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"LEARNING THROUGH WORK"

A case study of a bounded system of learning within an NHS Trust in Scotland

VOLUME ONE

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ABSTRACT

The idea that knowledge is generated from practice and that nurses learn through their work was the starting point for this thesis that examines the system of learning through work for experienced nurses and their managers working in a National Health Service Trust in Scotland. The thesis includes a pursuit of the meaning of work-based learning, life long learning and continuing professional development. The implications for the NHS as a learning organisation and the emerging conceptual issues generated questions about the current system of learning at work for nurses. Thirteen nurses and six managers from five hospitals participated in this case study that included a semi-structured interview, the development of individual picture maps and a second interview. Learning through work, its purpose and the processes experienced by the participants were analysed. Individual and collective benefits and the institutional and organisational omissions and barriers to learning were identified. Many factors were found that influence learning through work. The development of the charity paradigm is an attempt to explain one aspect. Key features such as *learning on the job, learning by doing and learning from others* are described as part of the informal learning that occurs within the organisation. Other learning, such as defined pathways, combine with informal learning to form the learning through work continuum. These different modes of learning within the system are categorised and related to single and double loop learning mechanisms. The matrix of the learning system within the organisation includes the four major components of the system. It is suggested that achievement of productive integrated learning needs a collaborative approach to curriculum development and learning within organisations that will facilitate collective experiential learning through work.

CHAPTER ONE

LEARNING THROUGH WORK –SETTING THE SCENE

Traditionally nurses and other health care professionals have undergone initial education that has led to a professional qualification and registration and, in recent decades, an academic award. Initial education includes theory and practice-based components that are designed to ensure that essential knowledge and skills lead to competence as a practitioner. All initial, pre-registration undergraduate programmes have been offered in higher education institutions since 1992. Post qualifying, post-registration programmes have been located within higher education for much longer, some since the 1970's, with a recent progression to undergraduate diploma and degree awards. Currently all education programmes leading to qualifications in nursing are approximately 50% practice based. The practice components may or may not be academically accredited as work-based learning.

There is now a statutory requirement for qualified nurses to maintain competence, through study days and by undertaking continuing professional development (CPD) (UKCC, 1994). As a result a plethora of post registration programmes, general and specialist, have been developed by education providers, in discussion and collaboration with service providers, the purchasers and employers (Castle et al 1998, Clarke and James 1998, NBS 1998). Part of this provision within curricula, has included the development of work-based learning modules that are directed and developed by students, who are qualified nurses employed by the National Health Service (NHS) (Hargreaves et al 1997, Walker et al 1998).

In the researcher's own area of work within higher education, work-based learning was first explored six years ago. As a result modules of study at Scottish degree levels three, four and masters were developed for qualified practitioners pursuing undergraduate and postgraduate studies. The structure of these modules was based on work undertaken by Sheffield Hallum University where colleagues had successfully introduced similar modules for nurses and other health care professionals. However, a curriculum set by students and agreed with lecturers did not follow the traditional curriculum concepts of established courses, where the curriculum was clearly articulated at the start of the student's course with a view to a final product at the end.

Institutional caution demanded that the size and shape of the workbased learning should be restricted to a double module thus reducing the potential for students to specify and negotiate the extent of their curriculum, the level and the volume of credit sought. The introduction of the modules challenged the academic staff because of the emphasis placed on student involvement. Similarly this approach to learning also challenged the students and their employers. The tri-partite partnership between the student, their academic supervisor and their employment mentor was innovative and more importantly, led by students.

The teaching team were successful in their bid for research funding awarded by the National Board for Nursing, Midwifery and Health Visiting for Scotland, to allow an evaluative study of the student directed work-based learning for post registration students undertaking community health nursing degree completion studies in 1997

(Walker et al 1998). The research provided a frame of reference for defining workbased learning and illustrated the challenges facing participants and all stakeholders. It also demonstrated the positive value of workbased learning to the nurses and their employers. Unfortunately it did not provide definitive evidence that students developed new knowledge through work or that knowledge gained was generated from practice.

During the last six years the author has co-ordinated the workbased learning modules at all levels and has gained first hand knowledge of student, mentor and lecturer opinion from successive module evaluations. This has resulted in increasing awareness of the fact that students are highly motivated to learn in this way. Students appear to find this approach to learning challenging and they enjoy being responsible for their own learning. There seems to be a great sense of personal achievement when their learning is complete, as by controlling their own learning it is directly relevant to their work, their personal development and the development of their professional practice. Similar evidence of learning within the context of work is available from the Accreditation of Prior Experiential Learning (APEL) portfolios submitted by students for general and specific credit as part of degree programmes. In many respects the process of submitting a portfolio of evidence for APL is the obverse of a workbased learning portfolio of evidence. Both provide evidence of learning achieved within the work context.

However students also identify the difficulties they face in pursuing their learning. Many of these issues relate to the nature and context of their work. Some issues are

linked to the student as an individual and others relate to the mode of learning and the approach to learning taken by the student.

In relation to issues regarding work, some students are fully supported by their employers, others have had to negotiate with their employer or colleagues at work the nature of their work-based learning. Some students need more support than others to pursue what they need and want to learn about, rather than undertake 'a project' that their employer wished them to do. Some students therefore, welcome feedback for the University College work-based learning panel that advise them to reduce the size and scale of their learning action plan. Others resent being advised to reduce the amount of work proposed because it exceeds the University College requirements for the amount of academic credit being awarded.

Students have difficulty finding the time to complete their workbased learning activities while at work and difficulty finding time to allocate to the collection of evidence in support of their learning. Most students, for example, are part-time, in full time employment, in mid career, fund their own studies and use a considerable amount of their own time. All have elected to pursue a defined educational pathway that results in an accredited outcome, hence their association with the author.

All students who have successfully undertaken work-based learning modules have, therefore, demonstrated to the researcher that they can and do learn at work, from and with colleagues and with the support of their employers. Perhaps more importantly, they have demonstrated that the process and context of learning have

been more significant than the structure and even the content of the curriculum determined by them on the basis of their own learning outcomes. The module framework provided the structure for their learning. However, it appears that the knowledge about how to learn through work was generated from the learning event itself within the work context.

Major questions remain about the nature of work-based learning, its main components and categories and whether or not it is a cognate area in its own right within curriculum studies. For example the researcher did not know if nurses learnt through their work because of the context or 'in-spite of their work'. There are varying descriptions of workbased learning and practice experience in nursing, but no known categories of learning through work. It is not known if workbased learning is the same for all nurses and whether or not it is possible to generalise it. Assumptions could be made from feedback offered by students, but this in itself is not sufficient to be able to differentiate between possibly different categories of learning at work and the process of learning. Clearly there are learning opportunities at work and the researcher could identify how individuals benefited, but other benefits were not evident. The researcher became interested in what practitioners perceived as learning through work, and identified a whole system of learning in the workplace for nurses that has not been explored.

These questions were in essence the beginnings of this research along with the belief of the researcher that knowledge is generated through practice. The on-going development of the practice of nursing generates the professional knowledge and, in

effect, determines the curriculum for later continuing professional development. Nurses therefore, need to be able to learn through their work and also identify and value that learning.

Thus issues emerging from the researcher's own experience of facilitating student directed workbased learning generated the interest in the topic of learning through work. The location of learning in practice and the development and changing context of the NHS in Scotland also raised questions about the feasibility and viability of future curriculum developments. The emphasis on post registration education and practice, continuing professional development, the national culture of economic enterprise and the development of life long learning strategies provided additional factors to be explored and considered in the development of this research study.

