many of these were simply further divisions of a more encompassing category. However, this independent grouping did lead the researcher to re-look at the category titled 'cares for patients'. When re-considering this category comparisons were made with the independent researchers category. A close look at this revealed that the independent researcher had grouped the descriptors found in 'cares for patients' into two separate categories; 'knowledge of caring for children' and 'implementing and delivering care to children/young people'. These category headings seemed much more appropriate and therefore were introduced into the overall list: though, the list was left unchanged for the purposes of the focus groups with children’s nurses at the end of Phase I. This decision was made to enable the focus group to be a second check on the original category.
combination. At this point in the data analysis these categories shaped the early development of the competency statements.

6.6 Competency development from the Delphi survey

6.6.1 Secondary data analysis
Data from the Delphi survey resulted in a wealth of information about the present and future role of a children's nurse. The Delphi survey had not specifically asked participants to list competencies, however this approach had been used in previous studies to do that (McGee et al 1987, Duffield 1993, Elder and Nick 1995, Fitch et al 1996). In contrast in the present study data arising from participant's comments were examined with the expressed aim of identifying additions to categories and descriptors developed from the focus groups. The aim at this stage was to re-consider the list of competencies developed from the focus group data in the light of findings from the Delphi survey. The inclusion of this data served a very important purpose as the initial list of competencies had been developed from data collected at the researchers place of work, thus reflecting the perspective of health care professionals working in one trust only. The intention of the Delphi was to widen that perspective to provide a national view on the desired competencies. This was an opportunity to make comparisons between data collected using two different methods.

In order to identify additional descriptors the Delphi survey questionnaires were re-visited. In particular the comments were re-read and any examples of descriptors related to a human activity, personal attribute and outcome action which would add anything new to the previously constructed list were highlighted and added to the list developed following analysis of data arising from focus groups.

6.6.2 Results
Overall there were very few additional descriptors identified. This factor must be considered in the light of the focus of the Delphi and where the questions had been derived from, the focus groups. Of note, there were comments by a small number of participants
(five in total) that the focus of the questionnaire seemed to be around acute specialist care, this was not surprising as this had been where seven out of the eight focus groups had been undertaken. In fact one of the driving forces behind the inclusion of the Delphi was to widen the perceptions gained as a result of undertaking focus groups with health care professionals currently employed in an acute specialist hospital. Some of the new descriptors appeared to stem from this notion of a different focus of care, that is, 'liaison to primary care', and 'work across boundaries'. These are two activities that may be considered to receive a higher profile in the work of nurses outside of tertiary care. The total number of new descriptors identified can be found in Table 6.14.

**Table 6.14 Additional descriptors from Delphi survey**

<table>
<thead>
<tr>
<th>Descriptor</th>
<th>Human Activity</th>
<th>Personal Attribute</th>
<th>Outcome Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult learner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aptitude</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Articulate</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Client focused decision making</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Liaison to primary care</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal awareness</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spiritual assessment</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Teach non-trained carers</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Work across boundaries</td>
<td></td>
<td>*</td>
<td></td>
</tr>
</tbody>
</table>

It was possible to add these descriptors to previously identified categories, and therefore no new categories were felt necessary (Table 6.15).
Table 6.15 Descriptors linked to categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undertakes effective and ongoing assessment of the child/young person</td>
<td>♦ Spiritual assessment</td>
</tr>
<tr>
<td>Considers immediate and continuing care needs of child/young person</td>
<td>♦ Teaching non-trained carers ♦ Liaison to primary care</td>
</tr>
<tr>
<td>Analyses problems and makes clinical decisions</td>
<td>♦ Client-focused decision making</td>
</tr>
<tr>
<td>Uses professional knowledge</td>
<td>♦ Political skills</td>
</tr>
<tr>
<td>Forms effective bridge between families and multi-professional team</td>
<td>♦ Works across boundaries</td>
</tr>
<tr>
<td>Takes an active role in professional development</td>
<td>♦ Adult learner</td>
</tr>
<tr>
<td>Demonstrates effectual personal attributes</td>
<td>♦ Articulate ♦ Aptitude ♦ Personal awareness</td>
</tr>
</tbody>
</table>

During the process of developing a list of competencies the next step was to take the constructed list to a group of 'expert' (in that they were very experienced) children's nurses. This next step was undertaken to validate, evaluate and thus refine the list of competencies developed from the earlier focus groups and Delphi survey.

6.7 Focus group with children's nurses

6.7.1 Rationale for use

The focus group with 'expert' children's nurses was undertaken for two reasons. Firstly, to ascertain participant's views and perceptions regarding the essential characteristics and behaviours of a children's nurse. And secondly, to validate findings from the previous focus groups and Delphi survey by asking participants to share their perceptions on a previously developed list of competency statements (Table 6.13).

6.7.2 The sample population

The focus group undertaken at the end of Phase I used a purposeful sample, the researcher chose to contact participants who would be rich in information (Patton 1990). Through the Royal College of Nursing membership groups, contact was made with nurses who meet
under the title, the 'Children and Young Peoples Field of Practice'. In common with one another they were all children's nurses with considerable years of clinical experience either in hospital or in the community. Twenty-four nurses were contacted by letter (Appendix XI). Only 10 responded to the letter out of which seven were able to participate: two further members had to pull out at a late stage due to work commitments. Out of the seven participants, six were in clinical practice in senior positions, such as clinical nurse specialist, advanced nurse practitioner and leader of a community nursing team. The seventh participant was involved at the policy and strategic level of children's nursing practice.

In contrast with the focus groups used earlier in Phase I to generate ideas, at this point the technique was used to synthesise and evaluate data that had been collected previously. A decision was therefore made to undertake only one focus group. Clearly this was negating the possibility of making comparisons across multiple groups, as recommended by Morgan (1996). However, at this point in the study comparing information between groups was not the aim, participants were being asked to validate findings from previous data and therefore one group was considered sufficient.

6.7.3 The procedure
The focus group was conducted using the procedure outlined in Section 6.3.2. There were two significant differences. In this case the procedure was undertaken in a different venue and the assistant moderator was required to maintain more detailed notes as the reliability of the tape machine was questioned when testing prior to the start. A tape recording was possible, but was of significantly poorer quality than previously. An increased level of background noise from the main road outside of the window made this problem worse. Pre-determined questions were produced, piloted prior to use and posted to the participants in advance of the interview (Appendix XII).
6.7.4 Data analysis

Organisation of the data involved labeling the tape with the date, time and location and focus group identifier. Once transcribed the hard copy was labeled and photocopied. Analysis of the data was both mechanical and interpretive (Morgan 1993a). The mechanical part involved data reduction and the interpretive part involved coding the data and searching for patterns. Two approaches were taken to data analysis. In the first instance thematic analysis was undertaken using as a guide the steps identified by Strauss and Corbin (1998) and Dey (1993). In addition content analysis was used to analyse data, as described earlier in Section 6.5.1. This was used to search for new descriptors that would add to the evolving list of competencies.

6.7.5 Results

Krueger (1994) suggests that the findings from focus groups should be presented within the questions that were asked using one of a choice of three styles, the raw data model, the descriptive model, or the interpretive model. Choice depends on the skills of the researcher, the intended audience, and the nature of the report (Krueger 1994). In this study the descriptive model was considered to be the most appropriate style, as this would provide a summary description followed by illustrative quotes. The use of quotes was considered important to facilitate understanding of how participants answered the questions as well as represent group discussion.

**Question 1 Can you state your current understanding of the use of competencies?**

There was general agreement that the use of competencies was about how a nurse translated knowledge into practice. It was something to do with ability and fitness for purpose. But that was too simple; there was an expressed need to define the different levels of practice. The assessment of practice itself was seen to be problematic, with participants wanting some objective measurement as opposed to their view of competencies which were considered to be too subjective. On the practical side one participant mentioned that an objective measurement might not necessarily be the answer.
to everything, giving the example of how difficult it would be to measure communication skills objectively.

**Typical comments included:**

*FGel P2* I think it's just a measure of fitness for a specific/particular purpose.....how you may measure that may change regarding the circumstances, around health care professionals.....for a particular purpose.....different clinical situations.

*FGel P3* Yeah it's the ability to do or reason isn't it or.....there needs to be a measure there but it needs to do something about how we are able to assess that people can do it and what it is that we want people to do, but its also the level at which you are able to do it, that's the gap.

*FGel P2* Problem is its someone else opinion, individual, group or peers and this may not necessarily correspond to your view.

*FGel P3* What you want it to be is completely objective and not just a persons opinion that its an objective measurement of somebody's competence to do something and that is where we are not at the moment...we don't have those levels of objectives measurement particularly in terms of practice.

*FGel P2* But how can you objectively measure someone's competence to for e.g. communicate.

**Question 2 Can you describe the characteristics that you believe to be essential in a nurse who cares for children and young people?**

This was a difficult question. The question led participants to debate the difference between nurses who care for children and other nurses, with some of the participants concluding that it was the context that was different. However, for other participants the context could not stand-alone. For some there was more to it, something about the 'person' that was more important than the context. It was the attributes that made the difference for some, identifying that these were on the whole innate and therefore could not be taught. The need for effective communication skills dominated the discussion, this included the need to be flexible, empathetic and holistic, in order to use communication skills well with children of different age groups as well as their family.
Typical comments included:

FGel P2 ........it’s the context that is different, the boundaries are drawn by the child and everything that goes with the child, e.g. the concept of family centred care…..the difference is the basis that we chose to nurse children.....I see no difference in the process by which nursing is undertaken at all…it’s the context.

FGel P4 mmmmmm maybe its intuition do you think that is used more because of the different ages.......to pick up the things that are important.

FGel P3 so what is it then that makes us chose to work with children...if that's what puts us into a different context….then what makes us chose to work with children.

FGel P4 I don’t know.

FGel P2 No.

FGel P1 But it is also what we need for that client group…rather than what we are.....or what attributes do people who care for children need....

FGel P3 You could ask the question....why did you choose to nurse children.....but surely its also why did you chose to nurse…what I'm trying to say is the core activities are generic, doesn’t matter who you are caring for...its what makes one type of nurse different from another...........

FGel P3 But there are some people aren't they, people who you work with who have just got it right.....the way they work with children they have just got it..so it does make a difference and I think its not that they are in that context I think it is something about them…and I think empathy is part of it, and yes you need good communication skills wherever you work but there is a particular communication skill that you can see in good children's nurses that's just lovely to see.

FGel P2 But is that something we are taught.

FGel P3 No I don’t think so.....a lot of it is....some of it is to do with you have someone in that culture and they will take on something and you will see a change.....but some of it I think is innate, it's what they are that makes them a children's nurse...so what is the things that they are...?
Question 3 Can you describe the behaviours that you believe to be essential in a nurse who cares for children and young people?

The focus of the discussion was once again on the need for good communication skills. These were needed to develop a rapport with the child and family. 'How you do it' was noted to be difficult to articulate, participants individually mentioned what they thought would be necessary to do that, such as, 'openness', 'sense of humour', 'sense of play' and being 'non-judgemental'. The ability to respond quickly to situations was noted, as was the ability to be adaptable and respond to the differing needs of children.

Typical comments included:

_FGe1 P3_ You do have to have two communication things going at the same time…the child or the young person and the parent….

_FGe1 P5_ Yeah the way you are saying something has to be responded to well by both sides……

_FGe1 P6_ Need to be very adaptable and change to different circumstances and be able to adapt quickly to those changes.

_FGe1 P4_ Even have to respond to same child differently in a short period of time.

_FGe1 P6_ Particularly adolescents…they change.

_FGe1 P2_ Play different roles and adapt to the situation.

Question 4 Now, if we consider competencies to mean a description of human activity, a personal attribute or an outcome action, do you have any comments to make on the list of competencies you have in front of you?

This question created the most discussion. The discussion returned to the problem of articulating what was different about a children's nurse. The participants were in agreement that the competencies as they stood could reflect any nurse and were not specific enough to reflect their description of a children's nurse and the role they assumed. The competencies were considered to be too broad and reflective of what they regard as the traditional role of a children's nurse. That is they failed to echo the range of the role. There was a high level of agreement in this part of the discussion, with participants returning to the notion of the context. The feeling seemed to be that the competencies
lacked the context, and therefore needed to make more explicit roles such as 'advocacy', 'health promotion', 'child protection', and 'family centred care' in order to construct competencies that truly reflect the nature of the children's nursing. When probed to consider whether there was anything from the list they would exclude, although initially one participant responded that everything should be removed except 'cares for patients', there was agreement that one sentence was insufficient to suggest the complexities of the role. Here again it was the concept of family centred care that was discussed as one element that distinguished children's nurses from other nurses. When probed about any additions they would make to the list, participants once again emphasised that personal attributes needed to be made more explicit. This discussion returned participants to reflect once again on the subjective nature of assessing competencies. How competencies could be measured remained a priority area that their discussion failed to illuminate any further.

Typical comments included:

*FGe1 P6* But then what do you put in ........

*FGe1 P7* So broad nothing measurable…it could be anyone.....

*FGe1 P1* But you need to be able to start measuring things…people are asking for definitions …people are asking what is different…if you do not have measurable outcomes then what are you doing it for.

*FGe1 P3* Taking that point…if you look at this and say what are the sort of things I do in my day that are not covered in this and I don’t think there is really anything …in some ways it’s the attributes the way you do things in the context you do it, i.e. nursing children we do them ….these are the things you want people to be able to do on your ward, you want them to make clinical assessments ….you want them to do these things but you want them to do them as nurses, with children so it putting the context back in …the actual competencies are the ones that we use and I don’t know what things are missing here.

*FGe1 P4* Maybe what you need is what is the aim of nursing a child ….add context by adding aim to competency might give clarity of context.

*FGe1 P1* Needs something.

Thematic analysis identified two categories and sub-categories (Table 6.16).
Table 6.16 Categories and sub-categories identified using thematic analysis

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describing competencies</td>
<td>♦ Problems with measurement</td>
</tr>
<tr>
<td></td>
<td>♦ Context is child and family</td>
</tr>
<tr>
<td></td>
<td>♦ Outcome of the assessment</td>
</tr>
<tr>
<td></td>
<td>♦ Elements missing</td>
</tr>
<tr>
<td>Characteristics of a generalist children's</td>
<td>♦ 'What's different'</td>
</tr>
<tr>
<td>nurse</td>
<td>♦ Specific skills</td>
</tr>
<tr>
<td></td>
<td>♦ Defining attributes</td>
</tr>
<tr>
<td></td>
<td>♦ 'The person'</td>
</tr>
</tbody>
</table>

Using content analysis it was possible to identify from the data elements with agreed consensus that needed to appear in the list of competencies in order to not only make them more comprehensive but also ensure that they more specifically encompassed the role of a children's nurse. This process resulted in the addition of only one new category, that is: 'having knowledge in caring for children/young people'. This category reflected the consensus that the competency list as it was presented to participants was missing the context, namely the focus of children/young people. The researcher established this as a new category that would encompass re-sorted descriptors from the focus groups and Delphi survey, as well as some new descriptors from the final focus group with children's nurses. At this point the data had more impact on the list of descriptors, as opposed to the creation of a new category, thus ensuring that even where the competency statements were broad they would ensure application to clinical practice explicit to the needs of children/young people and their families (Table 6.17).
Table 6.17 Additional descriptors

<table>
<thead>
<tr>
<th>Descriptor</th>
<th>Human Activity</th>
<th>Personal Attribute</th>
<th>Outcome Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply knowledge of child psychology</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aware of professional boundaries</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Cares for teenagers</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communicate on different levels</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish rapport</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish trust</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friendly</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Knowledge of consent</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-judgemental</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurturing role</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Proactive</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Sense of humour</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Understands context of the child's world</td>
<td></td>
<td></td>
<td>*</td>
</tr>
</tbody>
</table>

Table 6.18 presents data added to the evolving list of competencies.

Table 6.18 Descriptors linked to categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Considers caring role from a holistic perspective</td>
<td>♦ Nurturing role</td>
</tr>
<tr>
<td>Develops a professional and supportive relationship with families</td>
<td>♦ Aware of professional boundaries</td>
</tr>
<tr>
<td></td>
<td>♦ Establish trust</td>
</tr>
<tr>
<td></td>
<td>♦ Establish rapport</td>
</tr>
<tr>
<td></td>
<td>♦ Empathy</td>
</tr>
<tr>
<td></td>
<td>♦ Non-judgemental</td>
</tr>
<tr>
<td>Has effective communication skills</td>
<td>♦ Communicates on different levels</td>
</tr>
<tr>
<td>Demonstrates effectual personal attributes</td>
<td>♦ Proactive</td>
</tr>
<tr>
<td></td>
<td>♦ Sense of humour</td>
</tr>
<tr>
<td></td>
<td>♦ Friendly</td>
</tr>
<tr>
<td>Having knowledge in caring for children</td>
<td>♦ Apply knowledge of child psychology</td>
</tr>
<tr>
<td></td>
<td>♦ Knowledge of consent</td>
</tr>
<tr>
<td></td>
<td>♦ Cares for teenagers</td>
</tr>
<tr>
<td></td>
<td>♦ Understands context of the child's world</td>
</tr>
</tbody>
</table>
6.7.6 Trustworthiness of the data
Whether this process would reveal the same information if undertaken with the same group or another group could be questioned. The interactive nature of focus groups would make the process difficult to repeat. However, as the purpose of this stage in the data collection was to validate and evaluate pre-determined information the procedure was considered sufficiently rigorous.

6.7.7 Outcome of the focus group with children's nurses
The outcome was a refined list of children's nursing competencies supported by contextual data. The data was combined with the previous determined list resulting in 15 categories (competency statements) with respective descriptors (Table 6.19).

6.8 Summary
The end result of data collection was a list of competencies that describe a children's nurse. Multiple methods of data collection were put in place to check on preceding collection of data. The final list of competencies is grounded in the data collected. In support of the view that practitioners should develop competencies, this study has involved the most appropriate participants. The input of over 140 children's nurses and other health care professionals attaches a level of credibility to the findings.
Table 6.19 Final list of categories and descriptors

<table>
<thead>
<tr>
<th>1. Undertakes effective and ongoing clinical assessment of child/young person</th>
<th>2. Considers immediate and continuing care needs of the child/young person</th>
<th>3. Implementing and delivering care to children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prescribing investigations</td>
<td>Health promotion skills</td>
<td>Intervenes</td>
</tr>
<tr>
<td>Examines patients</td>
<td>Liaison with community</td>
<td>Wide range of skills</td>
</tr>
<tr>
<td>Monitoring skills</td>
<td>Continuity of care</td>
<td>Assess, plan, implement and evaluate</td>
</tr>
<tr>
<td>Observation skills</td>
<td>Awareness of transition to adult care</td>
<td>Family care</td>
</tr>
<tr>
<td>Takes histories</td>
<td>Liaison to primary care</td>
<td>Basic Life Support</td>
</tr>
<tr>
<td>Diagnostic skills</td>
<td>Teaching on non-trained carers</td>
<td>Discharging patients</td>
</tr>
<tr>
<td>Clinical assessment skills</td>
<td>Teaching skills, parents and other nurses</td>
<td>Practical skills</td>
</tr>
<tr>
<td>Specialist skills</td>
<td>Link with local services</td>
<td>Admitting patients</td>
</tr>
<tr>
<td>Spiritual assessment</td>
<td></td>
<td>Generalist skills</td>
</tr>
<tr>
<td>Refers patients</td>
<td></td>
<td>Maintains hygiene</td>
</tr>
<tr>
<td>Responds quickly</td>
<td></td>
<td>Accountable</td>
</tr>
<tr>
<td>Interprets findings</td>
<td></td>
<td>Prepares children for investigations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gives IV drugs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Delivers technical care</th>
<th>5. Considers caring role from a holistic perspective</th>
<th>6. Analyses problems and makes clinical decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technically expert</td>
<td>Involved in social aspects of nursing</td>
<td>Autonomous practice</td>
</tr>
<tr>
<td>At forefront of technical innovations</td>
<td>Gives psychological and supportive care</td>
<td>Ethical decision making</td>
</tr>
<tr>
<td>Technical skills</td>
<td>Able to focus on the whole</td>
<td>Clinical decision making</td>
</tr>
<tr>
<td>Expanded role</td>
<td>Nurturing role</td>
<td>Client-focused decision making</td>
</tr>
<tr>
<td></td>
<td>Practitioner rather than technician</td>
<td>Able to prioritise</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. Bases practice on current evidence</th>
<th>8. Uses professional knowledge</th>
<th>9. Forms an effective bridge between families and the multi-professional team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintains standards</td>
<td>Relate theory to practice</td>
<td>Undertakes dialogue with</td>
</tr>
<tr>
<td>Develops practice</td>
<td>Knowledge of how health care works</td>
<td>medics and Professions Allied to Medicine</td>
</tr>
<tr>
<td>Using research to inform practice</td>
<td>Applies knowledge</td>
<td>Manages interface between medicine and nursing</td>
</tr>
<tr>
<td>Research skills</td>
<td>Knows the body</td>
<td>Communicates medical information</td>
</tr>
<tr>
<td>Able to question practice</td>
<td>Transferable knowledge</td>
<td>Works across boundaries</td>
</tr>
<tr>
<td>Skills of audit</td>
<td>Knowledge of anatomy &amp; physiology</td>
<td></td>
</tr>
</tbody>
</table>
### Table 6.19 Final list of categories and descriptors (continued)

<table>
<thead>
<tr>
<th>10. Develops a professional and supportive relationship with families</th>
<th>11. Has effective communication skills</th>
<th>12. Demonstrates effectual personal attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talking with people</td>
<td>Listening skills</td>
<td>Common sense</td>
</tr>
<tr>
<td>Interacts with families</td>
<td>Counselling skills</td>
<td>Proactive</td>
</tr>
<tr>
<td>Information giver</td>
<td>Communicate on different levels</td>
<td>Sense of humour</td>
</tr>
<tr>
<td>Able to individualise information</td>
<td>Diplomacy skills</td>
<td>Friendly</td>
</tr>
<tr>
<td>Talking to families</td>
<td>Advocacy</td>
<td>Self-awareness</td>
</tr>
<tr>
<td>Facilitating parents in their role</td>
<td>Multi-agency working</td>
<td>Adaptable</td>
</tr>
<tr>
<td>Involves families in decisions</td>
<td>Uses medical terminology</td>
<td>Confident</td>
</tr>
<tr>
<td>Maintaining normality</td>
<td></td>
<td>Visionary</td>
</tr>
<tr>
<td>Negotiating skills</td>
<td></td>
<td>Grow</td>
</tr>
<tr>
<td>Empowering families</td>
<td></td>
<td>personally</td>
</tr>
<tr>
<td>Adviser</td>
<td></td>
<td>Versatile</td>
</tr>
<tr>
<td>Non-judgemental</td>
<td></td>
<td>Confident</td>
</tr>
<tr>
<td>Establish rapport</td>
<td></td>
<td>Articulate</td>
</tr>
<tr>
<td>Establish trust</td>
<td></td>
<td>Personal awareness</td>
</tr>
<tr>
<td>Aware of professional boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Works with the family unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aware of effect of hospitalisation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership skills</td>
<td>Participate in life-long learning</td>
<td>Advocacy skills</td>
</tr>
<tr>
<td>Knowledge of contracting and budgeting</td>
<td>Keep up to date</td>
<td>Unique insight into the child and family</td>
</tr>
<tr>
<td>Supervisors others</td>
<td>Learns through doing</td>
<td>Distraction skills</td>
</tr>
<tr>
<td>Business skills</td>
<td>Participates in multi-professional learning</td>
<td>Plays</td>
</tr>
<tr>
<td>Management skills</td>
<td>Develops through experience</td>
<td>Knowledge of normal child development</td>
</tr>
<tr>
<td>Assess competence of others</td>
<td>Expert nurse</td>
<td>Apply knowledge of child psychology</td>
</tr>
<tr>
<td>Prioritises and manages</td>
<td>Willing to learn</td>
<td>Knowledge of consent</td>
</tr>
<tr>
<td>Aware of resources</td>
<td>Self motivated</td>
<td>Cares for teenagers</td>
</tr>
<tr>
<td>Skills of delegation</td>
<td>Adult learner</td>
<td>Understands context of the child's world</td>
</tr>
<tr>
<td>Time management skills</td>
<td></td>
<td>Aware of implications of hospitalisation</td>
</tr>
<tr>
<td>Facilitator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role models</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working with the multi-professional team</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Chapter 7 Children's cancer nursing competencies: method, analysis and results

7.1 Introduction

The second phase led to the development of a classification of specialist children's nursing competencies, derived from competency statements developed and tested with children's cancer nurses. A number of methods of data collection were used to achieve the final outcome. Brief descriptions of each of the methods used are provided here to contextualise the approach taken and provide a clear audit trail. Discussion will also detail the population sample, the procedure, and the outcome. Each section concludes with discussion on the trustworthiness of the data. The text in this chapter will refer back to Chapter 6 where the technique has been used previously and discussed in relation to Phase I.

The simultaneous process of data collection and data analysis, the approach taken to analyse data and the results will be presented in a linear style (Table 7.1). This began with a nominal group technique, which resulted in a list of prioritised statements about the children's cancer nurse. In contrast to the approach taken in Phase I these were then developed and reproduced as competency statements and performance criteria. These were tested, refined and validated through a process of consultation and semi-structured interviews. Further validation and evaluation with a group of expert children's cancer nurses in a focus group was the final step. This chapter concludes with a presentation of the final competency statements and the related performance criteria.
Table 7.1 Summary of the process and outcome of data collection: Phase II

<table>
<thead>
<tr>
<th>Process</th>
<th>Analysis</th>
<th>Outcome 1</th>
<th>Outcome 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Group Technique</td>
<td></td>
<td>List of prioritised competencies of the children's cancer nurse</td>
<td>Rephrased competencies with performance criteria</td>
</tr>
<tr>
<td>Consultation with experts</td>
<td></td>
<td>Competencies and performance criteria refined</td>
<td></td>
</tr>
<tr>
<td>Semi-structured interviews</td>
<td></td>
<td>Identification of recurring themes</td>
<td></td>
</tr>
<tr>
<td>Focus group with 'expert' children's cancer nurses</td>
<td></td>
<td>Content analysis</td>
<td>Refined competency statements</td>
</tr>
</tbody>
</table>

7.2 Nominal group technique

This technique was used initially in Phase I. Section 6.2 outlines a description of the technique and discusses the procedure in detail.

7.2.1 Rationale for use

In Phase II the NGT was used as a first step to develop a list of competencies. Davey (1995) used the NGT to develop competency standards for Occupational Health Nurses in Australia. Davey (1995) used the NGT at the start of the development process to generate ideas and then added an expert group and consultation at the synthesis and evaluation stages. In contrast Fitch et al (1996) used the NGT later in their development of competencies, using the process to elicit feedback where ambiguity or overlap existed in competencies for critical care nurses, developed using a Delphi survey. Fitch et al (1996) fail to detail how the NGT was used in their study, however Davey (1995) outlined identical steps charted in Table 6.2.2. Neither offers a critique of the NGT; nonetheless
their description of its use was evidence that the NGT had previously been successfully used to develop competencies.

### 7.2.2 The sample population

Two NGTs were undertaken: one with senior staff/ward sisters on a haematology and oncology unit (group 1), and one with course members who were undertaking a Paediatric Oncology Nursing Course (group 2) based at the university where the researcher was employed. This was felt to be a comprehensive approach, which would involve the total population of senior nurses who were currently assessing clinical practice and the total number of children's nurses currently undertaking a children's cancer nursing course in these institutions. Letters were sent requesting their involvement, stating that their commitment was to a one-off session only and that their involvement was voluntary; they could refuse to participate in the activity. Group 1 consisted of seven members, from a total population of 10, that included four ward sisters and three practice nurse educators. Group two consisted of 12 members, representing the total population of qualified children's nurses undertaking the clinical course.

### 7.2.3 The procedure

The procedure followed an identical format as identified by Butterfield (1988). Similar to Phase I, potential participants were sent a copy of the Butterfield (1988) paper in preparation. In Phase II both groups were asked the following: 'can you identify the knowledge, decision making skills, and clinical attributes essential for successful performance as a paediatric oncology nurse?' This question reflected the holistic approach to competency development, which places equal value on role, attributes and performance of professional tasks. Once developed the NGT task statement was piloted with a group of children's nurses who were employed within the researcher's university. In contrast to Phase I clarity was not an issue. The question was felt to be comprehensive, with no ambiguities and very clear. Therefore no changes were made.

The detail of the procedure can be found in Section 6.2.2. In this case there was one variation. Group 1 took longer than the allocated 90 minutes. This group found it
extremely difficult to make a final decision and found the process of ranking nearly impossible. A decision was made by the group and facilitators to conclude the discussion and ask members to vote independently at a later stage following personal reflection and consideration of the ideas generated and the group discussion. The researcher instructed participants to award eight votes to their priority areas.

7.2.4 Data analysis
Organising data involved collecting together all the flip chart paper, and labelling each one with the date and identifier for the NGT session. The final step in the process involved the researcher transcribing the items listed on the flip chart paper. Additional to the tally rankings undertaken following the NGTs no further analysis of data was required.

7.2.5 Results of the nominal group technique
Group 1 generated 46 competencies and group 2 generated 66. The voting process of the NGT resulted in eight priority areas from both groups. Table 7.2 presents the ideas awarded the highest votes by both groups.
Table 7.2 Rank order of eight critical competencies by both groups

<table>
<thead>
<tr>
<th>Votes</th>
<th>Group 1 Idea</th>
<th>Votes</th>
<th>Group 2 Idea</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>In depth knowledge of symptom control</td>
<td>85</td>
<td>Knowledge of haematology and oncology</td>
</tr>
<tr>
<td>33</td>
<td>Understanding the basic principles of chemotherapy</td>
<td>80</td>
<td>Good basic paediatric nursing care</td>
</tr>
<tr>
<td>29</td>
<td>Understands how a diagnosis of cancer affects the family and friends</td>
<td>54</td>
<td>Good understanding of treatments</td>
</tr>
<tr>
<td>23</td>
<td>Care of the newly diagnosed child</td>
<td>36</td>
<td>Knowledge and understanding of symptom care</td>
</tr>
<tr>
<td>21</td>
<td>Knowledge of the cancer process</td>
<td>28</td>
<td>Communication skills</td>
</tr>
<tr>
<td>13</td>
<td>Knowledge and understanding of how to break bad news</td>
<td>25</td>
<td>Ability to give IV medications and deliver central line care</td>
</tr>
<tr>
<td>10</td>
<td>Prioritising care of a sick child</td>
<td>24</td>
<td>Family centred care, involvement of siblings</td>
</tr>
<tr>
<td>10</td>
<td>To have an understanding of taking on extended roles and the impact on nursing and the child</td>
<td>22</td>
<td>Counselling and supportive skills</td>
</tr>
<tr>
<td>10</td>
<td>Knowledge of research based practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Knowledge of distraction and other ways of carrying out procedures than with ketamine</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7.2.6 Trustworthiness of data

The sample used to develop the competencies originated from the same clinical unit. The nature of the clinical work in that unit may have influenced the focus of the competencies. In altering the NGT procedure and allowing the participants in group 1 to complete their voting external to the process may have a bearing on the final results. This was an opportunity missed for all participants to discuss the final voting; a different priority list may have been the result.

7.2.7 Outcome of the nominal group technique

The outcome of both the NGTs was a priority list that encompassed in the main, the knowledge and skills required of a children's cancer nurse. The next step in the process was to produce a competency assessment document structured around the priority list.
developed using the NGTs. At the outset of this development it was envisaged that clinical nurses would be involved in the refining process. However, at the time the work was being undertaken the wards were very busy, negating the potential for nurses to give much more of their time, other than in the initial NGTs. The refining process thus consisted of shaping the ideas from the two NGTs into comprehensive competency statements. The researcher and the second moderator who had been involved in the NGTs undertook this process (the moderator was the course leader for the Paediatric Oncology Course). These two nurse academics have nearly 25 years experience between them, with strong clinical links in children's cancer nursing. This was considered to be sufficient experience to refine the statements from the NGT, ensuring that the essence of their meaning was not lost, whilst maintaining the balance between the needs of education and practice in the assessment of competence to practice.

For each competency statement performance criteria were identified. When developing the criteria the following points from Gurvis and Grey (1995) were taken into consideration: to ensure criteria were focused on the learner, that they were measurable and achievable, and that they were relevant to the competency. In addition the criteria needed to facilitate the use of multiple sources of evidence to assess knowledge and understanding, application of theory to practice, and reflect on the caring role. The competency statements and performance criteria were thus collated into an assessment document with space to record pass/refer/fail and any comments. Criterion-referenced assessment levels were also produced at this time. The steps taken are presented in Table 7.3.
Table 7.3 Steps taken to develop competency statements

<table>
<thead>
<tr>
<th>Steps</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority list of competencies rephrased to reflect competency statements.</td>
<td>a) The words of the participants represent concepts. In order to express these precisely in 'competency language' these were rephrased (labelled) and expressed as outcome, process, behaviour or action statements.</td>
</tr>
<tr>
<td>Remaining list of competencies rephrased to reflect performance criteria.</td>
<td>b) For the purpose of assessment performance criteria are needed to represent the kinds of things a nurse might do to be competent in an area. Remaining data from the NGT represented sub-competencies and was used to develop performance criteria. Modifying terms were added to introduce values and provide further information.</td>
</tr>
<tr>
<td>Level of performance described.</td>
<td>c) Sets of criteria for each of the levels of advanced beginner, competent practitioner, proficient practitioner and expert were developed (see Benner 1984 for detail of levels). This criterion assessment was included for each competency.</td>
</tr>
</tbody>
</table>

This process resulted in 17 competencies (Table 7.4).
## Table 7.4 Resulting Competency statements

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Having a sound knowledge base of paediatric haematology and oncology.</td>
</tr>
<tr>
<td>2.</td>
<td>Having a sound knowledge base of the cancer process.</td>
</tr>
<tr>
<td>3.</td>
<td>Caring for the newly diagnosed child, helping them and their family to adjust to the diagnosis of cancer.</td>
</tr>
<tr>
<td>4.</td>
<td>Having knowledge and understanding of the process of breaking bad news to the child/teenager and family.</td>
</tr>
<tr>
<td>5.</td>
<td>Understanding the effect a diagnosis has on a family.</td>
</tr>
<tr>
<td>6.</td>
<td>Delivering a high standard of nursing care.</td>
</tr>
<tr>
<td>7.</td>
<td>Prioritising the care of an acutely ill child.</td>
</tr>
<tr>
<td>8.</td>
<td>Having an in-depth knowledge of symptom care related to children receiving chemotherapy, radiotherapy and bone marrow transplant.</td>
</tr>
<tr>
<td>9.</td>
<td>Communicating effectively with the child and family, colleagues and members of the multi-disciplinary team.</td>
</tr>
<tr>
<td>10.</td>
<td>Having an in-depth knowledge and understanding of chemotherapy, radiotherapy, bone marrow transplant and surgery.</td>
</tr>
<tr>
<td>11.</td>
<td>Undertaking an expanded role.</td>
</tr>
<tr>
<td>12.</td>
<td>Ensuring safe and appropriate use of central venous access devices.</td>
</tr>
<tr>
<td>13.</td>
<td>Having knowledge of distraction and other methods of preparation for procedures.</td>
</tr>
<tr>
<td>14.</td>
<td>Effectively using counselling and supportive skills.</td>
</tr>
<tr>
<td>15.</td>
<td>Developing a rapport with families.</td>
</tr>
<tr>
<td>16.</td>
<td>Providing holistic care to the child and their family throughout their cancer experience.</td>
</tr>
<tr>
<td>17.</td>
<td>Basing their practice on the current evidence.</td>
</tr>
</tbody>
</table>

As part of the refining process the researcher consulted widely. The competency document was distributed to members from both the NGTs and other senior nurse academics. The consultation process asked participants to comment freely, making sure the competency statements and performance criteria were clear and easily understood, jargon free, realistic and achievable. More importantly, they needed to guarantee that the competency statements and performance criteria truly reflected the nature of the speciality of children's cancer nursing.

Comments received from this process reflected some general confusion and poor wording, with requests for examples to be included with some performance criteria. Although the document was felt to be too long, no competencies were identified at this time to be removed. However, some performance criteria were linked, and thus the overall number...
reduced. Clarification and rewording were undertaken prior to piloting the document with course members on a Paediatric Oncology Nursing Course that began in 1998.

The refining process then continued in two directions. Firstly, the course leader for the Paediatric Oncology Nursing Course supported course members and clinical assessors in the use of the document. This involved undertaking and recording the evaluation of the document, and involved all parties using it. Evaluation was undertaken with course members at three months and at the end of the course at six months. In addition evaluation undertaken at the end of the course included a sample of clinical assessors. A competency checklist to evaluate the competency model was produced; this was adapted from one described by Gurvis and Grey (1995). The checklist asked for comments on each of the 17 competency statements, performance criteria, learning options and evaluation methods.

As a result of this process the following changes were made:
- 17 competencies were reduced to 14; reduction was made possible through combining competencies and removal of one which was felt to be a duplication;
- Wording of some performance criteria was changed; some wording was felt to be unclear and ambiguous, with clinical assessors not being sure what they were meant to be assessing;
- Core and speciality focus was indicated for all performance criteria; indicating which criteria were more reflective of core children's nursing skills and speciality nursing skills were considered to be helpful. However there were some inconsistencies here between clinical assessors and course members regarding the appropriateness of some criteria;
- The competency relating to bone marrow transplantation was made more expansive and additional performance criteria were added, making the assessment more realistic.

This evaluation remains ongoing with refinements taking place as felt and agreed to be necessary (see Appendix XX for a published report of this work).

The second part of the refining process involved the researcher validating and evaluating the list of competencies with a sample of children's cancer nurses. Using semi-structured
interviews the competency tool was tested and refined. This process was undertaken with members of a Paediatric Oncology Nursing Course that began in 1999: using the competency assessment document found in Appendix XIII (one competency presented as an example).

7.3 Semi-structured interviews

Robson (1993 p228) defines an interview as being “a conversation with a purpose”. Interviews vary on a continuum from highly structured, standardised and quantitatively orientated to semi-formal guided conversations, to free-flowing informational exchanges. Interviewing can be a complex and daunting undertaking, one that requires as much thought, preparation and skill as any other method of data collection in order to attain credibility. As Brink (1991) has argued issues of reliability and validity can be a major challenge when a study is based on semi-structured interviews. This stems from wanting to retain the flexibility to adjust interview questions, balanced with achieving depth and breadth whilst maintaining consistency in data collection, additionally, the interactional character of the interview attaches a further dimension.

The process for undertaking semi-structured interviews and the rationale for use are detailed in Appendix II with a summary of the rationale provided in Table 7.5 below.

| ♦ Potential to overcome the poor response rate of a questionnaire survey. |
| ♦ Well suited to explore the attitudes, beliefs, values and motives, not easily achieved in a questionnaire. |
| ♦ Open-ended questions can be used to gain a fuller and more authentic understanding of participant's experiences. |
| ♦ Allows some freedom to modify words during the process. |
| ♦ Able to ensure participants understand the questions being asked. |
| ♦ Allows for probing and prompting. |

7.3.1 The sample population

A longitudinal design was included in order to examine changes over an extended period of time (Burns and Grove 1997). This approach was taken to refine and test the list of
competencies with children's cancer nurses who were using the document as part of an assessment for an education course. The sample targeted was purposeful and therefore consisted of children's nurses undertaking the children's cancer nursing course at the researchers place of work. This was a six month course with intakes occurring twice each year. Course members undertaking the course beginning January 1999 were approached, and invited to participate.

The invitation to participate in the study took two forms. Initial contact was made using an informal meeting where the researcher described the nature of the study to course members and outlined their role and length of commitment. An information sheet was sent to all students following the meeting. The information sheet (Appendix XIV) clarified further their role in the study and the time period over which their involvement was required. The content stressed that their participation was voluntary; a refusal would not affect their experience whilst undertaking the course. Using both these approaches was more comprehensive than if only one method was used. The inclusion of an informal meeting meant that the researcher was able to make personal contact with potential participants. In describing the development of the competency assessment document to course members, what was apparent was the shared role and commitment to its development both the researcher and the course leader had. It was therefore crucial that the role of the researcher was clarified as being distinct and different from the course leader, who would also be evaluating the assessment document with course members through various stages of their course.

The notion of confidentiality was discussed and the researcher made it clear that any information shared during the interviews would not be discussed with the course leader while the course was underway. There was potential with such a small course that fosters a close relationship between course members and course leader that comments could be traced to their source. The researcher made it clear, however, that feedback from the research would be given to the course leader following completion of data collection and data analysis. Such a commitment made it apparent that their contributions would be valued and would ultimately contribute to further development of the competency
document. The amount of detail and assurance that was made possible through interaction with the course members would not have been achievable by letter. The opportunity to answer questions spontaneously and make it clear that timing and place of interviews would be co-ordinated around their specific needs was more easily facilitated in the informal meeting.

The total population of nurses on the course was 13, out of which six agreed to participate in the study. Out of the six, four had previously worked on the haematology/oncology unit at the researcher's place of work and two were undertaking the course whilst working in other units elsewhere in the country, one of whom was a children's community nurse. All were qualified children's nurses.

7.3.2 The procedure
The interview schedule was developed from a competency checklist devised by Gurvis and Grey (1995). This checklist was used when first evaluating the use of the clinical competencies with both clinical assessors and nurses undertaking an oncology course. It was found to be very clear and asked all the relevant questions, and was therefore adapted for use in the interviews (Appendix XV). The main aim of the interview was to refine the list of competencies, therefore the questions sought to find out if the competency document was comprehensive, reflective of the role of a children's cancer nurse, while providing participants an opportunity to comment on any aspect from their personal experience. The schedule also included a Likert scale in order to determine participants overall opinion of the use of competencies in clinical assessment. The interview schedule was piloted for content with the course leader and other nurse academics. This interview schedule was used twice while nurses were on the course. By asking the same questions on repeated occasions the researcher aimed to identify if the views of nurses altered in any way following consistent use of the assessment document. The third interview took place six months after the course was completed (Table 7.6).
Table 7.6 Interview procedure

<table>
<thead>
<tr>
<th></th>
<th>Interview 1</th>
<th>Interview 2</th>
<th>Interview 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timing</td>
<td>3mths</td>
<td>6mths</td>
<td>12mths</td>
</tr>
<tr>
<td>Aim</td>
<td>Refine the list of competencies</td>
<td>Refine the list of competencies</td>
<td>Note any change over time. Identify perceptions of relevance to continuing professional development. Explore core and speciality focus.</td>
</tr>
<tr>
<td>Interview schedule</td>
<td>Included questions specific to the competency statements, performance criteria and level indicators (Appendix XV).</td>
<td>Repeat of interview 1</td>
<td>Developed from previous schedule additions evolved from participant's responses (Appendix XVI).</td>
</tr>
</tbody>
</table>

The interviews took place in a variety of settings. This included the researcher's office, ward areas and course member's homes. Regardless of the setting, the interviews were always one-to-one and private. The setting was dictated by the course member's off-duty, often having to be changed at the last minute. The researcher had to be very flexible as even with efficient organisation the timing could not always accommodate the needs of course member's in clinical practice.

The interviews were formal, in that an interview schedule was used, but informal in that a relationship very quickly developed between the researcher and course members. This rapport was evident in that course members nearly always took the opportunity to talk about their experience on the course, either before or after the interview. This discussion was outside of anything related to the competency document, and was clearly an example of the researcher taking an interest in their careers and the course members making the most of time with an experienced children's cancer nurse.
The questions were asked verbatim, with probes used to gain a clearer understanding while also adding depth to comments. Sequencing order of the questions was changed when respondents gave responses that addressed questions which were to follow. Explanation of questions was rarely required, however respondents consistently required prompting when responding to the question asking them to explain the core and speciality focus. Each respondent was given a copy of the competency document to refer to where needed during the interview. With prior permission of the participants all interviews were audiotaped. Where possible these were transcribed as near to the time of the interview as possible. Where this was not possible the researcher made notes immediately after the interview.

7.3.3 Data analysis

Organising data consisted of labeling each tape with interviewee code, date, time and place of interview.

The interviews culminated in a collection of transcripts: three for each participant, 18 in total. The primary purpose of the interviews was to refine the competencies and to obtain perceptions and views from children's cancer nurses about their use and relevance in clinical practice. Descriptive analysis was undertaken to identify consistency of comments and the data was displayed in a time-ordered matrix (Miles and Huberman 1994). A time-ordered matrix uses chronology as its basic principle. The display uses columns to show time-linked data referring to particular phenomena, in this case change in perception of clinical competencies. Using this type of display the rows will depend on what else is being studied. In this case the rows of the matrix were aspects or components of exclusivity of the competency statements and their relevance to clinical practice, making transparent the following:

♦ Are there any competencies missing?
♦ Are the competencies reflective of their role?
♦ Is there repetition of performance criteria?
♦ Do they understand the meaning of the core and speciality focus?
♦ Would they use them for personal/professional development?
♦ What is the overall usefulness of the assessment tool?
Transcripts were read and a highlighter pen was used to indicate comments that reflected all of the above areas. Notes were made in the margin of the transcripts with a summary detailed in the researcher's notebook.

7.3.4 Results of the semi-structured interviews
Data reduction and display are presented in Table 7.7, with a written summary of the data presented in Table 7.8.
Table 7.7 Time-ordered matrix: changes in the perception of clinical competencies

<table>
<thead>
<tr>
<th></th>
<th>Interviewee a</th>
<th>Interviewee b</th>
<th>Interviewee c</th>
<th>Interviewee d</th>
<th>Interviewee e</th>
<th>Interviewee f</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>P</td>
<td>Y</td>
<td>Y</td>
<td>P</td>
<td>Y</td>
</tr>
<tr>
<td>2</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>3</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>4</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>5</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

Legend for source of data:

**Responses**

Y (yes) N (no) P (partly)

Likert 1-4: 1 not useful, 2 uncertain, 3 useful, 4 very useful

**Questions Asked**

1. Are there any competencies missing?
2. Are the competencies reflective of their role?
3. Is there any repetition of performance criteria?
4. Do they understand the core and specialty focus?
5. Would they use them for personal/professional development?
6. What is the overall usefulness of the assessment tool?