What the researcher wants to find out about is if there exists an internal NHS learning system, its structure and processes and thereby confirm whether or not nurses learn through their work on an on-going basis. If nurses do learn through their work then the researcher wanted to investigate if the learning could be identified, categorised and accredited through higher education.

This thesis, therefore, investigates the system of learning at work with qualified nurses and their managers and explores the potential for the development of curriculum. Recent, relevant literature and research reports are critically reviewed in Chapter Two. Chapter Three sets out the aim of the research study and the main

research questions, the qualitative approach and case study methodology. The bounded system of the case study of learning through work within one NHS Trust is described in Chapter Four. Chapter Five presents the research findings and analysis of the findings in relation to the main research questions and the recommendations arising from this are then brought together in the conclusion in Chapter Six.

CHAPTER TWO

CRITICAL INSIGHTS FROM THE LITERATURE

The statutory requirements for nurses have emerged alongside the concept of the learning society and life long learning, as a focus for higher education and industry within the culture of economic enterprise (The Scottish Office 1997, The Scottish Office 1998). Students, who now gain their degrees at the point of qualification, or who later return to study for a degree, are expected to have developed graduate skills alongside life long learning skills. Arguably, if students gained such skills in the past, it was as a result of the overt learning process within higher education, even if the learning outcomes were not clearly articulated in the curriculum. Skill gain and developing competence, may still be a result of the learning process even when learning outcomes are clearly articulated. Articulating and sustaining life long learning skills is now a key feature of the current government agenda particularly in relation to employment and learning (The Scottish Office 1998, Scottish Credit and Qualifications Framework 1999, Scottish Partnership 1999, QAA 2001a).

The National Committee of Enquiry into Higher Education recommended that key skills should be part of all higher education programmes and that the skills for employment and programme specifications should be clearly defined and set out for students and employers (NCHE 1997a). Higher Education institutions must, therefore, articulate the requirement of the professional statutory bodies and the higher education funding providers in terms of the standard, kind and content of programmes (Atkins et al 1993, Barnett 1997). The introduction of standards for

professional programmes through a national benchmarking exercise will contribute to the future development of nurse education (QAA 2001b).

However the nature and purpose of curriculum and the philosophical and theoretical constructs incorporated within its design, may or may not facilitate learning concurrent with on-going productive work and the development of life long learning skills (Drew 1998, Whitston 1998). Other issues such as the perpetual perceived divide between knowledge and skills in relation to health professionals' education and subsequent competence is possibly artificial and potentially misrepresents the learning process (Castle et al 1998, Wilson and Pirie 1999).

It is important to establish the concept of learning through work as a legitimate and accredited continuing professional education pathway for qualified nurses as nursing is a practice based profession. The need to gain and develop knowledge and to maintain professional competence as a clinical practitioner are paramount to the well being and safety of the public and the continuing professional registration of the practitioner (UKCC 1994, UKCC 2001a).

However, the fundamental premise of the Opportunity Scotland paper is that Scotland will be able to compete in a global market therefore learning opportunities for the workforce will be created through the Scottish University for Industry (The Scottish Office 1998). Awareness, access, participation, progression and quality are themes of the life long learning agenda. The ten point action plan (see Appendix I) aims to ensure that everyone will have access to learning by the year 2002 and that

there will be a credit and qualifications framework (The Scottish Office 1998). This drive to create the learning society throughout Scotland in the latter part of the twentieth century has also affected the learning ethos and provision for all staff working within the National Health Service in Scotland (Scottish Executive 1999).

The Scottish Executive Department of Health is currently developing the Education, Training and Lifelong Learning Strategy for the National Health Service in Scotland and the strategy is expected to build upon current plans for working in the NHS in Scotland (Scottish Executive 1999, Scottish Executive 2000a). The 'Learning Together' strategy will build upon previous plans for working in the NHS in Scotland (TSODOH 1998a, TSODOH 1998b).

The proposals set out in the document are far reaching and challenging for the whole of the NHS in Scotland. It attempts to bring together a number of different policy initiatives and clearly sets out the direction for the organisation as a whole for the foreseeable future. This will be crucial to the successful implementation of the NHS Scotland 'A plan for action, a plan for change', which also states the importance of learning and introduces individual learning accounts for employees (Scottish Executive 2000b).

Partnerships between health care professionals, their employers and higher education providers should create opportunities to develop learning initiatives at work and enable nurses to further their knowledge and skills through defined education pathways and learning networks that are work based (NBS 1999, QAA 2001a,

SHEFC & SACCA 2001). A defined education pathway usually describes the route or direction of an individual's studies which leads to a pre-determined outcome such as a specialist nursing qualification or short clinical update programme to maintain competence.

However a learning network is described by Poell et al (1998) as being integral to the learning system within an organisation, that includes the interactions between the contextual structure, the setting, actors, processes and events. The process of interaction, seen as diverse and leading to dynamic learning, will be influenced by the organisational ethos of learning, the potential for enterprise and the motivation of the participants, which in turn will shape and determine the learning content and structures (Edwards 1998, Keeling et al 1998, Poell et al 1998, Walker et al 1998).

Previous work-based learning modules completed by motivated, self-funded, post registration students as part of a degree completion programme have been considered valuable by the participants and their employers (Walker et al 1998). Adults returning to study as mature students can feel threatened by the experience (Richardson 1994) and could benefit from a carefully constructed programme of study or guided learning (Billett 2000). Therefore the creation of a learning environment in which the learner constructs and directs their studies and selects the curriculum content can increase motivation to learn and achieve personal and professional learning goals through customised study programmes (Doncaster 2000, Evans 1985, Garrison 1997, NCWBL 1997a, NCWBL 1997b). Learning network theory (Van der Krogt 1995, cited by Poell et al 1998) provides a framework for

categorising work-based learning projects within stake holder's learning systems and can be used to organise and develop work-based learning (Poell et al 1998, Walker et al 1998).

Garrison (1997) suggests a collaborative approach to the construction of a work-based learning experience to encourage cognitive responsibility. This approach is used through a self-directed learning model to facilitate integration of contextual and motivational aspects of the learning process (Garrison 1997). However this can be challenging for both higher education providers, employers (Billett 2000, Davies P 1999), and health care professionals as employees (Wilson and Pirie 1999).

A qualitative research study by Wilson and Pirie (1999) investigated the development of professional competence. It was conducted over a period of one year in ten sites and focused on the perceptions of health care professionals of the workplace as a learning organisation. Their methodology included observation and interview [72], from a random sample of staff from the ten sites. They concluded that continuing professional development should be systematic and structured. Therefore there is a need to investigate the learning at work of nurses, to consider possible different approaches to learning and organisational features.

Curriculum Frameworks

Grundy's ideology of curriculum as a social construction is perhaps appropriate in this context, in order that the construction of curriculum frameworks will be considered appropriate to the context of learning at work, and to facilitate the

development of self-directed learning and learning competence (Davies P 1999, Grundy 1987, Jarvis et al 1998, Garrison 1997 and Poell et al 1998).

It is argued by some authors that curriculum frameworks are needed to facilitate work-based learning, to take forward curriculum development in this field of study and to safeguard against the casual unstructured approach (Poell et al 1998) and inappropriate, traditionally rigid, educational frameworks (Freeland 1999, Whitston 1998). Pirie et al (1998), in their evaluation of multidisciplinary education in health care, and Wilson and Pirie's (1999) study of developing professional competence through work-based learning and Clarke and James's (1998) examination of flexibility in post registration nurse education courses all provide evidence from research to support this.

The construction and development of a flexible academic framework (Clarke & James 1998) and a system for accrediting work-based learning as part of life long learning for qualified nurses should also be of value to the different stakeholders (UKCC 1994, NBS 1999, QAA 2001a, SHEFC & SACCA 2001). Learners and employers have previously indicated that flexible study routes allow training and education to occur alongside work (Davies P 1999, NBS 1999, TSODOH 1998a, TSODOH 1998b). The professional regulatory body has identified recognition of learning and academic credit for nurses as required for all CPD that leads to qualification (UKCC 1994). A collaborative approach to the development of relevant curricula for professional health care employees that fits today's working patterns, meets the needs and expectations of the adult learner and employer and

develops a culture of life long learning through active learning (SCQF 1999, Whitston 1998), can be successful (NBS 1998). This is provided that policy makers are clear about the advantages of promoting post registration education (NBS 1999, Pirie et al 1998).

It is also important to recognise that social, historical, economic, political and cultural perspectives influence perceptions about education and work and they shape the context of workplace learning (Davies P 1999, Grundy 1987). Davies' description of learning within the context of work is

> *'the subjective construction of meaning derived from experience and reflection'* (Davies P 1999, page 8).

Another useful definition is provided by Mumford who states that

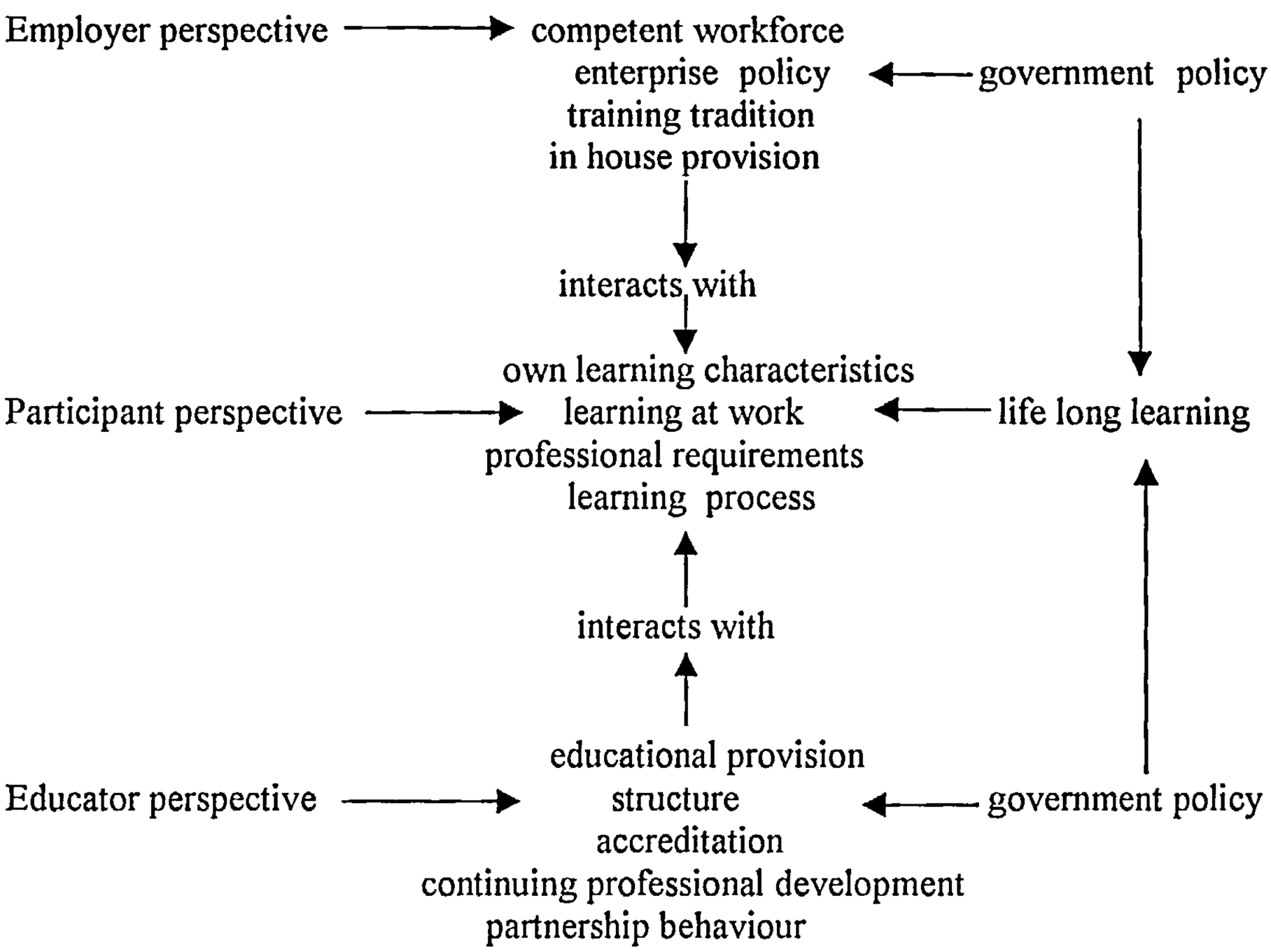
> *"learning has happened when people can demonstrate that they know something that they didn't know before and/or when they can do something they couldn't do before (skill)"* (Mumford 2000, page 2 of 8).

Learning has also been described as an essential core competence of an employee, fundamentally an individual activity (Jarvis et al 1998). The competence is needed to achieve flexibility in employment, changes to work practices, and within the NHS the need to maintain and develop new skills. However it is claimed by Coffield that the perceived shift of responsibility from the government to the individual to remain employable may present barriers to some people who cannot afford to pursue learning and opportunities to others who can afford to pay for learning needed for

their employment (Coffield 1999). Also, consumer and provider emphasis on the accreditation of learning as a product that is used as market commodity has been criticised by Gibbs (2001) as devaluing the worth of learning and education in general, by placing greater value on the end product rather than the education process. This supports Coffield's argument that life long learning is a form of social control and that what is needed is a new emphasis on a social theory of learning (Coffield 1999).

Learning as a central core competence may be highly desirable for nurses and employers, however there is the potential for economic, social and cultural barriers. It is necessary therefore to examine in some depth the key features of learning at work, within the social climate of life long learning as it currently exists, in order to consider the learning within the nursing profession in the NHS in Scotland. Exploring the context of learning at work and identifying the influencing factors, facilitates the emergence of the conceptual framework for learning at work for individuals and the broader collective (see Figure 1).

Figure 1: The emerging conceptual framework from the literature for learning at work for participants and contributors



Life Long Learning (LLL)

The purpose of considering the principles and definitions of LLL is to identify the similarities and differences between the concepts of LLL and work-based learning (WBL), to differentiate between them and to formulate and focus the research questions. Different definitions and meanings can be provided for the term life long learning (LLL), dependent upon the stance of the person providing the definition [contributor or participant] and the context within which they perceive learning will occur. Indeed Woodrow (1999), describes the current language as,

and concludes that there is no agreement about what is meant by lifelong learning. She has listed the different interpretations extracted from her review of definitions of lifelong learning, which demonstrates the diversity of approaches. The polarity of the emerging arguments about the rhetoric of life long learning is demonstrated in Appendix II. This shows that there are various definitions adopted by different participants, and contributors that reflect their beliefs about learning, the context of learning and preferred approach to learning (Alheit 1998, Council of Europe 1998, Department for Education and Science Policy Finland 1998, Levy 1998, West 1998 all cited in Woodrow 1999). Each aspect potentially shapes the construction of the curriculum. These influences could be classified as internal and external curriculum factors.