**Timing of Interview Shaded**

3/12 O
6/12 O
9/12 O
<table>
<thead>
<tr>
<th>Competencies missing</th>
<th>Interviewee a</th>
<th>Interviewee b</th>
<th>Interviewee c</th>
<th>Interviewee d</th>
<th>Interviewee e</th>
<th>Interviewee f</th>
</tr>
</thead>
<tbody>
<tr>
<td>At the start no, final interview perceived gaps in relation to symptom management.</td>
<td>No.</td>
<td>No.</td>
<td>Start wanted more on community and neuro-oncology, end requested more on palliative care.</td>
<td>No.</td>
<td>No.</td>
<td>Some too broad and general but reflective of previous experience, post course even more difficult to see the relevance, e.g. prioritising care of an acutely ill child.</td>
</tr>
<tr>
<td>Competencies reflect role</td>
<td>Only partly until final interview. At the start found them too general and broad, but found this useful later. Throughout felt they did not accommodate previous experience.</td>
<td>No.</td>
<td>Some too broad and not reflective of previous experience, post course even more difficult to see the relevance, e.g. prioritising care of an acutely ill child.</td>
<td>Partly, not able to personalise and reflect previous experience. Questioned relevance of some but in final interview understood why all there. BMT and radiotherapy difficult to achieve.</td>
<td>Yes. Overlap in relation to communication, breaking bad news. Expanded role too vague.</td>
<td>Yes. Overlap in relation to communication, breaking bad news. Providing holistic care.</td>
</tr>
<tr>
<td>Repetition of performance criteria</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
<td>Yes.</td>
</tr>
<tr>
<td>First interview no. Developed understanding through the course.</td>
<td>Clear from the start, core gave confidence in role at the start.</td>
<td>Clear throughout.</td>
<td>Clear throughout. Saw both developing in tandem.</td>
<td>No, and no change over time.</td>
<td>Clear throughout, but wanted more specialty focus.</td>
<td>Clear throughout, but wanted more specialty focus.</td>
</tr>
<tr>
<td>Understand core and specialty focus</td>
<td>Yes, but not if time consuming.</td>
<td>Yes. Helpful guidelines and a resource.</td>
<td>Yes, but levels difficult to interpret.</td>
<td>\</td>
<td>\</td>
<td>\</td>
</tr>
<tr>
<td>Use for personal and professional development</td>
<td>Initially daunting but always very useful.</td>
<td>Always very useful, provides goals but not sure everything needed to be assessed.</td>
<td>Always, offers guide and a framework.</td>
<td>\</td>
<td>\</td>
<td>\</td>
</tr>
<tr>
<td>Were they useful</td>
<td>Changed over time, found levels unhelpful throughout.</td>
<td>\</td>
<td>\</td>
<td>\</td>
<td>\</td>
<td>\</td>
</tr>
</tbody>
</table>

Table 7.8 Summary table verifying and interpreting time-ordered matrix: changes in the perception of clinical competencies
The respondent's comments indicated that there was a level of consensus regarding the competency statements, in that they did reflect the knowledge and skills of a children's cancer nurse. Overall, it was felt that no additions were necessary, however this must be balanced with a view shared by all respondents that 14 competencies were more than enough to complete during a six month course. Two respondents did identify competencies to add. One respondent identified that following the end of the course knowledge was lacking in some aspects of symptom management. A competency specific to neutropenia, infection control and nursing management of the immunosuppressed child was considered to fill that gap. A second respondent, reflecting on their own role, identified gaps in relation to caring for children in the community and those requiring neuro-oncology nursing. On completion of the course this respondent commented that being creative with the assessment document and encouraging course members to reflect on their personal needs may fill this gap. However, they still felt that a focus on palliative care was lacking.

The competencies were considered to be reflective of the role of a children's cancer nurse, however respondents consistently described a number of the competencies as being 'too broad', 'not specific to the specialty', and 'not accommodating of previous experience'. Comments reflected previous clinical experience, as well as the respondent's expressed need for specialist cancer knowledge. This perception did change over time with two respondents describing the benefit and application of core children's nursing knowledge to specialist practice. In contrast, one respondent found the core children's nursing competencies of less relevance on completion of the course. It was the timing that seemed to cause the most concern, particularly where previous knowledge and experience of an area was minimal for some, such as in the specialty of bone marrow transplant and radiotherapy; where these competencies were difficult to achieve.

Respondents identified some overlap of performance criteria, some appearing to be repeated in a number of competencies. For example, criteria addressing communication
needs appeared in two competencies. Some difficulties with wording were noted, with respondents describing the problems that this caused for them and their assessors. Wording in some was considered too vague, whereas in others it was described as verbose. One respondent suggested leaving gaps in the list of criteria where course members could add the evidence they had used to achieve a competency.

The focus of the performance criteria to reflect core and specialist knowledge and skills failed to be considered relevant by a number of respondents. One respondent failed to grasp the difference throughout the whole assessment process, and even on completion of the course was unable to express a level of understanding. All respondents distinguished between general and specialist knowledge in their quest during the course for specialist knowledge. For some this did change, respondents described the need to develop general and specialist knowledge and skills in tandem.

7.3.5 Trustworthiness of the data
The neutrality of the researcher was made clear at the start of the research. The fact that changes over time in relation to respondent's comments could be perceived as more favourable in terms of usefulness of the competencies would indicate that whilst on the course they were not influenced by the researchers role.

7.3.6 Outcome of the semi-structured interviews
Comments that reflected on omissions or duplication of competency statements and performance criteria were considered. The researcher used professional judgement to decide whether the current list warranted changing. Some of the comments reflected content that was already present. Where that was the case words were altered to be more explicit. Where there was clear duplication of performance criteria some were removed. Some competencies were combined where there was overlap, and some were divided to retain and increase focus on that aspect of care. Some wording was altered to be more specific about the intended outcome. One new competency was developed to reflect comments about the absence of a focus on 'community' and 'palliative care': titled
'considering continuing needs of the child/young person and their family'. This process resulted in reducing the number of competencies from 14 to 12.

The information gained at this stage of data collection represented the perceptions of a defined group of children's cancer nurses: generally nurses with minimal experience in the speciality, during and post an education programme. Their comments were extremely valuable and surprisingly consistent between respondents. The next step was to take the competency document in its original format to a group of very experienced children's cancer nurses, outside of an education programme, to gain their perceptions. This comprehensive approach was considered essential as part of the refining and validation process, and was undertaken to ensure that the voice of the expert who has a wider perspective of the speciality would be heard. The aim being to contribute to the emerging picture of what a children's cancer nurse is and does.

7.4 Focus groups

7.4.1 Rationale for use
Focus groups were considered to be superior to individual interviews in both phases of the study where the researcher sought to refine lists of competencies and validate data from the previous data collection method. It was this focus that also determined the use of one-off focus groups as opposed to a series. The focus group with 'expert' children's cancer nurses was undertaken for two reasons. Firstly, to ascertain participant's views and perceptions regarding the essential characteristics of a children's cancer nurse. And secondly, to validate and refine the list of competencies developed following the NGTs by asking participants to share their perceptions on the competency assessment document currently in use with course members. Section 6.3 outlines a description of the technique and discusses the procedure in detail.

7.4.2 The sample population
A purposeful sample was once again used, the researcher choosing to contact senior, in terms of length of clinical experience, children's cancer nurses who already meet as part of
a local network. The group represented nurses working in hospital and in the community from four UKCCSG centres. The researcher issued an open invite at a preceding meeting for volunteers to participate in a focus group (Appendix XVII). Out of a total of 13, nine were able to attend. As all nine had been qualified for some years it can be presumed that they held a general (adult) qualification in addition to a children's nursing qualification. The sample included:

♦ Five paediatric oncology outreach nurse specialists (community nurses);
♦ Nurse practitioner;
♦ Two Clinical Nurse Specialists;
♦ Senior lecturer.

7.4.3 The procedure
The focus group was conducted using the procedure outlined in Section 6.3.5. No changes were made to the approach taken. The focus group questions were developed and piloted with other nurse academics (Appendix XVIII). No changes were made. An additional aspect of the procedure included sending participants a copy of the competency document in advance of the interview.

7.4.4 Data analysis
Organisation of the data involved labeling the tape with the date, time and location and focus group identifier. Once transcribed the hard copy was labeled and photocopied.

Identical to the data analysis of focus groups with expert children's nurses, analysis included both thematic analysis and content analysis (Section 6.7.4).

7.4.5 Results
Using the descriptive model for presentation of findings the following discussion provides a summary description followed by illustrative quotes.
Question 1 Can you state your current understanding of the use of competencies?
There was a general understanding of the use of competencies amongst participants. Participants referred to the role of competencies in developing and maintaining standards, and ensuring delivery of a safe and quality service. Competencies were considered to complement policies that underpin service delivery. Participants expressed the need to define different levels of practice. There was debate around minimum and maximum standards with participants concluding that competencies would need to be individualised to the person and the role, and not a title. There was concern that practice can be undervalued where colleagues equate expert practice with titles and not the person. Using competencies depended on self-assessment and the ability to reflect on practice. They ended up by agreeing that all nurses should be working towards achieving expert practice. Defining expert practice was seen to be difficult, but there was general agreement that 'you know an expert when you see one'. It was felt that competencies could provide a means to recognise and value expert practice.

Typical comments included:
FGe2 P1 In development of staff I see them as a way of assessing where we are and setting goals where we would like to be……the individual would like to be ..hopefully a set of competencies that we are trying to achieve so we can develop a standard of what we want nurses to understand and service we want them to be able to deliver and support for other nursing staff on the ward and that we are aiming for particular level of competency and a particular skill that the person has related to that speciality…..as paediatric oncology…..that’s what I usually feel.
FGe2 P8 I think …..there's, ......an awful....as I understand competencies....... going along with what P1 said ......there's a big role mm for self assessment in the achievement of competencies….its something that you've got to feel OK about yourself rather than someone ....a third person saying that you are competent to do this.
FGe2 P2 going along with that...you can call it reflective practice in achieving working effectively and independently.
Question 2 Do the competency statements reflect the knowledge and skills required of a children's cancer nurse?

This was considered difficult to do within the context of a wide trajectory of care and the fact that both the clinical service and nurse's role would influence development of specific skills. It was felt that achieving expert status, assessed using competencies, might alter over time as nurses change roles and focus of care delivery. The need to self-assess was re-considered and thought to be crucial to develop self-awareness, to learn from experience, to be effective in a role, to be aware of boundaries of practice and limits of knowledge. Knowledge and skills were described as being part of a whole. Participants referred to 'complete practitioners' as those who had knowledge and skills but also the correct attitude. When asked to consider if they felt that there were any competency statements missing, participants focused on the need to emphasize long-term follow-up within the context of life-long care working collaboratively with other specialist teams. Participants reflected on the difference between general and specialist skills necessary to be effective in the delivery of follow-up care. Participants debated the difference between general and specialist, and began to deliberate when one finished and the other started.

Typical comments included:

Fge2 P4 I think there should be something about its not over when the treatment ends….there's far more that affects these peoples lives really…..and often I think what we see is this huge investment when they are in hospital…..especially with adolescents who then go off to university. And suddenly at 21 all their life collapse because of what they went through at ......the reality...what they went through when they were 15...actually hits them......at 21 mmmm...just to be aware of what happens...just because they have been cured......the question is....

Fge2 P9 its hard to answer at the minute.........is and I don’t know if I've really got a clear grasp of it......is that a paediatric oncology issue or is that a generic issue and that is where it is really hard....

Fge2 P4 yeah exactly.

Fge2 P9 and that’s where it is really hard......
**Question 3 Do the performance criteria reflect the competency statements?**
This was a difficult question relying on participants familiarising themselves again with all the performance criteria. The conclusion was that the only thing missing was an emphasis on an appropriate use of the multi-professional team as a resource.

**Question 4 Do you think the competency framework would help to develop children's nurses?**
There was a general agreement that the competency framework would help to develop children's nurses and children's cancer nurses. Resulting from some discussion around the transferability of skills and the need to focus on general skills within specialist practice, participants agreed that general and specialist skills develop simultaneously. Participants agreed that it was possible to recognise specialist practice even when it was being delivered outside of an area of practice. For example, a children's renal nurse working within children's cancer nursing would not be an expert in that area of practice but they would be able to transfer their specialist skills. Assessment of a child, communicating with parents, valuing parents knowledge, and an overall attitude of care were given as examples that distinguish specialist practice.

**Typical comments included:**

*FGe2 P6 but then it gets to a certain point when your general and specialist skills are ...feed off each other.......as your children's nursing skills have got to a certain level and your specialist skills have got to a certain level they start to...you start to...because you learn on both things.....then that might in turn makes you understand your specialist skills more.....and in a way you flip backwards and forwards ......I think it gets to a certain point when it simultaneously develops together ...........*

*FGe2 P3 you are spotted as a specialist nurse wherever you are.....maybe it's your confidence and competence that I know what I am doing............*

*FGe2 P3 there maybe something in being a children's nurse ...those skills that you develop as a children's nurse maybe you are a little more ......you view the care in a different way to perhaps adult nurses do.......from you first day of training when your asked to be that*
advocate that sort of stays with you …..that allows you to ask the questions and have the confidence.

FGe2 P8 and maybe it is easier to develop as a children's nurse when you are in a speciality ……cos if I think back to a DGH….where there was not a pathway…and here there is a pathway…I know we say we get bogged down in IV competencies but perhaps when you are in a much broader field you have to be much more motivated to go on and look for those opportunities to develop either counselling skills or whatever….whereas when you are in a speciality it is there guiding you.

**Question 5** Do you see a role for a competency framework, such as this one, in areas other than as part of a course assessment?

Individual performance review was considered as the vehicle to implement competencies. There was a general agreement that competencies could play a part in professional development, focus learning, develop clinical skills from preceptorship (period immediately following registration) and continue as part of life-long learning. However two participants did express concerns that more experienced practitioners would find the comprehensiveness of the competencies daunting.

**Question 6** Can you describe the characteristics of an expert paediatric oncology nurse?

Although there was much discussion around this question, participants did agree that expert practice was 'almost indefinable'. It was about knowing, intuition, coping with the unknown, responding to needs of families at different times, about being authentic and having confidence. Knowledge alone was considered to be inadequate. An expert nurse had both knowledge, the correct attitude and something else that was more difficult to define, but easily recognised.

**Typical comments included:**

*FGe2 P4* it's almost indefinable.

*FGe2 P8* yeah.
FGe2 P4 but it has to be steeped in knowledge and experience……you cannot do it without that.

FGe2 P6 but then its not exclusively knowledge is it…….

FGe2 P8 and FGe2 P4 no it isn’t.

FGe2 P6 cos if it was purely knowledge then some people could come and then know every single protocol in the book can tell you what does etc when it comes to talking to a family who have been given bad news…that’s different….its down to the situation.

**Question 7 Do you have any other comments about the competency framework?**

In the final discussion participants returned to the idea of levels and the expectation that all practitioners should be able to reach expert level using competencies. The debate revolved around balancing the need to aim for expert level whilst also recognising individual needs. Participants concluded that it was realistic for managers to push all their staff towards expert practice. However some practitioners may take longer to achieve that level because of personal circumstances. Participants returned to a point made earlier that expert practice must not be attached to a specific title; expert practice was not bound by roles. There was agreement that a competency framework could endorse the nature of expert practice and recognise and value all practitioner roles.

Thematic analysis identified two categories with sub-categories (Table 7.9).

**Table 7.9 Categories and sub-categories identified using thematic analysis**

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
</tr>
</thead>
</table>
| Characteristics of specialist practice | ♦ 'Know it when you see it'
|                                  | ♦ Defining attributes                               |
|                                  | ♦ More than knowledge                               |
|                                  | ♦ General and specialist skills                     |
| Describing competencies         | ♦ Levels of competency                              |
|                                  | ♦ Outcome of assessment                              |
|                                  | ♦ Missing elements                                   |
|                                  | ♦ Problems with competencies                        |
Using content analysis it was possible to identify from the data elements with agreed consensus that needed to appear in the list of competencies in order to not only make them more comprehensive but also ensure that they more specifically encompassed the role of a children's cancer nurse. This process resulted in some additions to the list of competencies as well as some considerable discussion on personal qualities that participants felt were missing from the competency document. Content analysis identified mainly descriptors (Table 7.10).

**Table 7.10 Additional descriptors**

<table>
<thead>
<tr>
<th>Descriptor</th>
<th>Human Activity</th>
<th>Personal Attribute</th>
<th>Outcome Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advocate</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authentic</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Challenging</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Confident</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education of children/young people</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Intuitive</td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Long-term follow-up</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Motivated</td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Perceptive</td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Reflective</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Role model</td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Self-assessment</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Self-awareness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress-awareness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supports families when treatment ends</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Transferable skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use wider skills</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Uses general and specialist skills</td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Weave together art and science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Works collaboratively with other experts</td>
<td></td>
<td>*</td>
<td></td>
</tr>
</tbody>
</table>

Where there was a level of consensus, identified through participant's discussion, these descriptors were added as sub-competencies to the list of performance criteria. One new category was developed 'demonstrate effectual personal attributes' in order to encompass
personal qualities, implicit rather than explicit in the previous list of competencies (Table 7.11).

<table>
<thead>
<tr>
<th>Competency</th>
<th>Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caring for an acutely ill child</td>
<td>◆ Use wider skills</td>
</tr>
<tr>
<td>Effectively uses counselling and supportive skills</td>
<td>◆ Self-assessment</td>
</tr>
</tbody>
</table>
| Providing holistic care to the child and their family throughout their cancer experience | ◆ Advocate
  ◆ Weave together art and science |
| Considering continuing care needs of the child/young person and their family | ◆ Long-term follow-up
  ◆ Works collaboratively with other experts
  ◆ Education of children/young people
  ◆ Supports families when treatment ends
  ◆ Transferable skills |
| Understanding the influences on paediatric oncology practice             | ◆ Role model                                           |
|                                                                           | ◆ Uses general and specialist skills                   |
| Demonstrate effectual personal attributes                                | ◆ Authentic
  ◆ Challenging
  ◆ Confident
  ◆ Intuitive
  ◆ Know own limitations
  ◆ Motivated
  ◆ Perceptive
  ◆ Self-awareness
  ◆ Stress-awareness |

7.4.6 Trustworthiness of the data

Whether this process would reveal the same information if undertaken with the same group or another group could be questioned. The interactive nature of focus groups would make the process difficult to repeat. However, the purpose of this stage in the data collection was to validate and evaluate pre-determined information the procedure was considered sufficiently rigorous.
Participants did validate the list of competencies through discussion and the comments made.

7.4.7 Outcome of the focus group with children's cancer nurses
The outcome was a refined list of children's cancer nurse competencies, supported by contextual data, which were combined with data from the semi-structured interviews. This process resulted in 13 competencies (Table 7.12).

7.5 Summary
The end result of data collection was a list of competencies that describe a children's cancer nurse. The multiple methods used generated, synthesised, validated and evaluated data collected. Multiple methods of data collection were put in place to check on preceding collection of data. The final list of competencies is grounded in the data collected. In support of the view that practitioners should develop competencies this phase of the study has involved the most appropriate participants.
<table>
<thead>
<tr>
<th>Competency</th>
<th>Performance criteria</th>
</tr>
</thead>
</table>
| Having a sound knowledge of the cancer process and of paediatric haematology and oncology | ♦ Demonstrate how knowledge would be shared with children/families and student nurses, respond effectively to parents’ request for information about their child’s cancer (SO)  
♦ Have a working knowledge of the types of common childhood cancers, including how they are diagnosed (SO)  
♦ Identify members of the healthcare team and discuss their roles in caring for the child/young person and family in hospital and at home (SO)  
♦ Distinguishes the aetiology, epidemiology and genetic details of childhood cancers (SO)  
♦ Describe the metastatic pathways of common childhood cancers (SO)  
♦ Provide effective health education to the child and family; example: sun protection. (SO) |
| Understanding the continuing effect a diagnosis has on a family             | ♦ Demonstrate ability to respond to the needs (physical and psychological) of the child/young person and family (C)  
♦ Demonstrate the ability to give consistent information at an appropriate pace to the child/young person and family recognising the individual needs of each family (C)  
♦ Discuss the principles of breaking bad news (SO)  
♦ Discuss the nurse’s role in facilitating breaking bad news (SO)  
♦ Support families in expressing their emotions at this time (SO)  
♦ Articulate any differences between a first diagnosis, relapse and palliation (SO)  
♦ Effectively utilise resource (human and others) (C)  
♦ Facilitate parental involvement in decision making (C)  
♦ Take a role in co-ordinating the needs of extended family members (C)  
♦ Establish effective shared care (SO) |
| Caring for an acutely sick child/young person                              | ♦ Identify those children/young people at risk of becoming acutely ill due diagnosis or as a result of treatment (SO)  
♦ Care for an acutely sick child demonstrating:  
♦ Nursing assessment skills that facilitate planning, implementation and evaluation of care (C)  
♦ Effective time management and prioritising care (C)  
♦ Knowledge of the underlying pathophysiology of why the child/young person is acutely ill (SO)  
♦ Ensuring family involvement at this time (C)  
♦ Effective communication (written and verbal) with other members of the healthcare team (C)  
♦ Liaison with other units to ensure safe and calm transfer as necessary (C)  
♦ Demonstrates use of a wide range of skills (C) |
| Having an in-depth knowledge of symptom management                         | ♦ Identify the potential acute side effects of therapy (SO)  
♦ Understand the physiological processes underlying side effect(s) (SO)  
♦ Have knowledge of, and demonstrate the appropriate use of assessment tools (SO)  
♦ Describe the decision making process that results from assessment (C)  
♦ Demonstrate skills of evaluating interventions (C)  
♦ Identifies interventions (pharmacological and non pharmacological) used in symptom management and explain how they work (SO)  
♦ Demonstrate the ability to explain to the family the rationale for care given (SO)  
♦ Describe the resources available for symptom management (SO) |
<table>
<thead>
<tr>
<th>Competency</th>
<th>Performance criteria</th>
</tr>
</thead>
</table>
| Communicating effectively with the child/young person and family, colleagues and members of the healthcare team | ♦ Demonstrate skills of negotiation with colleagues and members of the healthcare team (C)  
♦ Demonstrate good team skills (C)  
♦ Describe how to establish mutual respect (C)  
♦ Knowledge of professional boundaries (C)  
♦ Articulate how to deal with conflict (C)  
♦ Demonstrate the ability to challenge decisions in a non-threatening way (C)  
♦ Demonstrate the use of effective verbal and non-verbal communication skills (C)  
♦ Produce clear, concise, detailed and accurate written documentation (C)  
♦ Demonstrate how to be an effective role model for students and other staff members (C) |
| Having an in-depth knowledge and understanding of chemotherapy             | ♦ Explains how the main groups of cytotoxic drugs work (SO)  
♦ Describe the role of protocols and demonstrate how to use them (SO)  
♦ Describe the use of clinical trials in paediatric oncology (SO)  
♦ Recognise ethical issues that may arise when entering children into clinical trials (C)  
♦ Identify the late effects of chemotherapy, highlight the effect these may have on the child and family (SO)  
♦ Share knowledge with, other departments, community teams, shared care hospitals (SO)  
♦ States local and national guidelines for health and safety issues related to cytotoxic drugs (SO)  
♦ Demonstrate effective teaching skills enabling the child and family to understand the treatment they are receiving (SO) |
| Having knowledge and understanding of radiotherapy                        | ♦ Describes protocols in which radiotherapy is used showing an understanding of its use in clinical practice (SO)  
♦ Outlines the rationale for using radiotherapy in these protocols (SO)  
♦ Appraise the ethical issues that may arise when using radiotherapy to treat childhood cancers (SO)  
♦ Explain the acute side effects of radiotherapy (SO)  
♦ Identify the late effects of radiotherapy, highlight the effect these may have on the child/young person and family (SO)  
♦ Share knowledge with, other departments, community teams, shared care hospitals (SO)  
♦ Demonstrate effective teaching skills enabling the child/young person and family to understand the treatment they are receiving (SO) |
| Having knowledge and understanding of BMT                                | ♦ Describes protocols in which BMT is used showing an understanding of its use in clinical practice (SO)  
♦ Outlines the rationale for using BMT in these protocols (SO)  
♦ Appraises the ethical issues that may arise when using BMT to treat childhood cancers (SO)  
♦ Explain the acute side effects of BMT (SO)  
♦ Identify the late effects of BMT, highlight the effect these may have on the child/young person and family (SO)  
♦ Outline the role of long-term follow up (SO)  
♦ Share knowledge with, other departments, community teams, shared care hospitals (SO)  
♦ Demonstrate effective teaching skills enabling the child/young person and family to understand the treatment they are receiving (SO) |
<table>
<thead>
<tr>
<th>Competency</th>
<th>Performance criteria</th>
</tr>
</thead>
</table>
| Effectively using counselling and supportive skills | ♦ Recognise the cognitive level of children/young person so that appropriate support can be provided (C)  
♦ Describe different coping styles of family members and how these can be maximised in supporting a family (C)  
♦ Identify gender and cultural differences that must be considered when supporting family members (C)  
♦ Articulate an understanding of personal boundaries necessary when working with families. (C)  
♦ Self-assessors to recognise own limitations, referring families for specialist support as appropriate (C)  
♦ Recognise the supervisory role of senior nurses in this role (C)  
♦ Demonstrate ability to facilitate the child/young person to express how a diagnosis of cancer has affected them (C)  
♦ Accept and value the knowledge base of families (C) |
| Providing holistic care to the child and their family throughout their cancer experience | ♦ Describe the needs of the child/young person and family at different stages of their cancer experience (SO)  
♦ Demonstrate the skills needed to assess the family at critical points throughout their care; example: at discharge and liaison with community nursing teams (SO)  
♦ Recognise established boundaries/roles within the family unit, and describe how they might influence interactions with members of the healthcare team (C)  
♦ Recognise opportunities to enhance family time together (C)  
♦ Create opportunities to identify family’s perceived quality of life issues (SO)  
♦ Illustrates imagination in the variety of styles used to communicate with the child/young person and the family (C)  
♦ Ensure the outcome of the negotiation process is constructive (C)  
♦ Is an advocate for the child and family (C)  
♦ Demonstrate the art and science in caring (C) |
| Considering continuing care needs of the child/young person and their family | ♦ Outline and debate the role of long-term follow up (SO)  
♦ Detail the role and ongoing support given to families by the paediatric outreach nurse specialists (SO)  
♦ Describe the pattern of referral to adult services (SO)  
♦ Recognise the importance of collaborating with appropriate experts in relation to the needs of the child/young person (SO)  
♦ Detail their role in preparing the child/young person and family in relation to the long term implications of their disease e.g. back to school, employment etc (SO)  
♦ Detail the support available to families when treatment ends (C)  
♦ Outline the principles of palliative care (S)  
♦ Recognises how skills can be transferred from one situation to another (c) |
| Understanding the influences on paediatric oncology practice | ♦ Use current evidence to support their practice (SO)  
♦ Distinguish potential areas for role expansion within paediatric oncology nursing (SO)  
♦ Defines future developments in paediatric and adolescent oncology (SO)  
♦ Articulates the current debates within the speciality (SO)  
♦ Demonstrate skills of reflection to illustrate critical thinking (C)  
♦ Disseminate new knowledge to others (SO)  
♦ Summarises factors (international, national and local policies) that will influence paediatric oncology nursing in the next five years (SO)  
♦ Uses generalist and specialist skills in their practice (C)  
♦ Role models to others a questioning approach to practice (C) |
| Demonstrates effectual personal attributes, and is | ♦ Authentic  
♦ Challenging  
♦ Confident  
♦ Intuitive  
♦ Perceptive  
♦ Self-aware  
♦ Aware of own stress  
♦ Motivated |
PART 3
LABELLING, ORDERING AND DEFINING COMPETENCIES
Chapter 8 Classification and comparison: labelling and ordering

8.1 Introduction
At this point in the thesis the data have informed the development of:

1. Categories and descriptors defining the competencies of a children's nurse;
2. Competencies and performance criteria of the specialist children's nurse (case
children's cancer nurse).

These lists constitute proxy definitions for these underlying concepts. The quality of these
definitions will be tested by the process of classification: gaps will be identified when the
'objects' i.e. competencies descriptors etc. are grouped and related to each another in such a
way that their relationships are displayed.

The conceptual framework presented in Section 2.12 suggests an untested possible
relationship between a children's nurse and children's cancer nurse (Figure 2.2). This
conceptual framework proposes a generic relationship between nursing and the fields
within nursing. In a classification of types of nurses, a children's nurse (a species) and a
mental health nurse (a species) are types of nurse (the genus). As suggested in Section
2.12, the children's nurse has all the characteristics of the superordinate concept plus at
least one differentiating characteristic in that the focus of nursing practice is children. A
children's cancer nurse inherits all the characteristics of children's nurse, and nurse. A
children's cancer nurse has all the characteristics of the species that are superordinate with
the addition of one differentiating feature in that the focus of nursing practice is children
with cancer. Using classification to describe objects and their relationships grants meaning
to a term in two ways, by definition and also by its position in the classification: that is
ordering. Developed within the analysis, the classification will make explicit the criteria
for grouping, explore possible relationships, provide definitions and suggest possible
similarities and differences between a children's nurse and children's cancer nurse.

The following discussion reveals how a classification was developed inductively from
data, making explicit the relationship between the generalist and specialist children's nurse,
which will contribute to theory development. This process will be described under
method, analysis, and results.
8.2 Method
The ICN (1996) summarises the development of a classification in three steps:

1. *Identify the concepts that are to be classified and agree on the words to be used to express the concepts.* A concept is a unit of thought, an abstract idea, which exists in the mind of an individual, but in order for it to be communicated to others it has to be expressed in words. The words used need to be precise, and ordered in such a way that others can accurately understand them.

2. *Group the concepts according to common characteristics.* In order to do this, distinctions need to be made in order to bring together groups that are alike and separate out unlike things. How decisions are made in the establishment of classes and how similarities and dissimilarities are to be dealt with must be transparent (Aydelotte and Peterson 1987).

3. *Arrange the groups into a logical hierarchy, the classification:* A hierarchical classification is a series of classes or groups in successive subordination, built on a process of division, according to certain characteristics (Hunter 1998).

These steps were used to develop the classification.

8.3 Data analysis and results
The intent of the analysis was to sort out logically and place concepts into major categories in order to introduce, what Aydelotte and Peterson (1987 p5) refer to as "order in the real world into the experience of the individual". Categories were related to each other by inclusion or exclusion, made explicit by their definitions. The logical formulation placed the categories in a hierarchy, derived from a process of analysis, generalisations, and abstraction.

Participants involved in the multi-stages of data collection in both phases had previously provided the concepts to be classified. Competency statements and performance criteria were developed to represent these concepts. A process was undertaken to transform the competency statements and performance criteria to represent one concept unambiguously. These concepts were then grouped according to common characteristics. The concepts were then arranged into a logical hierarchy, the classification. The steps taken to develop
the classification are presented in detail in Table 8.1. Each step is then described with examples to make the process clear.

### Table 8.1 Steps taken to develop the classification

<table>
<thead>
<tr>
<th>ICN 3 steps for developing a classification</th>
<th>Children's nurse</th>
<th>Children's cancer nurse</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify the concepts that are to be classified and agree on the words to be used to express the concepts (labels).</td>
<td>♦ Concepts specified by participants in the focus groups and Delphi survey. ♦ List was refined using a focus group. ♦ Concepts converted into competency statements (labels) and performance criteria (defining characteristics). ♦ Each competency statement and performance criterion transformed to represent one concept unambiguously.</td>
<td>♦ Concepts specified by participants in the NGTs. ♦ Concepts converted into competency statements (labels) and performance criteria (defining characteristics). ♦ List was refined using semi-structured interviews and a focus group. ♦ Each competency statement and performance criterion transformed to represent one concept unambiguously.</td>
</tr>
<tr>
<td>2. Group the concepts according to common characteristics.</td>
<td>♦ Inductive categorisation to develop competency types. ♦ Grouping of competency statements into competency types until all were accommodated. ♦ Comparison to identify initial similarities and differences between children's nurse and children's cancer nurse. ♦ Grouping of performance criteria (sub-competencies) into competency types, expanded list of types. ♦ Comparison to identify similarities and differences between children's nurse and children's cancer nurse.</td>
<td></td>
</tr>
<tr>
<td>3. Arrange the concepts into a logical hierarchy, the classification.</td>
<td>♦ Isolating each class and transformed sub-competencies. ♦ Arranging each of the sub-competencies as a hierarchy for ChN and ChCN. ♦ Developing a hierarchy of ChN. ♦ Asking questions of the data, 'what kinds of things are these', 'are they a type or subtype', 'are the expressions in the right place'. ♦ Identifying which expressions should be in the ChN hierarchy, which are sub-specialist, are there any sub-specialist expressions missing. ♦ Combining synonyms into preferred expression. ♦ Collapsing related terms where meaning allowed. ♦ Noting the expressions that were in ChN but not in ChCN and vice versa.</td>
<td></td>
</tr>
</tbody>
</table>

---

3 In this section only abbreviations are used:  
ChN = Children's nurse  
ChCN = Children's cancer nurse
8.3.1 Step 1: identify concepts and label
The process used to identify and label concepts varied in the two phases of the study, and reflected the different outcomes following analysis of data collected. In Phase I, the outcome of data analysis was a refined list of categories developed by the researcher from ideas of children's nursing roles and further refined through data collection. In Phase II, the outcome of data analysis was competencies developed with children's cancer nurses and refined in use. Prior to the development of the classification the researcher repeated the process undertaken in Phase II (Table 7.3) in order to develop a set of children's nursing competencies and performance criteria. This guaranteed that at the start of developing the classification the researcher was working with the same kinds of data, that is competency statements and performance criteria (see Appendix XIX for an example).

With both sets of competencies a process of transforming the concepts was undertaken in order to express the concepts as precisely and unambiguously as possible, checking the original meaning intended by research participants if necessary by returning to the original data. To facilitate grouping, further paraphrasing was undertaken to transform competency statements and performance criteria as grouping an unclear expression may have proved problematic. This process involved:

♦ Removing duplicate or redundant concepts e.g. 'implementing' was removed, as it was the same as 'delivering care' in this context;
♦ Combining synonyms into preferred expression e.g. 'sharing knowledge through teaching' was the preferred expression over 'sharing knowledge';
♦ Collapsing related terms where meaning allowed e.g. 'having sound knowledge base in anatomy and physiology' and 'demonstrate knowledge of the body and apply to clinical situations' were combined and became 'having sound knowledge base in anatomy and physiology and apply to clinical situations';
♦ Removing modifying terms e.g. 'effective' and 'ongoing', 'sound';
♦ Removing performance criteria expressions that described critical outcomes of successful performance e.g. 'providing', 'forming an';
♦ Using where possible the same form of expression (syntax) ('gerund' in terminology work for verb functioning as a noun, ending in 'ing') e.g. 'observation skills', 'diagnostic skills', interpret findings', became 'observing', 'diagnosing' and 'interpreting';
♦ Splitting expressions, which contained more than one concept e.g. 'comprehensively document and record clinical assessments undertaken', became 'undertaking clinical assessment' and 'documenting clinical assessment';
♦ Removing reference to child, young person or family where it was felt to be redundant: implied in all statements unless otherwise stated.

This process was undertaken with the competency statements (Table 8.2 and Table 8.3) and the performance criteria (Table 8.4 and 8.5).

Table 8.2 Transformed expressions of competency statements: children's nurse

<table>
<thead>
<tr>
<th>Competency statements</th>
<th>Transformed expressions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Undertaking effective and ongoing clinical assessment of child/young person.</td>
<td>Clinical assessment</td>
</tr>
<tr>
<td>2. Considering immediate and continuing care needs of the child/young person.</td>
<td>Meeting care needs</td>
</tr>
<tr>
<td>3. Implementing and delivering care to children/young people.</td>
<td>Delivering care</td>
</tr>
<tr>
<td>4. Delivering technical care.</td>
<td>Delivering technical care</td>
</tr>
<tr>
<td>5. Considering caring from a holistic perspective.</td>
<td>Holistic care</td>
</tr>
<tr>
<td>6. Analysing problems and making decisions.</td>
<td>Problem solving</td>
</tr>
<tr>
<td>7. Basing practice on current evidence.</td>
<td>Practice based on evidence</td>
</tr>
<tr>
<td>8. Uses professional knowledge.</td>
<td>Professional knowledge</td>
</tr>
<tr>
<td>9. Forming an effective bridge between families and the multi-professional team (MPT).</td>
<td>Bridge between families and MPT</td>
</tr>
<tr>
<td>10. Developing a professional and supportive relationship with families.</td>
<td>Professional relationship with families</td>
</tr>
<tr>
<td></td>
<td>Supportive relationship with families</td>
</tr>
<tr>
<td>11. Having effective communication skills.</td>
<td>Communication skills</td>
</tr>
<tr>
<td>12. Demonstrates effectual personal attributes.</td>
<td>Personal attributes</td>
</tr>
<tr>
<td>13. Manages self and others.</td>
<td>Manages self</td>
</tr>
<tr>
<td></td>
<td>Manages others</td>
</tr>
<tr>
<td>14. Taking an active role in their professional development.</td>
<td>Professional development</td>
</tr>
<tr>
<td>15. Having knowledge to care for children/young people.</td>
<td>Caring for</td>
</tr>
</tbody>
</table>
Table 8.3 Transformed expressions of competency statements: children's cancer nurse

<table>
<thead>
<tr>
<th>Competency statements</th>
<th>Transformed expressions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Having a sound knowledge of the cancer process and of paediatric haematology and oncology.</td>
<td>Knowledge of cancer process</td>
</tr>
<tr>
<td></td>
<td>Knowledge of haematology and oncology</td>
</tr>
<tr>
<td>2. Understanding the continuing effect a diagnosis has on a family.</td>
<td>Effects of diagnosis</td>
</tr>
<tr>
<td>3. Caring for an acutely ill child/young person.</td>
<td>Caring for the acutely ill</td>
</tr>
<tr>
<td>4. Having an in-depth knowledge of symptom management.</td>
<td>Knowledge of symptom management</td>
</tr>
<tr>
<td>5. Communicating effectively with the child/young person and family, colleagues and members of the MPT.</td>
<td>Communicating</td>
</tr>
<tr>
<td>6. Having an in-depth knowledge and understanding of chemotherapy.</td>
<td>Knowledge of chemotherapy</td>
</tr>
<tr>
<td>7. Having knowledge and understanding of radiotherapy.</td>
<td>Knowledge of radiotherapy</td>
</tr>
<tr>
<td>8. Having knowledge and understanding of bone marrow transplantation (BMT).</td>
<td>Knowledge of BMT</td>
</tr>
<tr>
<td>9. Effectively using counselling and supportive skills.</td>
<td>Supportive skills</td>
</tr>
<tr>
<td>10. Providing holistic care to the child and their family throughout their cancer experience.</td>
<td>Holistic care throughout the cancer experience</td>
</tr>
<tr>
<td>11. Considering continuing care needs of the child/young person and their family.</td>
<td>Care needs</td>
</tr>
<tr>
<td>12. Understanding the influences on paediatric oncology practice.</td>
<td>Influences on practice</td>
</tr>
<tr>
<td>13. Demonstrates effectual personal attributes.</td>
<td>Personal attributes</td>
</tr>
</tbody>
</table>

Table 8.4 An example of transformed expressions of performance criteria: children's nurse (Competency 1)

<table>
<thead>
<tr>
<th>Performance criteria (defining characteristics)</th>
<th>Transformed expressions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensively document and record clinical assessments undertaken.</td>
<td>Undertaking clinical assessment</td>
</tr>
<tr>
<td>Provide evidence of taking clinical histories.</td>
<td>Documenting clinical assessment</td>
</tr>
<tr>
<td>Demonstrate effective use of observation skills.</td>
<td>Taking histories</td>
</tr>
<tr>
<td>Describe and apply monitoring skills.</td>
<td>Observing</td>
</tr>
<tr>
<td>Examine children/young people and use diagnostic skills where required.</td>
<td>Monitoring</td>
</tr>
<tr>
<td>Demonstrate ability to undertake a holistic assessment, to include social, psychological and spiritual needs.</td>
<td>Diagnosing</td>
</tr>
<tr>
<td>Have the ability to interpret findings.</td>
<td>Interpreting findings</td>
</tr>
<tr>
<td>Appropriately prescribe clinical investigations.</td>
<td>Prescribing investigations</td>
</tr>
<tr>
<td>Demonstrate ability to respond quickly to changing clinical situations.</td>
<td>Responding quickly</td>
</tr>
<tr>
<td>Use channels of referral.</td>
<td>Referring</td>
</tr>
</tbody>
</table>
Table 8.5 An example of transformed expressions of performance criteria: children's cancer nurse (Competency 1)

<table>
<thead>
<tr>
<th>Performance criteria (defining characteristics)</th>
<th>Transformed expressions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrate how knowledge would be shared with children/families and student nurses, respond effectively to parents’ request for information about their child’s cancer.</td>
<td>Sharing knowledge</td>
</tr>
<tr>
<td>Have a working knowledge of the types of common childhood cancers, including how they are diagnosed.</td>
<td>Knowing about cancer</td>
</tr>
<tr>
<td>Have a working knowledge of the types of common childhood cancers, including how they are diagnosed.</td>
<td>Knowing about diagnosing cancer</td>
</tr>
<tr>
<td>Identify members of the health care team and discuss their roles in caring for the child/young person and family in hospital and at home.</td>
<td>Knowing about role of health care teams</td>
</tr>
<tr>
<td>Distinguishes the aetiology, epidemiology and genetic details of childhood cancers.</td>
<td>Knowing about causes of childhood cancer</td>
</tr>
<tr>
<td>Describe the metastatic pathways of common childhood cancers.</td>
<td>Knowing about metastatic pathway</td>
</tr>
<tr>
<td>Provide effective health education to the child and family; example: sun protection.</td>
<td>Giving health education</td>
</tr>
</tbody>
</table>

8.3.2 Step 2: group concepts
An initial grouping of concepts was undertaken during the development of competency statements and performance criteria. This grouping was for the purpose of assessing clinical performance (outlined in Chapters 6 and 7). This second grouping of concepts had a different purpose. At this point in the analysis, inductive categorisation was undertaken to group concepts according to common characteristics to make explicit the relationship between a children's nurse and children's cancer nurse. These categories or classes were then related to each other by inclusion or exclusion, made explicit in their definitions (transformed labels). In the first place this process was undertaken with each of the competency statements, followed by the performance criterion. This process involved the researcher asking three questions of the data:

1. 'What kinds of things are these’?
2. 'What do they have in common’?
3. 'How do they differ from one another’?

This was a repetitious process of questioning in order to reveal the underlying meaning of words. This questioning and ordering resulted in the researcher allocating class names. An expert in classifications through a process of questioning the researcher validated these
class names. This was an interactive process that forced the researcher to question the class names and thereby be certain that transformed expressions had been allocated to the correct class. As is the convention class names will be underlined when presented in text.

**Competency statements: What kinds of things are these?** Asking questions revealed that the competency statements were expressing one of the following:

- The children's nurse or children's cancer nurse has knowledge about something;
- The children's nurse or children's cancer nurse does something;
- The children's nurse or children's cancer nurse believes in something;
- The children's nurse or children's cancer nurse is/has particular attributes.

This process revealed seven classes or 'kinds of things' which were labelled by the researcher in the following way:

1. **Decision-making**: included any concepts related to problem solving and making decisions about care.
2. **Interpersonal**: included any concepts related to relationships between nurses and others that required use of specific personal skills.
3. **Knowledge**: included any concepts related to theoretical or practical knowledge that underpinned care.
4. **Organising**: included any concepts related to management and organisation of care.
5. **Practice/intervention**: included any concepts related to implementing or delivering care.
6. **Professional responsibilities**: included any concepts related to continuing learning and personal education.
7. **Qualities**: included any concepts related to personal attributes of the nurse.
8. **Values**: included any concepts related to beliefs/attitudes or judgments made about the quality of care.

All the competency statements were accommodated within the identified classes (Table 8.6).
Table 8.6 Competency statements grouped into classes

<table>
<thead>
<tr>
<th>Class</th>
<th>Children's nursing (ChN)</th>
<th>Specialist nursing (ChCN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decision making (DM)</td>
<td>♦ Problems solving ♦ Making decisions ♦ <em>Bases practice on current evidence</em></td>
<td>♦ <em>Influences on practice</em></td>
</tr>
<tr>
<td>Interpersonal (IP)</td>
<td>♦ Bridge between families and the MPT ♦ Professional relationship with families ♦ Supportive relationship with families ♦ Communication skills</td>
<td>♦ Communicating ♦ Counselling skills ♦ Supportive skills</td>
</tr>
<tr>
<td>Knowledge (K)</td>
<td>♦ Knowledge to care ♦ <em>Bases practice on current evidence</em> ♦ Professional knowledge</td>
<td>♦ <em>Influences on practice</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td>♦ Effects of a diagnosis of cancer ♦ Knowledge of the cancer process ♦ Knowledge of haematology and oncology ♦ Knowledge of symptom management ♦ Knowledge of chemotherapy ♦ Knowledge of radiotherapy ♦ Knowledge of bone marrow transplantation</td>
</tr>
<tr>
<td>Organising (O)</td>
<td>♦ Manages self ♦ Manages others</td>
<td></td>
</tr>
<tr>
<td>Practice/Intervention (PI)</td>
<td>♦ Clinical assessment ♦ Delivering care ♦ Delivering technical care ♦ Care needs</td>
<td>♦ Caring for the acutely ill ♦ Care needs</td>
</tr>
<tr>
<td>Professional responsibilities (PR)</td>
<td>♦ Professional development.</td>
<td></td>
</tr>
<tr>
<td>Qualities (Q)</td>
<td>♦ Personal attributes</td>
<td>♦ Personal attributes</td>
</tr>
<tr>
<td>Values (V)</td>
<td>♦ Holistic care</td>
<td>♦ Holistic care throughout the cancer experience</td>
</tr>
</tbody>
</table>

**Competency statements: 'What do they have in common' and 'how do they differ from one another'?** The method of comparing 'like with like' uncovered a number of similarities and differences. The class referred to as knowledge contained the majority of the statements in both groups. The specialist nurse group included many more references.
to medical and nursing knowledge, a number of which placed equal emphasis on knowledge and understanding. In contrast, in the children's nursing group reference was made to a broad base of knowledge needed to care for all children/young people. Knowledge that underpinned continuing care needs was considered important in both groups.