In the United Kingdom the term life long learning generally refers to learning for all, whether in employment or not, as a continual process to enable people to attain the best possible quality of life within the context of our society (The Scottish Office 1999). Whereas in the USA the 'Learning a Living' system is more focused on the development of skills at school that an individual can later foster through work based learning (SCANS 2000 1997a). In the UK the introduction of the national learning grid for schools and colleges (The Scottish Office 1998), may lead to a similar development (Coughlan 1999). However, it is probably useful to note that the explanation about the principles of LLL and 'Learning a Living', are generally derived from politically driven agendas, government or state schemes or the higher education providers and therefore may be categorised as either a capital investment

in society [leading to increased accreditation], or to maintain the status quo, or potentially as a means of social control (Coffield 1999, Gibbs 2001, Woodrow 1999). All can be classified as external influencing factors on the curriculum.

The core principles of LLL were set out in the report of the National Advisory Group for continuing education and life long learning in 1997 (Fryer 1997). The principles were designed to allow the strategy for the learning society to take shape and to allow a system for the future to develop. The eight core principles of life long learning are: coherence in the form of government strategy, *equity* for all, *people before structures* as the focus of policy and practice, *variety and diversity of learning* for life and life enhancing, *life long learning should engage the whole of government*, quality *and flexibility* as the central aim as well as *effective partnerships*, with *shared responsibility* for life long learning (Fryer 1997) (see Appendix III). [author's italics]

Consideration of these principles leads to questions about the relationship between LLL and WBL.

In relation to the nursing profession, the United Kingdom Central Council for Nursing, Midwifery and Health Visiting (UKCC) is charged by statute with protection of the public by promoting high standards of professional practice through registration, post registration education and continuing professional development (CPD). Practitioners are required by the UKCC Code of Professional Conduct to maintain and improve their professional knowledge and competence (UKCC 1992a). Additional guidance is also available to nurses through advisory publications of the

council, such as: 'The scope of professional practice' (UKCC 1992b), the 'Guidelines for professional practice' (UKCC 1996), 'Guidelines for records and record keeping' (UKCC 1998), 'Practitioner -client relationships and the prevention of abuse' (UKCC 1999) and the 'Guidelines for the administration of medicines' (UKCC 2000a). The UKCC supports life long learning for all practitioners and encourages an

> *"enquiring approach to the practice of nursing.....as well as to the issues which impact on that practice"* (UKCC 2001b, page 2).

This is to be achieved through CPD and the renewal of registration every three years. The UKCC identifies a supportive framework for LLL that consists of preceptors (experienced practitioners)who support newly qualified staff and clinical supervisors (skilled supervisors) who will support experienced staff. However variation in the quality of perceptorship programmes was found throughout Scotland in a research study about the support available to newly qualified staff (Starr 1999). This study recommended that further investigation was needed into the preparation of preceptors and the possible benefits from working with higher education.

The UKCC also state that clinical supervision should be an integral part of every nurse's career and life long learning, helping individuals to meet Council's standards for post registration education and practice (PREP) (UKCC 2001a). Clinical supervision aims to provide opportunities for practitioners to reflect on practice, to encourage problem solving, to increase understanding of issues affecting the profession and ultimately improve standards of patient care (Butterworth et al 1997, Lowry 1998). Therefore, the conceptual framework and the principles of LLL are relevant to the UKCC, particularly the quality of clinical supervision.

Work-based learning

The process of learning at work may provide individuals with the opportunity to develop LLL skills, therefore it may be important to examine whether or not the principles of LLL can be tested against the work based learning process.

Cryer (1998) describes skill in a general fashion

> *"as an ability to apply knowledge and understanding effectively and consistently"* (Cryer 1998, page 208).

He developed through a trial programme a framework for a transferable skill set for MPhil/PhD students. This was based on four categories of skill identified by the Association of Graduate Recruiters: *specialist, self-reliant, team, generalist* (AGR 1995). These categories of skills may also be relevant to WBL and the enhancement of work through learning.

There are numerous definitions of work based learning (WBL) from different authors and higher education institutions (Doncaster 2000, NCWBL 1997a. NCWBL 1997b, Portwood and Costley 2000, Queen Margaret University College 2000, Queen's University of Belfast 1999, SHEFC & SACCA 2001, The University of Leeds 1996, Walker et al 1998, WECO 1999). Perhaps the most useful is that from the recently published report of the project to promote the use of SCOTCAT(Scottish Credit Accumulation and Transfer Scheme), that describes work-based learning as,

> *"experience in a workplace context that leads to the achievement of assessed learning outcomes. This can be retrospective and treated as AP(E)L* [accreditation of prior experiential learning]; *or prospective, planned in line*

and running in parallel with formal on-campus learning in a programme of study" (SHEFC & SACCA 2001, page 16).

The 'learning workplace', where all employees learn and contribute to the business of the organisation is said to be difficult to achieve (Cameron-Jones & O'Hara 1997). Nevertheless, there are many professions where work-based learning occurs, such as nursing, police, teaching and medicine. Educational definitions emphasise making learning at work explicit (Portwood and Costley 2000), whereas employers tend to define it in terms of human resource strategies, such as investors in people, or continuing professional development initiatives aimed at the development of the organisation (TSO 1998, TSODOH 1998b, NBS 1999). In each case, it could be argued that the purpose and recognition of the value of WBL to the organisation and the individual are set out using the overt policy and strategy of the organisation, rather than the individual's learning needs.

Employer led education developments, traditionally a top-down approach, have resulted in structured in-house short courses for nurses which are designed to ensure clinical competence. This approach can be superficial and may not result in effective learning for staff (Castle et al 1998, Eraut 1994). In the NHS there is evidence that nurses opt for formal higher education CPD themselves, not because their employer has encouraged them (Dowswell et al 1998). Traditional employer training has been located by Keeling et al (1998) at the formal end of the work-based learning continuum (see Figure 2). Informal WBL, such as observation, participation, the development of clinical skills is located at the other end of the

continuum, with semi-structured WBL taking a mid-line place. However informal learning has not traditionally been associated with formal higher education (Bamford and Schuller 2000).

Figure 2: The WBL Continuum

THE CONTINUUM OF WORK BASED LEARNING ⟷		
FORMAL	**SEMI-STRUCTURED**	**INFORMAL**
• NVQS	• INDUCTION SESSIONS	• OBSERVATION, PARTICIPATION
• PROFESSIONAL QUALIFICATIONS	• INTERNAL WORKSHOPS	• FEEDBACK FROM LINE MANAGER
• ACCREDITATION	• COACHING	• FEEDBACK FROM PEERS

(Keeling et al 1998, page 285)

Other authors have attempted to describe the different features of WBL, such as the SCANS 2000 project (SCANS 2000 1997a, SCANS 2000 1997b, SCANS 2000 1997c) and the Walker et al (1998) evaluative study which identified the key characteristics of WBL. These characteristics are summarised as: collaboration between learner and employer, embedded in work related activities, allows student to take responsibility for own learning, and acknowledges the learning process (Walker et al 1998) (see Appendix IV for description of features and relevance to nursing). Whereas the Scans 2000 project (SCANS 2000 1997a, SCANS 2000 1997b) identified five workplace competencies, three contributing foundation skills and the type of course where competencies are located (see Appendix V). There are similarities between the SCANS project competencies and the core skills required of

the graduate from the UK higher education system, recommended by the Dearing and Garrick reports (NCHE 1997a, NCHE 1997b). More recently the University of Cambridge project, about effective work-related learning, explored individual and organisational factors affecting work related learning in a number of organisations needing different approaches to learning (Caley & Hendry 2000).