The children's nursing group identified many more concepts related to practice or interventions. In contrast to the specialist group, clinical assessment and delivering technical care figured independently from delivering care. Analysing problems and making clinical decisions were absent from the specialist group. However, both groups acknowledged decision-making that used evidence to inform practice. This decision-making would need to be underpinned by knowledge, and therefore these concepts were located in two classes: knowledge and decision-making (indicated using italics in Table 8.6).

Communication skills were represented in both groups in relation to the child and family, as well as colleagues and members of the multi-professional teams. The children's nursing group distinguished between communicating with families and developing a professional and supportive relationship with families. Likewise they emphasised more than communicating with the multi-professional team, they referred to the nurses forming a bridge between families and the multi-professional teams. Classes related to organising and professional responsibilities were absent from the specialist-nursing group. The groups were identical in identifying caring from a holistic perspective.

From this initial process a primitive representation of the comparisons between a children's nurse and specialist children's nurse were revealed. However to discriminate clearly between the two groups this level of detail was considered to be insufficient. The competency statements lacked the specific elements that would allow the researcher to be confident that classes encompassed concepts that were all alike. This detail was provided in the shape of performance criteria. The researcher, therefore, repeated the process outlined above to accommodate performance criteria into classes.
Performance criteria: What kinds of things are these? When asking the question of the performance criteria ‘what kinds of things are these’? The researcher concluded that the performance criteria were sub-competencies rather than parts of a competency. They described critical outcomes of successful performance, and in some they contained evaluative statements, which defined a level of performance. When paraphrased and transformed they indicated a range of things a children's nurse or specialist children's nurse might do but not all of the things they would do to achieve a particular competency. The sub-competencies represented key elements, which were appropriate using the holistic approach to the development of competencies.

This process involved isolating the sub-competencies from the competency statements. Each sub-competency was labelled with an abbreviated title either ChN = children's nurse or ChCN = children's cancer nurse, and a number, which corresponded to the competency number. These details were used to identify the origin of the sub-competency prior to a manual process of cutting and pasting, which placed all the sub-competencies into one of the eight classes:

1. Decision-making
2. Interpersonal
3. Knowledge
4. Organising
5. Practice/intervention
6. Professional responsibilities
7. Qualities
8. Values

Asking questions of the data brought together sub-competencies that were alike and separated out the sub-competencies that were unlike grouping the concepts according to the eight classes listed above. Some of the sub-competencies did not reflect the characteristics of the previously identified eight classes. This process revealed three new classes:
9. **Developing practice**: included any concepts related to activities about developing or informing changes to practice.

10. **Health Education**: included any concepts about giving information regarding health and health promotion.

11. **Teaching**: included any concept related to teaching or sharing knowledge with others.

   Additionally, the class 'knowledge' was too broad to encompass all 'things about knowledge'. When asking 'what kinds of things are these' two classes of knowledge were revealed: 'knowledge about' and 'knowledge how to'. Dividing this class made explicit knowledge about how to actually do things and knowledge that would enable a person to do something if they needed to. In total 12 classes were revealed. Two examples of grouping concepts are presented in Table 8.7.

<table>
<thead>
<tr>
<th>Class</th>
<th>Children's nurse (ChN)</th>
<th>Specialist children's nurse (ChCN)</th>
</tr>
</thead>
</table>
| Professional responsibilities (PR) | ♦ Learning as an adult  
♦ Willing to learn  
♦ Participate in life-long learning  
♦ Keeping up to date  
♦ Supervising others  
♦ Developing through experience  
♦ Participating in multi-professional learning | ♦ Transferring skills  
♦ Using senior nurses as supervisors                                                                 |
| Teaching (T)                  | ♦ Sharing knowledge through teaching  
♦ Teaching non-trained carers  
♦ Advising  
♦ Role modelling  
♦ Facilitating  
♦ Assessing competence of others  
♦ Teaching children  
♦ Individualising information  
♦ Supporting nurses | ♦ Teaching families about chemotherapy  
♦ Responding to requests for information  
♦ Role modelling  
♦ Explaining interventions  
♦ Sharing knowledge with others  
♦ Explaining rationale for care  
♦ Teaching child and family about BMT  
♦ Sharing knowledge  
♦ Pacing information  
♦ Teaching child and family about radiotherapy  
♦ Sharing knowledge with other departments  
♦ Giving consistent information |
Performance criteria: 'What do they have in common' and 'how do they differ from one another'? The method of comparing 'like with like' uncovered a number of similarities and differences. Overall there was more in common than different. The focus on the needs of the child and family was apparent in both groups. The decision-making competency and interpersonal competency were very similar. In the decision-making competency both groups focused on assessment, planning and evaluating care, and the decisions around that with families. In the interpersonal competency both focused on communicating with colleagues, families and doctors. Both highlighted the importance of maintaining professional boundaries and the use of negotiating skills. Advocating, and developing a relationship with families was represented in both, but the ChN included many more sub-competencies about how that relationship might be formed. The teaching competency was also similar. Both focused on teaching children, families and others with sharing knowledge seen as important in both. There was one difference the ChCN included reference to how the information would be given as well as to whom.

Professional responsibilities, although represented in both groups included many more sub-competencies in the ChN.

There were many more sub-competencies in the ChN practice/intervention competency. On the whole these were very broad, as opposed to the specific nature of the ChCN. The fundamental aspects of caring for children and their families were very detailed in the ChN. Both made reference to an expanded role and the use of a wide range of clinical skills. Assessment, although appearing in both, was very detailed in the ChN. The developing practice competency was very similar. Organising, although represented in both groups included many more sub-competencies in ChN. Both values and health education competency were in the minority in both groups, likewise health education. Qualities were embodied in both groups. However, the ChN included many more characteristics than the ChCN. There was a degree of overlap, but overall the ChN was more detailed and very specific.

The main differences were in relation to knowledge. Both groups included numerous sub-competencies. The ChN was very broad in relation to needs of children, effect of
hospitalisation and awareness of the roles of the health care team. The ChCN was very specific to the medical and nursing knowledge required to care for children with cancer. The ChCN focused on treatments, protocols, side effects, and management of side effects, disease and the effects of disease. There was an element of overlap in relation to assessment skills, assessment tools, and knowledge about the health care team.

8.3.3 Step 3: arrange in hierarchy
This process involved taking each class and developing a hierarchy, which placed concepts in successive subordination, built on a process of division. Hierarchical classifications are usually presented in text in alphabetical order to ensure equal importance is awarded to each expression unless the purpose of the classification dictates otherwise. In this case, to order sub-competencies, successive subordination places all sub-competencies that are shared by the children's nurse and children's cancer nurse first with the sub-competencies specific to the children's cancer nurse at the end. This resulted in a mono-axial classification type/subtype hierarchy of nursing competencies. Further refinement involved the researcher asking questions of the data to make explicit relationships that indicated a pure type (parent) or subtype (child, brother or sister, grandchild) between competencies of a children's nurse and children's cancer nurse. In the hierarchy presented below (Figure 8.1) the top term is a competency, and the principle of division is types of sub-competencies. Within the 12 classes of competencies there were 26 sub-classes identified by the researcher to help logically order the sub-competencies for presentation. The process of identifying parent (type) and child (subtype) relationships explores the connections between the children's nurse and children's cancer nurse proposed in the conceptual framework. The process of refinement involved:

- Isolating each class and the transformed sub-competencies;
- Arranging each of the sub-competencies as a hierarchy for ChN and ChCN;
- Developing a hierarchy of ChN;
- Asking questions of the data, 'what kinds of things are these', 'are they a type or subtype', 'are the expressions in the right place';
- Identifying which expressions should be in the ChN hierarchy, which are subspecialist and represent ChCN (indicated by ChCN in brackets);
Combining synonyms into preferred expression;
Collapsing related terms where meaning allowed;
Noting the expressions that were in ChN but not in ChCN and vice versa.

As is the convention, order in the hierarchy will be presented in the figure below by the use of indentations to make clear the types and sub-types of competencies.
Figure 8.1 Classification of children's nursing and specialist children's nursing competencies

**Decision-making (DM) competencies**

DM competencies for the delivery of care
- Planning care
- Identifying interventions (ChCN)
- Evaluating care
  - Interpreting findings
  - Evaluating interventions (ChCN)
- Making clinical decisions
  - Making client-focused decisions
  - Making ethical decisions
  - Making ethical decisions about BMT (ChCN)
  - Making ethical decisions about use of clinical trials (ChCN)
- Making decisions based on assessment (ChCN)

**Developing practice (DP) competencies**

- Using research skills
- Maintaining standards
- Questioning practice
  - Auditing
  - Using reflection
- Relating theory to practice
- Using evidence in practice
  - Summarising influences on the speciality (ChCN)
  - Articulating future developments
  - Knowing about current debates (ChCN)

**Health education (HE) competencies**

- Using health promotion skills
- Giving health education (ChCN)

**Interpersonal (IP) competencies**

**IP competencies for team working**
- Maintaining professional boundaries
- Advocacy
- Working within the MPT
  - Dialoguing with doctors
  - Interfacing between medicine and nursing
  - Communicating with the MPT
  - Liaising with local services and community
  - Liaising with other units (ChCN)
- Challenging decisions (ChCN)
- Dealing with conflict (ChCN)
- Giving mutual respect (ChCN)
- Using team skills (ChCN)

**IP competencies for communicating and counselling**
- Empathising
- Establishing trust
- Establishing rapport
- Listening
- Assertion
- Using diplomacy
- Negotiating
- Empowering families
- Communicating on different levels
  - Communicating medical information to children and families
  - Communicating verbally and non-verbally (ChCN)
- Facilitating breaking bad news (ChCN)
Figure 8.1 Classification of children's nursing and specialist children's nursing competencies (continued)

Knowledge how to (Kh) competencies
Kh competencies for using the health care team
- Transferring to adult care
- Establishing shared care (ChCN)
- Collaborating with experts (ChCN)

Kh competencies for using protocols (ChCN)
- Outlining steps of Basic Life Support

Knowledge about (Ka) competencies
Ka competencies for caring for children
- Ka anatomy & physiology
- Ka child development
- Ka consent
- Understand the world of children
  
  Recognising effects of hospitalisation
- Knowledge of new technologies

Ka competencies for role of the nurse in the team
- Ka multi-agency working
- Ka how health care works
- Differentiating practitioner and technician role

Ka competencies for understanding cancer (ChCN)
- About diagnosis (ChCN)
- Causes of cancer (ChCN)
- Pathophysiology (ChCN)
- Metastatic pathway (ChCN)
- Long-term implications of cancer (ChCN)

Ka competencies for understanding treatments of cancer (ChCN)
- Ka cytotoxic drugs (ChCN)
  
  Ka pharmacokinetics (ChCN)
- Clinical trials (ChCN)
- Health and safety (ChCN)
- Side effects (ChCN)
- Long-term implications of treatment (ChCN)
- Ka radiotherapy (ChCN)
- Ethical issues about treatment (ChCN)
- Ka BMT protocols (ChCN)
- Side effects of BMT (ChCN)
- Late effects of BMT (ChCN)

Ka competencies for ongoing support of families of a child with cancer (ChCN)
- Long-term follow-up (ChCN)
- Quality of life issues (ChCN)
- Roles within the family unit (ChCN)
- Role of outreach nurse (ChCN)
- Palliative care (ChCN)
- Needs of family members (ChCN)
  
  At diagnosis (ChCN)
  At relapse (ChCN)
  At palliation (ChCN)
  
  Gender and cultural differences (ChCN)

Organising (O) competencies
O competencies for organising people
- Delegating
- Facilitating
- Using skills of other people (ChCN)

O competencies for organising resources
- Using business skills
- Managing time (ChCN)
- Prioritising care
Figure 8.1 Classification of children's nursing and specialist children's nursing competencies (continued)

Practice/Intervention (PI) competencies

PI competencies for delivering family care
- Facilitating parents in their role
- Giving family care
  - Responding to needs (ChCN)
- Maintaining normality
  - Enhancing family time together (ChCN)
- Coordinating extended members (ChCN)
- Supporting families (ChCN)
  - At diagnosis (ChCN)
  - When treatment ends (ChCN)

PI competencies for care delivery
- Implementing
  - Responding quickly
  - Giving IV drugs
  - Giving psychological care
  - Using distraction
  - Helping children express their emotions (ChCN)
  - Giving supportive care
  - Maintaining hygiene
  - Caring for teenagers
  - Preparing for investigations
  - Using play
- Assessing
  - Assessing holistically
  - Observing
  - Assessing family needs (ChCN)
  - Using assessment tools (ChCN)
  - Identifying risk of illness (ChCN)
  - Recognising cognitive levels (ChCN)
- Monitoring
  - Using wide range of skills
  - Using generalist skills
  - Using generalist and specialist skills (ChCN)
- Transferring skills
  - Admitting patients
  - Discharging patients
  - Ensuring continuing care
  - Referring
  - Approaching caring creatively
  - Documenting
    - Documenting clinical assessment
- Child protection

PI competencies for expanded role
- Using technical skills
- Taking medical history
- Diagnosing
- Prescribing investigations
Figure 8.1 Classification of children's nursing and specialist children's nursing competencies (continued)

**Professional responsibilities (PR) competencies**

**PR competencies for continuing learning**
- Learning as an adult
- Participating in life-long learning
- Keeping up to date
- Participating in Multi-professional learning

**PR competencies for personal development**
- Willing to learn
- Developing through experience
- Supervising others
- Using senior nurses as supervisors (ChCN)
- Role modelling
  - *Role modelling a questioning approach (ChCN)*
- Assessing competence of others
- Being accountable
- Practicing autonomously

**Qualities (Q)**

**Q for personal survival**
- Personal awareness
  - *Sense of humour*
  - *Aware of own stress (ChCN)*
  - *Recognising own limitations (ChCN)*
- Grow personally
- Motivating self
- Maturity

**Q for working in a team**
- Adaptable
- Versatile
- Credible
- Assertive
- Approachable
  - *Approachable expert*
- Challenging (ChCN)
- Authentic (ChCN)

**Q for leadership**
- Proactive
- Visionary
- Political skills

**Q for being affective in their role**
- Common sense
- Friendly
- Confident
- Caring
- Resourceful
- Thinking skills
- Articulate
- Nurturing
- Aptitude
- Intuitive (ChCN)
- Perceptive (ChCN)
**Figure 8.1 Classification of children's nursing and specialist children's nursing competencies (continued)**

**Teaching (T) competencies**

**T competencies for sharing knowledge**
- Teaching children
- Teaching children and families (ChCN)
  - Teaching children and families about chemotherapy (ChCN)
  - Teaching children and families about radiotherapy (ChCN)
  - Teaching children and families about bone marrow transplantation (ChCN)
- Teaching members of the MPT (ChCN)
  - Teaching non-trained carers
  - Teaching others (ChCN)
- Explaining interventions (ChCN)
  - Explaining rationale for care (ChCN)

**T competencies for delivering information**
- Individualising information
- Responding to requests for information (ChCN)
- Giving consistent information (ChCN)
- Pacing information (ChCN)

**Values (V)**
- Providing holistic care
- Showing unique insight
- Being non-judgemental
- Involving families in decision-making
- Valuing families knowledge (ChCN)
- Caring using art and science (ChCN)

**8.4 Review of findings**

The classification (Figure 8.1) makes explicit the relationship between a children's nurse and children's cancer nurse through the organisation of competency expressions into types and subtypes. The hierarchy illustrates that a children's cancer nurse inherits many competencies from the children's nurse. Although competencies were shared there were a number of competencies that differentiated a children's cancer nurse from a children's nurse. The hierarchy displays plainly the similarities and differences between the two.

In addition to the medical and nursing knowledge specific to the nature of children's cancer nursing there were a number of competencies present in children's cancer nursing which were absent from children's nursing. In the teaching competency there was an increased focus on how information was shared and explaining the rationale for care.

Practice/interventions included competencies about coordinating the needs of members of the extended family, enhancing family time together and responding to needs and requests for information. Assessing family needs considering gender and cultural differences were
also recognised. Assessment tools were mentioned, as was the need to evaluate interventions based on assessment. Establishing shared care and collaborating with experts were also features, which were missing from children's nursing.

Likewise there were a number of competencies unique to children's nursing which were absent from children's cancer nursing. Professional responsibilities and developing practice included many more elements. Fundamental aspects of care, such as maintaining hygiene, admitting and discharging patients, giving IV drugs, child protection and basic life support were mentioned only in children's nursing. Child development, effects of hospitalisation, the use of play and distraction were recognised. Taking histories, diagnosing and prescribing investigations were also features, which were missing from children's cancer nursing.

8.5 Trustworthiness of the data
The three steps detailed by the ICN (1996) were followed to develop the hierarchy. Involving an expert in classifications following analysis by the researcher ensured trustworthiness of the outcome. This process of validating involved dialogue between the researcher and supervisor to force conceptual clarity. This involved asking questions of the data: is the concept clear, is the parent correct, does the sub-type share characteristics of the parent and does it add specialisation and if not, does it belong elsewhere? There were examples of the concept not being clear, for example 'using human resources' was changed to 'using skills of other people', and making the concept plain. Some sub-types were re-located, for example 'caring using art and science' originally located in PI competencies for expanded role was moved to become a sub-type of values. This sub-type was clearly about valuing, related to worth. Overall, this process resulted in few changes being made to the classification.

8.6 Summary
A classification has been developed from the data, which illustrates relationships between a children's nurse and specialist children's nurse. The simplicity of the final result (Figure
8.1) conceals the complexities of this process that was both challenging yet enjoyable; a process made more pleasurable through interactions with an expert in classifications.

This chapter has detailed the competencies of a general and a specialist children's nurse and illustrated what is common and what is different between the two. The identification of 23 shared competencies supports the notion that there are core skills, knowledge and abilities that are common to all children's nurses, generalist and specialist. The children's nurse and children's cancer nurse shared twenty-three competencies. Both initial lists of competencies varied in their level of detail. All of the competencies related to a children's nurse had an increased level of detail in comparison to the competencies related to a children's cancer nurse. This was most strongly evident in the classes Practice/Intervention and Professional Responsibilities. In contrast the children's cancer competencies included significantly more detail in the class Knowledge about. The hierarchy illustrates that both groups had more in common than different, with only three sub-classes of competencies identified as specific to children's cancer nurses. Both the generalist and specialist nurse shared all the other sub-classes. This outcome supports hypothesis 1 for this study, which was that there is a significant common element in these two areas of nursing.

The hierarchy also illustrates the relationship between generalist and specialist sub-competencies, where sub-types represent increasing specialisation and levels of detail that define the nature of the speciality. In all cases of sub-types of children's cancer competencies there was evidence of detail, which related specifically to the nature of the speciality. Medical and nursing specialist knowledge that describes the nature of children's cancer nursing was what differentiated the two types of nurses. This supports the second hypothesis for this study, that the differences between the general children's nurse and specialist children's nurse are exclusively related to medical and nursing specialist knowledge.

Although untested the classification provides a detailed definition of general and specialist children's nursing through the labelling and ordering of competencies. The chapter that follows discusses in detail the competencies developed and makes additions to the
classification with the intention of making the meaning of the competencies clearer through a process of defining.
Chapter 9 Classification and comparison: defining

9.1 Introduction

In the previous chapter types and sub-types of competencies were labelled and ordered. As discussed in Chapter 4, labels and order in a hierarchy do not necessarily completely define a concept. The example of patient dependency given in Section 4.6 illustrates how practitioners and managers variously interpreted meaning. Depending on the purpose of the classification there may on occasion be a need for conceptual clarification or explicit definitions to ensure that words are not misinterpreted. This chapter will explore the labels (i.e. competencies) further and expand on the definition of children's nursing and specialist children's nursing, using data from both phases of the study and an appropriate selection of supporting literature. This process will reveal the complexities of the competencies and illustrate how expressions can be added to increase the level of detail of the classification. It begins a process of clarifying expressions to elaborate the definition element of the classification. This process of adding meaning was undertaken in order to take the classification to the point of practical application.

The level of detail and therefore the number of IS-A relation types of expressions will depend on the intention of the classification. This is non-exhaustive at the level of sub-competencies in the discussion that follows, where examples are given as evidence of the versatility of competencies that may serve a number of purposes. Depending on whether the competencies are to be used in practice, in education, or in management the level of detail and hence number of sub-competencies may vary. The purpose would dictate the outcome.

9.2 What are the competencies of a general and specialist children's nurse: defining competencies further

Within 12 classes of competencies there were 26 sub-classes identified to help logically order the sub-competencies for presentation:

*Decision-making*

DM competencies for the delivery of care
Developing practice
Health education
Interpersonal
    IP competencies for team working
    IP competencies for communicating and counselling
Knowledge how to
    Kh competencies for using the health care team
    Kh competencies for using protocols
Knowledge about
    Ka competencies for caring for children
    Ka competencies for role of the nurse in the team
    Ka competencies for understanding cancer
    Ka competencies understanding treatments of cancer
    Ka competencies for ongoing support of families of a child with cancer
Organising
    O competencies for organising people
    O competencies for organising resources
Practice/intervention
    PI competencies for delivering family care
    PI competencies for care delivery
    PI competencies for expanded role
Professional responsibilities
    PR responsibilities for continuing learning
    PR competencies for personal development
Qualities
    Q for personal survival
    Q for working in a team
    Q for leadership
    Q for being affective in their role
Teaching
    T competencies for sharing knowledge
    T competencies for delivering information
Values

The list of competencies of a children's nurse were very detailed. They focused on both roles/tasks and the attributes of the competent professional, bringing together knowledge, personal qualities, values and skills. Likewise the list of competencies of a children's cancer nurse were also very detailed. The following discussion explores the 23 sub-classes of competencies shared by the general and specialist children's nurse, and relates discussion to previous definitions whilst also highlighting comparisons to literature where appropriate. The three sub-classes of competencies specific to the children's cancer nurses will also be examined further. The relationship between the two types of children's nurse,
shown diagrammatically in the hierarchy in Figure 2.2, will now be analysed further through a process of defining. This process will describe the competencies further and also explore the commonalities and differences between the general and specialist children's nurse.

9.2.1 Decision-making competencies

The importance of ensuring competence was in relation to decision-making for the delivery of care in which 11 sub-competencies were described. The ability to make clinical decisions focused on the planning and evaluation of care. Competence to make client focused and ethical decisions was expressed by both groups of nurses. There was an agreement that there was a core foundation of generalist knowledge and skills that needed to encompass problem solving, ethical and clinical decision-making, and critical thinking. Specialist knowledge included making ethical decisions in relation to clinical trials and treatment options.

Decision-making is the process in which nurses gather and evaluate information to make judgements that result in the direct delivery of care, or the management of such care. Clinical judgement involves the selection of nursing interventions based on a nursing diagnosis arrived at through a decision-making process (Matteson and Hawkins 1990). The process of nursing, that includes assessment, planning, implementation and evaluation explored by Casey (1993) in the context of partnership nursing, is clearly underpinned by clinical decision-making. However, the process of decision-making is not explicit in Casey's model (1988). Yet at every point in this process nurses would be making decisions, decisions based on a nursing assessment that would lead them to diagnose a health problem (nursing or medical diagnosis), prescribe an aspect of care or treatment in response to that problem, liase with another health care professional to prescribe treatment that may be outside of their sphere of competence to do so and to evaluate the effectiveness of that treatment. As a direct result of evaluation further decisions may need to be made if the problem persists or a new problem arises. Problem solving using critical thinking that resulted in clinical decisions being made was reflected in both sets of
competencies. The ability to analyse problems and make decisions is obviously part of what children's nurses do and yet at no point did nurses in this study discuss how they make or should make decisions. Nonetheless decision-making occurs within virtually every interaction between health care professionals, parents and children. Nurses must therefore be able to articulate clearly the basis for their decision-making in all of these interactions.

For parents to be included in their child's care Sheldon (1997) argues that nurses need to be more analytical in their approach to decision making. Partnership in care relies on parents being well informed and prepared for the role expected of them. Nurses' decisions to include families in care have been described as ad hoc and based on assumptions (Casey 1995) that show a lack of understanding of the nature of parents' experiences (Darbyshire 1994). This has resulted in high levels of parental and child anxiety (Boosfeld 1995). Equally, being more analytical in their approach to decision-making would facilitate inter-professional discussions. For example, Benner (1984) identifies that diagnostic and monitoring skills are central to the nurse's role in assessment. Knowledge acquired through experience enabled nurses in her study to detect early changes in a patient's clinical condition. Changes that they were not always able to articulate sufficiently when negotiating patient care decisions with medical staff. Both perceptual and recognitional skills need to be articulated if the nurse is to influence and participate in clinical decision-making (Benner at al 1996). Nurses base their decisions about care on knowing the patient and on an understanding of the pattern of illness and care that is based on previous experience. How this skilful knowledge is interpreted as part of a decision-making process is less clear. There is a wealth of literature exploring how nurses make decisions, but the findings remain inconclusive on one approach because of the complexity of the process that is influenced by numerous factors, such as experience, complexity of the task, previous knowledge, and a range of personal variables (Hamers et al 1994). It might be useful to include sub-competencies that express decision-making in more detail, particularly if junior nurses are to develop these skills and if the process is to be made more transparent for parents so that they can be included in the decision making process. For example:
Decision making competencies for the delivery of care

- Being aware of the choices or options available
- Being able to examine and evaluate the alternatives available
- Client focused decision-making
  - Able to act in a child's best interests
  - Assessing the potential for children/parents to be involved in care
  - Being sensitive to the emotional states of parents
- Recognising family values and individual preferences
- Weighing-up the risks and possible consequences of options

9.2.2 Developing practice competencies

The need to develop practice was deliberated by both groups of nurses, resulting in ten sub-competencies. Basing practice on current evidence and maintaining standards were seen as critical aspects of the nursing role. Nurses spoke of the need to question practice, to use audit, reflection, and research as tools that would enable them to examine their practice. Reflecting on practice was seen as a useful way to examine practice. Although nurses spoke of reflecting in and reflecting on practice (Schön 1991), in discussion often these words were used interchangeably. In general nurses seemed to be talking about retrospective reflection carried out after an event and not what is referred to as 'experimenting in action' or 'thinking on your feet', which are the two interpretations of reflection in and on action (Rolfe 1998). One nurse spoke of reflective practice 'being this big thing' and yet nurses were 'fed-up of it', the reality being that the theory sounded quite good but the practice was more complex as it relies on creating the conditions within a team in which it can flourish. As an approach to learning in practice, nurses spoke of the benefits of reflecting on practice when evaluating care, thinking about what and how others have taught them, and for exploring interactions with families and members of the multi-profession. When faced with a new patient, nurses used reflection to think about similar situations and used that knowledge when planning care. They reflected on situations that had gone well or gone badly, learning in and about their own practice.
Reflective skills enable nurses to access, make sense of and learn through work experience, to achieve more desirable, effective and satisfying work (Johns 1995).

Reflection also played a part in enabling nurses to make links between theory and practice, helping to resolve the contradictions within practice between what is desirable and actual practice (Johns 2000). The practice of nursing involves the ability to integrate theoretical knowledge through the process of reflection. Student nurses in this study commented on the difference between theory and practice, where what was taught in the classroom was not always the same as in practice. Additionally they often found huge variations between clinical areas. What they did not explore was the reasons for these variations or the gap between theory and practice. One explanation could be the development of personal knowledge of practice, where practitioners have applied the theory to their practice and as a result have developed a new theory of 'practice' (Rolfe 1996) that becomes professional knowledge, which they use in order to nurse (Johns 1995). Nursing practice is about interpreting the situation and analysing the various sources of knowledge available whilst also imagining the outcome and its consequences (Johns 1995). Competence to develop practice relies on nurses being able to reflect in and on practice, reflecting on the theory, using personal knowledge developed through previous experience in order to modify practice for each clinical situation. Evidence of personal knowledge is what distinguishes a novice from an expert. The ability to share that personal knowledge requires specific skills, as experts may find it difficult to articulate the difference between intuition and professional knowledge if they have not been able to undertake the process (reflection) of turning experience into knowledge and learning through reflection (reflexivity). For personal knowledge to become professional knowledge nurses need to be confident and create an environment through activities such as clinical supervision and mentoring in order to develop nursing knowledge that is distinct from the traditional scientific paradigm. Examples of types of sub-competencies to define this role further are:
**Developing practice competencies**

Able to question practice

*Using reflection*

Able to learning through reflection

Able to use reflection on action

Able to use reflection in action

The link between knowledge, reflection and research has been noted, where reflection assists the practitioner to become more research minded (Smith 1997). Nurses in this study spoke of there being a greater influence of research on nursing with pressure on them to read, interpret and implement research. This influence was traced back to the initial education of nurses where it was felt that the new style of training (Project 2000) had increased the focus on research in an attempt to make plain the evidence that underpins practice. This research thread needed to be continued through post-registration education if that focus, of research informing practice, was to become a reality. Nurses spoke of having facilitators in practice that would have responsibility for ensuring that research influenced practice, where nurses would continue to question practice outside of an educational programme. None of the groups of nurses saw their role as doing research. This would be appropriate for both specialist nurses on the children’s cancer nursing course and the junior nurses within the study, but it was surprising that none of the more senior nurses described developing practice through actually doing research.

Audit was yet another way described by nurses as an approach to developing and questioning practice. Confusion between research and audit remains widespread (Closs and Cheater 1996). Although nurses spoke of both as means to develop practice, differences between the two were not explored in terms of usefulness or their respective places as methods of enquiry. Previous descriptions of the activities of children's nurses have failed to mention both research and audit (Section 2.10). Developing nursing knowledge specific to children's nursing is incumbent on nurses engaging in both research and audit. Competencies that define this aspect of the role may help children's nurses to view their involvement as it relates to developing practice, a role that should evolve in
parallel with years of clinical experience. This is an example where a multi-axial hierarchy (Section 6.4) may help in outlining the role of the nurse in research, where a continuum from reading and critiquing research to implementing and doing research can be made apparent as it applies to the roles that nurses undertake.

9.2.3 Health education competencies

The trend in health care has been to focus more on health than disease (DoH 1999c). Children's nurses have kept pace with this change. Health education and health promotion is now an important part of education programmes ensuring that these aspects feature in all areas of clinical practice, with nurses planning care that fosters every aspect of growth and development in order to promote health and wellness (Orr 1995). This emphasis was not apparent in the competencies described where there was reference to only two sub-competencies, using health promotion skills and giving health education. Only students and F/G grade nurses in relation to immunisations and the prevention of childhood illnesses, dental health and environmental factors specifically mentioned it. The lack of detail in describing this role can be accounted for by a number of reasons. For children's nurses this role, like advocacy referred to later, is considered implicit and part of what children's nurses do and therefore rarely comes to the fore to be more clearly articulated as a competency. The ability to articulate this role would necessitate nurses having the appropriate language to engage in discussions about health promotion, and maybe it is this level that is absent. For specialist children's nurses, where the focus is predominantly on illness, in this case cancer, and where opportunities to promote health are not so apparent or seen as appropriate at the time, this has become a minor role. Similarly for generalist nurses, the focus has been on illness, reflected in the old registration title of sick children's nurse. Or is it the case that children's nurses do not engage in health promotion, due to time constraints and lack of resources (Whiting 2001). This would imply that nurses viewed health promotion as an additional responsibility and not fully integrated into their role (Whiting 2001). Yet as Casey (1996) argues, it has become common practice, more so in education, to speak of child health nursing, rather than paediatric or sick children's nursing.
Health promotion and prevention of ill health are features of pre-registration education programmes. The message sent out from the government in the document titled 'Our Healthier Nation' (DoH 1998b) is that everybody has a part to play in improving the health of the population. Health Action Zones have been established as partnerships between the National Health Service, local authorities, community groups and the voluntary and business sectors in order to develop integrated approaches to tackling certain health problems that are adversely affecting a section of the population. Children's nurses in the community and hospital have a significant part to play in such programmes, alongside health visitors and school nurses etc. (Whiting and Miller 2000). An understanding of the health priorities of a community is an essential component of the role of a children's nurse if they are able to play their part in reducing inequalities and responding to health needs by developing appropriate services and influencing health care policies (Burr 2000). Additionally specialist nurses must also take opportunities to promote health. There is a role to promote health for the whole family, but only where there is knowledge of disease patterns and the wider implications of treatment and care. The extent of that role has yet to be defined and be differentiated from that of a school nurse or health visitor. Types of sub-competencies that would add to the hierarchy to define further this role are:

**Health Education competencies**

- Being aware of local health care needs
- Being political in relation to health care
- Keeping up-to-date with changing legislation
- Collaborating with other health care professionals where appropriate
- Collaborating with local services where appropriate
- Aware of role in disseminating health information to children and parents
- Able to evaluate health education initiatives introduced
- Taking opportunities as presented to undertake health education role
- Identifying health risk factors
- Obtaining views of children and families regarding their health needs
- Using health promotion skills

  - *Employing a range of strategies*
  - *Influencing lifestyle changes*
9.2.4 Interpersonal competencies

Interpersonal competencies were features identified by nurses in both phases of the study. Sub-classes of competencies were acknowledged (and expressed by the researcher as a level in the hierarchy) as those required for communication and counselling and for team working. Interpersonal competencies for team working encompassed 12 types of sub-competencies, some of which are explored below.

Advocacy

Both groups of nurses described the significance of advocacy. The importance of being an advocate for the child and family was identified as a component of the role of a children's nurse. It was recognised that children's nurses needed certain abilities to be an advocate. What was needed was expressed as both knowledge and interpersonal skills. Advocacy, as a role component, was not only identified in relation to the child and family but also to members of the multi-professional team:

**FG3 P5** *I mean advocacy with patient and family within the whole network profession. You know you must be there focused on them and what their needs are because you're the person that quite often knows the family and the child the best, you know you're one of the key figures.*

It was the relationship between the children's nurse and the family that made this role achievable. Although often felt to be invisible, it was described as going on all of the time as a facet of other roles. The role of advocate appeared as a sub-competency in relation to having effective communication skills and having knowledge in caring for children. As such it did not appear in the list of competencies shared with children's nurses in the final focus group in Phase I. Its absence was noted and considered by the group to be an important element that was missing, but they were unsure about where it would fit:

**FGe1 P7** *Cares for patients should include it but not implicit in the statement but it could be opened out to take that into account because in caring you should always advocate.*

**FGe1 P1** *I think they should be advocating for children in general not just in particular circumstances with a family in that clinical situation….to take the opportunities to…(....).I don’t know how you balance the general list with explicit statements about what is specific….that is what is implicit in a children's nurse…….
The fact that advocacy was considered to be an implicit feature of the role may have accounted for its absence in the competencies and sub-competencies developed in the early part of Phase II. Advocacy was an additional descriptor added following the focus group with experts. As an aspect of a role, advocacy was viewed as developing when first in the speciality and therefore may be considered as part of generalist preparation:

FGe2 P3 there maybe something in being a children's nurse …those skills that you develop as a children's nurse maybe you are a little more …you view the care in a different way to perhaps adult nurses do…(…).from your first day of training when you're asked to be that advocate that sort of stays with you.

Discussion with children's nurses did not reveal their understanding of their roles as advocates. Although it was seen to be an important element of their role there was no dialogue about how they operationalised this role, no examplars were given as evidence of why it was important. Long (1991) perceived that nurses felt that they were in a privileged position to take on this role, a role that differentiated children's nurses from other nurses where they were required to be a voice for children who, unlike adults for example, are unable to express their views. But is this advocacy, to plead on behalf of another (Allmark and Klarzynski 1992) or acting in a child's best interest, upholding a child's positive rights, which is inherently paternalistic and based on a professional's judgement (Baxter et al 1998)? There is conflict between the two that has implications for the role of a nurse as an advocate (Mallik 1997) and yet the notion that a nurse is or should be a patients' advocate now seems to be part of every articulated statement of philosophy by nursing colleges (Hunter 1994). Charles-Edwards (2001) offers a recent analysis of advocacy to differentiate between advocacy and acting in a child's best interests. She argues that there is a link between advocacy and negative rights, that is the right to be free to follow your own decision and course of action, and that children's nurses who claim a non-mandated role as advocates risk denying children's rights to self-advocacy and to be heard. By promoting the child's ability to make his or her views known, upholding self-advocacy, may mean ensuring a child is heard, even if the nurse considers that the child is wrong (Charles-Edwards 2001). Further definition and clarification of what was meant by advocacy would seem to be required. Clarification would ensure there was a shared
understanding which would avoid the multiple interpretations and difficulties in implementation that currently exist (Mallik 1997). Expressions could be added into the hierarchy to increase the level of detail, and define further the expression:

**Interpersonal competencies for team working**

- Competencies for advocacy
  - Explaining the risks and benefits of care
  - Listening to the views of children and families, and other health care professionals
  - Representing the views of children and families

**Maintaining professional boundaries**

Maintaining professional boundaries was considered an important aspect to both groups of nurses. In children’s cancer nursing this aspect of the role appeared as two sub-competencies in the initial list of competencies. Two aspects of this role were highlighted, that of both personal and professional boundaries where a distinction was made between boundaries between families and other professionals. The notion of boundaries and the need to maintain a supportive yet professional relationship with families was explored further:

*FGe2 P4* …(....)……but some of the stuff that you call the heart and soul of paediatric oncology that’s …with the contact you have with community nurses …..we had one that ….one in particular who …..from my perspective breaks all the boundaries and takes her patients curries….takes them out for the day and does all of that stuff…(…) but using that as an example …but of course when the going gets tough she had families that ….you had a professional responsibility to …..you had to ask her each time what are you doing to these families each time you do this…and to me that is really about competence because what she does is actually abuse families.

Over-involvement, where there is a loss of objectivity, there is a danger that the nurse becomes committed to the patient/parent as a person and this overrides the nurse's commitment to health/illness needs (Morse 1991). This can destroy the team approach to nursing and influence a nurse's objectivity in relation to that family’s care. Participants spoke of the struggle to achieve this balance as a junior nurse and spoke of role models
that helped them to describe boundaries that felt comfortable to them. Dialoguing and sharing these experiences with nursing colleagues, seen as an important learning experience in this study, has not always been valued leading Totka (1996) to conclude that the issues of unhealthy involvement or crossing the line will remain problematic until that situation alters. Although this process of clarifying boundaries was not automatic and required skills, time and experience to learn the margins of practice (Brace O'Neill 1998), nurses in this study were exploring how junior nurses could learn these skills. Over-involvement was viewed by this group of nurses as a negative experience, where they perceived unhealthy involvement as 'crossing the line'. A term used by Totka (1996) to distinguish between over-involvement, which she saw as essential in the development of a caring relationship that values people, to 'crossing the line', where the care itself becomes destructive to the patients, families and the nurses themselves. Totka (1996) saw over-involvement in a positive light whereas Morse (1991) viewed this type of relationship as dysfunctional, a view consistent with nurses in this study. The term over-involved would seem to have multiple meanings and must make the process of establishing a therapeutic relationship with families even more difficult. In situations where nurses hold differing perceptions, conflict is bound to result.

The development of a two-way relationship of respect and collaboration is a feature that underpins Casey's partnership model (Casey 1988). The competence of children's nurses to develop such a relationship relies on them developing a professional relationship with families; one in which care and concern is expressed in a relationship that values the personhood of both parties. What was expressed by both groups of nurses was the need to develop the type of relationship that would enable them to engage with families, as reflected in the following comment made by a student nurse:

*FG1 P3 One of the things I've noticed is the sisters tend to have really good relationships with the parents 'cos a lot of the time they aren't actually doing the hands on care so when they see families they're able to just go in and sit and chat to them…(...)…..they seem to be able to get into an even better relationship and come back to, sort of, the actually supportive relationship of the families.*
The difference between detached and professional and a valued friendship relationship were explored by parents in Darbyshires' study (1994). In his study parents valued nurses who created time to be with them and to engage in everyday conversation, resulting in relationships becoming more personal and connected and less clinical (Morse 1991, Romaniuk and Kristjanson 1995). Children's nurses expressed how difficult this relationship was to get right:

FG1 P2 Taking their bloods and all the rest of it. I think it can detract slightly from the relationship you've been able to build up with the patient.

Building up that relationship, for the children in the study by Bradding and Horstman (1999), relied on nurses getting to know the children and talking about topics other than their illness and treatment. Like the parents in Darbyshire's study (1994) children also expressed a need to develop a 'special relationship' with nurses that was established on knowledge of them as people. Knowing the patient as a person requires involvement (Tanner et al 1993). The need to recognise the boundaries of these relationships to prevent over-involvement that resulted in burn out seemed to be what nurses were expressing:

FGe2 P4 I can remember being guided by people here and just watching nurses who you knew were just going to burn out.....who went to every funeral and only wanted to look after the terminally ill children ...that's the sort of thing.

Defining their comfort level in nurse-patient and nurse-parent relationships in relation to emotional boundaries was seen to be an important aspect of professional practice, for personal survival and to maintain control over a developing relationship. Developing a connected relationship, one that does not abuse the friendship of parents, but a relationship in which children's nurses are able to care for the family as a whole, involving the family in care while being sensitive to the emotional boundaries of care seemed to be what children's nurses were exploring.

Totka (1996) argues that the nature of paediatric practice is different from adult practice in two ways that necessitates children's nurses to explore the boundaries of their practice. Firstly, the physical boundaries are different as children's nurses hold, nurture and use close contact to comfort children. Secondly, children's nurses give family care and this alters their role and level of involvement. In her study Totka (1996) noted that more
powerful relationships appeared to occur more frequently, but not exclusively, with chronically ill or terminal patients. This may account for the increased focus on this aspect of their role by children's cancer nurses. The sub-competency maintaining the boundaries of care appeared in the initial NGT (nominal group technique) and has remained within the assessment of practice document for children's cancer nurses. It was also explored by expert nurses in the focus group who used competence in this aspect of a role as a feature that distinguished levels of experience. Increasing the level of detail by adding in further expressions to define this important aspect of a role for general and specialist nurses would seem appropriate. This would then encompass the totality of what nurses, particularly cancer nurses were expressing. This would serve numerous purposes, such as clarifying the role, providing a focus of learning for junior nurses, and may guide nurses in identifying practical solutions that would avoid the painful experience of crossing as yet their described boundaries of care:

**IP competencies for team working**

Competencies for maintaining professional boundaries

- Being aware of boundaries
- Clarifying the level of emotional involvement
- Being comfortable with boundaries
- Distinguishing own feelings and needs from that of children/parents

**Working in the multi-professional team**

Multi-professional working has been advocated as the most appropriate approach to caring and remains an important theme underpinning current health policy activity aimed at improving standards of care (DoH 1999). A number of types of sub-competencies were identified which added levels of detail in relation to this role, such as dialoguing with doctors and interfacing between medicine and nursing. This was an aspect of the nursing role considered important both by nurses and doctors:

*FG2 P4 We have a dialogue with the nursing staff…(..). that ultimately ends in a course of action happening and I think that’s terribly important to keep that going and I think that’s what makes paediatrics, for me anyway, a special speciality.*
The interface between medicine and nursing was seen as a hallmark of effective multi-professional working in the field of paediatrics. This interface was also essential between doctors, nurses and families:

_FG2 P4 Parents are often very frightened and overawed, perhaps, by the doctor, they look to the nurse, you know, somebody to, to actually have the skills to translate that into language they can…(_…)_…..

Within the team children's nurses were seen as a bridge, necessitating the need to communicate between the multi-professional team, children and families, and to local services and the community. A role that respondents in the Delphi survey felt was well described by nurses in district general hospitals but less so in tertiary centres. The sub-types of expressions for working within the multi-professional team indicate the breadth of the context of the work of children's nurses that encompasses hospital, community, and primary care, requiring liaison and communication between all, if patients are to experience a seamless service of care. Liaising with other units was specifically mentioned by children's cancer nurses, and may reflect the nature of specialist work that often encompasses children being transferred to and from other units, such as a renal unit or intensive care.

Team working and the interface between other professions were common to both groups of nurses. Children's cancer nurses expressed in particular areas in relation to the need for mutual respect, challenging decisions, using team skills and dealing with conflict. This may be indicative of the nature of the speciality where all members of the multi-professional team share similar levels of knowledge and expertise. This can occasionally cause conflict when members of the team fail to respect each other's knowledge base. A type of respect that is not bound by hierarchical positions is important for team working. Specialist nurses expressed the need to challenge decisions and be able to deal with any conflict that may arise in response to other team members perceiving that their clinical judgement had been questioned. The delivery of high quality health care depends on doctors and nurses working well together in all areas of children's nursing. Conflict is known to be more pronounced in areas when the boundaries between the two professions is less distinct (Blickensderfer 1996), as is reflective of the nature of the work of specialist
It is important that each team member has a unique contribution to make and must be valued and respected for that contribution. Having an identifiable role, even where it overlaps with colleagues, is helpful. Team dysfunction can result from such conflict. An awareness of how to challenge decisions, manage conflict and use team skills to maintain the team to function to an optimum for the patients and toward each other was an important aspect of competence as a children's nurse.

Team working was clearly not isolated to just working with other health care professionals. Parents and families were seen as part of the team. The development of competence in challenging decisions, dealing with conflict, and giving mutual respect could all be applied to successful team working with parents; important in many aspects of children's nursing, but maybe more so when caring for children with a chronic illness where parents' knowledge of their child and how they have been affected by their illness can be extremely well developed. Conflict can occur when the pursuit of a common goal fails to be communicated, where parents feel that their views and concerns are not being respected (Soanes 1997). The successful formation of a nurse-parent relationship is dependent on good team working. These sub-competencies would be an important part of ensuring that success and would need the parent role to be expressed specifically as part of the team.

**Communicating and counselling**

Interpersonal competencies for communicating and counselling were consistent themes throughout all the methods of data collection in both phases. In total 12 sub-competencies were identified. The children's nurses groups identified many more sub-competencies. They highlighted elements of interpersonal competence, such as establishing trust, listening, establishing rapport and empathising; all of which are crucial to facilitate the type of relationship that both parents (Turner 1984) and children (Fleitas 1997) express that they want. These skills are seen as fundamental to engaging in true partnership nursing (Hutchfield 1999). Likewise, negotiating with families, one of the sub-competencies identified, is also a requirement for partnership nursing (Wade 1995). This
was identified as a complex element of the role of the children's nurse, where there seemed to be conflict between the theory and practice:

FG1 P3 ...(…) sometimes especially admissions and stuff if it’s a busy ward you don't have time to sit down and negotiate it all with the family....(........) I think quite often you go in and you actually do it the way you are trained to do it and you give them all the options you have to be very specific at handover.

This student nurse spoke of having to be explicit and point out aspects of care that had been negotiated in the care plan, otherwise the parents wishes were not adhered to and care was not carried out, often leaving the student to explain this failure to both parents and other nurses. Competence in communication skills is the foundation of successful negotiation. Parents describe the act of negotiation as evolving rather than a product of a deliberate plan, and stated in a study by Coyne (1995) that communication and lack of information were the reasons for this occurring. Non-negotiating of roles can result where there is a breakdown in this process, leading Coyne (1995) to emphasise the need for communication skills in educational courses.

Empowering families relies on the nurse being able to communicate on different levels by adapting information and language to both the child and parent's level of understanding (Long 1991). This was seen to be a skill particular to nurses who care for children:

FGel P1 Work on two levels often with adult parent and child side by side together which is different. Our adult colleagues do not do the same....... Families can only be empowered in situations where they are in possession of sufficient information, either to make decisions about treatment or care (Gibson 1991). This was another example of where nurses form a bridge to translate and communicate medical information. It was seen to be important however to match the language to the person and the situation in order to confer competence:

FG7 P1 ....(.....) the language that nurses use is very different language from the language doctors use....(......) its not quite lay language, its not quite medical language, it's a language all of its own and often your knowledge and understanding or competence is judged on the way you describe the care of a child.......
Children's nurses need to be skilled to use the right language at the right time. The skill to do this is incumbent upon the nurse having an exceptional understanding and grasp of the subject to be communicated, as well as knowledge of the recipient in order to be able to alter the style of language equivalent to the knowledge base of the person to whom the information is being communicated to. Examples of types of sub-competencies that would further define this skill are:

**Interpersonal competencies for communicating and counselling**

Communicating on different levels

*Communicating with children*

*Communicating with children who have special needs*

*Communicating with young people*

*Communicating with parents*

*Communicating with parents when distressed*

*Communicating with health care professionals*

Communicating on different levels was highlighted in both sets of competencies with children's cancer nurses emphasising the need to communicate both verbally and non-verbally. Interpersonal competencies that enabled the nurse to facilitate the breaking of bad news featured only in the specialist group. Although this is very specific to children's cancer nurses it could be argued that breaking bad news occurs in all spheres of children's nursing. The emphasis however is indicative of the significance of the role where children's cancer nurses take a key responsibility in communicating this information. This may not be the case in general nursing. Communicating the diagnosis of cancer represents a shared role, the nurse and doctor work as a team to effectively impart the information in a supportive environment. This is another example where team working is essential. This is a highly significant time for parents, with a successful or unsuccessful contact having a lasting effect (Davies 1979, Astlem 1995). In cancer nursing this point of contact will influence the relationship that develops between the parents and the nurse, therefore competence in handling the situation before, during and after breaking bad news is important for how they will work together as a team.
9.2.5 Knowledge how to competencies

When developing classes of competencies, 'knowledge how to' was distinguished from 'knowledge about'. Knowledge how to revealed four sub-competencies related to using the health care team and using protocols. Nurses spoke of making the most of other members of the health care team. This is a reflection that nurses see beyond the walls of the children's ward they work on. Indicating also that nurses endorse the concept of continuity of developmentally appropriate care:

FG7 P5 And thinking more of transition to adult care and um, decisions that have been made in childhood, looking forward rather than just ending with the paediatric care, looking at adolescent care and then adult care, so it's become a more extended view of what we're doing........

Transferring care to adult services was expressed by both groups of nurses. This view of children's nurses having a role to play throughout the whole of the continuum to adulthood was encouraging and reflects a change in clinical care that now sees children with chronic illnesses surviving into adulthood, yet still requiring care that is specific to their needs. For example children with cystic fibrosis or congenital heart disease are surviving into adulthood. They require ongoing specialist care, care that children's nurses have knowledge of, however there are limits to this knowledge where young people are facing problems and health needs of adulthood. Planning for long-term needs, that includes transition to adult care, is a role for children's nurses. Transition to adult care is complex and can be stressful for young people; they may feel abandoned while they develop a trusting relationship with a new set of health care professionals (Sawyer et al 1996). Children's nurses who have had responsibility for delivering care may also find the situation stressful as they 'let go' and severe their relationship with the young person and their family. Parents may also feel anxious, there may be some concern that their needs are not met by an approach that focuses more on the young person than the family. Knowledge of how to smooth the passage of transition is important if the ad hoc approach currently in place is to be avoided. This relies on strategies being put in place early enough to ensure success; strategies that anticipate the transition include informing young people and their families, introducing the health care team that cares for adults, and producing a comprehensive health summary. There are nurses who bridge this gap,
working within adolescent services with a bridge to adult services. Outside of these roles there is a need for all children's nurses to take responsibility for transition.

Using the health care team did not only encompass working with adult teams, for the cancer nurses it also involved establishing shared care and collaborating with experts. Knowledge of how to establish shared care is an important role as in the majority of cancer services shared care is a vital part of the family's cancer experience. To ensure success links are essential between the health care teams. Success for children and parents means that they view the context of their care in terms of primary, secondary and tertiary care. It may be argued that all of children's services and not just cancer, are founded on all three of these aspects of care and therefore knowledge of shared care is an important competence for all children's nurses.

Competencies for using protocols were specific to cancer nurses although children's nurses did make reference to basic life support, which is an example of a protocol. Cancer care is protocol driven, hence the need for competence and knowledge of how to use protocols.

9.2.6 Knowledge about competencies

The knowledge competencies exposed the elements of practice that were most different between the general and specialist children's nurse. The children's nursing competencies focused on caring for children irrespective of their health needs, whereas the children's cancer nursing competencies focused exclusively on knowledge required to care for children with cancer. The need to understand normal child development, implications of hospitalisation, and understanding the context of the child's world were not a feature in the specialist group. It may be that these specific child focused issues were either implicit in practice not needing to be related to the child's diagnosis, or considered to be developed to a sufficient level during general preparation, and therefore did not require further advancement. The focus in specialist practice was on the need for knowledge about cancer, treatments and the specific needs of families at the time of diagnosis, relapse, continuing care and palliation. This focus gives approval to the nature of speciality
practice being sufficiently complex and advanced, and beyond the scope of general nursing practice (ICN 1991). Specialist nurses described in detail sub-competencies that defined the boundaries of their specialist knowledge. In contrast children's nurses spoke in very broad and general terms.

Knowledge about caring for children and the role of the nurse in the team were a feature of both groups of nurses that encompassed nine sub-competencies. Caring for children is one of the main features that distinguish children's nurses from other types of nurses. Competencies that detail knowledge about children underpin all other competencies, and may be considered as a foundation for specialist knowledge. For example having knowledge about child development would influence competence in teaching children/young people about health issues related to their general health or specific to a diagnosis of cancer. Additionally, having knowledge about the consent process has a place in both general and specialist nursing practice. Children's nurses in Phase I made reference to child development, consent, effects of hospitalisation and understanding the world of children when attempting to articulate what was different between them and other nurses. The number of expressions and level of detail that could be voiced here are infinite, and as mentioned previously would depend on the purpose of the classification.

Nurses in both groups explored the role of the nurse in the team. Multi-agency working and knowledge about the roles individuals take was a particular focus in the Delphi survey where there was a consensus that in the future more children's nurses would be working in multi-agency teams. Hence competencies about how these teams work would be important. Likewise there was a focus on differentiating between practitioner and technician roles:

D1 Learning and acquiring technical skills is all well and good but my experience is that nurses want to take these on board at the expense of basic nursing care.

Part of defining the role of the children’s nurse would enable decisions to be made about roles in teams, facilitating nurses to agree on what it is that they do that is different from other professions, clarifying what their specialist skills are. Overall this would result in decisions being made about what roles children’s nurses would be best placed to perform.
Sub-competencies here link into expanded role competencies that feature later in this section.

Understanding cancer, understanding treatments of cancer, and supporting families of a child with cancer were the features that distinguished the general and specialist children's nurse. These were the three sub-types of classes found only in the data from Phase II. In total 26 sub-competencies were identified which describe in detail the specialist medical and nursing knowledge required of a children's cancer nurse. Here the sub-competencies are explicit and define knowledge required. It was this knowledge that students on the children’s cancer nursing course consistently expressed that they wanted from their specialist course. Students sought this knowledge and hence found many of the more general competencies not relevant to their professional development. However, knowledge alone was not considered to be sufficient when the experienced children's cancer nurses attempted to articulate expert practice:

*FG*2P8 its also about saying I don’t actual know now what the current protocol is…..but having the confidence to say.......I will go and get it and look at it…..but I do know about the drugs.

*FG*2P5 but also recognising that might not be the most important thing for that family at this particular time ..there might also be loads of other things that are more important at that time.

*FG*2P4 it's about being authentic.

*FG*2P2 what you said in the beginning *FG*2P4 about self-awareness brings it round to that....how do you define yourself what do we call an expert ......

*FG*2P6 an expert is not necessarily a know all......

It may, depending on the purpose of the classification, be necessary to define this medical and nursing knowledge even further. Any classification in the class of knowledge would need to evolve over time to reflect changes in clinical practice, introduction of new technologies, advances in the different sub-specialities of children's cancer nursing and changes in treatments. The expressions and sub-competencies identified so far were felt by nurses in Phase II to reflect the knowledge required of children's cancer nurses. In isolation they define only a part of this nursing speciality. More experienced nurses were
able to see that defining the speciality was more than defining knowledge. General preparation as a children's nurse is essential for developing core skills and abilities, which continue to develop in specialist practice, and is the focus of the other 11 classes of competencies.

9.2.7 Organising competencies

Within the hierarchy there was a differentiation made between organising people and organising resources. In total six sub-competencies were identified. Delegating and facilitating were sub-competencies specific to children's nurses. Being able to delegate care was seen as an important component of time, which would make the best use of available resources. What care was being delegated was a concern to children's nurses: D1 (…) the skills required to carry out fundamental nursing care (e.g. the washing and bathing of sick children) should not be underestimated as we are aware it incorporates more that the task of basic hygiene.

This was also the aspect of care the students in the focus group spoke of not losing. They felt 'hands on care' was what gave them the direct contact with parents, and this was required to form better relationships. Their concern arose from discussion about cannulation and the role of the nurse. Although one student had first hand experience of a good outcome from a nurse cannulating a child, the others had not. Their discussion focused on defining the role of a children's nurse in order to make explicit aspects of care. They were concerned that 'basic' nursing care would become the domain of health care assistants which would leave more time for nurses to expand their role into what they described as the 'tasks of junior doctors'. Where decisions were being made about delegating care, there was a feeling that nurses must take the lead in this decision-making. Participants expressed the need to manage these discussions to avoid situations where nurses, without realising it, give up important aspects of nursing care without reflecting on the consequences.

The focus of who care would be delegated to centre on the role of the health care assistant (HCA). The debate in the Delphi survey focused around those against, and those in
favour, under certain conditions. Those against argued that if care in hospital were to become more complex, the question is would there be a role for HCAs? Likewise in the community where much of the work is carried out independently, then what would their role be? However, respondents recognised that without the much needed evidence supporting the value of the children’s nurse, then it maybe difficult to argue against. Those in favour requested clarification of the HCA role as part of the overall health care team, in a variety of clinical settings. In some areas the role becoming more of a ‘housekeeper’ and in others a ‘parenting role’. Regardless of the role or setting there was overwhelming support that without clearly documented delegation, education, and supervision there could not be a role for the HCA in the care of children/young people and their families. In contrast to this view there was a feeling that there might not be a choice where resources and needs demand implementation of the role:

D2 I don’t believe that delegating care to HCA’s is something we can reject because of professional self-interest…we should look at what best meets the needs of the child and family and be prepared to:

a) train HCA to be competent

b) maintain the nursing management of the child and family.

The importance of audit, evaluation, patient satisfactory surveys and outcome studies were considered relevant. Nonetheless, looking to the future:

D2 If the time in hospital is going to be shorter then nurses need to be with the family preparing them for early discharge. I have difficulty in identifying nursing tasks, which HCA could do that the new practitioner we are planning to develop could not do as part of the overall care.

Organising people, for the cancer nurses, involved using the skills of other people. Nurses identified opportunities for collaboration to improve care. Using the skills of other people involved referral to other health care specialists, a role identified previously by Casey (1988). Part of this was recognising the limits of their knowledge and specialist skills that was related to their individual roles. Children's cancer nurses spoke in particular of long-term survivors and the need to ensure that these patients are linked to a key worker, which
may be a nurse or another health care professional, with knowledge appropriate to the
needs of the young person.

Participants described resources that enabled nurses to manage their own time and to
prioritise care. The ability to use business skills were considered crucial and reflected the
current management style that views all nurses as playing a role in 'the business side' of the
organisation. In the light of the re-defined 'modern matron' role (DoH 2000), where nurses
will be accountable for a group of wards with the authority to use resources to sort out the
fundamentals of care, competence in organising resources may be viewed as a vital role for
the children's nurse.

9.2.8 Practice/Intervention competencies
Competencies for delivering family care, care delivery and an expanded role were
described by both groups of nurses. In total 44 sub-competencies were identified.

Family care
Delivering family care included nine sub-competencies. Casey (1988) distinguished
between family care and nursing care. The partnership approach to caring is built on the
premise that both parents and nurses can deliver both types of care. This relies on a two-
way process of information sharing, with parents informing and teaching nurses and vice
versa. Casey (1988) is very clear that family care is a shared responsibility. Competence
on the part of children's nurses to deliver this care is important in ensuring true partnership.
This also involves facilitating parents in their role, so that they can continue to give family
care while their child is hospitalised and hence maintain some normality. Casey (1993)
defines family care as the care usually carried out to meet the child's needs as opposed to
nursing care, which is defined as the extra care related to health needs. Nurses in this
study did not define family care, understanding was assumed presumably due to the
widespread use of Casey's model where nurses believe they have a shared understanding
of these terms. Casey's (1993) definitions lead to a false understanding that the difference
between the two is clear-cut. In reality the boundaries between these two aspects of care
are often blurred in relation to roles and responsibilities. For example when does nursing care become family care for a child with a chronic illness? And how far is the involvement of families in nursing care an economic factor dictated by skill mix on a unit, the push towards shorter hospitalisation and the perceived benefits of home care (Taylor 1996).

Parental participation in care remains an unspoken and random arrangement rather than a deliberate nursing philosophy of care (Darbyshire 1994). It would seem to be important to distinguish between family care and nursing care in order to clarify parental participation in hospital that may result in anxiety and tension:

FG4 P3 I nursed a baby and the mother yesterday, and the baby sort of obviously …baby care lots of nappy changes, had eczema, so skincare as well as IVs, teething and everything, and you know, it was nice, I was doing everything and I felt that, I was happy with the way I looked after the baby, but the mother had slept a lot of the day and was exhausted and she spent, every time she woke up she was just apologising: 'Oh, I'm sorry, you've changed another nappy. Oh, I'm sorry, I was gonna do the skincare. Oh, I'm sorry'. And I kept saying, you know: 'It is part of our role'........

The literature suggests that decisions about who delivers care, whether it is family or nursing care resides with the profession (Dearmun 1992, Darbyshire 1994). There is an expectation that parents participate in care and yet their role is not negotiated and often leaves parents confused about what they should be doing. Parents described being unsure of their parental role, where 'basic mothering' became traumatic in what Darbyshire (1994) described as 'defensive parenting' where there was tension between the parents particular and personal knowledge of their child and the nurses general professional knowledge of paediatrics. Darbyshire (1994) argues that parental participation could be more meaningfully called the 'parents' agreement to take over certain tasks from nurses'.

Negotiation that relies on clear communication between the parents and the nursing team are two sub-competencies that have been described earlier in this chapter (Section 9.2.4). It may be presumed that competence in those sub-competencies would ensure the delivery of family care is a negotiated role. To further reduce the haphazard nature of this role further sub-competencies are described below:
Practice/Intervention competencies for delivering family care

Facilitating parents in their role

*Empowering parents to participate in care*

Identifying family care

*Identifying family care given by parents*

*Identifying family care given by nurses*

Identifying nursing care that has become family care

The children's cancer nurses extended the notion of delivering family care to include parents. Sub-competencies detailed a role that encompassed supporting families at defined points throughout their cancer experience. Children's cancer nurses also spoke of coordinating extended family members. Supporting parents is described as a hidden area of nursing work (Callery 1997). In his study parents were cared for on an 'ad hoc basis', depending on the nurse's own beliefs about their role towards parents, there was no systematic assessment of needs of parents, or recording of care that was provided to parents. Callery (1997) argues that family centred care includes care of parents. Care of parents as well as the child would sanction their status as co-clients. Making this aspect of the role of the nurse more explicit would ensure that staffing levels and skill mix could be determined more accurately to reflect the fact that children's nurses care for the whole family. This might also give children's nurses 'permission' to spend time with parents. Supporting and caring for parents and other carers might then be considered by all nurses as 'part of the work to be done' and 'real work' and not, as perceived by some, as an 'extra when there is time'. Children's cancer nurses detailed this aspect of their role, a role, it could be argued, that all children's nurses value but rarely articulate the complexity of it. For parents being involved in their child's care is not without some personal cost. To enable parents to perform their role to give family and nursing care, they need support to do that, support that other family members may find it difficult to give. To be assured of care when it is needed relies on a systematic approach to assessing parental needs with a plan of care documented to avoid what were perceived in Callery's (1997) study as 'unpredictable demands for time'. Detailing this aspect of care in the list of sub-
competencies may be one method to make explicit family care rather than just the care of children:

**Practice/Intervention competencies for delivering family care**

- Assessment of needs of parents
- Planning care of parents

**Clinical/Nursing care**

Children's nurses in Phase I described practice/intervention competencies for care delivery in much more detail than the specialist nurses. In total 31 sub-competencies were identified. This is an example where, depending on the purpose, there are an infinite number of sub-competencies that could be described. This is also an example where there may be an assumption that many of the sub-competencies outlined are developed during generalist preparation, not requiring further development as specialist nurses. Essential skills for giving direct clinical care, described by Lawrence (1998) and the Scottish National Board (NBS 2000), extend the list of sub-competencies by describing in detail generalist core skills. It may be argued that these skills are consistent in all nursing roles and do not define specifically the role of the children's nurse. This supports the notion of the relationship between nurse and children's nurse, detailed originally in the conceptual framework (Section 2.12). According to the position in the hierarchy the children's nurse inherits all the characteristics from the nurse, plus some additional features. The difference between the two is the age of the client, and whether an adult or child/young person.

Application to the client group in relation to care delivery is based on knowledge of the developing child, knowledge of anatomy and physiology and an understanding of how children communicate their needs. Such knowledge and understanding differentiates nursing adults and nursing children. It is therefore the application to client group where the difference is made explicit. For example, preparing children for investigations differs hugely from preparing adults, where distraction, use of play, pre-medication and involving parents would be essential tools to facilitate success.

Care delivery included assessing, implementing, monitoring, planning and documenting care. The ability to assess holistically was mentioned, but only the children's cancer nurses
mentioned assessment using specific tools, assessing family needs, identifying risks of illness and recognising cognitive levels. Although nurses in both groups spoke of the expectation that parents be involved in their child's care, there was no mention of assessing parents to be involved in that care or of supporting parents in the delivery of nursing care. Parents are involved in many of the skills identified by Lawrence (1998) and the Scottish National Board (NBS 2000), either in actually undertaking the skill or in a supporting role. Both levels of involvement expose parents to added stress. The role requires teaching, ongoing support and evaluation to ensure that parents are competent, maintain competence, and remain confident in undertaking the role in situations where the context may have changed, for example continuing with oral care when their child is experiencing pain as a result of oral stomatitis. Parents are increasingly involved in very technical aspects of care, such as accessing 'port-a-caths', catheterising, changing tracheostomy tubes, and administering home intravenous therapy components of care delivery that were once exclusive to nurses (e.g. Hooker and Kohler 1999). Nurses in this study expressed their concern that parents may be being asked to take on too much. Assessment of the family was noted to be a key skill that would ensure parental involvement was appropriate:

_Fge1P7 But it is also about parents being there through procedures which is a big issue….but if explained to parents a lot would decide not to be there but because of nursing shortages they are there_

_Fge1P5 A good children's nurse will be able to assess the family and have them there at the right time for them doing the right things for them and not expecting them to do everything or as in adults expect them to do nothing..it has to be to assess the right help that parents need._

It might therefore be useful to express this role within the list of sub-competencies. The purpose being to make explicit the nurses role in supporting parents to deliver care, reinforcing the view of partnership and negotiation of care, and providing an opportunity to strengthen the notion that involving parents in the delivery of nursing care needs to be systematic and not 'ad hoc':

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**Practice/Intervention competencies for care delivery**

- Continually negotiate parents' role in giving nursing care
- Identifying with parents their role in giving nursing care
- Supporting parents giving nursing care
- Teaching parents relevant nursing skills

**Expanded role of the nurse**

The nature of an expanded role was explored by both groups of nurses. Four sub-competencies were described. On the whole children's nurses expressed some anxieties regarding this aspect of their role. Student nurses expressed their concern about how to expand within a nursing focus to the benefit of the child:

*FG1 P3 I mean if you were helping a doctor to do cannulation and you’re using all the distractions that’s preparing the child and everything if you thought you could still do that whilst cannulating you know great but when you actually try and cannulate if you end up just concentrating on to get the needle in the vein you’re not being any better than the doctor.*

Senior children's nurses also shared these students concerns and described a potential danger in nurses becoming assistants to doctors:

*D1 There needs to be clear dialogue between the nursing and medical profession to define nursing role development and prevent the technical skills being deferred to the nurse in an undesirable role as a doctor’s assistant.*

The need to clarify ‘who currently does what’ was highlighted, in addition to considering ‘who is the best person to do it’:

*D1 I think we should move away from ‘Drs jobs’ and ‘nurses jobs’ to what is needed by the patient and whom can best do it.*

There was concern, however that nurses would have their role defined for them, hence there would be clear benefits in describing what nurses do and the skills they bring to a clinical situation:

*D1 Technical tasks are just that, but nurses bring different skills to their medical colleagues.*
There was some suggestion that technical skills could be delegated to others, for example technicians/health care assistants, thus leaving nurses to focus on ‘nursing’. However, it may be as suggested by one respondent:

*D1 (…) the lack of value that is often attached to the delivery of expert nursing care.*

Resulting in another hierarchy:

*D1 (…) should not become another technical task, which is associated with seniority and kudos.*

This is a hierarchy that must be avoided to ensure that role expansion and advancing practice roles do not become strictly biomedical focused. This dilemma surrounding role expansion has evolved because the term 'expanded role' remains an unclear concept (Rose et al 1997) in a climate where nurses are faced with changes in the boundaries of care (Mitchinson and Goodland 1996). The main rationale for expanding the role of the nurse must be improved patient care. Further sub-competencies could be described to define this role more; the need for further expressions would depend on the purpose of the classification and may benefit from being explored within a multi-dimensional hierarchy where types of nursing role, area of clinical practice and location of the nursing role define further the expanded role.

### 9.2.9 Professional responsibilities competencies

Professional responsibilities were outlined in relation to continuing learning and personal development. In total 13 sub-competencies were identified. Life-long learning was viewed in the context of a career with learning taking place in practice supported by appropriate education programmes. Such programmes needed to develop nurses in an increasing number of differing clinical specialities and different nursing roles. Life-long learning was seen as the nurses responsibility, with competence required to learn as an adult and keeping up-to-date being essential components of that process. As one way to support excellence in care, life-long learning must be promoted (DoH 1998a). Nurses shared the views of the government where they described continuing professional development as broader than education programmes. This depended on creating an environment where continuing learning is valued. Job rotation, role shadowing, coaching
on the job, clinical supervision and mentoring were mentioned as potential areas for continuing learning. In the current climate of 'collecting credits for courses', less arduous options for crediting work experience were considered appropriate.

In the context of continuing learning multi-professional learning is more than a shared education programme. Nurses expressed concern about the benefits of shared education programmes that are taking place in a climate that remains unclear about the difference between the various professions. In the absence of a definition of a children's nursing shared programmes were felt to be in danger of reducing the essence of a distinct professional identity. In contrast shared learning within the clinical environment had the potential to improve teamwork, encourage professionals to value each other's opinion and encourage collaborative care planning.

Personal development centred on their own learning as well as the part played in the learning of others. Students spoke of being willing to learn from parents. This was in response to respect for the knowledge parents have of their own child. Likewise nurses respected the knowledge of their colleagues and spoke about learning from experienced nurses and other members of the health care team. Developing through experience was specifically mentioned as part of personal development. Also mentioned was supervising others, role modelling, and assessing competence of others.

Overall competencies related to professional responsibilities had a higher profile in the children's nursing group, they were almost absent from the specialist group. There is a professional and personal necessity to participate in life-long learning the absence in the specialist nursing competencies was perturbing. The fact that the competencies were developed as part assessment for an education course may be a reason for their absence. It may be assumed that students were willing to learn, were keeping up to date, learning as an adult and learning from experience as they had chosen to undertake further education. It may not have been felt necessary to measure competence in relation to this aspect of their role. This assumption may not be the reality, particularly in relation to life-long learning and the need to keep up to date when not undertaking education. It is these
aspects that have been documented as more difficult to achieve outside of an education programme. This is another example where generalist preparation may be seen as the foundation, where competence is considered to have been achieved.

9.2.10 Qualities

Desirable characteristics and personal qualities have been considered important traits of a children's nurse since Catherine Wood was writing in 1888. Wood (1888a,b) wrote of nurses needing to be patient, gentle but firm, sympathetic and ready to promote comfort and happiness. She spoke of nurses needing to understand the specific needs of children; to be able to communicate with children and to use skills that were quite different to those required to care for adults. Many of the qualities identified by Woods have been reflected in more recent studies (Bradding and Horstman 1999, Price 1999, Price and Hicks 2000). In contrast to Woods, Price (1999) was not confident that the qualities of a children's nurse described by respondents in her study were distinct, and that many qualities could be applied across the whole spectrum of nursing. Yet it is the personal qualities that have been considered by both parents (Darbyshire 1994) and children (Bradding and Horstman 1999) to be important in a children's nurse. It would seem imperative to have a clearer understanding of what these essential qualities are. This would be vital for selection, retention and general accomplishment as a children's nurse. The hierarchy presents 23 sub-competencies, however it could be argued that these qualities are not dissimilar to what would be required by any nurse, and do not describe anything different in a children's nurse. This would support the notion represented in the conceptual framework that a children's nurse IS-A sub-species of nurse and therefore they inherit all the characteristics that belong to that broader class known as nurse. When the list of sub-competencies is considered all the qualities would be what both the profession, patients and their families would want from a 'good' nurse.

If the profession agrees that qualities are an important part of what makes a 'good' children's nurse, then these qualities do need to be explored in the selection interview. This would be important, particularly if there was evidence to suggest that qualities had an influence on learner wastage and 'success' as a children's nurse. Personality traits, although
they have been explored as evidence of learner wastage, have yet to be determined regarding which personality traits make leavers unsuitable for nursing (Lewis 1980). What makes a 'good nurse' is a perception that can change with time and is context specific. Both groups of nurses spoke of 'knowing it when you saw it', but found it difficult to articulate. For example expert practice was described by children's cancer nurses as more than knowledge:

*FGe1P4 but it has to be steeped in knowledge and experience......you cannot do it without that
FGe1P6 but then its not exclusively knowledge is it......
FGeP8 and FGePS4 no it isn’t
FGeP6 cos if it was purely knowledge then some people could come and then know every single protocol in the book can tell you what does etc when it comes to talking to a family who have been given bad news...that’s different....its down to the situation.*

Although they were unable to articulate what the missing element was, discussion revealed that it was something about the person. There was a shared belief amongst participants in both phases of the study that qualities were the outstanding features that contributed to overall competence: ultimately making the difference between a 'good' and 'poor' performance as a children's nurse. There were significantly more qualities described in the final list of children's nursing competencies than in children's cancer nursing. This was in spite of the question in the NGT used to develop the competencies of a children's cancer nurse asking the participants to identify attributes. The focus of responses in the NGT had been more on the role, knowledge and skills than attributes. These outcomes may be reflective of a number of issues; the different approaches to data collection, the presumption of the specialist children's nurses that essential qualities had already been developed in their role as a general children's nurse, and the perceived need for an education course to provide only specialist knowledge to prepare nurses for their role.

Qualities were identified for personal survival, working in a team, leadership and for generally being effective in a role. Personal survival depended on children's nurses being self-aware to recognise their own limitations and to protect themselves from stress that could result in burn out. Children's nursing, whether general or specialist, exposes nurses
to numerous factors that could impact on their ability to survive, such as: increasing workloads, poor management structures, high expectations of self, increased use of technology, suffering of patients, death of patients, and the inability to meet all role-related demands. Participants spoke of the importance of being self-aware in order to recognise the signs of stress. Developing positive coping mechanisms to cope with that stress were also mentioned. Self-assessment was seen as important to measure involvement with patients/parents, where it was felt that less experienced nurses were in danger of burn out if they had not developed the skills to recognise the signs. Hinds et al (1994) support this perception and identify in their study that both years as a nurse and years in children’s cancer nursing were indicators of success in managing work related stress. In a later study to test the stress-response sequence model Hinds et al (1998) describe how nurses were able to mediate their stress response in situations where they found their role fulfilling and meaningful. In the speciality of cancer nursing, where even with the improvement with overall survival of children, nurses are still faced with the consequences of death and dying as they help families to express their feelings towards the cancer diagnosis, the junior nurse may need to be facilitated to find meaning in their work. Feelings of helplessness and hopelessness can be transmitted to patients and families and negatively affect their coping. If this is to be avoided then alongside self-awareness junior nurses, whether generalist or specialist may need to develop additional qualities to ensure survival:

**Qualities for personal survival**

- Competencies to deal with uncertainty
- Maintains self-esteem
- Maintains social support
- Manages work boundaries

Team working was a distinguishing feature of both lists of competencies. To be successful required certain qualities. To be effective in their role, where both parents and children have stressed the importance of nurses being friendly and caring, these qualities would need to be explored further and reflected in a pre-selection tool. To be adaptable, versatile, assertive, credible, and approachable were all identified as important qualities for team working. Children's cancer nurses also spoke of being challenging and authentic. These
two qualities link back to previous discussion in Section 9.2.4, and relate to knowledge level. As a specialist in practice a nurse may be challenging the decisions of other health care professionals, and the success of that encounter may rely on the nurse being authentic by acknowledging their limitations.

Qualities for leadership received little attention in both groups. It was mentioned in only one of the focus groups where it was felt that nurses did not always take opportunities to lead:

*FG 5 P5 (…….) nurses need to feel that they can lead I know perhaps that sounds rather negative but there is sometimes a perception that they have a particular role in a team which is not a leadership role they you know they do particular things and they’re very good at them and if they didn’t do them who would do them where in fact it seems to me that it’s perfectly relevant and appropriate that under some circumstances they are the leaders…….*

It seemed to be both the person and the nature of the service that influenced nurses to be leaders. Nurses spoke of being visionary, proactive and having political skills. All qualities important in a role as leaders if nurses are to be concerned in shaping local, national and international politics and policy. Nurses also lead on developing practice and service delivery, these qualities would also be essential here.

Being effective in their role required qualities such as common sense, being friendly, confident, caring and resourceful. All of which are fairly self-explanatory, except for caring. Nurses in both phases of the study spoke of caring as a particular quality, what they meant by that term was not explored. Yet caring as a concept is noted to be very complex and because it is embodied in everyday language there is a presumed understanding of what the term actually means (Clarke and Wheeler 1992). Making this even more complex, caring has been interpreted differently by patients and nurses (Larson 1984, 1986). Using the CARE-Q instrument the nurses in Larson's (1986) study identified the behaviours of listening, touching, talking and individually giving patient care as most important in making adult patients with cancer feel cared for. In contrast using the same instrument (CARE-Q) adult patients with cancer identified being accessible, monitoring
and following through as the most important nurse caring behaviours. Listening, talking, and other psychosocial skills only became important after the patient's basic 'getting better' needs were met (Larson 1984). It may be argued that nurse caring behaviours are situational and therefore can be open to a different interpretation. Studies are required to define this quality further, from the perspective of the nurse, children and their families, following which further sub-competencies could be described.

9.2.11 Teaching competencies

The need to share knowledge and to deliver information, were identified as sub-competencies of teaching. In total 14 sub-competencies were identified. Nurses talked about teaching in all phases of data collection. Teaching was mentioned in relation to children, families, and other members of the multi-professional team. Specialist nurses identified overall more sub-competencies where they articulated the content of what they would be teaching as well as their approach to delivering that information. Casey (1988) and Long (1991) both highlighted teaching as a role of the children's nurse. Neither offer the detail reflected in this hierarchy. This role required children's nurses to interpret the needs of children for other health care professionals, teach by role modelling to other staff, teach parents, teach children and teach student nurses. It was recognised to be a key role and one that encompassed a great deal of time. It is has long been recognised that having patients better informed and more involved has an impact on the outcome of their illness (Boore 1978). Children have also responded to being more informed (Bradding and Horstman 1999).

Children's nurses distinguished their role from ward based teaching posts where they perceived a shared role in terms of teaching responsibilities. Teaching students was highlighted as an important role for some. In contrast, clinical nurse specialists did not feel that this was a large part of their role. Focus group participants in Phase I debated the difference between ward-based teaching and classroom teaching as they sought to find where the teaching role was best placed. Clinical staff as teachers within their own setting had overwhelming support in the Delphi survey. In addition, although the notion of
clinical experts from the practice setting teaching in higher education institutions was generally agreed upon, the comments revealed some anxieties in relation to that role:

*D1 experts should not need to go to ‘university setting’ to teach.*

This was balanced against a different view:

*D1 (……..) nurses need to have opportunities to teach in a university. Currently it is undertaken on a good will basis, time is rarely given for it and it is does not reflect the hour’s preparation that have gone into the session.*

It may be that what was being discussed here were two different kinds of teaching, both lending themselves to teaching by clinical staff. The debate may be more about deciding which is the most appropriate setting for the different types of learning that take place, and who is the most appropriate person to be teaching that subject. This may necessitate defining this role further:

**Teaching competencies for sharing knowledge**

- Competencies for teaching student nurses
  - Maximise student teaching in clinical setting
  - Teach students by role modelling

Teaching parents and children was a facet of many aspects of care. Teaching involved sharing knowledge to cover a range of issues, such as; knowledge about illness, knowledge about treatments, skills to continue to deliver family care, technical nursing skills, discharge planning, all ultimately aimed at helping the family towards independence from the health care team. Children's nurses identified the teaching role in broad terms. Teaching parents technical skills was specifically highlighted:

*FG3 P4 ...(...) teaching the parents as well so they can do that at home. And a lot of the parents are very motivated to do it. And you were saying about are we giving the parents too much to do, in the technical transitional care they do everything whether that's caught up in the guilt and their sort of need to be needed as well, their role as a mother.*

Teaching to influence independence, will in the current technological climate, necessitate parents undertaking complex aspects of care. How far this is a parental role in hospital was debated. There was a question for some about negotiation in situations where it was felt parents were being relied on to deliver nursing care. It was not clear, however,
whether this was a question about competence and preparation to deliver care, or poor staffing levels that necessitated parents delivering nursing care. Irrespective of the current climate and the concern over staffing levels, past studies have pointed out that parents want to be more involved in their child's care than children's nurses think (Merrow and Johnson 1968). Similar to the specialist nursing competencies the level of detail could be increased here to make explicit the content of what is being taught. Types of sub-competencies to extend the hierarchy include:

**Teaching competencies for sharing knowledge**

Competencies for teaching children and families
- *Teaching children and families about disease*
- *Teaching children and families about treatment*
- *Teaching children and families about family care*
- *Teaching children and families about nursing care*
- *Teaching children and families about nursing care given by parents*

Competencies for teaching children about self-care

The children's cancer competencies were more detailed in relation to whom the knowledge would be shared with as well as the content of the knowledge to be shared. Additionally the children's cancer nursing competencies detailed approaches to sharing information that included giving consistent information, pacing information and responding to requests for information. This level of detail is supportive of the fact that within the speciality nurses are involved in giving children and their families very detailed and often complex information about cancer and the various treatments. The additional competencies support the importance of getting it right to ensure that families are sufficiently informed so that they can participate in decision-making and the delivery of care. Information giving and the importance of delivery have implications for understanding and retention (Webb 1985). Although nurses referred to delivery, teaching style and content there was no reference made to evaluation of teaching. In terms of retention and the need to confer understanding and competence an approach to evaluating knowledge gained would seem to be a useful additional descriptor to the hierarchy. The class of teaching competencies is
an excellent example where the range of sub-competencies could be expressed in even more detail depending on the purpose.

9.2.12 Values

Nursing values portray the concepts of equity, respect for persons, and caring (RCN 1987). The importance of the individual in society and his need for health is connected to the concept of equity in terms of how and to whom the service is delivered. A belief in the dignity and intrinsic worth of each individual will influence the nature of the nursing service. It is through the act of caring for another person that the more abstract notions of respect for the individual and equity are found in nursing. In children's nursing these concepts are applied to patients and their families. The hierarchy presents six sub-competencies that are reflective of the beliefs of children's nurses that influence how they work. Providing holistic care, showing unique insight, being non-judgemental and involving families are examples of values statements. Specialist nurses added to this list valuing families knowledge and caring using art and science. This list of sub-competencies is not as straightforward as those in the other 11 classes.

Value statements are recognised to be complex, often relying on personal interpretation reflective of an individuals values and beliefs. Explaining and making clear the meaning that is attached to these words (i.e. defining) is therefore crucial, if the situation is to be avoided where personal values and beliefs are judged to be dominant. For example, nurses can interpret involving families in decision-making in a different way, depending on their own personal beliefs and level of experience (Callery and Smith 1991, Casey 1995). Callery and Smith (1991) report a correlation between increased respect for parents' own decision-making capabilities with increasing rank, where negotiation of care was only apparent in the critical incidents of more senior nursing staff. This was a small study and therefore the results must be treated with some caution. Similar findings however have been noted in a more recent but also small study (Sheldon 1997). It may be as Casey (1995) argues that more experienced nurses have moved away from a more traditional nurse-centred way towards a negotiated partnership approach that is more reflective of a
communicating/person centred approach to working. Personal beliefs, nursing style and length of clinical experience all together may impact on how far families are involved in decision-making. It may be useful to identify sub-competencies that would define this role further. In doing so nursing teams could make explicit their philosophy of care that would no longer need to rely on more experienced and person centred styles of working to bring about involving families in decisions and hence negotiating of care a reality.

9.3 Summary

This chapter has shown that it is possible to elaborate a classification and to increase the level of detail. The level of detail required would depend on the intended use of the classification. In this thesis the number of IS-A relationships were non-exhaustive at the level of sub-competencies. What has been detailed is a tentative proposition, developed from the data and literature, which would require refining and validating through additional data collection.

In the final chapter the relationship between a children’s nurse and specialist children's nurse will be explored further. It is through an analysis of this relationship that a critique of the study and the methods used will be detailed. A definition of children's nursing will be stated preceded by considerable reflections on the trustworthiness of the data that has culminated in the definition. The chapter concludes by proposing a model for testing by others.
PART 4

REFLECTIONS AND CONCLUSIONS
Chapter 10 Reflections on the classification of competencies: the pathway to defining the children's nurse

10.1 Introduction
At this point in the thesis detailed lists of competencies have been developed that describe the characteristics of a children's nurse and specialist children's nurse. Using the method of genus and difference, competencies were defined by specifying the broader class of objects to which they belong (genus) and the characteristics that distinguish competencies from each other (other species). The set inclusion relation (IS-A relation) was used to identify specific characteristics, to explore relationships and make explicit the superordinate and subordinate categories. This process resulted in a classification that labelled concepts (children's nurse and specialist children's nurse competencies), ordered competencies to reveal relationships between the two types of nurse, and defined further the competencies of both types of children's nurse.

This chapter will discuss in more detail the relationship between a children's nurse and specialist children's nurse exposed by the classification. Potential gaps and inconsistencies in the classification will be identified and possible reasons for these gaps postulated prior to addressing the questions of whether children's nursing can be defined using competencies. This chapter concludes by stating a definition of children's nursing and specialist children's nursing and proposes a model for testing by others.

10.2 The relationship between a children's nurse and a specialist children's nurse
This study inductively revealed 12 classes of competencies that were shared by children's nurses and children's cancer nurses:

1. **Decision-making**: included any concepts related to problem solving and making decisions about care.
2. **Developing practice**: included any concepts related to activities about developing or informing changes to practice.
3. **Health Education**: included any concepts about giving information regarding health and health promotion.
4. **Interpersonal**: included any concepts related to relationships between nurses and others that required the use of specific interpersonal skills.

5. **Knowledge about** included any concepts related to theoretical or practical knowledge that underpinned care: knowledge about how to actually do things.

6. **Knowledge how to** included any concepts related to theoretical or practical knowledge that underpinned care: knowledge how to do something if they needed to.

7. **Organising**: included any concepts related to management and organisation of care.

8. **Practice/intervention**: included any concepts related to implementing or delivering care.

9. **Professional responsibilities**: included any concepts related to continuing learning and personal education.

10. **Qualities**: included any concepts related to personal attributes of the nurse.

11. **Teaching**: included any concept related to teaching or sharing knowledge with others.

12. **Values**: included any concepts related to beliefs/attitudes or judgments made about the quality of care.

Within the 12 classes of competencies there were 26 sub-classes identified by the researcher to help logically order the sub-competencies for presentation in the hierarchy. The 198 sub-competencies were accommodated into the 12 classes. The classification was developed using types of sub-competencies as the principle of division as detailed in Section 8.3.3. The process of identifying parent (type) and child (sub-type) relationships explored the connections between the children's nurse and children's specialist nurse proposed in the conceptual framework in Figure 2.2. This as yet, untested classification (Figure 8.1) defines and differentiates between general and specialist children's nursing practice, the central characteristics of which are explored below.

When exploring the characteristics of children's cancer nurses, a clear link has been made to the initial preparation as a children's nurse (RCN 2000b). The notion that specialists in nursing practice are also generalists, in that they hold a general nursing qualification, and are therefore able to provide the full range of nursing care, has been endorsed by a number
of publications (ANA 1980, ICN 1985, RCN 1988, ICN 1991). Beyond these statements, the difference between generalist and specialist has never been articulated in the detail that has been presented in the classification in Figure 8.1. A number of points are highlighted below as evidence that a particular relationship does exist between these two groups of children's nurses.

10.2.1 Common elements of the general and specialist children's nurse

During the process of grouping concepts (Section 8.2.2) all of the competencies and types of sub-competencies were accommodated into the 12 class names developed by the researcher. All of the classes included competencies and sub-competencies developed from both phases of data collection, namely there were no classes that contained either only general or specialist competencies. This would seem to support the notion of a relationship, as there were no competencies that were not shared by both groups of nurses. The position in the hierarchy indicates that there was more in common than different between the two types of children's nurses. The classes of competencies reflected a broad base of knowledge and skills that all nurses require that care for children irrespective of their health needs. The classification defines the professional practice of children's nursing that includes values, knowledge, skills, and qualities.

It was in the sub-competencies that differentiation occurred between the general and specialist children's nurse. In all of the 12 classes of competencies there were specialist sub-competencies expressed that represented knowledge, skills and qualities specific to cancer nursing. The ordering of competencies revealed a relationship between the knowledge, skills and specific qualities of a children's nurse and specialist children's nurse. Many of the sub-competencies of a children's cancer nurse depended on the existence of competencies as a children's nurse. For example, the cancer nurses specifically mentioned one of their roles as facilitating breaking bad news. The skills required to achieve a good outcome from this interaction with parents are the abilities to establish rapport, to establish trust, to empathise, to listen, to communicate on different levels and to empower families. These skills were identified as important by children's nurses and were listed as types of
sub-competencies in the class of competencies named *interpersonal*. Other than communicating on different levels none of the other interpersonal skills listed were identified specifically by the children's cancer nurses. A number of points may be inferred from this example:

- These skills were implicit in the process of facilitating breaking bad news and therefore they were not specifically mentioned.
- These skills were considered as aspects of children's nursing preparation and therefore competence in these areas was presumed.
- As competence was presumed there was an understanding that children's cancer nurses applied their general knowledge and skills to specialist practice.
- Competence achieved during general preparation was judged unnecessary to be revisited in specialist practice.
- These skills were not considered necessary, however this was not sustained in the discussion.