However, it has been argued that traditional divisions between life, learning and labour need to be overcome if life long learning is to be the key to personal success in terms of lifetime work and employment and economic growth (Davies D 1999). Significantly he states that,

> *"The acquisition of personal competency and skills makes the individual liable for his/her own past, present and future(s)"*

and that

> *"Security of employment is best gained it is argued, when an individual is equipped with a knowledge base which allows one to learn how to learn"*

(Davies D 1999, page 3 of 19).

These work place competencies can be related to the main characteristics of work based learning that were described earlier (Walker et al 1998, Jarvis et al 1998). However the focus is again on the role and perceived responsibilities of the individual, as opposed to the positive contribution that can be made by the employer to promote learning in the workplace (Coffield 1999). The following section considers the current developments in learning in the NHS in Scotland.

The NHS in Scotland

The NHS executive is currently working with a number of strategic groups from a wide range of disciplines within the NHS to develop the implementation of the 'Learning Together' strategy (Scottish Executive 1999). The key aims of the strategy, set out in chapter two are;

- *"- to provide a framework of broad strategic principles which the Scottish executive believes should underpin education, training and life long learning in the NHS in Scotland;*
- *challenges individuals to take responsibility for their own learning;*
- *sets out the actions which NHS employers are expected to take to support their staff*
- *highlights a number of centrally funded initiatives by the Management Executive of the NHS in Scotland to support innovative education, training and lifelong learning "* (Scottish Executive 1999, page 11)

The document sets out what NHS staff can expect from employers, in return for accepting responsibility for their own learning (see Figure 3), and also what the employers will provide through the building of a learning organisation (see also Figure 4).

Figure 3: The aims of the learning together strategy for NHS staff in Scotland

"Staff of the NHS in Scotland can expect;
1. Support from their employer in helping them to keep up-to-date and acquire new skills, including access to appropriate learning resources and to induction training
2. The opportunity to sit down with their managers/senior professional colleagues at regular intervals, to discuss their development needs and identify learning opportunities
3. Help in preparing personal development plans and/or learning portfolios which support their career development
4. Local decisions about investment in education and training activities, including access to funding, based on a reasoned assessment of learning needs and the service development objectives of the NHS
5. To take part in team based learning as well as self development activities
6. To have their skills and competencies recognised as part of the continuous process of life long learning"

Source (Scottish Executive, 1999 page 13)

Figure 4 sets out the ideal for individual employees within the NHS in Scotland from porters to medical consultants.

Figure 4: The key factors the NHS as an employer is expected to implement

"by building a learning organisation NHS employers will:
1. Be better able to recruit and retain a highly motivated workforce with the skills, knowledge and attitudes to respond flexibly to changing service needs;
2. Be supporting staff who are committed to their own personal and professional development and who recognise the potential benefit of working and learning in teams
3. Ensure new service improvements are supported by a coherent plan which covers the education and training and workforce implications
4. Reduce the risks associated with service failures
5. Be recognised as a good employer that promotes quality through investing in its people"

Source (Scottish Executive 1999, page 14).

How it will be achieved through employers is shown in Figure 5 which sets out the key words in the 'Learning Together' document.

Figure 5: Learning Together - Key words

Building a learning organisation; investment, integrated planning, a partnership for local innovation, improving workforce planning, keeping pace with the knowledge age, supporting a learning organisation, external accreditation; developing a responsive framework for learning in the NHS in Scotland. **Improving access and opportunity**; learning for all, recognising competence, national occupational standards, widening access to learning, partnerships with educational bodies and induction. **Life long learning**; flexibility, accessibility and creative learning, personal development plans & portfolios, CPD. **Career development**; fulfilling potential and encouraging flexibility, promoting opportunities for staff, promoting career pathways for professionals, linking staff development- career progression and rewards.

The Strategic Implementation Group established by the management executive has a key role in developing the strategy throughout 2000, implementing the plans in 2001 and finally monitoring and assessing the effectiveness of Learning Together by the end of 2001. The remainder of the report highlights the key areas of work and specifically addresses some of the factors already identified by the author from previous literature.

Figures Three, Four and Five demonstrate that the LLL strategy of the NHS in Scotland is based on principles that attempt to set a standard for the health service. The strategy appears to be founded on the belief that the individual is a resource of the organisation that can be invested in (Coffield 1999, Woodrow 1999). However individuals are expected to 'take responsibility for their own learning', an approach that combined with an emphasis on human capitol can result in inequalities (Woodrow 1999). It could potentially be argued that the overall emphasis of the government document is firstly, on capital investment and secondly, the principles of LLL. Also that the terminology used reflects the disposition towards learning that is

centred on training, competence and the maintenance of standards, rather than a strategy that builds on a theory of learning and the development and redevelopment of knowledge (Coffield 1999, Eraut 1994, Grundy 1987).

As part of the building of the learning organisation it is proposed that a Scottish Nursing, Midwifery Education Council (SNMEC) will be established late 2001 to support the learning for the profession in Scotland (Scottish Executive 2000a). This is also part of ongoing change to existing statutory bodies. The intention is that the new body will undertake some of the work currently undertaken by the National Board for Nursing, Midwifery and Health Visiting. Consultation papers have clearly indicated that the key roles of the new SNMEC will be:

- Promoting the investment in the post registration education and training of nurses
- Accreditation of post registration programmes

These key functions will promote learning as part of the learning together strategy and through multi-disciplinary approaches. The SNMEC will, therefore, be one of a number of related councils in Scotland that will be required to liaise with all NHS Trusts and education providers to support and strengthen opportunities for learning and to establish a system of professional accreditation that will ensure competence and fitness for purpose' (Scottish Executive 2000a). This attempt to shift the focus and culture of learning to the organisation may be successful, although there are a

number of potential issues related to qualifications and the need to accredit learning (Davies P 1999).

The Learning Organisation

The characteristics of the learning organisation have been described by a number of different authors (Gabriel et al 2000, Jarvis et al 1998, Morrison 1998, Paton and McCalmon 2000, Scottish Executive 1999). The concept has supporters and critics. Morrison (1998) cites both Senge and Otala 's descriptions of a learning organisation as being

> *"one which is continually expanding its horizons and capabilities through the development of its employees, both individually and collectively, in order to achieve individual and organisational goals" (Morrison 1998, page 164).*

Growth and progress within an organisation is said to be dependent upon the knowledge within the organisation and how that is used to develop and change the organisation's output through employees, structures and products (Morrison 1998, SE 1999, Paton and McCalmon 2000). Learning is therefore a vehicle by which the strategic goals of an organisation can be met (Findlay et al 2000).

The Scottish Executive in the learning together strategy state that

> *"A learning organisation promotes and supports learning by all its staff, as part of a continuous process of development. It encourages self-development at all levels of the organisation, giving staff the opportunity to develop their potential and have their achievements recognised. It places staff at the heart*

of its organisational development strategy and plans investment in its people"

(Scottish Executive 1999, page 17).