There are many examples in the classification that demonstrated this application of general knowledge and skills to specialist practice, such as teaching and practice/intervention (see Figure 8.1). All the points noted in the above list could be related to these further examples.

In addition to applying knowledge and skills there were also examples where generalist skills have been built on in specialist practice. For example:

**Teaching competencies**

**Teaching competencies for delivering information**

- Individualising information
- Responding to requests for information (ChCN)
- Giving consistent information (ChCN)
- Pacing information (ChCN)

Here specialist nurses have identified teaching skills relevant to their area of work. One interpretation of the classification would be to suggest that individualising the information is insufficient for competence to deliver information in specialist practice. Delivering information has been further defined by specialist nurses to include three additional sub-
competencies. This increasing level of detail is reflective of the nature of the speciality where parents and children need to assimilate very complex and in depth information about medical conditions and treatments. The ability to give consistent information, to pace information appropriate to the recipient and to respond to requests for information are all skills that would increase effectiveness and ensure information was delivered in the most suitable way. These skills, it could be argued, are skills that children's nurses may and do use. This may be an example where specialist skills, identified through a process of discourse with nurses and then detailed in a competency framework, would benefit from being shared with general children's nurses. The responsibility of specialists for continued strengthening of the generalist foundation of nursing is an important role (ANA 1980). The view that specialist nurses build on generalist knowledge and narrow their focus on a part of the whole field of nursing (ANA 1980) has been highlighted in the classification developed.

10.2.2 Differences between a general and a specialist children's nurse

In addition to application and building on of general skills, the classification demonstrated that there exists specialist knowledge that is beyond the scope of general nursing practice. This was only evident in relation to knowledge competencies. Understanding cancer and cancer treatments and supporting families of children with cancer were only mentioned by the cancer nurses. These are examples of knowledge that would not be shared by general children's nurses. What would be shared are the competencies for caring for children and working in a team. This knowledge is considered to be relevant to the care of all children irrespective of their health needs. It would be this knowledge applied to cancer practice that would enable specialist children's nurses to deliver age appropriate, safe and effective care. Added to this shared knowledge was the specialist medical and nursing knowledge that underpins this defined area of children's care. It is this specialist knowledge and how it is applied that are provided through specialist education.
10.2.3 Trustworthiness of the implied relationship

The hierarchy has exposed elements of practice that are shared, applied, built on and different in terms of the relationship between the two types of nurses. The sources of data and the methods used to collect and analyse data must be considered alongside the inferences that have been made from the classification.

The conclusion that there were shared competencies was reached because the applied class names encompassed all the competencies and sub-competencies. The class names were derived during an inductive process (undertaken by the researcher) of grouping concepts (competencies and sub-competencies) according to common characteristics. The trustworthiness of this process is dependent on three issues. Firstly, that the concepts have been labelled to express meaning as precisely and unambiguously as possible. Secondly, that the inclusion and exclusion of concepts into groups was correct based on the accuracy of the initial label. Thirdly, that the class names specified reflect the concepts grouped within that class. An expert in classification independently checked analysis of the data at each of the steps identified by the ICN (1996). The degree of concurrence was high increasing the reliability of the generated concepts.

The validity of the outcome may be considered less certain. The class names were dependent on the concepts available to be grouped. In turn the concepts were dependent on the data, on the data source, how the data were collected as well as the analysis of the initial data. The inclusion of 146 nurses in this study who care for children from around the UK and 37 children's cancer nurses goes some way to validate the data source. The two phases of data collection had advantages and disadvantages. Although both revealed a wealth of data regarding the nature of the general and specialist nurse it may be argued that the approach taken in Phase II, to develop competencies for a specialist course, may have focused the participants on those elements of practice amenable to assess (knowledge and skills) as a measure of successful course completion. In contrast to this specific focus on clinical competencies, the approach taken in Phase I was broad by focusing on the nature of children's nursing and the role of a children's nurse. The avoidance of focusing on competencies may have enabled the participants in Phase I to think more widely about the
role of a children's nurse. The final focus groups in each phase reversed the focus, specific to broad in the children's cancer group and broad to specific in the children's group. The inclusion of this step in the data collection has increased the validity of the data through a process of validation and evaluation that has augmented the extent to which the competencies will be considered by the respective professional groups to reflect the nature of their practice.

A further threat to the reliability of the classification was the process of data analysis, in particular the use of content analysis to produce stable and reproducible data (Weber 1990). Inconsistencies in coding that result from only one person coding the data, such as ambiguities in the coding rules, ambiguities in the text, or simple errors of miscoding can be avoided through the use of a second coder. Although there was only one coder involved, the researchers decision to use predetermined codes added to the detail and clarity of the steps taken (recorded in Section 6.5.1) would enable other researchers to replicate this part of the study.

The thought that specialist nurses apply and build on generalist knowledge and skills was a further conclusion reached. It was the ordering of the sub-competencies that revealed this particular aspect of the relationship. The strength of this conclusion must also be considered in conjunction with the trustworthiness of the data. As a result of the process of developing competencies with children's cancer nurses a level of detail was attained that was not replicated in the data collected from children's nurses. The initial broad approach taken with children's nurses was an advantage in that it awarded breadth to the data, but it was also a disadvantage where depth was sacrificed for breadth. If given the opportunity, through a different method of data collection, it may be suggested that children's nurses might (like the children's cancer nurses) have provided more detail about, for example, their teaching role. Likewise children's nurses would be able to identify clinical situations were they apply generalist knowledge and skills in new situations such as when caring for a child whose health needs are different from the client group the children's nurse normally cares for. That these outcomes are possible need not negate the conclusions deducted from the classification, as there were further data that supported this finding. It was specifically
mentioned and agreed by the children's cancer nurses in the focus group that there was a relationship between general and specialist skills:

*FGe2 P6 but then it gets to a certain point when your general and specialist skills are ... feed off each other ... as your children's nursing skills have got to a certain level and your specialist skills have got to a certain level they start to ... you start to ... because you learn on both things ... then that might in turn makes you understand your specialist skills more ... and in a way you flip backwards and forwards ... I think it gets to a certain point when it simultaneously develops together.*

One of the features that differentiated the two types of nurses was the specialist medical and nursing knowledge. A point needs to be made about this particular finding. As discussed previously, the approach taken to data collection may have prevented the children's nurses from providing detail about the health needs of their client group that required specialist medical and nursing knowledge. How far a generalist preparation can prepare children's nurses for all spheres of clinical practice has previously been highlighted. The lack of a detailed definition of a children's nurse added to the multiple meanings of the title specialist has resulted in difficulties in describing the exact nature of general and specialist children's nursing. This point aside, sub-competencies in the classification do demonstrate, in the case of children's cancer nurses, evidence of knowledge and skills not articulated by children's nurses.

10.2.4 Implications of this relationship

The previous discussion regarding the relationship between the general and specialist children's nurse leads to the following conclusions:

- There is a significant common element in these two areas of nursing practice;
- Generalist preparation is the foundation of specialist practice;
- Generalist knowledge and skills are furthered in specialist practice;
- There is evidence of speciality practice that is beyond the scope of general nursing practice.

Two important implications may be inferred from the data:
1. Generalist children's preparation must be a pre-requisite for specialist practice.
2. Generalist knowledge and skills should also further develop in specialist practice.

**Generalist children's preparation must be a pre-requisite for specialist practice**

In the current education system in the UK general children's preparation is the starting point for nearly all careers in children's nursing. This has more recently been captured in the form of the child branch, which follows a common foundation of nursing. But, as argued in Section 2.2 since the registration of children's nursing questions have been asked over the need for children's nursing as a separate branch. The central arguments being:

1. There should be one qualification that leads to registration (Judge 1985).
2. Generalist education should prepare nurses to care for individuals of all ages in all communities (ICN 2001).
3. Children's nursing represents a specialist not generalist nursing qualification (Clark 1994).

In the light of the classification developed each of these arguments will be considered to support the conclusion that general children's preparation must be a pre-requisite for specialist practice.

**1. Should there be only one qualification that leads to registration?**

Since the recommendations of the Horder Committee (The RCN 1942) there have been two persistent themes around the education of nurses. Firstly, that nurses should have a wider basic training in order to gain clinical experience (not qualification) in all branches of nursing. Secondly, that there should be one qualification that leads to registration as a nurse. These two themes represent different points in the history of nursing, nonetheless in various forms they have been consistently stated (refer back to Chapter 2). One qualification as referred to here means registration as a general (adult) nurse. If introduced, this would replace the four branch structure currently in place in the UK. The current stated competences to Register as a nurse are the UKCC competencies (1999c,d). As mentioned previously in this thesis, these competencies were viewed by the researcher
to lack detail and would require application and further development to encompass children's nursing. A comparison of the four classes of UKCC competencies to the 12 classes identified in the classification has confirmed that view (Table 10.1).

Table 10.1 Comparison of the 4 UKCC classes with the 12 classes in the classification

<table>
<thead>
<tr>
<th>Classification of children's nursing competencies</th>
<th>UKCC competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decision-making</td>
<td></td>
</tr>
<tr>
<td>Developing practice</td>
<td></td>
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<tr>
<td>Health education</td>
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<tr>
<td>Interpersonal</td>
<td></td>
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<tr>
<td>Knowledge about</td>
<td></td>
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<tr>
<td>Knowledge how to</td>
<td></td>
</tr>
<tr>
<td>Organising</td>
<td>Care management</td>
</tr>
<tr>
<td>Practice/Intervention</td>
<td>Care delivery</td>
</tr>
<tr>
<td>Professional responsibilities</td>
<td>Personal/professional development</td>
</tr>
<tr>
<td>Qualities</td>
<td></td>
</tr>
<tr>
<td>Teaching</td>
<td></td>
</tr>
<tr>
<td>Values</td>
<td>Professional and ethical practice</td>
</tr>
<tr>
<td>12 classes</td>
<td>4 classes</td>
</tr>
<tr>
<td>198 sub-competencies</td>
<td>61 sub-competencies</td>
</tr>
</tbody>
</table>

If this model of nurse education were to be accepted, the UKCC competencies as they stand would not be sufficient to prepare nurses to care for children. When compared with the classification developed in this study there are a number of important areas missing, they lack detail and hence they fail to reflect the practice of children's nursing. Two examples are given below to support these findings.

Firstly, the specific knowledge to care for different client groups is an important area missing from the UKCC competencies. Any suggestion that adding 'client group' to every competency in order to make it specific would fail to do justice to the importance of knowledge in the planning and delivery of safe and effective care. It is difficult to see from the UKCC list of competencies how competence could be developed around skills to
individualise care, where there are no specific references to the health needs and specific approaches to care of the different client groups.

Secondly, the emphasis and level of detail in relation to interpersonal competencies was lacking when compared with the classification developed in this study. In the UKCC competencies the use of appropriate communication and interpersonal skills were located in the class 'care delivery'. In the classification 'interpersonal' was a class on its own. Two sub-competencies were listed by the UKCC in contrast to the 24 identified in the classification. Whereas the UKCC simply referred to 'utilising a range of effective and appropriate communication and engagement skills', the classification explicitly detailed a complete range of communication skills. The classification makes specific reference to the client group and highlighted skills that would enable a children's nurse to engage and disengage from relationships with children, families and other professional groups.

By comparing the UKCC competencies with the classification these two examples are evidence of how inadequate the UKCC competencies would be in ensuring the competence of a children's nurse to practice. Therefore one qualification leading to registration would be an inappropriate way to prepare children's nurses.

2. Should a generalist education prepare children's nurses?

Generalist education, as referred to by the ICN (2001), aims to prepare nurses to care for individuals of all ages, families and communities with physical or mental illness, disabilities or rehabilitation needs in institutional and community settings. If introduced, this would replace the four branch structure currently in place in the UK. Comparable to the previous model this approach to education would result in one qualification. In contrast to the one qualification referred to in the previous section, this model implies an expansive educational curriculum. In addition, the ICN (2001) have introduced competencies for the generalist nurse. These competencies are structured using the four classes of competencies identified by the UKCC. Minor changes have been made to the lists of sub-competencies that include regrouping into different classes, some re-wording
and the addition of an international perspective. Irrespective of these minor changes the competencies of a generalist nurse remain broad and lacking in specific detail.

If this model of nurse education were to be accepted, even with the implied expanded educational curriculum, the competencies of a generalist nurse as they stand would not be sufficient to prepare nurses to care for children, for the same reasons as the one qualification in general (adult) nursing (referred to in point 1) was considered to be inappropriate.

3. Should children's nursing be a post qualifying qualification?

Since the recommendations of the Horder Committee (RCN 1942) there have been suggestions that children's nursing was specialist as opposed to generalist, and hence was more appropriately placed in the domain of post-qualifying education (Clark 1994). The lack of clarity about the terminology and concepts regarding generalist and specialist nursing has impacted on that debate resulting in the contributions for and against the argument being unsuccessful. If this model of nurse education were to be accepted children's nurses would be prepared by a post qualifying programme following either a general (adult) nursing or generalist nursing model for first level training. The classification would not appear to support this model as there was clearly a difference between general and specialist children's nursing, where specialist was an additional layer of practice that developed from general children's nursing.

The suggestion that children's nursing is specialist was not sustained by the classification. The classification developed in this thesis illustrates the professional practice of general children's nursing as the 12 classes of competencies detailed a broad base of knowledge and skills that would be required by nurses in all areas of children's nursing practice. The higher-level expressions in the classification define generalist as opposed to specialist nursing practice and reflect the WHO (1988) definition of generalist nursing.

The exact nature of specialist nursing, defined in this thesis as a children's nurse working in a specialist area of clinical care that meets all the essential features of specialisation
listed by the ICN (1991), was revealed in the classification. Specialist practice was reflected in the sub-competencies that were beyond the scope of general nursing practice. In addition to identifying what was different between the two types of nurses, the relationship between the general and specialist children's nurse was also made clear. The classification presented a continuum from general to specialist, with generalist knowledge and skills described as a pre-requisite for specialist practice.

This continuum, from a general to a specialist children's nurse, detailed in this study could not be supported by any of the three models of education described. If the models are introduced the implications for children's nursing would be:

♦ The majority of children would be cared for by nurses with only a basic understanding of their health needs;
♦ The majority of children would not be cared for by a qualified children's nurse;
♦ There would be a decrease in the number of specialist children's nurses available to care for children requiring specialist nursing care;
♦ A programme to prepare general children's nursing would need to follow general (adult) or generalist nursing;
♦ Programmes to prepare specialist children's nurses would need to follow general (adult) or generalist and general children's nursing;
♦ Preparing children's nurses and specialist children's nurses would become longer and be more expensive;
♦ Major advances and hence improvements in care could be lost;
♦ Children's nursing and specialist children's nursing research (and thus knowledge) may be lesser developed.

In contrast to the three models of the relationship between a children's nurse and specialist children's nurse identified in the literature (detailed in Section 2.12) the preferred model implied by the classification is:

Children's nurse  ---------  Specialist children's nurse
In identifying this as the preferred model it must be noted that children's nursing was the
staring point for all the participants in this study, even though the majority of the
participants were dual qualified as children's nurses and adult nurses.

*Generalist knowledge and skills should be further developed in specialist practice*

The need to develop general knowledge and skills as part of specialist education
preparation was illuminated by the classification. As highlighted, specialist children's
nurses used, applied and developed further generalist knowledge and skills. On the whole
in specialist practice the sub-competencies represented another layer, where a competency
was expressed specifically as it related to the sphere of practice that is children with
cancer. The order in the classification revealed that specialist children's nurses inherited all
the characteristics from the parent type expressions related to general children's nursing.
Without these characteristics specialist knowledge could be viewed in isolation and there
may be a danger that children and families could potentially receive care that was less than
holistic where there was a focus on the disease and not the person. As mentioned by the
expert children's cancer nurses in the focus group, specialist knowledge on its own was
insufficient. A nurse may know all the treatment protocols but that would not necessarily
make them a competent children's cancer nurse. For example, a nurse may be
knowledgeable about a particular chemotherapy regimen but may not be able to
communicate and share that knowledge with parents or children. With reference to the
classification, the knowledge and skills to communicate and teach parents and children are
characteristics of a general children's nurse and therefore specialist nurses would need
these skills in order to share their specialist knowledge. Where that was missing, or not
developed as part of specialist nursing practice there may be a risk that specialist
knowledge is either not communicated or communicated in an appropriate way. This
evidence supports the need for children to be cared for by specialist nurses who are also
children's nurses. The characteristics of an 'expert' were felt to be more than knowledge
alone, this was something else which the experienced children's cancer nurses in this study
found it difficult to define.

General knowledge and skills of a children's nurse were seen as essential to support
specialist medical and nursing knowledge. Developing specialist knowledge in isolation
from generalist knowledge could result in professional practice that failed to relate to the client group, and hence a 'knowledgeable doer' that is unable to engage in nurse-parent or nurse-child relationships that are so important in children's cancer nursing (Brace O'Neill 1998).

A consistent theme throughout the final focus group (with expert children's cancer nurses) in Phase II was the notion that the overriding principle of what they did as nurses was to care for children and families, and that much of their practice would be described as general (as it relates to any child and family), which was then applied and advanced within their speciality. In addition there was a vast amount of specialist medical and nursing knowledge that they used which was supplemented by their generalist knowledge. It was this combination that enabled them to be confident and 'expert' within their speciality. Nurses debated the fact that the knowledge competencies could not exist independent of generalist knowledge and skills. However children's cancer nurses undertaking the children's cancer nursing course consistently argued that the general competencies were not appropriate and should not be assessed on a specialist course. Although this notion of continuing to develop generalist skills changed over time for some participants on the course, for others they continued to state that their need was for specialist knowledge and skills. Nurses participating in the semi-structured interviews seemed to be articulating two points. Firstly, that they were already expert children's nurses and therefore presumably did not need to develop their generalist skills any further. Secondly, that they had enrolled on a specialist course for specialist knowledge, that is knowledge about children's cancer. This is an important finding that has implications for specialist education programmes. The different perception of experienced and less experienced children's cancer nurses is salient. There is a question about whether the less experienced nurses, who were nonetheless experienced children's nurses, valued what they did not have (specialist knowledge) higher than what they already had (generalist knowledge)? Even as it stands the classification makes explicit the relationship between general and specialist children's nurses and would enable less experienced nurses to understand the importance of life-long learning and professional development in both spheres of clinical practice.
The classification illustrates the point that generalist competencies are developed further in specialist practice. If both spheres of practice are to benefit mutually from this process then the relationship between the two must be exploited to enable both to benefit from the advancement of knowledge. There needs to be a recognised place for this to occur, one such place would be education programmes. For example, knowledge about how nurses make decisions is relevant to generalist and specialist practice. This is an example of shared learning, where advancement of generalist skills would have an impact on specialist practice, and vice versa. This cooperation has the potential to strengthen the community of children's nursing, avoid fragmentation (ANA 1980), and prevent the development of a hierarchy where specialist nursing is valued higher than generalist. This was a concern expressed in the Delphi survey.

10.3 Identifying gaps and inconsistencies in the classification

The competencies developed for both children's nursing and children's cancer nursing, were considered less than comprehensive by the 'expert' nurses participating in the focus groups because they were felt to be missing certain elements. Both final focus groups highlighted issues that have been debated in the literature. One of the main criticisms of the behavioural approach to competency is that they fail to specify how complex activities are made up of elements of competence. This approach to the assessment of competence has involved generating long lists of competencies to cover all the skills, information and performances needed to carry out the activity. Predominant use of functional analysis of current jobs as the technique to develop competencies has emphasised discrete tasks that make up a role (Hodkinson and Issit 1995). Thus, they have assumed in practice that individual elements of competence add together to produce global competence (Ashworth and Saxton 1990). Actual work practice is much richer than sequences of isolated tasks, leading Hager et al (1994) to conclude that the distinctive character of the occupation has been destroyed through the analysis. By selecting to develop competencies reflective of the holistic approach, the tendency to dissect a role to describe all the possible facets of professional practice was avoided. Therefore there was always the potential for missing elements. There are four important aspects to this part of the discussion:

- Identifying elements missing:
Ensuring completeness;
Identifying gaps or inconsistencies;
Exploring the reasons for the gaps or inconsistencies.

10.3.1 Identifying elements missing

The two main approaches to identify missing elements would be through consultation with the professional groups and testing in future research studies.

Consultation would need to be undertaken with general children’s nurses and children's cancer nurses. This process of consultation would need to be context specific. As mentioned previously purpose would dictate level of detail and therefore the respective professional groups would need to be clear about the purpose in order to be comprehensive in their approach. One possible approach to achieve widespread consultation would be through the use of a Delphi survey where nurses are given the opportunity to comment on the list of competencies developed. The advantages of the Delphi survey are that it would identify missing elements, assist in achieving consensus and facilitate participation from a large sample size to reflect the required outcomes of the survey. It would ensure geographical spread and be relatively low in cost to undertake. Balanced against these advantages are the disadvantages, highlighted during data collection in this study, that a Delphi survey can be very time consuming to undertake, and that results can be affected by a response bias that may ultimately affect the generalisability of the results. Overall the use of a Delphi survey, that makes explicit the reasons for inclusion of participants, has the potential to increase the probability that the outcome, a definition of children's nursing, will be accepted and used by the respective professions.

In addition to consultation, the final list of competencies and sub-competencies would be amenable for testing as a further approach to identify missing elements. The list of competencies could be tested by means of number of potential methods:

- Observation - where the competencies could be tested in the realities of practice through the introduction of a range of different variables such as, clinical setting (surgical/medical/adolescent unit), location (hospital/community), type of hospital...
(district general hospital/tertiary referral centre), geographical setting, level of clinical experience (recently qualified/more experienced), and nursing role (staff nurse/ward sister/clinical nurse specialist);

♦ Discourse with nurses - critical incident analysis, nursing narratives and interviews are some of the approaches that could be used to test the list of competencies against the realities of nursing practice;

♦ Assessment of practice - where the competencies could be tested in different situations, such as, the outcomes from pre-registration and post-registration courses, their ability to guide nurses during the period immediately after first level qualification (period of preceptorship), as well as their ability to assist in ongoing personal and professional development throughout the career of general and specialist children's nurses. This approach has the benefit of capturing two different perspectives, from the nurse being assessed and the assessing nurse.

10.3.2 Ensuring completeness

The list of competencies and sub-competencies were developed with members of the relevant professional groups. The consumer perspective adds an important dimension as highlighted through the research of Bradding and Horstman (1999) and Darbyshire (1994). As evidenced by these studies children and parents, as receivers of care, are able to describe the attributes of nurses that would or could increase their satisfaction with care. To ensure completeness the consumer view would need to be added. Potential methods to undertake this process could take two different directions:

♦ Parents and children could be asked to comment on the list of competencies;

♦ Parents and children could be asked to identify the skills, knowledge and qualities of a children's nurse and specialist children's nurse (inclusion to reflect their experience of nursing care) using such methods of data collection (relevant to sample, parent/child/young person) as focus groups, interview, draw and write technique, questionnaire, story completion tasks etc.

In addition to the consumer perspective, the views of specialist nurses other than cancer nurses and other professional groups would add to the completeness of the classification.
Although it has been possible to describe a relationship between general and specialist children's nurses, how far the findings of that process can be applied to other specialist nurses would need to be tested. Undertaking this process would measure the ability to generalise the classification to other children's nursing specialities. In addition it would reveal aspects of professional practice that are both common and different between the specialities in children's nursing, a relationship which has not previously been explored. Similar to data collected with parents and children there would be the option here of asking for comments on the list of competencies or developing a new list of competencies that could be compared to the classification. Both steps would necessitate the need to clarify concepts and ensure meaning through a process of labelling and ordering as described in Section 8. The inclusion of this step in the development process would have a number of advantages:

- Clarify areas of children's nursing practice that are specialist as opposed to generalist;
- Direct the development of further post-qualifying educational programmes;
- Reveal opportunities for shared learning on post-qualifying educational programmes;
- Facilitate a climbing frame approach to career development that would encourage movement in a number of different directions (rather than a single ladder approach).

The opinion of health professional groups other than nurses was sought in this study in a focus group undertaken in Phase I. This was undertaken in order to add to the completeness of data. The sample size was very small and this would need to be increased and undertaken in both general and specialist aspects of children's care as a further step to be sure that completeness had been achieved. The views of other professional groups are important as they have the potential to reveal areas of professional practice that are implicit and as a result more difficult for children's nurses to articulate.
10.3.3 Identifying gaps or inconsistencies

Participants in the final focus groups in both phases of the study identified that the competencies failed to cover all aspects of a role and that something was missing which 'brought everything together'. It was the 'person' and the qualities of a children's nurse that were debated by both groups of nurses to be absent. The focus on the individual is essential to avoid falling into the behaviourist approach of using competencies to deal with only technical skills. The skills and qualities needed to maturely, reflectively and expertly deal with families and their problems must also be features of competencies (Ashworth and Morrison 1991, 1994). For the expert children's nurses the focus was not necessarily on identifying the attributes of a children's nurse, the angle that they wanted to pursue was identifying the attributes of a nurse appropriate to meet the needs of children and families. The addition of a consumer perspective would resolve this problem by testing and enhancing the list of qualities detailed in the classification.

There were inconsistencies in the classification in relation to the level of detail used to describe both knowledge and skills. The children's cancer nurses described in detail medical and nursing knowledge specific to the health needs of their client group. In contrast, the children's nurses described knowledge that could be generalised to all children irrespective of their health need. This finding was replicated in relation to skills where the children's nurses detailed skills used when caring for all children and the children's cancer nurse's referred to skills appropriate to the health needs of their client group. The addition of further consultation, testing in future research studies and including a perspective from other professional groups and other specialist nurses would balance these inconsistencies.

10.3.4 Exploring the reasons for the gaps or inconsistencies

The reasons for the gaps or inconsistencies may be attributed to the study design, in particular:

- The contrasting approaches used in the two phases of data collection;
- The sample, both size and participants selected;
- The methods used to collect the data;
- Bias introduced by the researcher.
The contrasting approaches used in the two phases of data collection

The two phases of data collection were inherently different. Although the final outcome was identical (a set of competency statements and performance criteria) the process of development took two different routes. From the outset of data collection in Phase I participants in the nominal group techniques (NGT), focus groups and Delphi survey were considering the nature and role of a children's nurse in relation to all areas of professional practice. In contrast in Phase II the focus was on developing competencies from the outset. The focus with children's cancer nurses to develop competency statements from the outset may have unconsciously directed participants towards skills and knowledge at the expense of qualities. This may have been as a result of focusing on assessment of clinical performance, as well as the participants perception of competencies only reflecting knowledge and skills, as is apparent in much of the behaviourist approaches to competency. Historically clinical assessment in a search for objectivity has failed to find an appropriate method that encompasses indicators of the person and the qualities that they possess. This often leaves clinical assessors to use their intuition and professional judgement to distinguish good or poor qualities that impact on a student's performance (Girot 1993). As this approach to clinical assessment was the accepted norm, the participants in the NGTs may have been unaware that this was an opportunity to make more explicit to clinical assessors and students the qualities that contribute towards producing an expert children's cancer nurse. Responsibility for missing this opportunity must also be shared by the researcher and course tutor as an overview of the nature of competencies and the chosen holistic approach was not discussed with participants in the NGTs. The focus group with experts recognised that qualities were missing and hence supported the addition of this final step in data collection to validate and evaluate the list of competencies with nurses not directly involved in the assessment of practice.

Similarly, this approach may have impacted on the level of detail in relation to knowledge and skills. By focusing attention on the competencies to be assessed during a clinical course the children's cancer nurses in the NGTs may have been directed to concentrate on aspects they understood to be relevant to specialist practice and the outcomes they desired
following course completion. Reflecting on that list of competencies and performance criteria a number of points may be inferred:

- There was a shared understanding of the competence required to deliver safe and effective care to children with cancer;
- There was a shared understanding of the meaning of specialist practice;
- There was a shared assumption that because all of the course members were children's nurses competence related to generalist knowledge and skills had already been achieved;
- Despite this there was recognition that some aspects of generalist knowledge and skills could be developed further in specialist practice.

These inferred findings were strengthened through the process of validation and evaluation undertaken with experts in children's cancer nursing in the focus group. All of these points could be extrapolated to the data collected from children's cancer nurses on the clinical course, except for the final point. No participants during the semi-structured interviews confirmed the need to develop generalist knowledge and skills within specialist practice except for two participants (n=6) in the final interview. As previously mentioned there could be a number of reasons for this outcome, such as the course member's focus on acquiring specialist knowledge, and the perception that less experienced (in terms of knowledge and length of clinical practice) children's cancer nurses were unable to perceive the importance of developing generalist skills and knowledge in order to enhance specialist practice.

During Phase I the focus on the role of a children's nurse and the nature of children's nursing practice may have directed participants in the NGT, focus groups and Delphi survey away from describing the qualities of a children's nurse. Although, with probing, some qualities were mentioned in the earlier steps of data collection it was the final focus group with experts where there was an increased focus on qualities. As the first step towards validating and evaluating the list of competencies, the identification of missing elements was commenced at this point. As neither the approach taken in Phase I or Phase II revealed in the first instance the qualities of a children's nurse it may be tentatively concluded that qualities were either:
- Presumed and implicit;
- Difficult to articulate;
- Subjective;
- Difficult to assess;
- Unrelated to competence to practice.

These conclusions would need to be verified in future research studies. Nonetheless, the view that the qualities of a children's nurse are difficult to articulate concurs with the findings of Price and Hicks (2000).

As mentioned previously, the broad approach to data collection taken with children's nurses may have directed participants away from detailing the specifics regarding the knowledge and skills required to care for children with specific health problems. This deficit could have been avoided if the development of competency statements had been the focus of the earlier steps of data collection. The level of detail that may have resulted from that change in focus (highlighted in the data collected with children's cancer nurses) may however have obscured the relationship between generalist and specialist nurses. The broad base of knowledge and skills shared by all children's nurses would have been unarticulated as participants focused on specific health needs, and the competence to meet those health needs, as opposed to articulating the competencies needed to care for all children irrespective of health need.

The sample, both size and participants selected

A number of points must be made regarding the sample as this may have a bearing on the reliability, validity, replicability and generalisability of the study (Morse 1989), and may have been responsible for gaps or inconsistencies in the classification. Two types of sampling were used in this study, purposeful and network, both are examples of sampling in qualitative studies where participants are selected according to the needs of the study.

In Phase I the sample reflected general and specialist children's nurses, other health care professionals, and specific to the Delphi survey a small number of qualified nurses who cared for children who were not qualified children's nurses. This range has added
something to the completeness of the data through the inclusion of participants who were not qualified children's nurses. Although interesting, the numbers are too small to justify re-visiting the data to identify variations in responses that may have depended on professional group or qualifications. The majority of the sample were qualified children's nurses who were qualified as adult and children's nurses (all working with children), with a smaller number prepared through child branch who had one qualification. Although the researcher selected not to record explicit demographic details of the sample it would still be possible to replicate this part of the study as criteria for selection has been made explicit at each stage of data collection. The inclusion of 146 nurses who care for children has influenced the validity and generalisability of the findings that have defined the nature of children's nursing practice. But, as mentioned in Sections 10.3.1 and 10.3.2 future research studies would need to be undertaken to develop and test the classification to ensure completeness, and reliability and thus gain approval by the profession of children's nursing.

In Phase II the sample size was smaller, limited to one geographical area and included a combination of children's cancer nurses some with and without a post-qualifying qualification in children's cancer nursing. Although the sample varied sample details have been recorded and therefore replicability of the study would be possible. Further and wider consultation of the classification would need to be undertaken to increase reliability and gain approval by the profession of children's cancer nursing.

The methods used to collect the data

The trustworthiness of each of the methods of data collection was referred to in Chapters 6 and 7. In relation to the gaps and inconsistencies, there are a few further points to be made about the methods used.

The capacity for any of the methods used to enable participants to articulate qualities and the characteristics important to describe 'the person' could be debated. Clearly, the person and the scope for the qualities of that individual to impact on their ability to care and to be considered a 'caring person' were important for the expert nurses in the two final focus
groups. But, as previously mentioned the subjective nature of these qualities makes them difficult to identify and agree on. One approach that could have been introduced to strengthen this component of the study and attempt to gain some agreement on the essential qualities of a children’s nurse was a repertory grid (for a critique see Mazhindu 1992). This method, that focuses on individual’s perceptions of elements and their constructs has been used previously to identify caring attitudes and caring behaviours (Burnard and Morrison 1989, Morrison 1990, Dyson 1996). To ensure completeness of the classification that has begun the process of defining children's nursing future research studies would benefit by including this additional method of data collection.

The final focus group in each phase served a very important purpose. This was an opportunity afforded to both groups of nurses to comment on the list of competencies and sub-competencies that had emanated from the data. These focus groups have begun the process of consultation with the professional groups. How useful they were in successfully achieving that consultation could be debated. It may be argued that the focus groups attempted to achieve too many things by attempting to gain further views and perceptions on the characteristics of these two groups of nurses in addition to asking participants to comment on the developing list of characteristics (competencies and sub-competencies). As a result the intention of this method to validate and evaluate nursing competencies was compromised by the decision to continue to generate ideas. On reflection insufficient time was given to participants to study and comment on the developing list of characteristics, even though the list had been distributed prior to the event. Focus groups may not have been the most appropriate method through which to achieve validation and evaluation. A Delphi survey may have been a more suitable.

Following experience gained in using a Delphi survey in this study a number of advantages can be highlighted in support of this method as the primary method through which to validate and evaluate the classification as part of a wider consultation process with the two professional groups. In addition to the advantages noted earlier the Delphi survey would:
♦ Enable detailed information regarding the development process to supplement the questionnaire;
♦ Give participants time to reflect and consider the classes of competencies and sub-competencies;
♦ Increase accountability for the views expressed by informing survey members of the participants involved whilst keeping their judgements and opinions anonymous;
♦ Although time consuming, be the quickest method to encompass the greatest number of participants from the professional groups.

_Bias introduced by the researcher_

There are two points to be highlighted in relation to the researcher and the study. Firstly, ease of access to participants in both phases of the study was possible due to the researchers role, both local and nationally. This bias could have resulted in two issues: participants may have been influenced by the position held by the researcher and therefore felt obliged to be involved in the study; the potential sample may have solely mirrored the researchers professional networks that was narrow and not representative. All participants were given the opportunity to decline to be involved in the study. The fact that there were non-responders to requests to participate would go some way to conclude that participants approached did feel able to refuse. The addition of a network sample did ensure that the sample reflected participants other than those known by the researcher.

Secondly, the researcher is both a children's nurse and a children's cancer nurse. This may have affected the overall objectivity of the researcher both during the data collection and data analysis. For example, the probes used during the focus groups may have been influenced by the researchers knowledge of the issues being explored. In addition, during data analysis the researcher may have been searching for characteristics that confirmed her perceptions of the appropriate characteristics to be included, and thus may have missed contrary examples. To control for this bias the researcher used pre-determined probes in the focus groups and pre-determined codes during the content analysis of the data. In addition a second researcher was involved in all of the focus groups. These strategies will
have gone some way to prevent a researcher bias, particularly in relation to the data analysis. The inclusion of a second researcher to undertake the content analysis would have proved how far the use of pre-determined codes had controlled the bias.

10.4 Can children's nursing be defined using competencies?
The literature is fairly unanimous in directing those undertaking the task of developing competencies to produce holistic competencies that reflect knowledge, skills, values, critical thinking, clinical judgement and attitudes in the context of realistic professional practice. Participants in both final focus groups contested the reality that competencies can do all of these things. Nurses undertaking the children's cancer nursing course shared this view. As a result of participant's discussion gaps and inconsistencies in the list of competencies were noted. These gaps and the hypothesised reasons for the gaps have been explored in the preceding section. At this point in the thesis reflections will concentrate on the use of competencies and how far they did and should define children's nursing. To structure this discussion the main debates surrounding competencies highlighted in Section 3.5 will be explored further in the light of the classification of competencies developed alongside relevant data from this study.

The competencies developed in both phases of data collection were intended to be used to assess competence in clinical practice, and hence performance of the practitioner in the real-life situation, as advocated by While (1994). This is important as Grussing (1984) points out there is a distinction between the capacity for performance and the nature and quality of the performance itself. In other words, there may be a difference between what an individual should be able to do, as an outcome of an educational process and what they actually do in practice. Performance will be important for assessment in many cases as competence as a construct is not in itself directly observable and therefore must be inferred from performance (Gonczi et al 1993). This has a number of implications for the development of competency-based standards:

- If competencies are to be used in the real-life situation of practice, they must reflect the nature of professional practice and therefore must be developed with clinical practitioners;
♦ Outcomes of education need to be translated into clinical outcomes;
♦ Performance criteria must be clear, realistic, easily understood, jargon free and achievable;
♦ Multiple sources of evidence need to be used to assess performance for a comprehensive view of that performance (observation, oral questioning, self-reports, and documentation of care);
♦ Assessment documents must not be burdensome if they are to be used effectively by clinical practitioners.

All of the above points influenced the development of competencies in Phase II and influenced the consultation process. Clinical practitioners were the sources of data in both phases. Therefore the idea that the competencies developed in this study represent practice and as a result would measure performance of practitioners may be a safe one.

The process of assessment is in itself complex. Using the holistic approach has prevented the production of extensive lists that focus on only one activity. Nonetheless the competencies that have described both types of nurses may result in a weighty assessment document. Purpose would dictate the content and be closely linked to the method of assessment and resources required to undertake that assessment. For example, in the case of recruitment and selection for child branch an interview schedule would focus on competencies appropriate and amenable to measure in that setting, i.e. qualities and values. The challenge for the professional group would be to produce an assessment process appropriate to the purpose, and hence encompass competencies sufficiently detailed for that purpose.

Competencies have been criticised for reducing a role to individual functions leading individuals to complete tasks in a highly reductionist way, so that the whole becomes less than the sum of the parts (Hodkinson and Issit 1995). When the competencies were presented to experienced general and specialist children's nurses out of context they were concerned about the 'whole'. There was a concern that the person was missing. These concerns were also apparent with nurses on the children's cancer nursing course where they wanted to individualise the competencies to reflect themselves and their particular
role. Using the holistic approach to competency development aimed at avoiding a focus on the identification and completion of tasks. The identification of knowledge, decision-making and interpersonal competencies has made that possible. However, the inclusion of values and qualities, aspects of the holistic approach, which it may be argued does enable the person to emerge from the list of competencies are much more complex concepts to capture. Their inclusion may raise questions about how they might be assessed, but to exclude them would result in an invalid assessment. Gonczi et al (1993) argue that attributes and values can be accommodated in the performance criteria for elements that define an occupation. This is imperative in children's nursing where personal qualities were significant and reflected in judgements of performance and outcome by both children (Bradding and Horstman 1999) and parents (Darbyshire 1994). What have been detailed in the competencies developed here are the values and qualities considered by practitioners to be important. These were similar to those identified in other research studies (Darbyshire 1994, Bradding and Horstman 1999). Nevertheless they would benefit from further consultation prior to agreeing performance criteria that would meaningfully identify and assess values and qualities.

Some have argued that the focus on performance to assess competence has been at the expense of knowledge and understanding (Barnett 1994). The behavioural approach to competency development is associated with the identification of atomised task (Gonczi 1994), where (in the later stages of development) there have been attempts to include knowledge but only in so far as it underpins performance (Jessup 1990). Knowledge features in the competencies developed here, both in the sense of underpinning performance and the acquisition, storage and application of knowledge. The competencies illustrate the need for practitioners to be able to comprehend, apply, analyse, synthesise and evaluate data and information (Gonczi et al 1993). This may be perceived as more detailed with regards to children's cancer nurses, but as the defining process in Section 10.2 demonstrated further sub-competencies could be added to define more specifically the nature of generalist practice, for example the knowledge essential to care for a child with asthma would be listed in the class knowledge about competencies.
Ashworth and Saxton (1990) argued that in practice the specification of level of performance has been found to be vague. The behaviourist approach has been criticised for failing to show progression, and as a result superior performance. In a similar way the generic approach has been criticised for only focusing on superior performance. Levels have been considered by proponents of the holistic approach (Gonczi et al 1990) to be important. This was a view shared by general and specialist nurses in the final two focus groups. Levels were included in the competency-based standards developed for use on the children's cancer nursing course. Although the levels described by Benner (1984) of novice to expert had been used within previous assessment documents their use, as parts of the competency document were less than straightforward. Students understanding of the levels varied, they were confused between the level of one competency and its combination with another competency, and they were unable to differentiate between level as a general children's nurse and level as a specialist children's nurse. The inclusion of core and speciality indicators for all the performance criteria on the whole failed to enhance the students understanding of the concurrent development of general and specialist children's nursing practice. It would seem important to distinguish between levels in both general and specialist practice to:

- Show progression from novice to expert as a general children's nurse;
- Value and make explicit the development of expert general nursing practice in specialist nursing practice, and vice versa;
- Approve the existence of simultaneous expert general nursing practice and novice specialist practice;
- Provide recognition for expert practice to fluctuate as nurses change roles and areas of clinical practice.

This identification of levels would have implications for career pathways where personal growth and development of expertise that continue to develop on the job are sanctioned (Elkin 1990).

The conclusion reached is that competencies can define children's nursing. The classification of competencies developed are specific, detailed, focused on the child and family. In addition they have established that knowledge, skills, values, decision-making
and qualities can be defined within the context of a particular sphere of practice. The study is evidence of the need to develop competencies with clinical practitioners to ensure there exists a dynamic relationship between the key activities of children’s nursing (stated as a set of competency-based standards) and the activities required to demonstrate competence in performance (Figure 10.1).

**Figure 10.1 Defining professional competence: the importance of practice**

A *competent* professional has the attributes necessary for job performance to the appropriate standards

<table>
<thead>
<tr>
<th>Competencies:</th>
<th>Knowledge</th>
<th>Skills</th>
<th>Attitudes</th>
<th>Other attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrated in performance and other ways, judged against performance criteria</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Competency: | Is a combination of attributes underlying aspects of successful professional performance |
| Competence: | Focused on performance or a set of tasks |

A set of *competency-based standards* for a profession sets out performance criteria for a range of key activities within the practice of that profession

**10.5 Definition of general and specialist children's nursing**
The classification presented in Figure 8.1 states a definition of general and specialist children's nursing. Additions have been made to the classification in Section 9.2 where
examples are given as evidence to show that increasing levels of detail can further define the roles and activities of these two types of nurse. The process of labelling, ordering and defining has supported the relationship between general and specialist children's nursing implied in the conceptual framework in Figure 2.2.

The relationship of children's nursing to other professions within nursing has not been explored. As a result of this study more is known about the characteristics that define children's nurses. With reference to the classification, there is now more to distinguish children's nurses from other types of nurses than sphere of practice, education and registration, which were the starting points for this study. A basic comparison of the classification to the UKCC competencies in Table 10.1 has confirmed the inadequacy of the UKCC competencies to describe the characteristics of children's nurses, which would infer that there are features that distinguish children's nurses from other types of nurses. Future studies would need to validate this finding and test whether the 12 classes of competencies identified in this study can be applied to other fields within nursing.

As a result of this exploratory study, based around the conceptual framework in Figure 2.2, a model has been developed which proposes an un-tested relationship between a general children's nurse and a specialist children's nurse. The original conceptual framework depicted a linear relationship between the two types of nurses that suggested that a specialist children's nurse inherited all the characteristics of a general children's nurse in addition to one differentiating characteristic in that the sphere of nursing practice was children with cancer. The process of labelling and defining has revealed more differentiating characteristics about these two types of children's nurses than the sphere of practice. In addition, the process of ordering data has revealed further dimensions of the relationship that is non-linear and influenced by education, training and supervised clinical practice. The model presented in Figure 10.2 is proposed for testing by others.
Figure 10.2 Proposed model of the relationship between general and specialist children's nurses

To the extent that this model reflects reality it has the following implications:

- Maintaining generalist children's nursing preparation;
- Necessitating the need for generalist preparation to be continued in specialist practice;
- Influencing nurse educators to maintain a focus on generalist as well as specialist in specialist education courses;
- Focusing in-house education and training for general nurses entering specialist fields of practice;
- Guaranteeing general skills and knowledge are valued alongside specialist knowledge and skills;
10.6 Appraisal of the proposed definition

In order to appraise the proposed definition a number of questions were asked:

1. What are the characteristics of a good definition of nursing?
2. How does it compare with other definitions?
3. Does it meet the purposes stated in Section 2.8?

A good definition of nursing is one that:

- Provides an overall view of the phenomenon, in this case the practice of children's nursing;
- Gives coherence to an identifiable body of knowledge;
- Identifies the goals and focus of practitioners concerns and the parameters of their work;
- Is useful, and serves a purpose;
- Is relevant, and can be applied to practice;
- Can give direction to educational preparation;
- Can easily be understood as the meaning has been made explicit;
- Can guide research from which practices may be improved;
- Is accepted by the professional groups.

When all of the above were considered it might be argued that the resulting definition has the potential to be of high quality. This would need to be verified through use and application in practice.

In comparison to other definitions, where either personal reflections, research based listings of activities/tasks or classifications have been used to define nursing, the definition proposed in this study has incorporated all three approaches. This combination has strengthened the resulting definition. The definition represents more than one person's personal reflections on nursing and has gone beyond a single statement. These combined approaches facilitated the involvement of the relevant professional groups throughout the
development process. This ensured that practice was the starting point, as opposed to curriculum planning, which has been the focus for the development of previous definitions of nursing. Overall, the definition more holistically describes the nature of children's nursing practice. It is flexible as increasing levels of detail can be added depending on the purpose. The definition will be able to evolve over time to reflect the dynamic nature of children's nursing. Finally, it is possible to trace the development of the definition and therefore replication, testing, and further development is possible.

Overall, the definition is more accommodating and dynamic. Other children's nursing specialties can be defined using the same process and additions can be made to reflect changes in nursing roles, advances in technology and improvements in nursing care. In contrast to the definitions mentioned in Section 2.9 and 2.10 this definition would:

♦ Distinguish nurses from other carers;
♦ Differentiate roles;
♦ Make explicit what is to be taught;
♦ Clarify what is to be assessed;
♦ Enable the nursing contribution to be evaluated, and therefore rewarded and valued;
♦ Guide research and lead to improvements in care.

The definition will help to answer major questions facing the child branch related to policy, practice, education and management. The definition has mapped in some detail the nature of professional practice that is general and specialist children's nursing. At face value the list of classes and detailed competencies would certainly support the purposes stated in Section 2.8 and listed below in Table 10.2 but the extent of their utility in each of these areas can only be established through testing and use.
Table 10.2 Purposes for which the definition will meet

<table>
<thead>
<tr>
<th>Practice</th>
<th>Education</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define nursing roles</td>
<td>Recruitment and selection</td>
<td>Recruitment</td>
</tr>
<tr>
<td>Map the scope of role expansion</td>
<td>Curriculum content</td>
<td>Role development</td>
</tr>
<tr>
<td>Distinguish nursing roles from other carers</td>
<td>Practical experience</td>
<td>Personal development</td>
</tr>
<tr>
<td>Guide nursing research</td>
<td>Assessment strategies</td>
<td>Remuneration schemes</td>
</tr>
<tr>
<td></td>
<td>Competency frameworks</td>
<td>Skill mix</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skills training</td>
</tr>
</tbody>
</table>

10.7 Summary

An audit trail exists that introduces the reader to the tensions that are present in children's nursing calling for the need for a definition. Approaches to defining nursing have focused on personal reflections on the nature of nursing, as well as research based listing of nursing activities/tasks and classifying nursing activities. These three approaches were brought together in the research design, which dictated a range of research methods to answer the following questions:

1. Can children's nursing be defined using competencies?
2. What are the competencies of a general children's nurse and specialist children's nurse?
3. What are the commonalities and differences between the generalist and specialist children's nurse?

Answering these three questions has resolved the following two hypotheses:

♦ Hypothesis 1: there is a significant common element in these two areas of nursing;
♦ Hypothesis 2: the differences between the general children's nurse and the specialist children's nurse are exclusively related to medical and nursing specialist knowledge.

Two sets of competencies resulted from the data collected, one for general children's nursing and one for specialist. The journey from raw data to competencies and sub-competencies by necessity was very involved, even so the examples provided in this thesis
should enable the reader to follow the development and be confident in the result. It was only by reproducing the competencies in the classification that relationships between a general and specialist children's nurse could be revealed. The process itself was enlightening as personal philosophies of the nurses in the study were confirmed as clear links between specialist practice to generalist practice were exposed. The classification that resulted from the data defines general children's nursing as broad, focusing on the child and family irrespective of health needs. In contrast specialist nursing is narrow and defined by health needs, whilst still focusing on the child and family. The movement from general to specialist is made explicit in the classification that has defined the practice of children's nursing. It has been possible to propose a model that pulls together the main arguments from this thesis that generalist children's nursing is the foundation of specialist nursing. Evidence provided through the data collected does adequately address and resolve the debates that children need appropriately educated nurses and that this education needs to begin at the level of generalist children's nursing preparation.

In stating a definition of children's nursing practice and establishing a relationship between general and specialist children's nursing (Figure 10.2) a number of questions are generated which would make the basis of further research:

- How complete is the definition?
- Can it be developed to encompass other specialties within children's nursing?
- How useful will the definition be in guiding policy, practice, education and research?

Although these questions remain, a century of questions have been answered in this thesis and children's nurses have new evidence with which to advocate for the right of every child to be cared for by appropriately qualified nursing staff.
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APPENDICES
Appendix I

Different conceptions of the nature of competence

Behaviourist approach

The behaviourist approach outlines competence in terms of discrete behaviours associated with the completion of atomised tasks (Gonczi 1994). The aim here was to make transparent specification of competencies to minimise confusion about what constitutes a satisfactory performance. In this model, evidence for the possession of competency was based on direct observation of performance in the workplace (Hodkinson 1992). Those who followed this approach viewed education and training programmes as being directly related to the behaviours specified in the occupations competency standards. This approach became popular within NVQs in the UK, and was the approach that underpinned the competency-based teacher education programme in the USA (Eraut 1994). In the NCVQ model, competency standards are incorporated into unit form in which the elements, units and statements of competence are given meaning by the performance criteria and range statements, which have to be met before the unit can be awarded (Hodkinson 1995). Elements of competence are mostly expressed as outcomes, although they may also describe a process, action or behaviour; competence is treated as something a person is or should be able to do (Norris 1991). The Table AI.1 below presents a part example of an occupational standard for health and care professionals (NHS Executive 1998).

Table AI.1 Example of an occupational standard

<table>
<thead>
<tr>
<th>Key Roles</th>
<th>Units</th>
<th>Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assess individuals' needs and develop, implement, monitor and review programmes of care to meet them.</td>
<td>Assess individuals’ needs, which affect their health and social well being.</td>
<td>Plan programmes of care with individuals.</td>
</tr>
<tr>
<td></td>
<td>Plan, implement, monitor and review programmes of care for individuals.</td>
<td>Implement, monitor and evaluate interventions within an overall care programme</td>
</tr>
</tbody>
</table>
In their totality the elements and performance criteria reflect the broad concept of competence originally described as: "the ability to perform the activities within an occupation or function to the standards expected in employment" (Debling and Hallmark 1990 p9).

This is usually the model referred to by authors when they are attacking the competency movement. Although this model has the attraction of simplicity and clarity, its weaknesses have been pointed out by critics as being positivist, reductionist, disregarding underlying attributes, disregarding group processes and their effect on performance, the complexity of performance in the real world, the role of professional judgement in intelligent performance, and is conservative and other theoretical (Ashworth and Saxton 1990, Hodkinson 1992, Ashworth and Morrison 1994, Hyland 1995). The limitation of this approach lies in the fact that the model assumes that the job performance is a sum of specific competencies and that specific competencies are directly observable (Gonczi et al 1990). There are problems with identifying all the specific tasks of a role which then results in a large number of competencies which are difficult, time consuming and expensive to comprehensively assess.

In the light of these criticisms this approach has been considered inappropriate for conceptualising professional practice (Hodkinson 1995, Weinstein 1998). Referring to the outputs of NCVQ movement the following statements summarise current thinking about their widespread application:

- The focus on assessment of outcomes, at the expense of structures and processes limits widespread use;
- The use of functional analysis to specify skills leaves the area of knowledge and understanding unexplored and unspecified in competence terms, particularly at higher levels;
- Not all learning outcomes are specifiable in behavioural terms, which leaves areas of practice undefined;
The reliability and validity of assessment methods based simply on the observation of performance in real world context fails to cover a wide range of contexts that reveals successful transferability of skills;

♦ The tendency to presume that all people in a role will perform a task in the same way does not take into account the variety of ways a task may be performed;

♦ By focusing on discrete skills ignores the holistic way that skills and knowledge are integrated;

♦ The concern with generation and collection of evidence to satisfy criteria fails to capture the activities of learning and professional development;

♦ The assessment of bare minimum standards fails to distinguish levels of performance.

Hyland (1995) concludes that the behaviourist approach is not only incompatible with the ethos of adult education it is incompatible with any activity concerned with the development of knowledge, rationality and critical thinking.

**Generic approach**

This approach concentrated on the general attributes thought to be crucial for effective performance. Contrasted with the behaviourist approach that aimed to ensure that all workers were competent to do what was required of them, generic competencies were concerned with what enabled them to do it (Eraut 1994). The main focus of this approach has been to distinguish between average and expert workers, primarily for selection and appraisal purposes (Boak 1997/98). This approach has been popular in the management literature (see Adams 1995) and reflects the notion of competency defined by Boyatzis as "an underlying characteristic of an individual which is causally related to effective or superior performance in a job" (Adams 1997 p19).

Pioneering research using this approach was undertaken by consultants at McBer in the USA (Adams 1995). They developed lists of competencies, which claimed to differentiate average and superior managers, 19 of which were arranged in five interrelated clusters included in a generic model. Later work differentiated between different levels of competency, identifying those essential for performing a job as
threshold competencies, compared with those necessary for superior performance (Adams 1995). In contrast to the approach taken in the NVQ movement, which stressed the job and minimum standards, the McBer approach to competency stressed the person and superior performance (Manley and Garbett 2000). The Table A1.2 below presents part of an example of a leadership competency used at Rothmans International (Boutet et al 1999/00).

Table A1.2 Example of management competencies

<table>
<thead>
<tr>
<th>Definition</th>
<th>Themes</th>
<th>Key Behaviours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team leadership. <em>Sets direction, mobilises effort and gains commitment to achieve business objectives. This involves developing a culture of ownership, trust and accessibility.</em></td>
<td>♦ Setting direction ♦ Gaining commitment ♦ Empowerment ♦ Personal visibility</td>
<td>♦ Leads by example, developing enthusiasm and commitment to the organisation's goals and values. ♦ Delegates' activities and responsibilities to maximise the team performance. ♦ Makes self accessible and approachable to others.</td>
</tr>
</tbody>
</table>

This approach has been widely criticised. The certainty that generic competencies actually exist has been questioned, and if they do whether they are learnt, inherited or both remains unresolved (Furnham 1990). Secondly assessing attributes in isolation from actual work practice is considered to bear little relation to future occupational performance (Hager et al 1994). General attributes are considered to be of limited help to those designing education and training programmes for the various professions (Gonczi 1994).

**Holistic approach**

This approach seeks to integrate both previous approaches, referred to as the holistic or integrated approach (Gonczi et al 1990), and is based on cognitive constructs of competence (Eraut 1994). This approach focuses on both roles/tasks and the attributes
of the competent professional. Competence here is conceived as complex structuring of attributes needed for intelligent performance in specific situations, and incorporates the idea of professional judgement (Gonczi 1994). Within the context of realistic professional tasks this approach brings together attributes of knowledge, attitudes, values and skills. Wood and Power (1987 p414-415) describe a developmental model that reflects this approach, which would show "how specific competencies are integrated at a higher level and would also accommodate changing patterns of salience among those skills and abilities at different ages and in different contexts". The aim in this approach is to analyse professional practice to identify the essential features to demonstrate minimum competence, which are then described in terms of knowledge, abilities, skills and attitudes, and displayed in the context of realistic professional tasks. The professions in Australia, for example medicine, pharmacy, nursing and engineering have adopted this approach, as they believe it overcomes all the objections to the behaviourist and generic competency movement noted in the literature (Gonczi et al 1990).

By having methods to assess a number of elements and all their performance criteria simultaneously integration is achieved (Hager et al 1994). This approach incorporates elements in competent performance such as, ethics and values, the need for reflective practice, the importance of context, and the fact that there may be more than one way of practicing competently; elements thought to be absent from the two previous approaches. The integrated model brings together elements from the two previous approaches:

♦ Focuses on essential tasks as well as knowledge and understanding;
♦ Is adaptable to both entry-level assessment and outstanding performance;
♦ Is suited to designing education and training in which higher-level competencies are required;
♦ Has a role in different occupational levels and professional practice.

The three approaches outlined are in evidence in a number of areas of professional practice. It is their features and the manner in which they define competency that
distinguishes one approach from another. All can be seen to have documented advantages and disadvantages. The intended purpose and outcome must be the driving force behind the approach selected.

References


Appendix II

Descriptions of approaches to data collection Phase I and Phase II

Nominal Group Technique

The process

The purpose of the nominal group technique (NGT) is to generate ideas, which are then discussed and ranked by the group (Moore 1987). The group is highly controlled, with discussion occurring only in the later stages of the group process (Gallagher et al 1993). As a result the group outcome is the pooled summary of individual efforts. The group is guided by a facilitator who controls the group process through the management of information flow, acting essentially as a collector of ideas (O’Neil and Jackson 1983) as opposed to leading the discussion. The work of the facilitator is complemented with one or two other individual(s) acting as note taker, co-ordinating activities with the flipchart/whiteboard. The structure for obtaining qualitative information using this technique is achieved through the steps identified by Butterfield (1988).

The technique has been adapted in a number of ways since it was initially described. Variations include conducting the technique as a first stage with follow-up meetings and supplying reading material prior to the meeting as a topic for discussion. Non-participant observation has been added to the technique, introducing features similar to a focus group. Overall, the distinguishing feature of the NGT is that it focuses on a single goal and is less concerned about eliciting information about the group process than is the case in focus groups (Jones and Hunter 1995).

Rationale for use

In selecting the technique for this study considerable thought was given to the aim of the research, what the technique needed to achieve and the time available. The use of the technique in Phase I was to generate ideas and encourage individual thought in order to develop questions for the focus groups. It was important that the technique facilitated individual expression but also encouraged the group to reach a decision that reflected the input of all group members.
In deciding on the NGT, other decision-making processes were considered and rejected. The NGT has been compared to other group processes designed to generate new ideas and encourage creative expression, such as brainstorming and the Delphi survey (McMurray 1994). The following discussion presents the rationale for selecting the NGT, comparing the technique to brainstorming and the Delphi survey, considering benefits of this structured approach, resource and time issues for the researcher and participants.

The NGT encourages group activity that begins initially with silent interaction and written responses, introducing discussion later. This democratic style allows all members to have an equal opportunity to contribute through initial independent generation of ideas. This avoids the potential problems associated with discussion being dominated by more gregarious and articulate participants, which often occurs with brainstorming (McMurray 1994). The NGT encourages generation of minority opinions and ideas (Van de Ven and Delbecq 1974), a benefit not always apparent with brainstorming. McMurray (1994) suggests that although brainstorming is easy to conceptualise, it can prove difficult in practice as the free flow of ideas, fundamental to the technique, can be hampered by critical comments from other group members. Factors such as fear related to failure, criticism and ridicule that could so easily intimidate group members are avoided by using the NGT, as all its members have an equal opportunity to contribute (Carney et al 1996). Peer influence however, cannot be totally avoided, as there is still a potential for this in the discussion phase. Thus the main advantage of the NGT is equality of participation where silent voting ensures that both dominant and quiet members in the group have participated. A non-critical atmosphere in the discussion stage is still required which demands specific skills of leadership and gentle facilitation from the moderators. Although the nurse academics had not used the technique previously, both had considerable experience in undertaking group work, with skills in managing discussion and creating a non-threatening atmosphere.
Brainstorming and open group discussion might be thought to generate more ideas through interaction. However, compared to these techniques, the NGT has the potential to provide more ideas, as the silent generation of ideas within the group encourages independent creativity, enabling different perspectives to be revealed (O’Neil and Jackson 1983). The NGT has been found to provide nearly twice as many ideas as in interacting groups (Van de Ven and Delbecq 1974). When compared with the Delphi, Van de Ven and Delbecq (1974) found no significant difference in the quantity of ideas generated, however, unlike the Delphi the NGT generated more unique ideas.

The fact that data collection can be collected in one session was particularly appealing when inviting practitioners from the clinical environment to contribute and participate. Another factor in its favour was that there was no need for any preliminary discussion or lengthy preparation for the practitioners and yet a substantial amount of work could be generated in a relatively short space of time (Carney et al 1996). Overall, the technique demands little from the participants, both prior to and post the procedure. This factor contrasts with the Delphi survey where successive rounds can be very time consuming.

The structured formats of sequential steps or stages to be followed were considered to be very useful. Moore (1987) states that to undertake a NGT there is a requirement that a group leader has mastered the process. Lack of previous experience was not considered a disadvantage as the nurse academics had significant experience in undertaking group work. It was felt that these skills, facilitated by the clearly identified steps in the process, would be sufficient to ensure success. The sequential steps, shared with participants prior to the meeting, would provide a structure that could easily be understood and easy to follow, and had the potential to allow the facilitator to keep the session on course. In addition, replicability in terms of the procedure would be made transparent where steps are identified and followed.

One of the aims of the NGT is to encourage individuals to explore their ideas further, and value their own contribution while listening and commenting appropriately to the
ideas generated by other participants. This would also allow participants to pool individual judgements and arrive at desirable group decisions through the process of voting and ranking, achieving a sense of completion and satisfaction in a short period of time (Hall 1983). Although research by Van de Ven and Delbecq (1974) found that participants in a Delphi felt a moderate sense of closure and accomplishment, they also felt detachment. In comparison, participants in the NGT expressed interest in future phases of problem solving. The authors compared these findings with interacting groups where they found a tendency towards lack of closure, low felt accomplishment and minimal interest in future phases.

In conclusion, studies and commentary papers indicated that the NGT produces a higher quality alternative, more accurate decisions, lower costs, stronger feelings of accomplishment, more satisfaction and fewer socio-emotional behaviours than free-flowing problem solving group procedures such as brainstorming, and interacting groups (Gustafson et al 1973, Van de Ven and Delbecq 1971 and 1974, Penley 1978). However, evaluations of the effectiveness of NGTs are not uniformly favourable with Green (1975) and later Green and Taber (1980) were unable to verify the superiority of the NGT over other decision group processes. The majority of these earlier studies all agree that choice of technique must be dictated by purpose, as different techniques suit different groups as well as different approaches to decision making. From the literature it is apparent that different phases of problem solving require different group process strategies. Van de Ven and Delbecq (1971) conclude that the NGT is the most appropriate technique for fact-finding and idea generation. This factor alone suggested the NGT as the most appropriate technique (for idea generation) to be used at this stage in the research.

Focus Groups

The process
Krueger (1994 p6) defines a focus group as "a carefully planned discussion, designed to obtain perceptions on a defined area of interest in a permissive, non-threatening environment". It can be considered as one form of group interview, with the
distinguishing feature of group interaction (Kitzinger 1994), which is used to encourage in-depth discussion (Carey 1994). Although the method is used to reflect the views of individual group members, it upholds the view that attitudes and perceptions do not develop in isolation (Morse and Field 1996). The aim of a focus group is not to develop consensus but to produce qualitative data that provides insight into the attitudes, perceptions, motivations, concerns and opinions of participants related to current and projected human activity (Kingry et al 1990, Krueger 1994), by generating a collective consciousness (McElroy 1997). Morgan (1996) identifies three defining characteristics of the focus group:

♦ It is a research method employed to collect data
♦ Group interaction is the source of that data
♦ The researcher's role is active in creating discussion for data collection purposes.

In identifying these characteristics Morgan (1996) distinguishes focus groups from other group processes. He excludes groups that do not have research as their aim, groups that do not encourage group interaction, such as NGT or Delphi (Stewart and Shamdasani 1990), and naturally occurring groups where no one acts as the interviewer.

The use of focus groups involves the sequential steps of preparation, implementation, analysis and interpretation (Carey 1994). Focus groups employ an interviewing technique with discussion taking place under the guidance of a moderator. The moderator and researcher are usually one and the same person. The role of the moderator within the group is to facilitate discussion in a non-directive and unbiased way, using pre-determined questions (Kingry et al 1990). By creating a non-threatening and non-evaluative environment, the moderator promotes self-disclosure and hence increases the potential for animated discussion (McElroy 1997). A second moderator is often present, taking on the role of note taker, observing group interactions, supervising the tape recorder, providing a summary to conclude the discussion, but not participating in the ongoing discussion. Involving two people in the moderator process increases the amount of information that can be accumulated and the validity of the analysis (Kreuger 1994). Focus groups generate narrative data in the form of transcripts, the analysis of which is directed by the intent of the study, as well as the skills, time and commitment
of the researchers (Morgan 1993), who also ensure that the process is systematic and verifiable (Kingrey et al 1990), as well as reflective of the group context (Carey and Smith 1994).

Rationale for use

Although the breadth of potential applications of focus groups is increasing, they are not appropriate for all research purposes. Kidd and Parshall (2000) indicate that the increased interest in their use was historically based on pragmatic issues of time and cost efficiency relative to individual interviews. They argue, however, that these presumed savings may be illusory as focus groups are not necessarily inexpensive and can be time consuming in relation to recruitment and analysis of data (Kidd and Parshall 2000). Jackson (1998) argues they should not be used simply for reasons of convenience, and offers a critique of the methodology to inform decision-making. Morgan (1996) suggests that experience may be the best predictor of where focus groups will work. The following discussion presents the rationale for selecting focus groups, considering resource and time issues, as well as the benefits of group interaction.

Morgan (1996) supports the use of focus groups in combination with other methods. Focus groups were first introduced in this study in Phase I to collect data, which would then be distributed to gain a national perspective using a Delphi survey. This was not undertaken to verify results but to extend the study to explore where a national consensus might lie. It is this combination of focus groups and surveys that would appear to be a popular combination. This was the approach used by O'Brien (1993) to develop health surveys through which a number of advantages of this combination were highlighted. Firstly, he argues that data from the focus groups ensured that the questionnaire was designed using words and phrases to enhance respondent's understanding. Secondly, the focus groups helped to shape his choice of problems to be investigated further by examining the prevalence of themes, this was preferred to the questionnaire focusing on what the researcher thought might be the issues. Thirdly, the focus groups generated a new hypothesis that could be tested quantitatively in the
survey. In the present study, all of the above applied. The questionnaire for the follow up Delphi survey arose directly from the focus group data. Views and perceptions gained from the focus groups were then explored further and in more detail with the survey respondents, for example, the future role that healthcare assistants might play in relation to the role of a children's nurse was not considered at the outset. Discussion in the focus groups brought the issue to the attention of the researcher and was therefore explored further using the survey. Focus groups provide depth, with breadth added when using a follow-on survey. This was the central rationale for using focus groups in the early stage of Phase I.

Other factors that made the method more attractive were the fact that time and cost constraints are considerably less than individual interviews. Bringing a group of people together was cheaper and required less time than one-to-one interviewing. Although authors have reported the low cost as an advantage (Frey and Fontana 1993, Krueger 1994), other authors have made reference to the hidden costs of focus groups (Crabtree et al 1993, Macleod Clark et al 1996). Krueger (1995) states that the notion that focus groups are cheap is a myth, arguing that they are time intensive with the time spent in the focus group representing the tip of an iceberg. The time in setting up the focus groups can be lengthy. In the present study convening groups of healthcare professionals was difficult and at times very frustrating, and required a significant amount of administration time. This cost was balanced against the advantage of focus groups to gather broader data more quickly, that is, more ideas per transcript than an individual interview.

Macleod Clark et al (1996) argue that transcribing tapes from focus groups is more time consuming and overall more complex than individual interviews. Transcribing tapes that involve a number of different participants, different accents with all participants potentially talking at once was not considered easy; and thus would benefit from being professionally transcribed. In the present study, however, only focus group tapes from the early stages of Phase I were professionally transcribed due to cost. Although transcribing tapes was time-consuming, it did however facilitate familiarisation with the
content and enabled the researcher to transcribe interactions that had not been highlighted by the professional transcribers. The analysis of the data also consumed considerable amounts of time. Low-cost and time, initially perceived as advantages, must therefore be also viewed as potential disadvantages. The hidden time and cost were considered alongside other reasons for selecting focus groups.

It is in the area of participant interaction that most authors identify the distinct advantages of focus group interviews (Carey and Smith 1994, Kitzinger 1995, Macleod Clark et al 1996, Kidd and Parshall 2000). Individual interviews are also interactive, however the dynamic between interviewer and interviewee is very different in focus groups. In contrast to individual interview, focus groups encourage interaction between participants and enable the researcher to check responses with other group members to confirm or contrast opinion. Focus group participants comment on each other's point of view, and relate their experiences and reactions among peers with whom they share a common frame of reference (Kidd and Parshall 2000). Stewart and Shamdasani (1990) detail these characteristics and outline the four Ss of respondent interaction advantages referred to as synergism, snowballing, stimulation and spontaneity. Using group dynamics and encouraging debate enable the researcher to probe answers and note group reactions to participant's opinions and views. Tapping into interpersonal dialogue enables the researcher to note strength of opinion, contradiction and argument, as well as non-verbal communication and nuances of expression (Clarke 1999). This is a powerful, yet complex element that distinguishes focus groups from individual interviews. The group effect is recognized to be one of the attractive features of focus groups, when it is appropriate to the needs of the study, as was the case in the present study where the researcher sought to enrich the data collected through group interaction (Carey 1994), particularly in the later stages of Phase I.

Van de Ven and Delbecq (1971) suggest that interactive group processes are more useful where there is a need to consider dimensions of a problem or where there is a requirement to synthesise and evaluate alternative solutions. However, evaluations of the effectiveness of focus groups are not consistently favourable with authors
highlighting concerns specifically in relation to the nature of interactions, the social context, and analysis and reporting of the group effect (Carey 1994, Carey and Smith 1994, Kitzinger 1994, Reed and Payton 1997, Sim 1998, Kidd and Parshall 2000). Reviewing over 40 published reports of focus group studies, Kitzinger (1994) could not find a single paper documenting the conversation between participants. Carey and Smith (1994) suggest that this occurs because of an over dependence on transcripts without the incorporation of the non-verbal, sequential nature of interactions. The group effect must be teased out, as what individuals say in a group, is influenced by the dynamic of the group (Morgan 1995). This represents a challenge to the researcher and will be considered in the discussion that follows regarding the procedure and data analysis. Much of the literature supports the view that the needs of the study must dictate the research design and as a result the research methods. Focus groups have been reported to contribute to the development of questionnaires (O'Brien 1993) and have the potential as a means of gathering qualitative data that explores collective as opposed to individual phenomenology (Sim 1998). These features alone suggested that focus groups were an appropriate technique (for idea generation and synthesis) to use in the early and later stages of Phase I.

**Delphi survey**

**The process**

The Delphi survey is essentially a series of questionnaires. The first questionnaire aims to gain a response to a broad subject and the following rounds are built upon the responses of the preceding questionnaires. Three to five questionnaires may be required before consensus is reached (Beretta 1996). Strauss and Zeigler (1975) have identified six key characteristics that are common to the Delphi process. They are that the surveys:

1. Will use panels of experts for obtaining information or data
2. Are conducted in writing, using sequential questionnaires interspersed with summarised information
3. Will systematically attempt to produce a consensus of opinion and to identify opinion divergence
4. Will guarantee anonymity of both the panel members and their statements
5. Will use iteration and controlled feedback
6. Are conducted in a series of rounds between which a summary of the results of the previous round is communicated to the panel members.

Although since its introduction in the 1950s there have appeared numerous modifications of the technique, these include the 'modified technique' (McKenna 1994), the policy Delphi' (Crisp et al 1997), and the 'real-time Delphi' (Beretta 1996) the above principles continue to guide the use of the technique.

Since the technique was proposed its use has been more evident within the field of social policy, however in more recent years literature reveals its growing popularity with healthcare professionals: primarily in relation to identifying research priorities. Lindeman (1975) was one of the first nurse researchers to determine the research priorities of clinical nurses, using the Delphi survey. Since then the Delphi survey has been used in a variety of nursing specialities:

- Cancer nursing (Western Consortium for Cancer Nursing Research 1987, Daniels and Ascough 1999),

But as Rudy (1996) points out in her review of Delphi surveys conducted to establish research priorities over a ten-year period there are a number of methodological and practical aspects of implementing a Delphi, some of which fail to be explored in published work. Many of her conclusions result from personal conversations with the relevant researchers. She concludes her critique with favourable comments on the technique, and as a result her work adds to the body of knowledge helpful for future researchers.
Fitch et al (1996) initially invited 1,000 critical care nurses to participate in their study the sample reflecting geographical spread throughout Canada. By the fourth round their sample was 139. However, they note that this sample represented 69% of questionnaires distributed, as questionnaires were only posted to responders from round 3. They considered this reasonable when contrasted with the accepted 36.5% returns for postal surveys. This original large sample can be contrasted with the entire population of 68 assistant deans who participated in the study by Elder and Nick (1995). In the case of this much smaller sample, round 1 was completed by 34 deans (50% of the total sample), and round 2 was completed by 36 deans (53% of the total sample). In contrast to Fitch et al (1996), Elder and Nick (1995) selected to distribute the 2 round questionnaires to the total original sample. Reid (1988) argues that high response rate with smaller samples could result from panel members knowing each other, thus a degree of peer pressure may come into play. If this is so, the researcher concurs with Reid (1988) that this would seem to be contrary to the spirit of Delphi. This argument does not appear to be the case with the sample of assistant deans, where the final response rate was only just over 50%. The inclusions of the total sample in round 2 clearly having no significant effect on the return of questionnaires. Neither of the two studies described suggested that follow-up letters to non-responders were sent, despite this being routine practice in postal surveys (Salant and Dillman 1994).

**Rationale for use**

The advantages of the Delphi technique are widely recognised and accepted, particularly when contrasted with other techniques used to reach a consensus, such as committee or conference meetings (Whitman 1990). The following discussion presents evidence in support of this chosen technique.

Linstone and Turoff (1975) editors of the seminal work on the use of the Delphi survey outline a number of reasons why a researcher may choose the technique, some of which were apparent in studies using the technique to develop clinical competencies. McGee et al (1987) and Fitch et al (1996) identified a lack of empirical data that prompted them
to undertake a Delphi survey. Both Fitch et al (1996) and McGee et al (1997) used an open-ended question in round 1, which requested participants to list core competencies of critical care nurses and oncology clinical nurse specialists, respectively. Consequently they facilitated grassroots involvement - a 'bottom up' approach, a considered advantage of the Delphi survey. This approach can be contrasted with a study by Elder and Nick (1995) who modified the technique by presenting their sample with a pre-determined list of competencies of doctoral programme graduates from professions allied to health. An adaptation referred to as the 'modified Delphi' (McKenna 1994). Their approach was to work 'top down' with recognised experts, notably the assistant deans of academic institutions. Regardless of the approach taken, and the modifications made, all three studies where attempting to elicit subjective judgements and generate a consensus of opinion from a known group of experts, two of the guiding principles for selecting to use a Delphi survey. They differed mainly in the interpretation of expert.

Another reason considered by Linstone and Turoff (1975) to be important when selecting the Delphi technique is the size of the sample required and the logistics of facilitating opinion consensus that avoids face-to-face interaction, minimising cost and time. All of these issues were considered to be advantages of the technique, but they could also be determined as disadvantages. Time and cost are important considerations in any research study. Delphi surveys are noted to be cheap to undertake (Hitch and Murgatroyd 1983, Williams and Webb 1994). Using a survey method that avoids face-to-face interactions will always be cheaper, however unlike postal surveys, which normally distribute advance-notice letter, one questionnaire with the potential of a reminder letter, Delphi surveys can encompass up to 4 rounds of questionnaire. Nonetheless, this would always be less costly than face to face particularly where a large sample was required, or where the geographical spread necessary would incur too great a cost.

Other further advantages often noted of the Delphi, when comparing the technique to face-to-face meetings, is that panel members have time to consider their responses; it
encourages honest opinion, which is free from group pressure, and thus reduces the
effect of dominant individuals. Potentially destructive group dynamics that can
accompany other group techniques can be avoided. The reverse of this is that
respondents may be hasty when completing the questionnaire, resulting in ill-considered
judgements knowing that there will be no negative feedback as a result (Goodman
1987). Hence the accepted principle of anonymity can lead to a lack of accountability
for the views expressed (Sackman 1975). In an attempt to avoid this Rauch (1979)
refers to 'quasi-anonymity', which implies that panel members are known to each other
but their judgements and opinions remain anonymous. This was not the technique that
was used in this study. However, the cohesiveness and perceived 'small world' of
children's nursing may have contributed to increased accountability for this reason.

The literature examined supported the view that the Delphi survey is flexible, allowing
for diversity in its application. Hence the numerous modifications of the technique now
witnessed. These alterations, however, present potential problems where too much
modification without ensuring rigour could threaten the validity of the original research
(McKenna 1994, Hasson et al 2000). This presented some initial problems to overcome
for a novice new to the Delphi technique. Opinions and judgements can of course be
gained using other data collection techniques, such as, postal questionnaire or the
interview schedule. However, neither of these approaches makes any attempt to obtain
consensus alongside the collection of information (McKenna 1994). Thus they were
rejected as methods in this study.

Semi-structured interviews

The process

Interviews involve verbal communication between the researcher and the subject,
during which information is supplied to the researcher (Burns and Grove 1997).
Although words are exchanged in both directions, an interview is essentially a one-way
process (Oppenheim 1992). Authors have concluded that the interview technique must
be perceived as a social encounter, an encounter in which bias, error, misunderstanding
or misdirection are problems to be controlled whichever point of the continuum the format of the interview lies (Holstein and Gubrium 1997). On this continuum there are three main types of interview: structured, unstructured and semi-structured. The structured interview is guided by pre-determined questions and a standard response schedule, whilst the semi-structured technique although adhering to an interview schedule (Fielding 1994) allows flexibility in the phrasing and sequence of questions and the amount of attention given to different subject matter (Robson 1993, Flick 1998). In contrast to these two approaches the unstructured interview, often referred to as either open-ended, in-depth or ethnographic (Fontana and Frey 2000), does not rely on pre-determined questions, with questions formulated as the interview progresses, and thus reflects the nature of a conversation more than any other interview style.

Semi-structured interviews were used in the current study. Using this approach the researcher uses an interview guide to ask participants the same questions, however the sequence may be altered in subsequent interviews with standardised probes used to gain further information. This flexibility can be responsible for systematic bias, therefore the interviewer must aim where possible to ask the same questions, with the same meaning, and same intonation; finding ways to make the question mean the same for each respondent even where flexibility in sequencing the questions has been introduced (Oppenheim 1992). There are limits to the extent to which an interview can be conducted the same way every time, this is why reporting of the interview is crucial. Recording of responses is either by hand, writing down the responses verbatim, or tape-recorded? In semi-structured interviews the role of the interviewer is one of gentle guidance as opposed to firm control (Rose 1994).

**Rationale for use**

The choice of interview style ultimately depends on the nature of the research question, as each approach has its own strengths and limitations. Additionally different interview formats are noted to be more appropriate for certain types of research question. Structured interviews are used when the researcher knows the salient factors of the
study area, and wants maximum consistency and topic control, such as in quantitative studies. Semi-structured and unstructured interviews are more often used in qualitative studies where the primary issue is to generate data from the interviewee that provides insight into the area of study (May 1991).

The final decision to use semi-structured interviews rested on the following characteristics that were considered relevant to the present study:

♦ It has the potential to overcome the poor response rate of a questionnaire survey (Oppenheim 1992);
♦ It is well suited to the exploration of attitudes, values, beliefs and motives (Pontin 2000), not easily achieved using a questionnaire;
♦ It utilises open-ended questions (Parahoo 1997). Open-ended questions hold advantages for both the study participants and the researcher. Participants do not experience the constraints of providing a fixed answer (Coolican 1994) and the researcher gains a fuller, more authentic understanding of participant experiences (Silverman 1993);
♦ Freedom to modify the wording of questions in semi-structured interviews is also seen to enhance the validity of data (Parahoo 1997). It ensures that participants understand the questions asked appreciating that words could have different meanings due to variability of participant vocabulary (Parahoo 1997);
♦ Semi-structured interviews allow for probing and prompting. An invaluable tool for ensuring reliability of data (Barriball and While 1994). A probe is a “device to get the interviewee to expand on a response when you intuit that he or she has more to give” (Robson 1993 p234). Prompts can provide the interviewee with suggestions as to the range of potential answers (Robson 1993), allowing for clarification of interesting and relevant issues raised by the respondent (Hutchinson and Skodal Wilson 1992). Prompts need to be applied in a consistent manner, amongst interviewees, and be incorporated in the interview record (Robson 1993).
In interviewing there has to be flexibility between consistency, depth and breadth, how to get the 'story' and attend to the needs of the respondents themselves (May 1991). This clearly relies on the skills of the researcher where interviewing techniques require interpersonal skills of a high order, but also on the motivation of respondents where the intrinsic value of being interviewed as part of a research study may be minimal (Oppenheim 1992).

References

39. Kitzinger J (1994) The methodology of focus groups: the importance of interaction between research participants. Sociology of Health and Illness 16(1) 103-121.
Appendix III

Focus Group Questions-Phase I

1. Could you introduce yourself and tell us what you do and where you work.

2. Reflecting on your experiences, how do you think that children’s health care has changed over the last 5 years?
   **Probe:** how do you think that children’s nursing has developed to meet these changes?

3. Having reflected back, can you now think ahead into the future.....how will children’s nursing need to change to meet future health care needs?
   **Probe:** do you think they will be different when caring for children within different health care settings, eg. day care, ambulatory care intensive care, community?
   **Probe:** do you think their needs might be different at varying stages of their career development?

4. Can you be more specific and describe what practical skills a paediatric nurse of the future might need?
   **Probe:** what knowledge will they need in preparation for these skills?
   **Probe:** do you think that all knowledge can be taught......how much is learnt through practice alone?
   **Probe:** what role does education play?

5. So, how can nurse education help prepare paediatric nurses to advance their nursing practice?
   **Probe:** what is different to what we have now?
   **Probe:** is this education at diploma, degree, or master’s level....what do you think the difference makes?
   **Probe:** what would you find attractive in an education package?
   **Probe:** can you now describe what advancing nursing practice is?

FG/NOV97
Appendix IV

Letter of invite to participate in the Delphi survey

Dear
A three-year research project is currently been undertaken jointly between X university and Y hospital. The main aim of this project is to examine the notion of advanced practice, develop a new post-registration nursing curriculum that reflects advancing practice, and finally construct a career pathway to facilitate professional development for general and specialist children's nurses.

In this part of the study the question being asked is: is it feasible to construct a common education pathway to prepare such a practitioner? To answer this question a number of different health care professionals within the trust have participated in a group style interview, known as a focus group. In total seven focus groups were undertaken to solicit views as to the future direction of clinical practice in children's nursing: specifically considering the role of a children's nurse. Analysis of the findings was qualitative with the common themes reproduced for this next step of data collection. This next step is to 'check out' these findings with a known group of children's nurses using a Delphi survey.

A Delphi procedure is being used to solicit the opinions and judgements on the findings of the focus groups from a defined group of 'experts'; providing a method for the systematic collection and aggregation of informed judgements. The Delphi process of response-analysis-feedback-response is undertaken using a postal survey and repeated two-three times until a general consensus is obtained. The inclusion of the Delphi aims to structure group communication and reach a consensus.

This letter is inviting you to participate in this postal Delphi. If you require more information before deciding whether to participate then do not hesitate to contact me on.........: your participation in this study is voluntary; your response(s) will remain anonymous and you will be able to opt out of the process at any time. If you require no further information, post your reply slip to me in the SAE. Should you agree to participate, further information regarding the completion of the Delphi will accompany the first questionnaire.

I look forward to hearing from you.

Yours sincerely

Faith Gibson
Education/Research and Practice Development Nurse
Appendix V

Section 1

Over the years children’s health care has seen many changes. When considering some of these changes a number of challenges facing children’s nurses in meeting future healthcare needs were identified. Participants reflected on a variety of potential health care settings for which paediatric nurses would require preparation.

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Inpatient stay will be shorter thus nurses in the community will require more specialist skills</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>II. More children will require care in short stay investigation units</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
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</tr>
<tr>
<td>III. Children in hospital will be more acutely ill thus requiring even more specialised nursing care</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>IV. Paediatric nurses working in hospital will need more awareness and understanding of liaison.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Paediatric nurses working in hospital will need more awareness and understanding of shared care</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
Appendix VI

Descriptive statistics: Delphi survey

Data were combined from the two rounds and summarised in the following tables highlighting the median score (representing the exact middle score in a distribution of scores) and degree of consensus (agreed where 80% or more scored 4 or 5, agree or strongly agree).

For comprehensiveness in this thesis the sections appear as they did in the original questionnaire using the themes identified from the focus groups.

Section 1 Context of Care

<table>
<thead>
<tr>
<th>Section 1 Round 1</th>
<th>Round</th>
<th>Median Score</th>
<th>Number agree</th>
<th>Number disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Inpatient stay will be shorter thus nurses in the community will require more specialist skills</td>
<td>1</td>
<td>5</td>
<td>86</td>
<td>1</td>
</tr>
<tr>
<td>2) More children will require care in short stay investigation units</td>
<td>1</td>
<td>4</td>
<td>80</td>
<td>0</td>
</tr>
<tr>
<td>3) Children in hospital will be more acutely ill thus requiring even more specialised nursing care</td>
<td>1</td>
<td>5</td>
<td>82</td>
<td>4</td>
</tr>
<tr>
<td>4) Paediatric nurses working in hospital will need more awareness and understanding of liaison</td>
<td>1</td>
<td>5</td>
<td>84</td>
<td>2</td>
</tr>
<tr>
<td>5) Paediatric nurses working in hospital will need more awareness and understanding of shared care</td>
<td>1</td>
<td>5</td>
<td>80</td>
<td>2</td>
</tr>
<tr>
<td>6) Day care provision and ambulatory care will be more in evidence</td>
<td>1</td>
<td>5</td>
<td>85</td>
<td>0</td>
</tr>
<tr>
<td>7) Paediatric nurses will need to be more flexible, having skills that are transferable enabling them to move easily between health care settings</td>
<td>1</td>
<td>4</td>
<td>70</td>
<td>5</td>
</tr>
<tr>
<td>8) There will be more nurses working in multidisciplinary and multi-agency teams</td>
<td>1</td>
<td>4</td>
<td>76</td>
<td>2</td>
</tr>
</tbody>
</table>

Round 2

<table>
<thead>
<tr>
<th>Round 2</th>
<th>Median Score</th>
<th>Number agree</th>
<th>Number disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Paediatric nurses of the future will require a comprehensive range of knowledge and skills to enable them to assess and meet the needs of families from diverse social and cultural backgrounds</td>
<td>2</td>
<td>5</td>
<td>84</td>
</tr>
<tr>
<td>b) Paediatric nurses of the future should contribute actively to decisions concerning the suitability of the setting in which children and families are cared for</td>
<td>2</td>
<td>5</td>
<td>83</td>
</tr>
<tr>
<td>c) The opportunities provided by primary care in the new NHS requires paediatric nurses to collaborate more closely with GP led care and associated professionals within the primary health care setting</td>
<td>2</td>
<td>4.5</td>
<td>79</td>
</tr>
</tbody>
</table>
There was consensus that the context of care was changing with provision of inpatient stay becoming shorter and more acute, thus requiring the addition of ambulatory care, day care and investigation units. This change would necessitate children’s nurses having increased knowledge and understanding of liaison, shared care, and the role of the primary healthcare team. The notion of children’s nurses needing to be more flexible to respond to these changes was not conclusive with five respondents disagreeing and ten remaining undecided. Recognising that external forces and trends often determined changes in healthcare delivery, not necessarily meeting the needs of children/young people and their families, there was a consensus on the need for children’s nurses to actively participate in decisions concerning the suitability of the context of care.

**Section 2 Context of Nursing Work**

<table>
<thead>
<tr>
<th>Section 2 Round 1</th>
<th>Round</th>
<th>Median Score</th>
<th>Number agree</th>
<th>Number disagree</th>
<th>Number shift from round 1 to 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Any new curriculum will need to be structured around clearly articulated and well defined competencies of a paediatric nurse</td>
<td>1</td>
<td>5</td>
<td>85</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2) There will be two separate branches to post registration education in paediatrics, generalist and specialist</td>
<td>1</td>
<td>3</td>
<td>37</td>
<td>16</td>
<td>13 → agree 9 → disagree 6 → undecided</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3</td>
<td>39</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>3) Although there are some core basic skills, paediatric nurses will need additional skills depending on the health care setting in which they work</td>
<td>1</td>
<td>5</td>
<td>84</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4) Whether in hospital or in the community, developing nursing roles involving management, education or clinical practice will need to be defined and supported by a separate education pathway</td>
<td>1</td>
<td>4</td>
<td>49</td>
<td>11</td>
<td>20 → agree 4 → disagree 3 → undecided</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4</td>
<td>60</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>5) There is an expectation that parents, in hospital or at home, will undertake more complex nursing skills for which they will require teaching and support</td>
<td>1</td>
<td>4</td>
<td>79</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>6) In the future more of the physical care of children will be delegated to health care assistants</td>
<td>1</td>
<td>3</td>
<td>29</td>
<td>36</td>
<td>9 → agree 1 → disagree 7 → undecided</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3</td>
<td>35</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

There was unanimous agreement for the development of competencies that would reflect core and specialist skills and knowledge. The notion of there being two branches
for this development, however, remained undecided. But there was agreement that preparation should be explicit for the differing nursing roles within management, education and clinical practice. Nursing work that encompassed supporting parents/carers in undertaking more complex care was not disputed, however the future role of the healthcare assistant remained undecided, with some participants expressing strong views on the subject.