This again appears to place emphasis on the staff of the organisation more than the strategic process of learning within the organisation and therefore disregards the organisation's ability to change and develop (Coffield 1999). It also seems to ignore the purpose of the organisation and the learning context .

Investment in the organisation's employees is claimed to be advantageous in terms of ensuring that the organisation has a 'competitive advantage' and enhanced effectiveness (Paton and McCalmon 2000), possibly through increased capacity or potential to develop (Watkins & Marsick 1993 cited in Jarvis et al 1998). However efficiency and investment in learning do not always go hand in hand (Gabriel et al 2000), even though the intrinsic value to individuals, through CPD, and extrinsic value to employers, through growth and increased income, can be identified (Paton & McCalmon 2000). The need to ensure that patient services are maintained and staff numbers honed to provide an efficient service may not result in the investment needed by the NHS in Scotland to ensure that the Learning Together strategy works. This is because the organisation will always have a restricted budget and will, therefore, need to constrain the level of investment in the social infrastructure and framework for learning at work.

For example, during 2000/2001, a large sum of money was made available by the SE to take forward the learning together strategy. Members of the Strategic

Implementation Group and sub project development groups, were encouraged to bid for funds for various projects. An alternative strategy might have been to set aside the money to be given to every employee as part of a learning fund. This would have amounted to £50 per employee and would, perhaps, have acted as a reward or incentive for some employees. Reward systems are an integral part of the philosophy of some organisations and the 'inventiveness of learning ' is described by Pedlar et al as one of the characteristics of a learning company (cited in Jarvis et al 1998).

Perhaps the ethos of the learning organisation encapsulated in the following key features will be sufficient to generate change in the traditional working practices of the NHS: continuous improvement in the organisation, collective participation, flexibility of the workforce, professional autonomy and expertise, ownership of the organisation, learning within the organisation and problem-solving (Morrison 1998).

Such change requires alteration to employees' behaviour, as a result of knowledge gained and learning, that will result in organisational goals being met. Senge (1990) advocates five disciplines for the learning organisation. These are firstly, *systems thinking* - the whole and the relationship of each aspect to the whole, secondly *personal mastery* achieved through support and development and thirdly *the mental models* - our beliefs and perception of work and life in general. Also a *shared vision* - to which the stakeholders within the organisation are committed from the grass roots up and finally *team learning* – that maximises the ability and potential within the organisation.

These disciplines together should result in *'metanoia'*, a shift in mind (Senge 1990).

According to Senge learning organisations need to be able to:

- *"Transcend internal politics and internecine conflicts*
- *Create time for learning*
- *Balance delegation, control and co-ordination*
- *Develop the facility for personal mastery to be practised in the workplace*
- *Ensure that people can learn from experience by living with the consequences of their actions"* (Senge 1990 page 272)

Again this is a formula and describes the type of organisation and its learning characteristics, rather than the nature of the learning within that organisation, how learning will be achieved, the changes in behaviour that are needed, the policy and procedure and knowing when you have arrived (Paton & McCalmon 2000). The emphasis appears to be on the individual as opposed to the collective. The approach taken by Senge and others to the learning organisation describes the ideals of managers and could be said to be a positive prescription for developing more effective working practices. Learning as personal development and empowerment is also portrayed as positive.

Positive learning is however influenced by the context of learning, the application of knowledge and how the transfer of knowledge to different contexts is facilitated (Eraut 1994). Custom and practice may result in non-learning or negative learning that is founded on the replication of existing practices with the assumption that it is

correct, or an unwillingness on the individuals part to recognise that they have a learning need (Jarvis et al 1998). The literature about the learning organisation does not significantly address the challenge presented by positive learning and the increased ability of individuals to challenge and potentially change the organisation, either individually or as a collective group within the organisation.

Employment contracts for individuals have also shifted in focus in recent years. Now there is greater emphasis on performance, which in turn ensures that the individual continues in employment based on on-going learning, thereby fostering employees' independence (Romaniuk and Snart 2000). The organisation of learning as a social construction within the organisation is therefore, perhaps of greater significance than the pluralistic approach to the learning organisation (Davies P 1999, Grundy 1987, Jarvis et al 1998). The strategic development needed through the human resource mechanisms will also need a clearly articulated learning strategy (Mumford 2000).

Organisational learning

The term 'organisational learning' is used to describe learning in an organisation and the process of learning throughout the organisation. The emphasis is on the collective learning process and the resultant change of behaviour or transformation within the organisation (Jarvis et al 1998).

Nutley and Davies (2001) explain the relationship between the learning organisation and organisational learning;

"organisational learning is collective learning. It builds upon past knowledge and experience and thus depends on organisational mechanisms for retaining and deploying knowledge. Organisations that deliberately seek to develop organisational learning are often referred to as learning organisations " (Nutley & Davies, 2001 page 36)

So the organisation of learning, the mechanisms by which learning is facilitated, and the type of learning within an organisation is clearly of importance. Some authors focus on organisational learning as the means to change the behaviour of the organisation (Swieringa &Wierdsma cited in Jarvis et al 1998) or indeed to achieve organisational competence (Drejer 2000).

Different approaches to learning within organisations have been developed. Some of these are developments from the concepts of the learning organisation, others are specifically designed conceptual models. Paton and McCalmon, and Morrison discuss the different models of organisational learning developed by Garvin (1993 cited in Paton and McCalmon 1998, Morrison 1998) and Miller (1996 cited in Morrison 1998) and Nonaka and Takeachi (1991 cited in Paton and McCalmon 1998). These models of organisational learning have more in common than differences when compared against each other (see Figure 6).

Figure 6: Models of organisational learning

Nonaka &Takeenchi - *Model for 5 requirements for knowledge creation*	**Garvin** - *5 component model*	**Miller** - *6 modes of learning*
Organisational intention - *strategic vision and direction*	Systematic problem solving - *building on scientific data through small groups to strategically plan*	Analytical - *deductive, systematic mode to meet the goals of the organisation*
Autonomy - *Individual action and shared team innovation*	Experimentation *seeking new knowledge through experimental design and outcome analysis*	Synthetic - *inductive, discovery, synergetic*
Fluctuation and creative chaos - *challenging preconceived ideas and ways of working by deliberate introduction of ideas and goals by managers*	Learning from previous experience – *through review and appraisal of outcomes*	Experimental - *exploration, testing of ideas*
Redundancy - *overlap of information/duplication spread of information through e.g. functional rotation or competing teams*	Learning from others- *outside the organisation, looking for best practice , benchmarking, making recommendations for change*	Interactive - *learning through adapting, through experiential learning*
Requisite variety - *the deliberate creation an environment for a skilled team to follow through a product*	Transferring knowledge - *shared knowledge through different ways of communicating throughout the organisation*	Structural - *Bureaucratic, change through the systems in place in the organisation, reliable*
		Institutional learning - *ideology, beliefs, vision*

Each of the models outlined emphasises the role of the individual within the organisation and also attempts to address the role of the organisation. Organisational learning would appear to be based on the same theoretical foundation as learning for individuals. For example, Nutley and Davies(2001, page 36) identify four kinds of learning within the NHS:

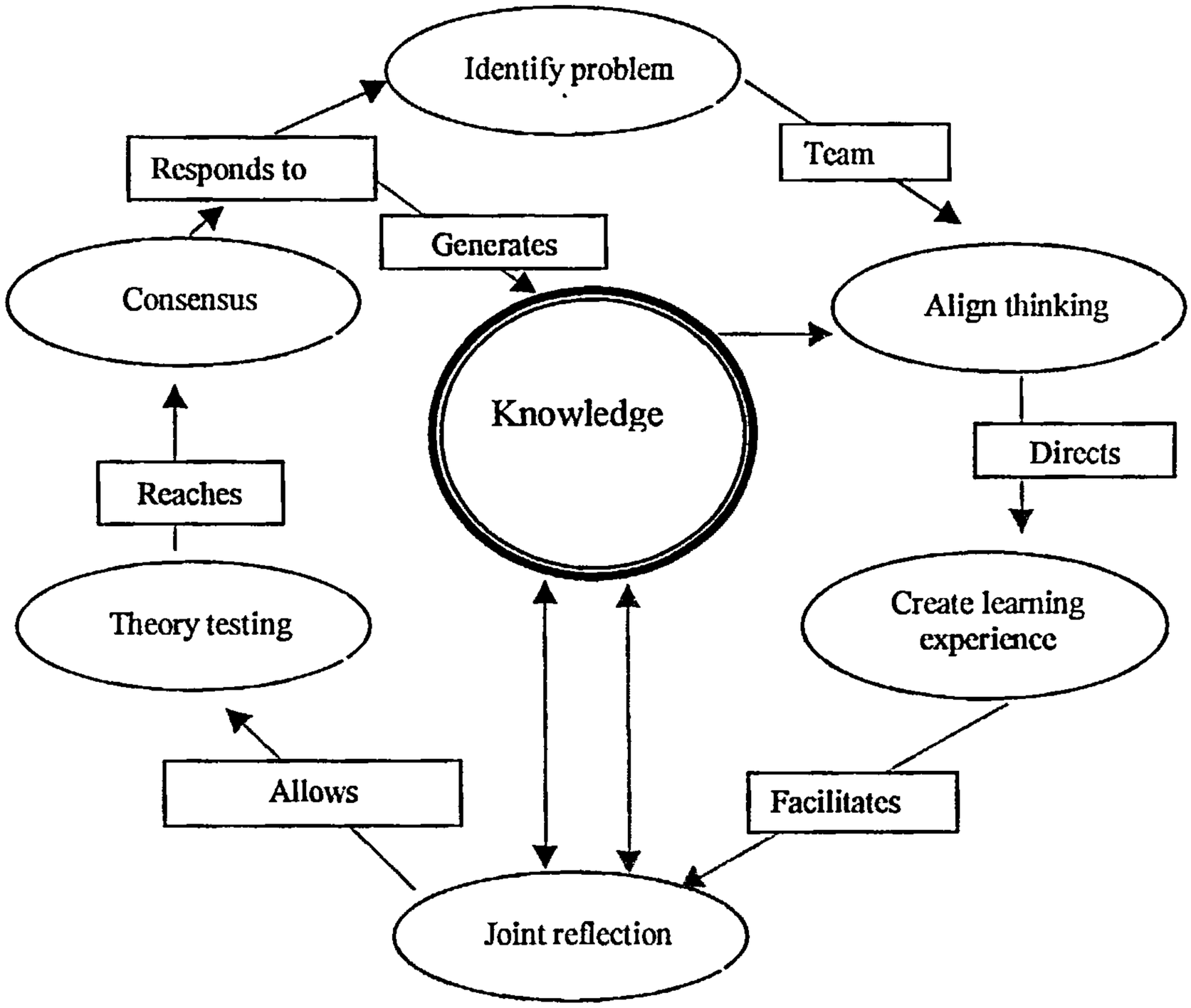
- *Learning about things - knowledge*
- *Learning to do things - skills, abilities and competence*
- *Learning to become ourselves- personal development*
- *Learning to achieve things together - collaborative inquiry.*

The four kinds of learning reflect the goals of LLL and the key skills for graduates and to some extent the SCANS project skills (NCHE 1997a, NCHE 1997b, SCANS 2000 1997a, SCANS 2000 1997b, SHEFC & SACCA 2001). More importantly they point towards generative or transformational learning as opposed to individual adaptive learning [single loop] or indeed double loop learning (Paton & McCalmon 2000).

Adaptive or instrumental learning helps individuals to cope with the everyday difficulties, without having to understand the cause and effect or the need to integrate theory with practice, thus learning becomes routine. The routinisation of work may lead to greater organisational efficiency, however routinisation of learning tends to focus on psychomotor skill development rather than challenging and developing practice (Karakowsky and McBey 1999). Nutley and Davies give the example of clinical audit activities as learning routine (Nutley and Davies 2001). One of the dangers of this approach is the emphasis on learning from mistakes and the negative reinforcement on established routine (Jarvis et al 1998, Karakowsky and McBey 1999, Nutley and Davies 2001).

Multiple feedback loops of learning are therefore needed for developing continuous organisational learning. Such organisational learning can potentially be achieved through double loop learning that happens through collective experience and joint testing which leads to appropriate action through consensus (see Figure 7).

Figure 7: Collective experiential learning within an organisation



Note: The blue line represents single loop and the red line double loop learning.

Major decisions can then be reached and followed through as participants learn together and are committed to continuous learning. This is because the results of experience are shared and are seen as being different from expectations and the learning is facilitated by the use of a shared language. Meaningful conversation then ensures that assumptions are addressed and therefore a change in behaviour occurs.

The development of evidence based practice for a health practitioner is an appropriate example of double loop learning (Nutley and Davies 2001, West et al

2001). However, achieving anticipatory learning that is participatory, and takes a long-term view, as opposed to a functionally efficient training package is challenging for organisations and managers (Caley & Hendry 2000). Van der Heigden and Eden (cited in Paton &McCalmon 1998) describe alignment of thinking within the organisation as a collective experience, therefore managers or leaders within an organisation need to create experiences from which employees can learn. Here reference to Kolb's learning cycle for individuals can be integrated with Senge's ideas about mental models and a shared vision of the organisation (Kolb 1984, Senge 1990). The concept map at Figure 7 illustrates collective experiential learning that incorporates a double loop process within an organisation.

Clearly the co-ordination of learning activity is needed as uncoordinated ad hoc learning for individuals will not transform the organisation. Kolb's learning is one way of achieving change by generating opportunities to challenge the long-term assumptions of the organisation and create new ways of looking at the whole for individuals and groups within an organisation (Drejer 2000).

Organisational transformation will only be created through a holistic approach to organisation learning and productive learning will be achieved if learning is integrated at all levels of the organisation. An example of an organisation trying to achieve this is given by O'Hara et al (2001) in their descriptive account about the use and introduction of action learning sets within the North Western Health Board of Ireland in an attempt to change the culture of the organisation and introduce continuous development among all employees. In the project, undertaken by the

Health Board in conjunction with the University of Brighton Faculty of Business, managers at all levels of the organisation participated.

Productive learning appears to have been achieved through shared vision, team work, use of a common language and generating relatively quickly, what is described as collective or organisational memory (Findlay et al 2000, O'Hara et al 2001, Paton & McCalmon 1998). It was accepted that this approach did not suit all potential participants in the learning sets because of different learning styles and working patterns. Other barriers to learning may also exist, such as the use of unfamiliar language. The structure of learning sets is also advocated by Bond and Holland (1998) as a way of structuring and facilitating clinical supervision for nurses and for addressing workplace problems. Similarly in a major research study about shared learning and clinical teamwork, learning sets were incorporated as part of a multi-disciplinary approach to learning (Miller et al 1999).