Section 3 Role Expansion

<table>
<thead>
<tr>
<th>Section 3 Round 1</th>
<th>Round</th>
<th>Median Score</th>
<th>Number agree</th>
<th>Number disagree</th>
<th>Number shift from round 1 to 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Role expansion will be dictated by the specialty and the health care setting in which the nurse works</td>
<td>1</td>
<td>4</td>
<td>83</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2) All qualified paediatric nurses have the potential to undertake a role that encompasses role expansion</td>
<td>1</td>
<td>4</td>
<td>71</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>3) There should be an element of choice regarding role expansion</td>
<td>1</td>
<td>4</td>
<td>71</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>4) Content of any future post registration course must be appropriate to the specialty and encompass skills to undertake an expanded role e.g. cannulation, nurse prescribing, child and family therapy</td>
<td>1</td>
<td>4</td>
<td>75</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>5) In the future, physical assessments will routinely be undertaken by paediatric nurses as the basis for planning care</td>
<td>1</td>
<td>4</td>
<td>65</td>
<td>3</td>
<td>10 → agree 0 → disagree 1 → undecided</td>
</tr>
<tr>
<td>6) Technical skills, previously in the domain of medicine, must provide an opportunity to exercise nursing knowledge and enable the nurse to make autonomous decisions</td>
<td>1</td>
<td>4</td>
<td>75</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>7) There should be a clearer distinction between nurses who are developing ‘doctors assistant type roles’ and those who are incorporating a medical perspective into a nursing role</td>
<td>1</td>
<td>4</td>
<td>45</td>
<td>8</td>
<td>24 → agree 0 → disagree 1 → undecided</td>
</tr>
</tbody>
</table>
There was agreement that all nurses have the potential to expand their role. However, this would be dictated by the needs of the child and family, specialty, and healthcare setting. This would require appropriate post-registration education, training and supervision, the context of which had yet to be decided. Holistic care was the agreed focus for role expansion, where a medical perspective was incorporated into a nursing role.
**Section 4 Knowledge Base of Nurses**

<table>
<thead>
<tr>
<th><strong>Section 4 Round 1</strong></th>
<th>Round Score</th>
<th>Median Score</th>
<th>Number agree</th>
<th>Number disagree</th>
<th>Number shift from round 1 to 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) The context of nursing work should be placed within a core foundation of generalist knowledge and skills</td>
<td>1</td>
<td>4</td>
<td>79</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2) Applied anatomy and physiology, relevant to the specialty, should underpin all post registration courses</td>
<td>1</td>
<td>4</td>
<td>81</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3) Knowledge that facilitates problem solving and the ability to make ethical and clinical decisions should be part of any education process</td>
<td>1</td>
<td>5</td>
<td>86</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4) Knowledge that facilitates practitioners to develop the ability to think critically and creatively should be part of any education process</td>
<td>1</td>
<td>5</td>
<td>83</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5) The knowledge component of any course should be guided by the expressed outcome of the education process</td>
<td>1</td>
<td>4</td>
<td>72</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6) A qualified paediatric nurses knowledge base is intended to facilitate the development of an autonomous practitioner</td>
<td>1</td>
<td>4</td>
<td>75</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>7) One of the aims of any education process is to develop nurse leaders</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>70</td>
<td>6</td>
</tr>
<tr>
<td>8) Paediatric nurses contribution to inter-professional work patterns must be supported through knowledge of advanced communication skills</td>
<td>1</td>
<td>4</td>
<td>81</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

There was an agreement that there was a core foundation of generalist knowledge and skills that needed to encompass problem solving, ethical and clinical decision-making, and critical thinking. This foundation of knowledge would then facilitate the development of autonomous practitioners and potential nurse leaders.
### Section 5 Round 1

<table>
<thead>
<tr>
<th>Statement</th>
<th>Round</th>
<th>Median Score</th>
<th>Number agree</th>
<th>Number disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Shared learning with doctors and Professions Allied to Medicine is beneficial on post registration courses</td>
<td>1</td>
<td>4</td>
<td>78</td>
<td>3</td>
</tr>
<tr>
<td>2) Clinical experts within the practice setting should be more involved with teaching in the university setting</td>
<td>1</td>
<td>5</td>
<td>77</td>
<td>5</td>
</tr>
<tr>
<td>3) There is a need to distinguish where is the most appropriate setting for the defined learning</td>
<td>1</td>
<td>4</td>
<td>79</td>
<td>2</td>
</tr>
<tr>
<td>4) Learning in practice needs to be maximised through the use of reflection and experiential learning</td>
<td>1</td>
<td>4</td>
<td>79</td>
<td>0</td>
</tr>
<tr>
<td>5) Ward based education facilitators have a role in minimising the theory/practice gap</td>
<td>1</td>
<td>5</td>
<td>83</td>
<td>1</td>
</tr>
<tr>
<td>6) Theoretical assessments need to be clearly linked to and benefit practice</td>
<td>1</td>
<td>5</td>
<td>85</td>
<td>0</td>
</tr>
</tbody>
</table>

### Round 2

<table>
<thead>
<tr>
<th>Statement</th>
<th>Round</th>
<th>Median Score</th>
<th>Number agree</th>
<th>Number disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) The specific purpose of shared learning (between nurses, doctors, and other Professions Allied to Medicine) needs to be explicitly clarified before widespread adoption of this as an educational strategy</td>
<td>2</td>
<td>4</td>
<td>76</td>
<td>4</td>
</tr>
<tr>
<td>b) The practice of nursing involves the ability to integrate theoretical knowledge through the process of reflection. Clinical nursing staff have a unique educational contribution to make in creating an environment in which this process can be developed</td>
<td>2</td>
<td>4</td>
<td>78</td>
<td>0</td>
</tr>
</tbody>
</table>

There was agreement that education was the responsibility of nurses in higher education institutions and clinical settings. The need to distinguish, which was the most appropriate setting for what learning was agreed. An education strategy that encompassed shared learning with other professional groups was seen to be possible but only where the specific needs of each group have been clarified.
Section 6 Lifelong Learning

<table>
<thead>
<tr>
<th>Section 6 Round 1</th>
<th>Round</th>
<th>Median score</th>
<th>Number agree</th>
<th>Number disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Education is required to increase paediatric nurses ability to adapt to a variety of clinical settings</td>
<td>1</td>
<td>4</td>
<td>78</td>
<td>4</td>
</tr>
<tr>
<td>2) Courses needed to be available allowing paediatric nurses to specialise in an increasing number of different areas</td>
<td>1</td>
<td>4</td>
<td>73</td>
<td>2</td>
</tr>
<tr>
<td>3) Paediatric nurses need a planned career pathway, identifying career options, with identified milestones</td>
<td>1</td>
<td>5</td>
<td>78</td>
<td>1</td>
</tr>
<tr>
<td>4) Knowledge and skills acquired on post registration courses should transfer to different settings</td>
<td>1</td>
<td>5</td>
<td>79</td>
<td>2</td>
</tr>
<tr>
<td>5) A career pathway should incorporate all the present, and potential nursing roles identified within clinical practice, management and education</td>
<td>1</td>
<td>4</td>
<td>71</td>
<td>6</td>
</tr>
<tr>
<td>6) A career pathway should be structured around the development of a skilled performance, competency experience and education</td>
<td>1</td>
<td>5</td>
<td>85</td>
<td>0</td>
</tr>
</tbody>
</table>

Round 2

a) The paediatric nurse of the future will be confronted with a variety of novel patterns of career progression. Education providers will need to anticipate and respond to these challenges by providing flexible courses of study which will lead to a meaningful academic award.

There was unanimous agreement that a career pathway needed to be developed to encompass a planned individualised pathway with career options. This would need to be underpinned by suitable and evolving education programmes. Such programmes would need to develop nurses in an increasing number of differing clinical specialties and different nursing roles.

A summary of the results of this phase of the analysis can be found in Table AVI.1 below. This table highlights the main focus of each of the six sections of the survey.
Table AVI.1 Summary of findings from descriptive statistics

<table>
<thead>
<tr>
<th>Section 1</th>
<th>Context of Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦</td>
<td>Context of care is changing with provision of inpatient stay becoming shorter and more acute</td>
</tr>
<tr>
<td>♦</td>
<td>Requiring the addition of ambulatory care, day care and investigation units</td>
</tr>
<tr>
<td>♦</td>
<td>Necessitating children’s nurses having increased knowledge and understanding of liaison, shared care and the role of the primary healthcare team</td>
</tr>
<tr>
<td>♦</td>
<td>Children’s nurses needing to be more flexible to respond to these changes was not conclusive</td>
</tr>
<tr>
<td>♦</td>
<td>Children’s nurses need to actively participate in decisions concerning the suitability of the settings where children are nursed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 2</th>
<th>Context of Nursing Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦</td>
<td>Need to develop competencies that will reflect core and specialist skills and knowledge</td>
</tr>
<tr>
<td>♦</td>
<td>Notion of there being two branches for this development remained undecided</td>
</tr>
<tr>
<td>♦</td>
<td>Preparation should be explicit for the differing nursing roles within management, education and clinical practice</td>
</tr>
<tr>
<td>♦</td>
<td>Nursing work that encompassed supporting parents/carers in undertaking more complex care was welcomed</td>
</tr>
<tr>
<td>♦</td>
<td>The future role of the healthcare assistant remained undecided.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 3</th>
<th>Role Expansion</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦</td>
<td>All nurses have the potential to expand their role</td>
</tr>
<tr>
<td>♦</td>
<td>Dictated by the needs of the child and family, specialty, and healthcare setting</td>
</tr>
<tr>
<td>♦</td>
<td>Requiring appropriate post-registration education, training and supervision, the context of which is yet to be decided</td>
</tr>
<tr>
<td>♦</td>
<td>Holistic care was the focus for role expansion, where a medical perspective is incorporated into a nursing role</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 4</th>
<th>Knowledge Base of Nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦</td>
<td>There is a core foundation of generalist knowledge and skills</td>
</tr>
<tr>
<td>♦</td>
<td>These skills need to encompass problem solving, ethical and clinical decision making, and critical thinking</td>
</tr>
<tr>
<td>♦</td>
<td>With this foundation of knowledge then facilitating the development of autonomous practitioners and potential nurse leaders</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 5</th>
<th>Role of Nurse Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦</td>
<td>Education is the responsibility of nurses in higher education institutions and clinical settings</td>
</tr>
<tr>
<td>♦</td>
<td>But there is a need to distinguish which is the most appropriate setting for what learning</td>
</tr>
<tr>
<td>♦</td>
<td>An education strategy that encompasses shared learning is acceptable, only where the specific needs of each group has been clarified</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 6</th>
<th>Lifelong Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦</td>
<td>A career pathway needs to be developed</td>
</tr>
<tr>
<td>♦</td>
<td>To encompass a planned individualised pathway with career options</td>
</tr>
<tr>
<td>♦</td>
<td>Underpinned by suitable and evolving education programmes</td>
</tr>
<tr>
<td>♦</td>
<td>Programmes developing nurses in an increasing number of differing clinical specialties and different nursing roles</td>
</tr>
</tbody>
</table>
Appendix VII

Summary of comments: Delphi Survey

During the survey participants contributed a great deal besides their votes, with commentaries from both rounds providing an abundance of information. Analysis of the comments was relatively straightforward as a high level of consensus emerged early during the process of data collection, resulting in fairly clearly defined phenomena from the outset. Other comments represented such original or divergent opinion that they comprised discrete phenomena. Their inclusion highlights the breadth of roles currently performed by children’s nurses and their perceived individual needs relating to preparation for these roles. Table AVII.1 below presents the categories and sub-categories that emerged during the analysis.

<table>
<thead>
<tr>
<th>Rank order of categories by weighting of comments (1=highest ranking)</th>
<th>Sub-categories</th>
</tr>
</thead>
</table>
| 1. Defining the Role of the Children’s Nurse                  | ♦ Nature of children’s nursing  
♦ ‘Jack of all trades master of none’  
♦ Development pathway |
| 2. Boundaries of Practice                                      | ♦ Patient and family focused  
♦ Technical versus holistic care  
♦ Partnership in care |
| 3. Education for Practice                                     | ♦ Core knowledge and skills  
♦ Service needs and patient focused  
♦ Relevant and recognisable education pathways  
♦ Multi-professional education |
| 4. Who Cares for Children and Young People                    | ♦ Role of parents  
♦ Children’s nurse in different settings  
♦ Role of other Healthcare professionals |
| 5. Learning Environment                                        | ♦ Practical experience  
♦ Clinical staff as teachers  
♦ Valuing practice based education  
♦ Role of lecturers |
| 6. Care Setting                                                | ♦ Context of care  
♦ Organisation of care delivery  
♦ Shift to community care |
Defining the Role of the Children’s Nurse

The need to define and describe the role of the children’s nurse was a recurrent theme throughout the comments:

Difficult to define. As we are still trying to define ‘nursing’—how can we define paediatric nursing?…..important to move towards a definition however.

Sub-categories identified were: nature of children’s nursing, ‘jack of all trades master of none’, and development pathway.

Nature of children’s nursing clearly needed to be described, comments reflected on the focus of the specialty and the clinical setting:

Both hospital and community children’s nurses require more specialist skills.
The skills required by the general paediatric nurse are just as important as those required by the children’s ITU nurse—just different, it is a pity that the latter often attract more kudos.

The notion of a generalist and specialist route was debated, however at times there seemed to some confusion between ‘generic’ and ‘generalist’. Respondents often interpreting ‘generalist’, that is non-specialist, with ‘generic’, a term usually used when referring to a health practitioner qualified to care for either an adult or paediatric patient group. There was some mention of a new hierarchy, and some concern that distinguishing between the two would cause some confusion, and cause disintegration of professional cohesiveness:

Post registration generalist/specialist I am not sure that this would be beneficial…….what I feel is necessary is for core ‘concepts’ to be analysed and applied to a range of settings e.g. Ventilated child in hospital/community/school etc.

However, within the context of generalist being the basis for specialist, where specialist cannot occur in isolation to generalist, there maybe some potential to explore this route:

…….implications of specialist without generalist background is worrying.

There was some suggestion that generalist equated to child health focus at pre-registration level, with post-registration courses providing the specialist route:
Multiple routes to specialist qualification, e.g. Community, cardiothoracic, oncology, adolescent etc.

Specialist can include, surgical, medical, oncology, PICU, renal, HIV etc.

One of the questions that remains unanswered from the survey, is when does generalist become specialist?

By defining the nature and role of the children’s nurse it was felt that other roles, such as health care assistant (HCA), parent, doctor and other professions allied to medicine might also be clarified. It was considered that this might avoid delegation of inappropriate ‘nursing tasks’ to others, and avoid nurses being assigned unsuitable medical ‘technical tasks’.

We must be very clear in our definition of what children’s nurses do before we start delegating to HCA otherwise we may potentially lose skilled nurses who do not want to pursue intensive and academic pathways.

I feel it is important to remember that nursing is a different profession to medicine-not better or worse, but on equal. Perhaps we should work harder to promote the positive image of children’s nursing.

‘Jack of all trades master of none’ was a term used by a number of respondents. This referred to the notion of flexibility, as well as role expansion:

I have always been of the opinion that children’s nurses should become experts within one chosen area of specialty.

We need to be aware, as a profession, of becoming or trying to become all things to all men! Or just a cheaper way of giving care than employing doctors. Again we need to work towards a clearer definition of the nature of nursing as distinct from other HCP. There was a concern that without a clear definition of children’s nurse, they might become extinct, with specialist nursing skills subsumed by other roles. The driver for this change was not clear, whether internal or external to nursing:

It seems we are always prepared to give up old territory and pick up new-usually the parts we don’t like and the parts, which are attractive to us respectively.
Learning and acquiring technical skills is all well and good but my experience is that nurses want to take these on board at the expense of basic nursing care.

These statements imply that individual nurses are part of that driving force, and potentially not always for the right reasons. Part of defining the role of the children’s nurse would enable decisions to be made about roles, facilitating nurses to agree on what it is that they do that is different from other professions, clarifying what their specialist skills are. Overall this would result in decisions being made about what roles children’s nurses would be best placed to perform.

Development pathway would then follow on from defining the role of the children’s nurse:

By defining a pathway we need to ensure that we do not become too rigid……talk more about career development or progression.

The use of the term pathway, however, was considered unhelpful, implying that there was only one route, which would then offer a rigid career structure. This confusion would seem to reflect various interpretations of the term pathway. The term potentially being used differently by practitioners and nurse academics, and draws attention to the need for open dialogue to promote shared understanding. Regardless of the varied interpretation of the term pathway, choice was considered important, reflecting different directions that lives may take:

It would be better to get nurses to think in terms of a climbing frame which enables nurses to move up and down as well as laterally, with ease and support.

Alongside clinical experience, education programmes would need to reflect these different directions. It was suggested that transfer of credits on courses needs to become a reality, allowing nurses to select from different programmes in different higher education institutions but with an individual personal development plan that clearly outlines their education and clinical pathway. An individual development plan thus facilitating a climbing frame approach to career progression that would encompass changing roles, lifelong learning and continuing professional development.
The identification of a career pathway was supported by many of the respondents: *Clinical pathways have their place to prevent the potential to drift into/through your career.*

Individual nurturing and guidance in the appropriate direction was considered, naming clinical supervision, preceptorship and mentoring as processes that could facilitate understanding and progression of the pathways available. Within the pathway it was recognised that all roles should be considered as valuable and worthwhile, for example, the role of clinical nurse specialist should not only be considered in terms of a side-ways move but part of an identified clinical career structure. A meaningful career structure that would provide opportunities within all clinical settings, and evolve alongside the changing patterns of care was described. The opinion that clinical practice remained central was once again highlighted: *Clinical practice at an advanced level must be better valued if a clinical career structure is ever to happen.*

Clinical practice and education were considered important in career development that would result in nurses who could lead their profession:

*……..at present there are some people well known for specific areas of interest but fewer people with grand visions!*  
There were some doubts that education could take a key role in this, however, if it was to make some impact then it must begin in pre-registration. The origins of leadership were examined and stated as being important, but the pathway to develop visionary leaders remained unclear. However, respondents did recognise the value of role models, clinical experience and lifelong learning:

*I believe it could be equally achieved with a motivated, knowledgeable sister.*

*…..life-long learning that has to facilitate future leaders together with a nurturing health service with a career structure that values nursing.*
**Boundaries of Practice**

How to balance increasing demands on nurses and respond to the pressure to expand into new areas of clinical practice, while delivering good, safe and effective ‘basic’ nursing care was the focus of the comments. This contrasted with comments categorised under ‘jack of all trades master of none’, however, emphasis placed on the reasons for role expansion, recognising that there were various drivers of change ensured comments were considered more in terms of boundaries of practice:

*It must be a holistic approach, which benefits patient rather than ‘taking on’ junior doctors ‘tasks’.*

Although there were some reservations:

*I can only see a fragmentation of care emerging when in fact the reason for nurses extending their skills should be so that they can provide the whole range of care.*

*I believe there should be a refocus on clarifying and helping nurses to articulate and feel confident in what their ‘core’ role is before they think of expanding it in anyway, in order to enable them to make a decision about whether they are getting the ‘core’, ‘basics’ or whatever right first.*

Comments did suggest that some of the current expanded roles, nurse practitioner type roles, could not be described as holistic. On the whole the way forward seemed to begin with defining and agreeing the future direction of children’s services and the identity and boundaries of practice of those delivering that service. Sub-categories identified were: patient and family focused, technical versus holistic care, and partnership in care.

**Patient and family focused** in terms of role expansion and the boundaries of practice were considered to be crucial. This focus would need to be expressed above the desire of the professions alone:

*……..in the context of patient and family led, not nurse, profession, education or doctor led i.e. patient led autonomous practice guides role expansion.*
I still believe that the family and service need must dominate over individuals needs and desires. If practitioners don't want to expand in the way required they are in the wrong field of practice.

The question of choice for practitioners was debated, with some respondents feeling that not all nurses have the knowledge, skills or desire to expand their practice. In contrast, others felt that there would not be an element of choice if the nurse applied for a post that included an aspect considered as an expanded role. Problems may occur, however, where a role expands while a nurse is in post. It must ultimately come down to what is essential and desirable to improve the outcomes of patient care. Recognising that the right people need to be involved in any decision-making regarding role expansion:

A way forward could be indicated by asking parents and children their views - this might defuse the potential for conflict between nurses and doctors in deciding who should do what.

However, it must be acknowledged that parents may not feel comfortable in contributing to the debate. There can be no doubt that parent’s views are important but these must be considered in addition to the views of health care professionals.

Ultimately the point seemed to be to ensure nurses are:

..... equipped to develop nurse-led services/initiatives that parents/carers/other professionals feel confident about using and referring to.

But, nurse-led services cannot be the only aim. Patient and family need, in addition to service need, will define the boundaries of practice for all health care professionals.

Technical tasks versus holistic care was a recurrent theme in the comments:

I can see a place for role expansion within children’s nursing but only as part of providing holistic care.

There needs to be clear dialogue between the nursing and medical profession to define nursing role development and prevent the technical skills being deferred to the nurse in an undesirable role as a doctor’s assistant.

xliv
The need to clarify ‘who currently does what’ was highlighted, in addition to considering ‘who is the best person to do it’:

*I think we should move away from ‘Drs jobs’ and ‘nurses jobs’ to what is needed by the patient and whom can best do it.*

There was concern, however that nurses would have their role defined for them, hence there would be clear benefits in describing what nurses do and the skills they bring to a clinical situation:

*Technical tasks are just that, but nurses bring different skills to their medical colleagues.*

There was some suggestion that technical skills could be delegated to others, technicians/health care assistants, thus leaving nurses to focus on ‘nursing’. However, it may be as suggested by one respondent:

*……the lack of value that is often attached to the delivery of expert nursing care.*

Resulting in another hierarchy:

*……should not become another technical task, which is associated with seniority and kudos.*

A hierarchy that must be avoided to ensure that advancing practice roles do not become strictly biomedical focused.

**Partnership in care** encompassed not only the partnership with medical colleagues in terms of the roles undertaken but also with the providers of education and training in terms of the preparation for role expansion. Decisions therefore, being made in partnership about areas for potential role expansion, time frame for this change and the training, education and supervision required and by whom. There were perceived to be clear benefits in this collaboration with nurses, doctors and other professions allied to medicine learning from each other. However, there were some words of caution:

*We cannot afford to underestimate medical power and dominance.*

xlvi
Ultimately the jobs which the different professions undertake are quite disparate……when these boundaries become blurred we are surely talking about a ‘generic health care worker’.

Comments emphasised that collaboration and not delegation was the way forward in an evolving and constantly changing environment:

_I believe role boundaries must be set and re-set as roles expand rather than obtain a fluid flexible boundary._

_Although difficult to actually determine where the boundary lies in practice._
The de-skilling of medical staff was mentioned, thus reinforcing the notion of collaboration:

_The medical profession needs to look at what they need to do to ensure medical staff are skilled for the future…..we need to think through new work patterns and the implications on human resources._

The implications for education were highlighted. Comments stressed the importance of appropriate education that would provide depth within a narrow specialty focus.

Partnerships between education and practice will be crucial for success throughout the phases of planning and delivering such programmes. Whether these programmes will develop autonomous practitioners was debated:

_Can a nurse really be autonomous-is it appropriate for one who acts as an advocate and in partnership with others to be autonomous-surely the key to success is shared client focused decision making._

**Education for Practice**

The notion that education should underpin practice was not disputed. However, there was a strong feeling that education needed to be relevant, appropriate, derived from practice, recognise previous experience, assess clinical competence, and valued as part of an individualised professional development pathway:

_It has always been difficult in the past to have a clear educational pathway._
There would be sympathy for this statement from many practitioners as it has not always been easy for them to visualise a route through education that benefits the individual as well as the patients in their care. It may be as suggested by one respondent that:

*Perhaps the gap is inevitable whilst we begin in the place of theory and attempt to move into practice.*

Sub-categories identified were: core knowledge and skills, service needs and patient focused, relevant and recognisable education pathways, and multi-professional education.

**Core knowledge and skills** were recognised to be relevant to children’s nurses:

*A core of advanced practitioner skills needs to be identified with a range of skills relevant to the various specialties.*

In addition it was recognised that:

*Management, education and clinical practice need different sets of advanced skills.*

However, to describe them separately was considered to be artificial as in reality all areas overlap. To recognise that some core skills were required was important but once a career path was chosen there needed to be an approach to preparing nurses for different areas of nursing practice:

*........could they start common/core and then have add on modules so that people can have flexibility and ease to change direction?*

The comments seemed to suggest that although core knowledge and skills were important, these were implicit in the comments rather than explicit, and possibly difficult for practitioners to articulate. The potential for nurse academics and clinical staff to work together in new exciting ways to articulate core knowledge and skills must be the way forward. Educationalists have an important role here to inform the debate, steer dialogue and ask the questions that should focus thinking in the right direction that will clarify core knowledge and skills.
Service need and patient focused were considered priorities for education. So often the focus of programmes was perceived to be on specialist and ‘high tech’ care areas, with other areas such as, mental health, adolescents and learning disability receiving minimal attention. Although it was recognised that it was not possible to have education programmes that cover every service need, by involving clinical nurses in the planning of programmes a realistic view of what was required might be feasible. There was a feeling that on occasion education was approached from the wrong focus:

*It may be more relevant to examine health needs first.*

This respondent did not clarify how they perceived the focus of education; nonetheless the statement does emphasis the fact that preparing children’s nurses for practice must reflect the context and content of health care.

In addition the perceived focus on hospital care in education programmes was felt to limit clinical experience, reduce career pathway choices and fail to provide a realistic picture of the totality of children’s health care. This focus potentially leaving gaps in curriculum content, expecting children’s nurses to apply knowledge gained to a range of settings.

Relevant and recognisable education pathways were debated at length with respondents recording their perceptions of current programmes:

*I think it is essential that both breadth and depth are developed within the students chosen area and that a point gathering system is not instigated.*

Although flexibility and choice were considered important there were some reservations:

*I agree with the need for flexible courses of study, but I am also concerned that such flexible courses can leave the participant feeling that they have learnt nothing about their specialty.*

*Too much variance and aiming towards adaptability and flexibility reduces specialist experience.*
Educational opportunities which bring together nurse from a variety of practice settings should be considered in addition to specialist courses which could potentially further fragment children’s nursing.

This flexibility referred to course structure and not the nurse becoming flexible to work in a range of settings. One respondent felt that as nurses became more specialized flexibility would decrease, flexibility equating to generalism. Transferable skills and not flexibility seemed a more appropriate term:

*Not sure about educating nurses to work in a range of settings, need to persuade nurses they have transferable skills I think they doubt this and stay in particular specialisms and find they are not prepared for a range of settings.*

There was no doubt from the responses that education was required for practice, the two being inextricably linked. It was the academic award that received particular attention:

*.....the award must be recognisable, worthwhile, valued by other professions and thus various components should be easily transferable.*

*We also need to develop more flexible and less arduous options for crediting experience, e.g. Vivas.*

*We cannot afford to waste time and resources on study that is not academically credited.....this must take into account service need and practical competencies.*

*......ensure that courses developed are at a level which is consistent nationally.........appropriate and rigorous at degree/masters level.*

This would seem to suggest a need for national standards and a national framework to support nursing role developments that would, it was felt by some respondents, require higher education institutions to put an end to competition and embrace collaboration.

The link between education and practice was an area of concern for some respondents: *I still see a great cavern between sick children’s care and children’s nurses.....is it really desirable to educate to meet all eventualities.*
Education should encourage nurses to remain within the clinical setting and developing alongside their needs.

Many of the respondents took the opportunity to express a view regarding current education preparation that clearly reflected their own personal experiences. Few respondents were able to move beyond the current debates about preparation for pre-registration practice.

Multi-professional education was seen as valuable by some, and although still seen as valuable by others there were some reservations:

I do see the benefits of shared learning and support the concept…..my concern is that the ‘art’ will be lost, as learning becomes increasingly science based.

Two issues arose from the question, that of ensuring the individual needs of everyone involved are explicit, and that the long-term outcomes of such an approach are reported prior to widespread introduction:

Provided we are clear about the differences between professional groups.

The widespread ‘knee jerk’ attempts to offer shared learning programmes definitely needs to be reviewed or the benefits will be few.

Benefits were perceived to be improved teamwork, professionals valuing one another and seeing each other as equals. In addition, it was felt that the approach could facilitate multidisciplinary care and encourage collaborative care planning. Such benefits were considered for both groups of professionals:

……..need to appreciate other’s roles, similar foundation knowledge, need for nursing to be more ‘scientific’ and medicine more ‘artistic’.

Although the focus of many of the responses revolved around the education of nurses and doctors, the benefits of joint education with other professions, such as social workers was also recognised.

Questions raised by some respondents were firstly how this could be managed for post-registration courses? Secondly, how to avoid this approach being viewed as the first
step in developing the generic health care worker? These questions would seem to reinstate the need to define the role of the children’s nurse, generalist and specialist, and articulate the qualities unique to children’s nurses. Relevant and appropriate education programmes would then follow, with the benefits of shared learning reinforcing and not reducing the essence of a distinct professional identity for children’s nurses.

**Who Cares for Children and Young People**

The context of nursing work resulted in a great number of comments. Overall, there was a feeling that nurses needed to be able to speak out and articulate whom they think should be caring for children/young people and their families:

…….have the political skills to be pro-active in the debate ……..to be effective advocates for children and their families regardless of the setting.

Sub-categories identified were: role of parents, children’s nurse in different settings, and role of other health care professionals.

**Role of parents** was considered as complementing that of nurses. There was a question whether this was ‘basic care’ or ‘technical care’, however both areas require nurses and parents to ‘team-up’ to deliver appropriate care. For nursing staff it was about getting the balance right between giving skilled care and teaching and supervising others to give that same skilled care:

*We need to be careful in ‘paediatric nursing’ not to expect too much of families/parents.*

*The complex care undertaken by both parents and HCA is an opportunity and not a threat to paediatric nurses whom must be educated to have skills to support others and truly delegate.*

There was a question for some about negotiation in situations where it was felt parents were being relied on to deliver nursing care. It was not clear, however, whether this was a question of competence and preparation to deliver care, or poor staffing levels that necessitated parents delivering nursing care.

**Children’s nurses in a different setting** were recognised to need different skills and
therefore different preparation. This was felt to begin by describing all the settings in which children are cared for, now and in the future. The opportunity to develop expertise in the various settings was described, with education programmes required for that preparation. Respondents commented on a notable absence in programmes to prepare for the following settings: day care and assessment, out patient, community, medical and surgical nursing, adolescents, learning disability, and mental health. It was felt that education programmes needed to be responsive to these changes, planning for the future as well as the present.

Role of other health care professionals centred on health care assistants (HCA). The debate focused around those against, and those in favour, under certain conditions. Those against argued that if care in hospital were to become more complex, the question is would there be a role for HCA’s? Likewise in the community where much of the work is carried out independently, then what would their role be? However, respondents recognised that without the much needed evidence supporting the value of the children’s nurse, then it maybe difficult to argue against:

*If the majority of these children are acutely ill and highly dependent on skilled nursing care what will the HCA provide?*

*In the community much of the work is in isolation and HCA would be in a very vulnerable position.*

Those in favour requested clarification of the HCA role as part of the overall health care team, in a variety of clinical settings. In some areas the role becoming more of a ‘housekeeper’ and in others a ‘parenting role’. Regardless of the role or setting there was overwhelming support that without clearly documented delegation, education, and supervision there could not be a role for the HCA in the care of children/young people and their families:

*The children’s nurse must always be responsible for the overall care and treatment, assisted by the child’s parents or carers. Where HCA are employed adequate training and supervision must be provided.*
I don’t believe that delegating care to HCA’s is something we can reject because of professional self-interest…we should look at what best meets the needs of the child and family and be prepared to:

a) train HCA to be competent

b) maintain the nursing management of the child and family.

In contrast to these views there was a feeling that there might not be a choice where resources and needs demand implementation of the role. The importance of audit, evaluation, patient satisfactory surveys and outcome studies were considered relevant. Nonetheless, looking to the future:

If the time in hospital is going to be shorter then nurses need to be with the family preparing them for early discharge. I have difficulty in identifying nursing tasks, which HCA could do that the new practitioner we are planning to develop could not do as part of the overall care.

This discussion would seem to return to the fact that there is a need for children’s nurses to articulate and describe a children’s nurse as distinct from other health care professionals. In addition, when decisions are made about delegating care, nurses must take the lead in this decision-making:

The skills required to carry out fundamental nursing care (e.g. the washing and bathing of sick children) should not be underestimated—as we are aware it incorporates far more than the task of hygiene maintenance.

Of note was the difference described between support worker and replacement, both terms requiring clarification within the context of health care delivery.

Learning Environment

Where students learn, and whom they learn the majority from was highlighted in the discussion:

……there are some things you can’t learn in a classroom.

Sub-categories identified were: practical experience, clinical staff as teachers, valuing practice based education and role of lecturers.
**Practical experience** was clearly recognised to be crucial in the development of children’s nurses. However, there was some conflict here between practitioners wanting to support students in the clinical areas and being committed to their education, balanced with providing a service for patients. These issues are clearly inextricably linked however from some respondent's comments a dichotomy would appear to be present. The clinical area was described as an appropriate area in which learning can take place, with some provisos: students need to spend more time there, clinical staff need to be facilitated to use their teaching skills more effectively, and academic staff need to be used more realistically in that setting. This would seem to be a crucial area to consider particularly within the context of preparation for practice at either pre or post-registration level. In addition, the role of practical experience is relevant for nurses advancing their practice where the question of who will be the most appropriate health care professional to teach and supervise the skills required has yet to be decided.

**Clinical staff as teachers** within their own setting had overwhelming support. In addition, although the notion of clinical experts from the practice setting teaching in higher education institutions was generally agreed upon, the comments revealed some anxieties in relation to that role:  

*Clinical experts should not need to go to ‘university setting’ to teach.*

This was balanced against a different view:  

…….*nurses need to have opportunities to teach in a university. Currently it is undertaken on a good will basis, time is rarely given for it and it is does not reflect the hour’s preparation that have gone into the session.*

It may be that what was being discussed here were two different kinds of teaching, both lending themselves to teaching by clinical staff. The debate may be more about deciding which is the most appropriate setting for the different types of learning that take place, and who is the most appropriate person to be teaching that subject.

Overall, the value of learning from clinical staff was not disputed; role models were recognised to offer many skills that would be difficult to teach in a classroom:
I feel that observing advanced practitioner carry out nursing actions and managing
difficult decisions, and methods of clinical decision making is a valuable way of
learning in the clinical setting. However practitioners must be willing to have students
‘shadowing’ them with difficult situations i.e. home visits with palliative patients.
This raised some concerns about how to prepare staff in the clinical areas to teach, and
how the ‘higher education institution’ can support them in this role:
This needs to be paralleled by the development of equivalent academic career pathways
for practice based educationalists-equivalent that is to the pathways already accessible
to ‘academic’ based lecturers.

Medical model of consultants being honorary senior lecturers in university should be
developed with senior clinical nurses.
These two comments suggest an opportunity for formalising arrangements between
service providers and higher education institutions in ensuring that both practitioners
and nurse academics are confident and competent in providing an excellent learning
environment in the practice setting.

Valuing practice-based education was seen to be important:
Practiced-based education needs to be valued as highly as ‘academic’
college/university based education.
The need to value this part of the learning process was emphasised by many
respondents in order to ensure parity between theory and practice:
There is too much theoretical learning in the classroom and not enough hands on
practical experience in the clinical environment.
But having the experience was not considered to be enough, this needed to be
recognised within the structure of courses that award academic credits:
APEL for clinical practice must have more than lip service paid to it. There needs to be
time for theory and practice to catch up.
This final comment offering a further example of the benefits of a closer collaboration
between practice and education.
Role of lecturers was commented upon. Their role in teaching, supporting students and supporting clinical staff in their teaching role was referred to. The focus here related to a method for keeping lecturers up-to-date, ensuring that they continue to teach from an informed background and are thus able to speak with authority on a particular subject. The notion of the changing needs of service delivery was highlighted, reflecting on the need for the role of lecturers to continue to evolve to meet the needs of practitioners of the future. There was a feeling that the role of lecturer practitioner was not the answer, but no other solutions were forthcoming from the respondents. Nonetheless the need for the role of academic staff to continue to contribute to the practice area was highlighted. It must be recognised that the role of the nurse academic can be defined in a number of different ways, with academics shaping and informing practice through creative approaches in maintaining an educational environment. There is a role here for nurse academics to articulate their role in creating a learning environment, distinguishing this current role from the historical view of a clinical nurse teacher that does not reflect the changing demands of education provision of today.

Care Setting
Comments here reflected a concern that external forces and trends, and not necessarily the needs of patients and their families often determine changes in health care delivery: *I believe in reality we must organise care differently so that it is truly child focused and not system focused….in that way quality care can be maintained.*

What appeared to be important here were vision, anticipation and planning for future changes. Sub-categories identified were: context of care, organisation of care delivery, and shift to community care.

Context of care was considered in its widest sense. It was felt that this context should not be centred on hospital care, and should encompass the community as well as the continued welfare of children and young people when they are ‘well’. This focus of care was considered in terms of clinical experience gained whilst undertaking courses, as well as the current emphasis in education. Rehabilitation and transfer to adult services were specifically mentioned as areas often neglected. Identifying all the areas
in which children and young people are cared for, whether sick or healthy, was mentioned in terms of ensuring nurses have the right skills or skills that are clearly transferable to the variety of contexts.

Organisation of care delivery was recognised to be changing. There was a feeling, however, that these changes did not always take into account the views of children and their families:

...ambulatory care-will there be constraints to this i.e. do patients really wish it? Do all parents have time and skills to nurse sick children at home?

On the whole, shared care and liaison were described by respondents as being well understood, particularly by nurses working outside of specialist centres.

Shift to community care was felt to be happening now, with that shift undoubtedly increasing in the future. The concern here revolved around the gaps in service from insufficient children’s community nurses. Reasons for this were given as lack of ample community children’s nursing education programmes, the failure of the government to respond to evidence-based requests for more children’s community nurses and the continued neglect of a community focus in pre and post-registration courses.

Respondents did not mention the implications of funding for community posts and the considered antipathy towards this role as an issue.

A summary of the analysis of the comments found in Table AVII.2 below provides a conclusion to the results section at this point.
**Table AVII.2 Summary of analysis of comments**

<table>
<thead>
<tr>
<th>Category</th>
<th>Summary</th>
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| 1. Defining the Role of the Children’s Nurse | ♦ define in terms of specialty and clinical setting  
♦ distinguish between generalist and specialist  
♦ generalist identified as a basis for specialist  
♦ clarify role and boundaries in relation to other professions  
♦ value nursing  
♦ identify clinical career climbing frame  
♦ flexible education programmes that reflect roles and responsibilities |
| 2. Boundaries of Practice | ♦ reasons for role expansion must be clear  
♦ clarify who are the drivers for change  
♦ focus must be to deliver holistic care  
♦ needs of children and families must be paramount  
♦ require partnership with other professions, and education  
♦ collaboration and not delegation way forward |
| 3. Education for Practice | ♦ education underpins practice  
♦ education must be relevant, appropriate and value clinical experience  
♦ value strengths of academic staff and practitioners  
♦ core knowledge and skills must be explicit  
♦ identify health needs first, then plan education programmes  
♦ need equity of education programmes  
♦ need national standards and framework to support nursing role developments  
♦ consider multi-professional programmes, encompass evaluation and measurement of outcomes |
| 4. Who Cares for Children and Young People | ♦ nurses need to articulate who should care for children  
♦ clarify role of parents within a framework of negotiation and family centred care  
♦ clarify all care settings and prepare nurses appropriately  
♦ clarify and make explicit supporting roles |
| 5. Learning Environment | ♦ recognise and value clinical setting  
♦ value role models  
♦ identify novel approaches to facilitate teaching in the clinical areas  
♦ identify appropriate role for lecturers in the clinical setting  
♦ academic awards for practice |
| 6. Care Setting | ♦ identify range of care settings  
♦ balance hospital focused clinical experience and education  
♦ responsive education required  
♦ anticipate and plan for changes |
Appendix VIII

Example of a coded transcript (focus group 1)

Personal attribute

Human activity

Outcome action

F4 Though I find one of the biggest problems or one of the thing that I always notice when I go into the (…..??) ward are that nobody talks to families. You see the mother sat by the side of the bed, the father sat by the side of the bed and nobody talks to them like as you just said I think it’s the family side of the

F3 Yeah

F4 Care that’s really missing. You tend to focus on all these machines

F3 And everything bleeping

F4 And

F1 You don’t think it’s the whole pace of that is so much higher - they haven’t got the time they need to - the quality time

F2 (inaudible) Maybe they should employ people to (inaudible)

F1 Yeah, yeah

F2 You know there’s a different nursing role there

F1 Because that is

F2 I don’t (inaudible)

F4 But you’ve got 1 on 1 care - 1 nurse, 1 child, 1 family

F1 You need someone to talk to the family

F4 Exactly

F1 Because they can be sitting there worried up to the eyeballs

F4 I think that’s an area you could really get into and try and develop

F1 Yeah that’s a good idea

I
Do you think also that if you, so it might be that you need different skills in different settings but there might be some things which we all need and it depends on where you are. Do you think those skills also change through a career so as you’re newly qualified you need some things and as you move on can you think of a change - can you say of the change.

Yeah *management skills assertion skills* (laughter) (inaudible) skill

Everything

One thing I’ve noticed is the sisters tend to have really good relationships with the parents ‘cos they a lot of the time aren’t actually doing the *hands on care* so when they see the families they’re able to *just go in and sit and chat to them* and they tend to have when you think when you got to the sister and you’re managerial and everything you’d lose all the hands you know all the care time but they seem to be able to get into an even better relationship and come back to sort of the actually supportive relationship of the families because they’re not seen as a person who’s going to be coming in and doing things to their children

They’re also seen as a *knowledge bank* as well

Yeah

So if they’ve got any anxieties they’re not going to go to someone like me who’s newly qualified or about to qualify they’ll go straight to the top person who *knows exactly what they’re talking about* - who knows the ifs, buts, whys and it happened to me today actually (laughter)

Yeah but sometimes

But I’d rather they do that

They come to us because they know we, they perceive that we’ve got more time

Yeah

To talk to them and a lot of the time we have because we’re not running around at 6 o’clock in the evening doing, getting everybody’s *IVs* but I don’t know some parents I find are a dismissive of you because you’re a student but others I think come to you because they think they’ll get a more *honest* opinion

What I’m finding at the minute that I don’t have time to be sitting

No I think now we’re getting more and more
Yeah

Stuff put on us

I’m finding as well that well maybe it’s just this ward I don’t know but it’s sometimes I think they tend to give the students the admissions and the discharges and give them more involved complicated care to a qualified staff nurse so you end up running around all day and you end up going home and thinking what have I done for that family I’ve done nothing okay I’ve filled in the profile A and the profile B and I’ve made sure they’ve had their photos taken and everything else - what have I actually done for them they had all these questions and I didn’t have time to sit down and talk to them and that’s when you really notice that there is this big gap between what you’re taught and what happens in practice

You come home and you just think I haven’t done anything

Yeah

Which is what you mentioned before didn’t you. So you started to mention things like management and assertiveness and things like that. That’s been quite specific and that’s what I want to move you on to. Can you be more specific and describe what practical skills a qualified paediatric nurse of the future might need. You’ve mentioned other things - you’ve mentioned cannulation and things but can you brainstorm between you and come up with any in addition

Budgeting

You’re going to have to have more business skills

Yeah

Just because of the way the NHS is going - it’s turning into business management and you’re going to have to have those kind of negotiating skills that an accountant would have you know and be able to give sort of clear case you know clear cut reasons why this child needs this, this and this and it’s going to cost that, that and that. I mean you’re going to need those kind of business based skills in management and budgeting and

I think that might come in, start bringing in making ethical decisions as well you know to do that - being able to say well I can manage without this but this child needs that I think that will come into it

It’s going to get very (………………??) and ethical especially when you do let them know (………………………??) the ward sister or the director at senior
staff nurse you know when you get these high positions that are much more in charge of the day to day running of the ward I think it’s going to get thrown more and more down to ward level and these people are going to have to sit up and justify why they’re spending their money and what they’re spending it on

F1 Yeah they do that already

F2 Yeah I know but I just think it’s going to get worse

F3 I think there’s probably going to be more nurse bed units as well isn’t there and then you’re going to have to just (………??) why you need the service, you know keep the research going to prove that you need the service and prove that you should be there doing that job

F2 Well I know doctors that have to do that already and I think it’s going to get you know consultants that have to justify to their managing board why they’re dialysing some patients and not others and you know make these kind of decisions and I think it’s going to just get further down

F3 Like the ethical stuff

F2 It’s the ethical stuff and the justifying stuff is going to may be in to more of a multidisciplinary decision rather than just a consultant saying he will treat this one and not that one but I think it’s all going to get put onto nurses heads as well which I don’t know - doesn’t make me feel very comfortable

I1 And you mentioned cannulation anything else similar to those things that comes into

F2 I think certainly in the community things are going move on to minor ops and stuff like that

F4 There’s prescribing as well isn’t there

F2 Prescribing but you know people are going to be doing you know women with warts and stuff like that in the GP surgery just

F3 I mean there’s some things you see now I mean nurses prescribing sometimes on the ward you get so infuriated ‘cos you can’t give paracetamol and

(Both talk at once)

F2 Well half the time the nurses don’t (……………??) doctors anyway

F3 I mean you all check the doses anyway I mean I know this we don’t know all the drugs and stuff but when you’re sort of a senior staff nurse on ward that’s say a
surgical ward and you know the children which painkillers work well for that type of surgery you know then to have the children in the middle of the night having to wait say 2 hours sometimes to have someone like come and write it up

F4 You’ve got to wait for a junior doctor to come up who doesn’t know the child and doesn’t really know
## Appendix IX

### Descriptors: Focus group 1

(Descriptors in bold link to example of transcript Appendix VIII)

<table>
<thead>
<tr>
<th>Descriptor</th>
<th>Human Activity</th>
<th>Personal Attribute</th>
<th>Outcome Action</th>
</tr>
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<tbody>
<tr>
<td>Administration</td>
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</tr>
<tr>
<td><strong>Admissions</strong></td>
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<tr>
<td>Admit children</td>
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<tr>
<td>Approachable</td>
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<td>Approachable expert</td>
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<tr>
<td><strong>Assertion skills</strong></td>
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<tr>
<td>Be professional</td>
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<tr>
<td>Being with people</td>
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<tr>
<td>Bridge gap to consultants</td>
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<tr>
<td>Broad spectrum of knowledge</td>
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<tr>
<td><strong>Budgeting</strong></td>
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<tr>
<td><strong>Business skills</strong></td>
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<tr>
<td>Cannulation</td>
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<tr>
<td>Caring</td>
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<tr>
<td>Change practice</td>
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<tr>
<td><strong>Chat to parents</strong></td>
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<tr>
<td>Clerking in patients</td>
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<tr>
<td>Clinical supervision skills</td>
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<tr>
<td>Committed to further education</td>
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<tr>
<td>Confident</td>
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<td>Continue professional development</td>
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<tr>
<td>Continuity of care</td>
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<td>Develop practice</td>
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<tr>
<td>Diplomacy</td>
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<tr>
<td><strong>Discharge patients</strong></td>
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<tr>
<td>Do invasive things</td>
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<tr>
<td><strong>Do minor ops</strong></td>
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<tr>
<td><strong>Do research</strong></td>
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<td>Empowering families</td>
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<tr>
<td>Equal partner in care</td>
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<tr>
<td>Expanded role</td>
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<td>Focus on the whole</td>
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<td><strong>Filed in profile A and B</strong></td>
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<tr>
<td>Give family care</td>
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<td>Give handover</td>
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<td>Give information</td>
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<td>Give support to parents</td>
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<td>Giving IVs</td>
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<td>Good role models</td>
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<td><strong>Hands on care</strong></td>
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<td>Health promotion</td>
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<td>Help children</td>
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<td><strong>Honest</strong></td>
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<td>Is a knowledge bank</td>
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<td>Keep up to date</td>
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<td>Knowledge of child development</td>
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</tr>
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<td>Knows families</td>
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<td>Knows what they are talking about</td>
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<td>Learn through doing</td>
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<td>Learn through experience</td>
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<td>Supportive relationship with families</td>
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</tr>
<tr>
<td>Taking bloods</td>
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<td>Talking to families</td>
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</tr>
<tr>
<td>Teach</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Technically expert</td>
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<td>✓</td>
<td></td>
</tr>
<tr>
<td>Theory into practice</td>
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<tr>
<td>Undertakes ethical decision making</td>
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<td>Use distraction</td>
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<tr>
<td>Uses A&amp;P knowledge</td>
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<td>Willing to learn</td>
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<tr>
<td>Work together</td>
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<tr>
<td>Work with MPT</td>
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Appendix X

Descriptor cards grouped and categorised: two examples given
(Descriptors in bold link to example of transcript Appendix VIII)

<table>
<thead>
<tr>
<th>Category</th>
<th>Descriptors</th>
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<tbody>
<tr>
<td>Manages self and others</td>
<td>• Leadership skills</td>
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<tr>
<td></td>
<td>• Knowledge of contracting and budgeting</td>
</tr>
<tr>
<td></td>
<td>• Supervisors skills</td>
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<td></td>
<td>• Business skills</td>
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<td></td>
<td>• Management skills</td>
</tr>
<tr>
<td></td>
<td>• Assess competence of others</td>
</tr>
<tr>
<td></td>
<td>• Prioritises and manages</td>
</tr>
<tr>
<td></td>
<td>• Co-ordinator</td>
</tr>
<tr>
<td></td>
<td>• Aware of resources</td>
</tr>
<tr>
<td></td>
<td>• Self-managed professional</td>
</tr>
<tr>
<td></td>
<td>• Skills of delegation</td>
</tr>
<tr>
<td></td>
<td>• Time management skills</td>
</tr>
<tr>
<td></td>
<td>• Facilitator</td>
</tr>
<tr>
<td></td>
<td>• Talking with people</td>
</tr>
<tr>
<td></td>
<td>• Confidence to look after someone else’s child</td>
</tr>
<tr>
<td></td>
<td>• Interacts with families</td>
</tr>
<tr>
<td></td>
<td>• Information giver</td>
</tr>
<tr>
<td></td>
<td>• Able to individualise information</td>
</tr>
<tr>
<td></td>
<td>• <strong>Sit and talk</strong></td>
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<tr>
<td></td>
<td>• Working with mums</td>
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<td></td>
<td>• Talking to families</td>
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<td></td>
<td>• Family care</td>
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<tr>
<td></td>
<td>• Facilitating parents in their role</td>
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<td></td>
<td>• Involves families in decisions</td>
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<tr>
<td></td>
<td>• Maintaining normality</td>
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<tr>
<td></td>
<td>• <strong>Supportive relationships with families</strong></td>
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<td></td>
<td>• Negotiating skills</td>
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<td></td>
<td>• Empowering families</td>
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<tr>
<td></td>
<td>• Knowing children and families</td>
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<td></td>
<td>• Unique insight into the child/family</td>
</tr>
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<td></td>
<td>• Advisor</td>
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Appendix XI

Letter to children's nurses to participate in a focus group

Dear

As part of my PhD studies I would like to undertake a focus group with a group of nurses who are involved with caring for children and young people.

This letter is requesting your involvement as part of that process.

I have spoken to …… who has suggested approaching chairs/members of the RCN Paediatric Forums and SIGS as you have a meeting already planned for January 20 in London. We expect the meeting to be finished by 15.00. If you were interested in participating in the focus group this would require you staying on until 16.30, at the latest. I will arrange to have more coffee/tea provided to keep you going.

The focus group will involve asking a series of questions with the process encouraging you to discuss amongst yourselves individual responses. My role will be one of moderator facilitating, and occasionally probing your answers. The questions will revolve around the described competencies of a children's nurse. Although the focus group does not require you to do any ‘work’ in preparation, prior to the meeting I will send you a brief document detailing identified competencies and some background about how they were generated. There will be a second moderator present, and with your permission I will arrange for the focus group to be taped.

Your participation in the focus group is voluntary and your responses will remain anonymous.

If you require more information prior to deciding whether to participate then do not hesitate to contact me on………… If you require no further information, as time is short, could you leave a message on my answer machine (either number) letting me know if you/or another member of your group attending the meeting are able to participate. Further information will be sent ASAP.

I look forward to hearing from you.

Yours sincerely

Faith Gibson
Education/Research and Practice Development Nurse
Appendix XII

Focus Group Questions for nurses who care for children and young people

1. Can you state your current understanding of the use of competencies?

2. Can you describe the characteristics that you believe to be essential in a nurse who cares for children and young people?

3. Can you describe the behaviours that you believe to be essential in a nurse who cares for children and young people?

4. Now, if we consider competencies to mean a description of human activity, a personal attribute or an outcome action, do you have any comments to make about the list of competencies you have in front of you?
   Probe: are there any you would take out
   Probe: are there any you would add?

Thank you
FG/2000
List of competencies of a children’s nurse, resulting from initial analysis of focus groups with healthcare professionals and the subsequent Delphi survey.

- Analyses problems and makes clinical decisions
- Undertakes effective and ongoing clinical assessment of child/young person
- Considers immediate and continuing care needs of the child/young person
- Manages self and others
- Takes an active role in their professional development
- Forms an effective bridge between families and the multiprofessional team
- Bases practice on current evidence
- Uses professional knowledge
- Considers caring role from a holistic perspective
- Develops a professional and supportive relationship with families
- Cares for patients
- Delivers technical care
- Has effective communication skills
- Demonstrates effectual personal attributes
Appendix XIII

Competency assessment document

Competencies and performance criteria; clinical assessment guidelines
This clinical assessment documentation contains an identified list of clinical competencies that the course member will need to meet to effectively care for a child/teenager and their family; successful completion of all competencies is a requirement for course completion.
Alongside each competency there is a standard statement. In addition performance criteria have been identified which will be used in the assessment process. Level indicators within Benner’s framework of novice to expert have been identified for each competency: descriptions are provided for advanced beginner to expert.

Steps for successful completion of the competencies:

1. Prior to each unit undertake a self-assessment of the competencies to be achieved
2. Prior to each unit meet with course tutor and agree which competencies are to be completed for that unit.
3. Use the learning contract to examine each competency, describing potential sources of knowledge to be explored in relation to the learning outcomes for that unit.
4. Meet with link nurse and discuss learning contract and competencies to be achieved on the allocation.
5. Meet with link nurse at defined periods throughout the allocation, for discussion and direct observation of clinical practice.
6. When meeting with link nurse to discuss progress and demonstration of competencies multiple sources of evidence must be used.
7. Competencies will be assessed using level indicators. By the end of the course competent practitioner must be the level achieved in all performance criteria.
8. In order to reflect progression, depending on previous experience in the speciality, use learning contract to identify core (C) and specialist (S) competencies.
9. Ensure regular feedback is given and received by the course member from link nurse(s), referring to the course tutor where appropriate.
10. To successfully pass a competency, over 50% of the performance criteria must be achieved to a minimal level of competent practitioner.
11. If referred on a competency, the course member has one further opportunity to provide evidence and achieve that competency to be successful in completing the course.
12. A fail grade at a second attempt in any one competency will be a considered an overall fail of the course.
### Self-Assessment of Competencies

<table>
<thead>
<tr>
<th>Advanced Beginner</th>
<th>Competent Practitioner</th>
<th>Proficient Practitioner</th>
<th>Expert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having a sound knowledge base of the cancer process and of paediatric haematology and oncology.</td>
<td></td>
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</tr>
<tr>
<td>Caring for the newly diagnosed child, helping them and their family to adjust to the diagnosis of cancer</td>
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<tr>
<td>Having knowledge and understanding of the process of breaking bad news to the child/teenager and family.</td>
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<tr>
<td>Understanding the effect a diagnosis (relapse or palliation) has on a family.</td>
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<tr>
<td>Delivering a high standard of nursing care.</td>
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<tr>
<td>Prioritising the care of an acutely ill child.</td>
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<tr>
<td>Having an in-depth knowledge of symptom care in relation to treatment modality received.</td>
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<tr>
<td>Communicating effectively with the child and family, colleagues and members of the health care team.</td>
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<tr>
<td>Having an in-depth knowledge and understanding of chemotherapy.</td>
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<tr>
<td>Having an in-depth knowledge and understanding of either radiotherapy or bone marrow transplant.</td>
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<tr>
<td>Undertaking an expanded role</td>
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<tr>
<td>Effectively using counselling and supportive skills</td>
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</tr>
<tr>
<td>Providing holistic care to the child and their family throughout their cancer experience.</td>
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<tr>
<td>Basing their practice on the current evidence</td>
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</table>
## Competency

Course members are required to demonstrate competence by: **having a sound knowledge base of the cancer process and of paediatric haematology and oncology.**

## Performance criteria

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>have a working knowledge of the types of common childhood cancers, including how they are diagnosed (S)</td>
</tr>
<tr>
<td>2.</td>
<td>demonstrate how knowledge would be shared with children/families and student nurses, respond effectively to parents’ request for information about their child’s cancer (S)</td>
</tr>
<tr>
<td>3.</td>
<td>describe the pattern of care of childhood cancer, diagnosis through to palliative care (S)</td>
</tr>
<tr>
<td>4.</td>
<td>identify members of the health care team and discuss their roles in caring for the child and family in hospital and at home (S)</td>
</tr>
<tr>
<td>5.</td>
<td>identify those children at risk of late effects and describe what support/education these children and families will need (S)</td>
</tr>
<tr>
<td>6.</td>
<td>describe the metastatic pathways of common childhood cancers (S)</td>
</tr>
<tr>
<td>7.</td>
<td>understand the relevance of parents reporting symptoms that may relate to metastases or relapse (S)</td>
</tr>
<tr>
<td>8.</td>
<td>provide effective health education to the child and family; example: sun protection. (S)</td>
</tr>
</tbody>
</table>

## Level Indicators

<table>
<thead>
<tr>
<th>Advanced Beginner</th>
<th>Competent Practitioner</th>
<th>Proficient Practitioner</th>
<th>Expert</th>
</tr>
</thead>
<tbody>
<tr>
<td>The course member will be able to understand the epidemiology and aetiology of childhood cancers identify common childhood cancers distinguishing differences related to age, sex and prognostic variables.</td>
<td>The course member will be able to describe all the cancers (common and rare) that occur in children distinguishing differences related to age, sex and prognostic variables.</td>
<td>The course member will be able to describe all the cancers (common and rare) and their incidence that occur in children distinguishing differences related to age, sex and prognostic variables. Choose one malignancy and describe the relevance of staging, tumour markers and genetic implications.</td>
<td>The course member will be able to describe all the cancers (common and rare) and their incidence (geographic and ethnic) that occur in children distinguishing differences related to age, sex and prognostic variables. Choose one malignancy and describe the relevance and rationale of staging, tumour markers and genetic implications.</td>
</tr>
</tbody>
</table>
Assessors comments and evidence provided

<table>
<thead>
<tr>
<th>Advanced Beginner</th>
<th>Competent Practitioner</th>
<th>Proficient Practitioner</th>
<th>Expert</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1.</td>
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<tr>
<td>2.</td>
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<td>3.</td>
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<tr>
<td>4.</td>
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<td>4.</td>
<td>4.</td>
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</tbody>
</table>

date.......................................................... PASS/REFER/FAIL
signature of student................................. signature of assessor.................................
Appendix XIV

Information for ENB 240 Course Members regarding PhD study

Title of study:
*Defining specialist practice through competencies: the notion of the general and specialist children’s nurse examined and explored further within paediatric oncology nursing.*

How is the study being done?:

1. Nominal group technique to develop focus group questions
2. Focus groups with a range of healthcare professionals
3. Delphi survey
4. Nominal group technique to develop competencies
5. Test competencies
6. Individual semi-structured interviews with paediatric oncology course nurses
7. Focus group with a range of children’s nurses
8. Focus group with children's cancer nurses

Theoretical framework:
*The study aims to use a classification scheme as a framework through which to develop theory. ‘Classification is the systematic arrangement of entities or categories according to their relevant features or properties. It assumes recognition of similarities as a basis of grouping or clustering and assigning entities into categories’ (Kritek 1984 p77).*

Your role:
- to agree to share your experiences of using the competency tool
- to meet with the researcher (i.e. me) on each occasion that you have theoretical weeks of study (not taking up timetable space, I will arrange with Louise to meet you on your first day to make a suitable time)
- each meeting will last for no more than one hour and will be taped
- that meeting will take the form of a semi-structured interview (I will have prepared some questions, but you can also add to those)
- to agree to allow the research to have a photocopy of your final completed competency document at the end of the course
• to agree to participate in the study for a year, i.e. six months of the course and six months after
• for the six months after the course I will be asking you to self-assess yourselves with the same competency tool
• for those returning to their seconding hospital I will arrange to visit you there
• for those remaining on the unit after the course I will visit you there

Do you have to take part in this study?
No. If you decide now or at a later stage that you do not wish to participate in this research study that is entirely your right and this will not affect your experience on the course in any way.

Should you decide to participate, confidentiality and anonymity will be assured. As the researcher I am the only person who will have access to the data collected during this study.

Data will be stored by the researcher on computer.

If you have any questions prior to making you decision please do not hesitate to contact me Faith Gibson at…….

When you have made your decision please complete the tear off slip below.

Thank you for giving your participation in this study some thought.

Date
........................................................................................................................................

I.......................................................................................give my consent/do not give my consent to participate in the study titled:
‘Defining specialist practice through competencies: the notion of the general and specialist children’s nurse examined and explored further within paediatric oncology nursing’.

Date...........................................
Signature.............................
Appendix XV

Questions for ENB 240 course members, 1st and 2nd interview

Firstly consider the competency statements:

- in your opinion do they reflect the knowledge and skills required of a paediatric oncology nurse
- are they relevant
- are they realistic, i.e. can they be achieved
- is there anything missing
- are there any of the statements you would like to comment on

Performance criteria:

- do they reflect the competency statement
- is the terminology clear
- are they appropriate
- are they realistic, i.e. can they be achieved
- anything missing
- can you explain what the core and speciality focus means to you

Level indicators:

- can you explain what the indicators mean to you
- do they reflect the levels as you understand them
- do the indicators help you in developing your role i.e. can you place yourself and identify what you need to do to progress

Finally, what is your overall opinion of the competency tool:

not useful uncertain useful very useful

☐ ☐ ☒ ☐ ☐

Any further comments
Appendix XVI

Questions for ENB 240 course members 3rd interview

I now want you to consider the competencies in terms of personal and professional development, as opposed to an assessment for a clinical course.

Firstly consider the competency statements:

- in your opinion do they reflect the knowledge and skills required of a paediatric oncology nurse
- are they relevant
- are they realistic
- is there anything missing
- are there any of the statements you would like to comment on

Performance criteria:

- do they reflect the competency statement
- is the terminology clear
- are they appropriate
- are they realistic
- anything missing
- can you explain what the core and speciality focus means to you

Overall:

- how have they contributed to your development as a paediatric oncology nurse
- can you describe how they have facilitated your development as a children’s nurse
- do they capture and make explicit aspects of the decision making process
- if you were to continue to use them how would they help you in your personal and professional development e.g. IPR
- would you find them useful to assess someone else

Finally, what is your overall opinion of the competency tool:

not useful uncertain useful very useful

☐ ☐ ☑ ☐ ☐

Any further comments
Appendix XVII

Letter to children's cancer nurses to participate in a focus group

Dear

Thank you for agreeing to participate in my PhD studies.

As discussed, my request was for you to participate in a focus group on December 21 16.30-18.30. I have booked the conference room in the school of nursing, next floor up from the classrooms in the Directorate of Nursing. On the day we will be joined by one of my colleagues from the university who will be my moderator for the session, taking notes and supervising the tape machine.

The focus group involves asking a series of questions with the process encouraging you to discuss amongst yourselves individual responses. My role will be one of facilitation, and occasionally probing your answers. The questions will revolve around the described competencies of a paediatric oncology nurse, I have enclosed the competencies produced could you please ensure that you are familiar with them and bring them with you on the day. Could I request that you do not share the competencies with any of your colleagues, I will request back the copies sent to you, as these are not be the final work.

I will provide some nibbles, mince pies and wine, in recognition of the fact that you are giving up your valuable time to contribute to my work in the busy run-up to the Xmas festivities.

The focus group will last for approximately 90 minutes.

If you have any queries do not hesitate to contact me. Best telephone number is home in the evenings………………

Yours sincerely

Faith Gibson
Education/Research and Practice Development Nurse
Appendix XVIII

Focus Group Questions for children's cancer nurses

1. Can you state your current understanding of the use of competencies?

2. Do the competency statements reflect the knowledge and skills required of a paediatric oncology nurse?
   probe: do you think they also reflect attitudes?
   probe: do you feel that there is any aspect missing?

3. Do the performance criteria reflect the competency statements?
   probe: are there any you would add?

4. Do you think the competency framework would help to develop a children’s nurses?
   probe: how can it also help to develop a paediatric oncology nurse?
   probe: do you think that development occurs simultaneously?

5. Can you describe the characteristics of an expert paediatric oncology nurse?
   probe: how do you think a competency framework can facilitate nurses in achieving the level of expert?

6. Do you see a role for a competency framework, such as this one, in areas other than as part of a course assessment?

7. Do you have any other comments about the competency framework?
   FG/1999
Appendix XIX

Example of a children’s nursing competency

Competency 12

(Descriptors in bold link to example of transcript Appendix VIII)

| Managing self and others. |

Performance criteria

1. Demonstrate skills to prioritise and manage care.
2. Recognise opportunities to delegate.
3. Demonstrate time management skills.
4. Have an awareness of resources and how to use them.
5. Demonstrate leadership skills.
6. **Describe the process of contracting and budgeting.**
7. Use supervision skills appropriately.
8. **Identify and demonstrate use of management skills.**
9. Able to assess competence of others.
10. Recognise the importance of role modelling.
11. Detail how to co-ordinate and facilitate care given by others.
12. **Describe use of business skills in day to day practice.**
13. Demonstrate the ability to work with the multi-professional team.
Appendix XX

Published paper
The development of clinical competencies for use on a paediatric oncology nursing course using a nominal group technique

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Accepted for publication 17 November 1999

Summary
• This paper outlines the development of a competency model to be used to assess clinical competence during a post-registration specialist course.
• A nominal group technique was used to gather data about the detailed practice of paediatric oncology nurses.
• The nominal group technique was chosen to achieve consultation and consensus with a professional group.
• The six steps from undertaking the nominal group technique to implementation are described in detail.
• Some reflections on the use of competency statements are offered.

Keywords: assessment of competence, children’s nursing, clinical practice, nominal group technique.

Introduction
There is no doubt that the assessment of clinical competence is a difficult and tenacious concern for nurses in education and clinical practice (Squier, 1981; Coates & Chambers, 1992; Chambers, 1994, 1998; Claflin, 1997; Bradshaw, 1997, 1998; Walton & Reeves, 1999). Nonetheless, clinical assessment is required to provide effective and detailed feedback to students on their level of competence, achievement and performance, and contributes to their overall academic award. Marrying the two concerns of academic award and a practitioner’s competence to practise has presented a challenge to nurses in education, thus resulting in a growing awareness of the contribution that practice-based learning makes to an academic award (Gerrish et al., 1997). This process is made more complex as what is being judged is imprecisely defined (Phillips et al., 1994).

Despite these difficulties, central to the discussion is the definition of the purpose of assessment, as the outcome of assessing the competency of nurses has local and national implications. In detailing the national implications of competency, Bradshaw (1997) discusses the policy change and historical roles of the United Kingdom Central Council for Nursing, Midwifery and Health Visiting...
(UKCC) and other professional bodies in interpreting and influencing agreed levels of competence to ensure safe practice and the delineation of professional practice. The UKCC interprets the purpose of the assessment of competence as the identification of a nurse’s fitness to practise (UKCC, 1989, 1992, 1996, 1998). However, fitness to practise goes beyond the adequacy of determining knowledge and skill acquisition (Sharp et al., 1995): it includes finding ways to make sense of the uncertainty and complexity of practice, in the art of professional practice (Carper, 1978; Benner, 1984; Schon, 1991). In order to fulfil this holistic remit to assess an individual’s performance as a practitioner, a broader approach to assessing competency is called for.

An opportunity to re-visit the clinical assessment for a Paediatric Oncology Nursing Course arose with an impending joint re-validation by the English National Board and the university. Two paediatric oncology nurses from the university initiated and undertook the development of a new assessment for practice document. This paper details the steps taken in the development of competency-based clinical assessment to be used in combination with a learning contract.

The assessment of competence

Defining competence is a difficult and subjective undertaking (Ashworth, 1992; While, 1994; Bradshaw, 1997; Flintman, 1997). In her literature review, Girot (1993) explored the meaning of competence, how it could be assessed, and the tools used to measure it. The disparity in all three areas led her to observe that the term competence was not only ill-defined but also contradictory. Girot’s (1993) observation was confirmed by Gerrish et al. (1997), who confirmed the notion that clarity of understanding has been made even more complex because of the growth of different ways to assess it.

Nonetheless, from the literature there appear to be two senses in which competence can be defined (Miller et al., 1988): firstly competence equating with performance, describing the ability to perform a nursing task, and secondly competence as a ‘psychological construct’ evaluating a person’s ability to integrate cognitive, affective and psychomotor skills when delivering nursing care. Benner (1982) goes further, to emphasize that competence in nursing refers to the ‘real world’ of practice, distinguishing different levels, from novice or beginner nurses to experts. Competence thus focuses on a person’s potential capability to function in a particular situation and competency focuses on a person’s actual performance in that situation (Alspach, 1992). Ashworth & Saxton (1990) describe three perspectives on competency:

- a description of human activity;
- a personal attribute;
- an outcome action.

Assessing competency therefore primarily appears to be concerned with the affirmation of the individual’s effectiveness in a specific area (While, 1994). Nursing as a practice-based discipline needs to gain consensus on which skills, knowledge and attitudes are required by the nurse, the expected level of competence, and whether performance should be classified (Woolley, 1977; Nicol et al., 1996), and if so in what way. The next logical step is to ask, ‘How is such effectiveness determined?’ The answer to this is less than straightforward.

Chambers (1998) details succinctly some of the issues surrounding the breadth of clinical assessment. She argues that the main obstacle to valid and reliable assessment of competence lies in the lack of objectivity in the tools used to judge it, be they criterion or norm referenced. Many tools measure performance by distinguishing between levels of competence and, although this is contentious, Sharp et al. (1995) and Flintman (1997) suggest that measuring the effectiveness of a practitioner necessitates assessment of the less well-defined areas of practice such as aptitude, motivation and ways of working.

Again, Girot (1993) identifies that clinical assessors of practice use abstract concepts such as clinical judgement, intuition and a ‘state of being’, as well as concrete evidence, to judge whether a practitioner is competent. Consistent with this holistic conceptualization of competence (Short, 1984; Le Var, 1996; Milligan, 1998), assessment should be based ‘on a cluster of evidence’ (Milligan, 1998; p. 278) gathered to facilitate consideration of the elements of practice such as attitudes, behaviour and values.

Hence, according to Ross et al. (1988), the chosen method of assessing clinical competence needs to be objective, valid, reliable and practical, with the capacity to test a wide range of knowledge and skills whilst accommodating a number of assessors. It should also be dynamic, enabling the students to reflect on their performance and develop skills of self-assessment. This latter component is congruent with facilitation of individualized learning and the ethos of life-long learning (Henfield & Waldron, 1988).

Assessment using competence statements

The competence model is used as a vehicle with which to describe the nursing role in terms of discrete, assessable...
elements of behaviour or outcomes performed by an individual (Lillyman, 1998). Both advantages and disadvantages of such a model have been described. Boak (1997/98) identifies competency models as having the potential to provide guidance for all who are involved in staff development, recruitment, training, appraisal, promotion and succession planning. Specific to nursing, Morin Robinson & Barberis-Ryan (1995) describe the benefits derived from using competency assessment to include the ability to: identify learning needs of individuals, provide insight into areas of professional practice that can be implemented given the skill level of nursing staff, and clarify allocation of educational resources for training and development needs. Use of competency statements can also facilitate individualized learning by enabling practitioners to reflect on their current practice and become self-directing (Henfield & Waldron, 1988). Concluding the advantages, the competence-based approach to education has been heralded as an objective assessment method, facilitating distinctions in levels of competence when a variety of sources of evidence are used to support judgements concerning performance (Percival et al., 1994).

These positive views are balanced against some concerns raised by Ashworth & Morrison (1991). Their main arguments opposing the competence model centre on the use of competence, as it describes a technically orientated way of thinking that is inappropriate for the training of human beings. The potential weakness of the competence model is in dealing with skills and qualities needed in maturely, reflectively and expertly dealing with patients and their problems (Ashworth & Saxton, 1990; Ashworth & Morrison, 1991), thus often emphasizing a focus on technical skills at the expense of knowledge and understanding (Ashworth & Morrison, 1991). Added to these concerns is the notion that use of such a model also fails to analyse and assess critical thinking (Lillyman, 1998). It appears also that using a competency model fails to bring objectivity to the process, as the assessment still involves ‘the perception of evidence about a performance by an assessor, and the arrival at a decision concerning the level of performance of the person being assessed’ (Ashworth & Morrison, 1991; p. 237).

All of these issues were taken into consideration prior to making a final decision to pursue the development of a competence model for the Paediatric Oncology Nursing Course. When balancing these issues overall, there were two factors that validated our choice: firstly, that a competence model had the potential to assess theory and practice as an integral whole, and secondly, the development of competence statements would begin to define and describe the speciality of paediatric oncology nursing.

**The nominal group technique**

A number of ways of gathering and interpreting data about the detailed practice of paediatric oncology nurses, and thus the development of clinical competencies, were considered. Examination of the literature revealed a number of different approaches to developing competencies; however, irrespective of the variations, they all included one common theme: that of consultation with the professional group. This was via questionnaire (Duffield et al., 1995), use of an expert panel (Percival et al., 1994), a Delphi survey (McGee et al., 1987), functional analysis (Winter & Maisch, 1996), or a group process such as nominal group technique (Davey, 1995). In addition to these approaches, Adams (1997/98) describes three methods that have more recently come to prominence, namely critical incident technique, behavioural event interviews, and the repertory grid. Besides considering the methods described in the literature, advice was also sought from colleagues in education, research and management.

A number of practical issues were taken into consideration before deciding on the most appropriate technique to use. Firstly, the approach needed to involve as many of the target audience as possible. Secondly, although the approach was required to be not too time-consuming, it needed to be comprehensive and give quick results. Thirdly, there was no financial support for the work and it therefore needed to be cheap. A decision was consequently made to use a nominal group technique as this would resolve all of our practical issues whilst also achieving consultation and consensus with a professional group.

The nominal group process is ‘a structured meeting which seeks to provide an orderly procedure for obtaining qualitative information from target groups who are most closely associated with a problem area’ (Van de Ven & Delbecq, 1972; p. 338). It was originally developed in the 1960s from an analysis of group decision-making in aerospace, environmental and industrial fields. However, the original authors, Van de Ven & Delbecq (1972), also noted that the process could be applied to other settings such as healthcare and health policy. As a planning and problem-solving process (Hall, 1983), it has been used previously in curriculum planning (O’Neill & Jackson, 1983). In addition, the technique has been found useful in identifying researchable problems (Thomas, 1983; Gallagher et al., 1993; Carney et al., 1996), training needs...
assessment (Scott & Deadrick, 1982), and programme evaluation (O’Neil, 1981) and has been helpful in structuring meetings and conferences (Butterfield, 1988). The technique can be compared to other group processes designed to generate new ideas and encourage creative expression, such as brainstorming and the Delphi techniques, which have been examined and compared with the nominal group by McMurray (1994).

The purpose of the nominal group process is to generate ideas, which are then discussed and ranked by the group (Moore, 1987). The group is highly controlled, with discussion occurring only in the later stages of the group process (Gallagher et al., 1993). The group is guided by a facilitator, who controls the group process through the management of information flow, acting essentially as a collector of ideas (O’Neil & Jackson, 1983), as opposed to leading the discussion. The work of the facilitator is complemented by usually one or two other individuals acting as note-taker, co-ordinating activities with the flipchart/whiteboard. The technique aims to avoid the known pitfalls of group interviews – where some participants can be silent or overridden in the presence of more articulate and dominant personalities, particularly when perceived to be in a different position in the hierarchy – as all its members have an equal opportunity to contribute (Carney et al., 1996). This equity and structuring for obtaining qualitative information is achieved through the steps identified in Table 1.

There were a number of reasons why the technique was chosen and these will be justified using a structure provided by McMurray (1994).

- **Group activity:** initial silent interaction with later discussion: the democratic style would allow all members to have an equal opportunity to contribute through initial independent generation of ideas which would avoid the potential problems associated with discussion being dominated by more gregarious and articulate participants. The silent generation of ideas would also encourage independent creativity, enabling different perspectives to be revealed.

- **Can be conducted in one session:** this was particularly appealing when inviting practitioners to contribute and participate. Another factor in its favour was the fact that there was no need for any preliminary discussion or lengthy preparation and yet a substantial amount of work could be generated in a relatively short space of time (Carney et al., 1996).

- **Non-critical atmosphere desirable in discussion stage:** the deliberate avoidance of interference or interpretation by the facilitator was considered to be important here. In addition, recognizing the experience of the nurse academics in undertaking group work, they would be skilled in managing the discussion and creating a non-threatening atmosphere. The overall aim was to encourage individuals to explore their ideas further, and value their own contribution while listening and commenting appropriately to the ideas generated by other participants.

- **Structured format:** sequential steps or stages to be followed: this was useful, as neither of the two nurse academics had used this technique before. Moore (1987) states that to undertake a nominal group technique there is a requirement that a group leader has mastered the process. As the nurse academics had significant experience in undertaking group work it was felt that these skills, facilitated by the clearly identified steps in the process, would be sufficient to ensure success. The sequential steps, shared with participants prior to the meeting, provided a structure that was easily understood, easy to follow, and had the potential to allow the facilitator to keep the session on-course.

- **Promotes more and better quality ideas than brainstorming:** the notion of initial independent generation of ideas was the deciding factor in not using brainstorming. In addition, McMurray (1994) identifies that although brainstorming is easy to conceptualize, it can prove difficult in undertaking, as the free flow of ideas, fundamental to the technique, can be hampered by critical comments from other group members. Factors such as fear related to failure, criticism and ridicule, which could so easily intimidate group members, would be avoided by using the nominal group technique. The technique would also provide more ideas than individuals working alone.

- **Peer influence likely only in discussion phase:** this factor alone had the potential to ensure greater individual and group productivity (O’Neil & Jackson, 1983). This would also allow participants to pool individual judgements and arrive at desirable group decisions through the process of voting and ranking, achieving a sense of completion and satisfaction (Hall, 1983).

---

**Table 1** Nominal group process steps (Butterfield, 1988)

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduce nominal group process to the group</td>
</tr>
<tr>
<td>2</td>
<td>Silent generation of ideas in writing</td>
</tr>
<tr>
<td>3</td>
<td>Round-robin listing ideas</td>
</tr>
<tr>
<td>4</td>
<td>Discussion of ideas on a flip chart</td>
</tr>
<tr>
<td>5</td>
<td>Rank ordering ideas</td>
</tr>
<tr>
<td>6</td>
<td>Total rankings</td>
</tr>
<tr>
<td>7</td>
<td>Discussion</td>
</tr>
<tr>
<td>8</td>
<td>Conclusion</td>
</tr>
</tbody>
</table>

Steps in the development process

The decision to use a nominal group technique (NGT) combined a number of advantages and offered a process that was highly structured and allowed for input from as many clinical nurses as possible. The NGT was used as the initial step in the process, with consultation and evaluation being integral to the overall development. Table 2 outlines all the steps in the development of clinical competencies. These steps will be detailed in the following discussion.

STEP ONE: THE NOMINAL GROUP TECHNIQUE

At the start of developing the competencies, the plan had been to undertake three NGTs: one with senior staff/ward sisters on a haematology/oncology unit (group 1), one with course members currently undertaking the Paediatric Oncology Nursing Course (group 2), and a final group with previous course members. Only the first two groups were possible; due to work commitments the third group proved to be impossible. Group 1 consisted of seven members and group 2 of twelve.

In both groups, the steps of the process identified by Butterfield (1988) were followed. The nominal group task statement handed out to both groups asked the following question: can you identify the knowledge, decision-making skills, and clinical attributes essential for successful performance as a paediatric oncology nurse? The process was the same for both groups, the only difference between them being that group 1 took longer than the allocated 90 min. This group found it extremely difficult to make a final decision and found the process of ranking nearly impossible. A decision was made by the group and facilitators to conclude the discussion and ask members to vote independently at a later date following personal reflection and consideration of the ideas generated and the group discussion.

Group 1 generated 46 ideas and group 2 generated 66, out of which they awarded their eight votes to the most important ideas: eight being the most important, seven the next and so on. Table 3 presents the ideas awarded the highest votes by both groups.

STEP TWO: THE REFINING PROCESS

At the outset of the development it was envisaged that clinical nurses would be involved in the refining process. However, at the time the work was being undertaken the wards were very busy, negating the potential for nurses to give much more of their time. A decision was made by the nurse academics to undertake the refining process themselves, and that decision was shared with members of both groups. The two nurse academics have nearly 25 years experience between them, with strong clinical links in paediatric oncology nursing. This was considered to be sufficient experience to refine the statements from the NGT, ensuring that the essence of their meaning was not lost, whilst maintaining the balance between the needs of education and practice in the assessment of competence to practise. The refining process consisted of shaping the ideas from the two NGTs into comprehensive competency statements. This process resulted in seventeen competencies.

For each competency statement, performance criteria were then identified. When developing the criteria the following points from Gurvis & Grey (1995) were taken into consideration: to ensure that criteria are focused on the learner, that they are measurable and achievable, and that they are relevant to the competency. In addition the criteria needed to facilitate the use of multiple sources of evidence to assess knowledge and understanding and the

Table 2 Steps in the developing process

<table>
<thead>
<tr>
<th>Time frame</th>
<th>Steps taken</th>
<th>Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 1998</td>
<td>Step one</td>
<td>Nominal Group Technique with sisters on the haematology/oncology unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nominal Group Technique with the current ENB 240 Nursing Course</td>
</tr>
<tr>
<td>April 1998</td>
<td>Step two</td>
<td>Refining process resulted in 17 competencies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Performance criteria for each competency was developed</td>
</tr>
<tr>
<td>May 1998</td>
<td>Step three</td>
<td>Consultation process with practitioners and senior nurse academics</td>
</tr>
<tr>
<td>June 1998</td>
<td>Step four</td>
<td>Piloted for 6 months alongside previous assessment process</td>
</tr>
<tr>
<td>December 1998</td>
<td>Step five</td>
<td>Evaluated with Paediatric Oncology Nursing Course at 3 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Evaluated with Paediatric Oncology Nursing Course at 6 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Evaluated with clinical assessors on the haematology/oncology unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Changes made, further consultation process</td>
</tr>
<tr>
<td>January 1999</td>
<td>Step six</td>
<td>Introduced as clinical assessment with new Paediatric Oncology Nursing Course</td>
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<tr>
<td></td>
<td></td>
<td>Return to step five</td>
</tr>
</tbody>
</table>
application of theory to practice, and to reflect on the caring role.

The competency statements and performance criteria were collated into an assessment document with space to record pass/refer/fail and any comments. Guidelines for successful completion were also produced. As the piloting of the new assessment process was to run in tandem with the current assessment process, discriminating between satisfactory and unsatisfactory other than pass/refer/fail was not a requirement. The assessment process already in use incorporated the work of Benner (1984) and provided descriptions of practice to distinguish between the levels of advanced beginner to expert.

**STEP THREE: THE CONSULTATION PROCESS**

The consultation process was seen as a crucial part of the development and hence was extensive. Copies of the assessment document were circulated to members of both NGT groups and to senior nurse academics. The consultation process asked participants to comment freely, making sure the competency statements and performance criteria were clear and easily understood, jargon-free, realistic and achievable. More importantly, they needed to guarantee that the competency statements and performance criteria truly reflected the nature of the speciality of paediatric oncology nursing.

Comments received reflected some general confusion and poor wording, with requests for examples to be included with some performance criteria. Although the document was felt to be too long, no competencies were identified at this time to be removed. However, some performance criteria were linked, and thus the overall number was reduced. Clarification and rewording were undertaken.

**STEP FOUR: THE PILOT**

The assessment document encompassing seventeen clinical competencies was piloted with course members on a Paediatric Oncology Nursing Course that began in June 1998. There were eleven paediatric nurses on the course. The assessment was used in addition to the current validated document. This meant that course members and clinical assessors had a doubling of their work, and this was explained and participation agreed at the start of the course. For clinical assessors, one incentive was the suggestion of a future assessment process that was less time-consuming to complete, retaining its roots in the speciality, whilst also focusing on the development of paediatric oncology nurses in the context of holistic care.

Time was spent prior to the course preparing assessors for the new assessment process and documentation. Preparation of course members took place at the start of the course.

**STEP FIVE: EVALUATION**

Evaluation was undertaken at three months and at the end of the course (at six months) with course members. In addition, evaluation undertaken at the end of the course included a sample of clinical assessors. A competency checklist to evaluate the competency model was produced; this was adapted from one described by Gurvis & Grey (1995). The checklist asked for comments on each of the


<table>
<thead>
<tr>
<th>No. of votes</th>
<th>Idea</th>
<th>No. of votes</th>
<th>Idea</th>
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<tbody>
<tr>
<td>40</td>
<td>In-depth knowledge of symptom control</td>
<td>85</td>
<td>Knowledge of haematology and oncology</td>
</tr>
<tr>
<td>33</td>
<td>Understanding the basic principles of chemotherapy</td>
<td>80</td>
<td>Good basic paediatric nursing care</td>
</tr>
<tr>
<td>29</td>
<td>Understands how a diagnosis of cancer affects the family and friends</td>
<td>54</td>
<td>Good understanding of treatments</td>
</tr>
<tr>
<td>23</td>
<td>Care of the newly diagnosed child</td>
<td>36</td>
<td>Knowledge and understanding of symptom care</td>
</tr>
<tr>
<td>21</td>
<td>Knowledge of the cancer process</td>
<td>28</td>
<td>Communication skills</td>
</tr>
<tr>
<td>13</td>
<td>Knowledge and understanding of how to break bad news</td>
<td>25</td>
<td>Ability to give IV medications and deliver central line care</td>
</tr>
<tr>
<td>10</td>
<td>Prioritizing care of a sick child</td>
<td>24</td>
<td>Family-centred care, involvement of siblings</td>
</tr>
<tr>
<td>10</td>
<td>To have an understanding of taking on extended roles and the impact on nursing and the child</td>
<td>22</td>
<td>Counselling and supportive skills</td>
</tr>
<tr>
<td>10</td>
<td>Knowledge of research-based practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Knowledge of distraction and other ways of carrying out procedures than with ketamine</td>
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seventeen competency statements, performance criteria, learning options and evaluation methods.

As a result of this process the following changes were made:

- Seventeen competencies were reduced to fourteen; reduction was made possible through combining some competencies and removal of one which was felt to be covered elsewhere.
- The wording of some performance criteria was changed; some wording was felt to be unclear and ambiguous, with clinical assessors not being totally sure what they were meant to be assessing.
- Core and speciality focus was indicated for all performance criteria; indicating which criteria were more reflective of core paediatric skills and speciality nursing skills was considered to be helpful, although there were some inconsistencies between clinical assessors and course members regarding the appropriateness of some criteria.
- The competency relating to bone marrow transplantation was made more expansive and additional performance criteria were added, making the assessment more realistic.

STEP SIX: IMPLEMENTATION WITH A NEW COURSE

Following consultation, changes were made and Benner’s (1984) descriptors of novice to expert were incorporated as level indicators against which students would be assessed. These descriptors enable an assessor to discriminate and to identify satisfactory and unsatisfactory performance at all levels. The new approach to assessment was approved as part of a re-validation of the course, to be used with students undertaking the course at both diploma and degree levels.

The new approach to clinical assessment thus encompassed the competency statements (Table 4 is an example of one competency) and a learning contract, with a portfolio being introduced as part of formative assessment at the end of the six-month course in anticipation of students completing their diploma or degree pathway (Fig. 1).

Reflections on use of competency statements

The competence approach to clinical assessment has now been applied with a further two courses. Evaluation and consultation have continued, involving both paediatric nurses undertaking the course and clinical assessors. Reflecting on their use, nurses on a previous course had the following to say:

Basically having worked with them now and actually completed them I don’t think there was anything missed out. I don’t think I would have added anything. I think they encompass what I expected to

<table>
<thead>
<tr>
<th>Table 4 Example of a competency statement and performance criteria</th>
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<tbody>
<tr>
<td><strong>Competency 4</strong></td>
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<tr>
<td>Course members are required to demonstrate competence by: having an in-depth knowledge of symptom management</td>
</tr>
<tr>
<td>Performance criteria</td>
</tr>
<tr>
<td>1. identify the potential acute side effects of therapy (SO)</td>
</tr>
<tr>
<td>2. understand the physiological processes underlying side effects(s) (SO)</td>
</tr>
<tr>
<td>3. have knowledge of, and demonstrate the appropriate use of assessment tools (SO)</td>
</tr>
<tr>
<td>4. describe the decision-making process that results from assessment (C)</td>
</tr>
<tr>
<td>5. demonstrate skills of evaluating interventions (C)</td>
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<tr>
<td>6. identifies interventions (pharmacological and non-pharmacological) used in symptom management and explain how they work (SO)</td>
</tr>
<tr>
<td>7. demonstrate the ability to explain to the family the rationale for care given (SO)</td>
</tr>
<tr>
<td>8. describe the resources available for symptom management (SO)</td>
</tr>
<tr>
<td>Level Indicators</td>
</tr>
<tr>
<td><strong>Advanced Beginner</strong></td>
</tr>
<tr>
<td>The course member will select one modality of treatment and reflect on the care of a child that encompasses symptom management.</td>
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</table>

Figure 1 Model of assessment of clinical practice.
learn and what I thought of being an oncology specialist nurse.
You’ve gone from the diagnosis, the whole gamut really, right through to palliative care and chemotherapy, and the treatments is quite a big bit and I think that’s right really. So yes, I think they do reflect the knowledge and skills required of a paediatric oncology nurse.

I think the way we identify ourselves as advanced, competent, proficient and expert prior to actually going through the competencies on the ward… I think.

It’s good idea that we assess our own sort of level initially and I think if you do work through the criteria properly, I think if you get yourself in the right category, either competent or proficient, then I do think they are achievable.

I do think there’s a lot of… there’s no consistency in how people are assessed.

I’ve practically had them with me all the time working with my link nurse. When I was there we very much worked with it and referred to it as an ongoing process rather than ‘It’s a competency time now.’ We used it very much as an ongoing thing. I felt [it] was very useful and pointed out areas for me to sort of focus in on.

Both positive and negative comments have been received. On one side they are clearly time-consuming to complete, rely on an element of subjectivity, and are difficult to achieve in a six-month course. On the other side, they identify learning related to theory and practice, and make explicit the knowledge, skills and attributes required by a paediatric oncology nurse. The elements of subjectivity and the role of the clinical assessors are important. It has been recognized that any assessment involves an element of subjectivity (Gerrish et al., 1997). However, the use of a variety of approaches that reveal a more complete picture, and that do not rely solely on inferring competence from performance, offsets the potential bias (Percival et al., 1994). Training of assessors, providing an opportunity to share views and perceptions regarding levels of expertise and the developing professional role of the paediatric oncology nurse, is one approach that must be part of the dynamic process of ongoing development of the competency model and must continue.

**Next steps in the development process**

Further small changes have been made to the competency assessment document. These changes have resulted from both informal and formal feedback, but ultimately they stem from familiarity gained by using the assessment document. Changes have included, for example, reducing the number of competency statements from fourteen to ten. This has occurred through a process of combining, with no performance criteria being lost. In addition, there was also some re-clarification of the performance criteria, with use of language, jargon and syntax refined. Step five in the development process will be continually re-visited in order to keep on refining the assessment document.

Alongside this progress, a competency model for clinical assessment is being developed and implemented with other post-registration courses at the university. In tandem with this, its use is also being considered on pre-registration courses, in line with recommendations from the UKCC (1999).

**Conclusion**

Assessment of clinical competence is a difficult and tenacious issue for nurses in education and clinical practice. Nonetheless this paper has presented one example where nurse academics and clinical practitioners have begun to address this issue. The development of an assessment tool that has the potential to assess clinical competence while also facilitating personal and professional development in a cyclical rather than linear model of progression has been described. Clearly there is still some way to go with a number of issues yet to be addressed, particularly regarding validity, reliability, and discrimination. However, the face validity inferred from ongoing evaluation and feedback is considered to be sufficient to continue to use the competency model of assessment unchanged for the time being. This will provide stability for clinical assessors to develop their role and allow time for them to develop their thinking surrounding the notions of competency and competence.

**References**