It is formally acknowledged by these authors that the organisation can facilitate learning and achieve change and accepts that providing feedback as a basis for such change can make improvement. Therefore it is possible to use Kolb's learning cycle to show collective learning by acknowledging learning and the development of new knowledge and accepting that improvements can be made (Kolb 1984). Feedback to employees is also needed in order to change practice and to acknowledge the new knowledge within the organisation.

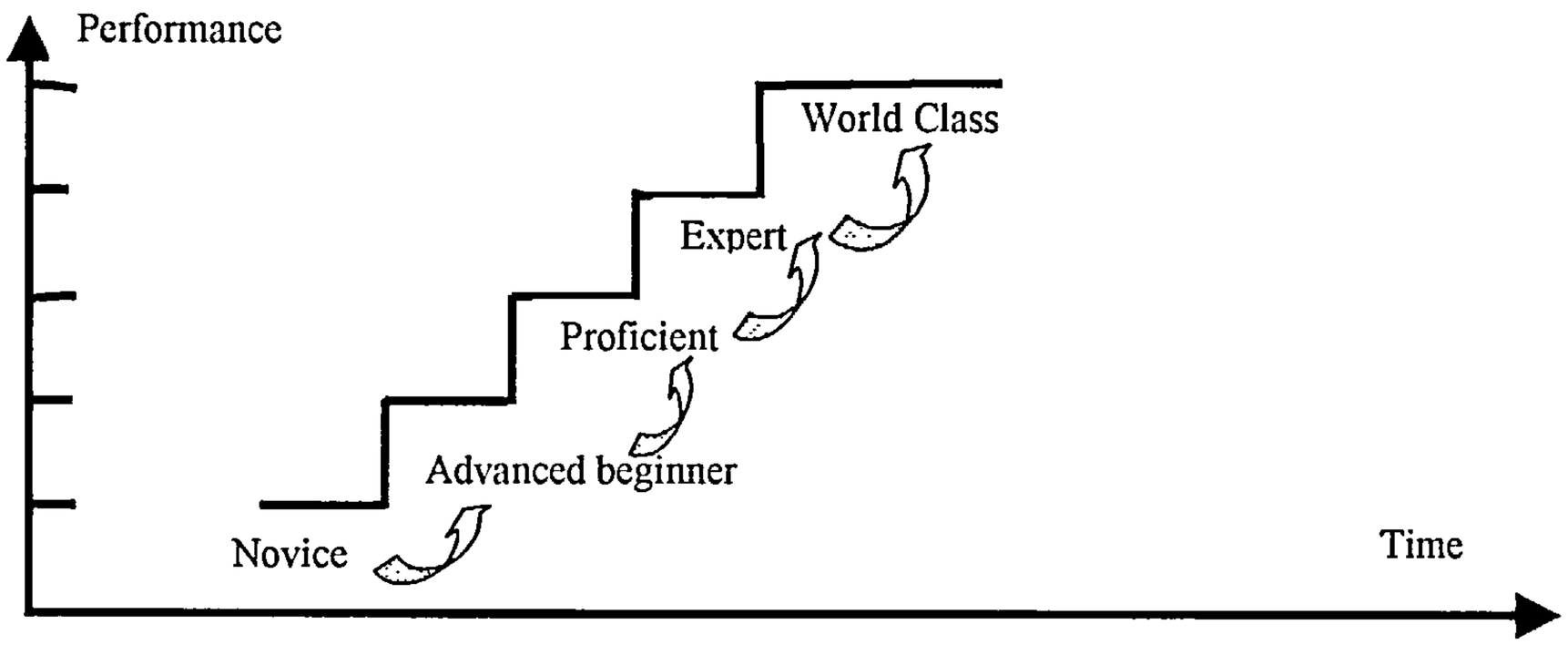
Therefore, if an organisation is to create effective learning that will result in change and progress, it is clear that the organisation must be able, as a collective group, to generate and build on its knowledge. Consequently, the integrated organisation will also need mechanisms to establish and retain organisational memory, such as policies, strategies, and models of documentation and information systems as opposed to relying on individual memory that is a risk in terms of only investing in individuals and the potential loss of knowledge.

Continuing Professional Development and Nurse Education

The safety of the public and the need for the professional registration of the practitioner through the maintenance of competence and professional development were identified earlier (UKCC 1994). Practitioners are employed to work in the clinical areas and cannot easily be released to undertake academic study outwith the work environment. Indeed some employers may not see formal, higher education as relevant to the education and training requirement of their staff and prefer internal organisational training programmes (Keeling et al 1998, Poell et al 1998). Perhaps this is in an attempt to ensure that employees are prepared to undertake the work of the organisation, rather than improving or enhancing the quality of professional practice (Eraut 1994). As such the employer acts as an extrinsic motivational factor that potentially encourages personal intrinsic motivation, but can also inhibit the growth of the practitioner through a lack of support for external education (Pratt et al 1999).

Competence development in an organisation is, however, dependent upon a number of different factors: technology, people, organisational structure and the organisation's culture. The integrated organisation will focus on the relationship between people, function and ideas. People are the crucial point of competence within an organisation, therefore frameworks for achieving organisational competence can be useful, such as the one illustrated in Figure 8, that was developed by Drejer from the original work of Dreyfus and Dreyfus (Drejer 2000, page 211).

Figure 8: A framework for organisational competence



(Drejer 2000, page 217)

A similar framework for achieving individual expertise was also developed for nurses (Benner 1984) and can be linked to the development of professional knowledge and competence throughout a practitioner's learning career (Eraut 1994).

The key to professional development and growth through prior learning assessment and self-directed planning is said to be dependent on a number of work competencies. Examples of these include: knowing oneself - *identity*, maintaining

skills needed to work and *working competently* to retain work, *confidence* possessed by successful workers, identifying and solving problems based on continuous learning over time, as indicated in Figure 8, and *adaptability* (Romaniuk & Snart 2000).

One way of achieving professional and personal growth is by undertaking a prior learning assessment (PLA) of the different learning contexts such as formal and informal and effectively extracting learning from experience. This is then presented as a portfolio of evidence of life long learning. For the nursing and midwifery professions the UKCC set out its standard for CPD in 1999 and incorporated this with the PREP standard in 2000 (UKCC 2001a). The PREP standard requires practitioners to:

- *"undertake at least five days or 35 hours of learning activity relevant to your practice during the three years prior to your renewal of registration*
- *maintain a personal professional profile(PPP) of your learning activity*
- *comply with any request from the UKCC to audit how you have met these requirements"*

(UKCC 2001a page 7).

The purpose is to maintain competence and ensure safe practice and this is recognised as a legitimate and on-going function of the profession (Eraut 1994). The profile of learning activity is seen as a collection of evidence for the purpose of providing evidence to the UKCC that CPD has been on going. However, a composite portfolio that demonstrates current competencies, development activity

and reflection on professional practice may be more appropriate (Eraut 1994, Jasper 1995, Mezirow 1998, Tsang 1998). The consultation document on 'Supporting learning for nurses.... in Scotland', from the Scottish Executive also emphasised that "fitness for purpose" was

"often best acquired through competency based learning in the workplace"

(Scottish Executive 2000a, page 5 of 10),

and therefore rigorous systems, to ensure that accreditation of post registration programmes with high quality assessment and standards were needed (Scottish Executive 2000a).

The features of continuing professional development within the profession include the employment and professional aspects and are integral to nurses' professional career and life long learning. However there does appear to be a mismatch between individual professional learning as part of a learning career and organisational learning (Eraut 1994) as well as individual and collective responsibilities (Coffield 1999).

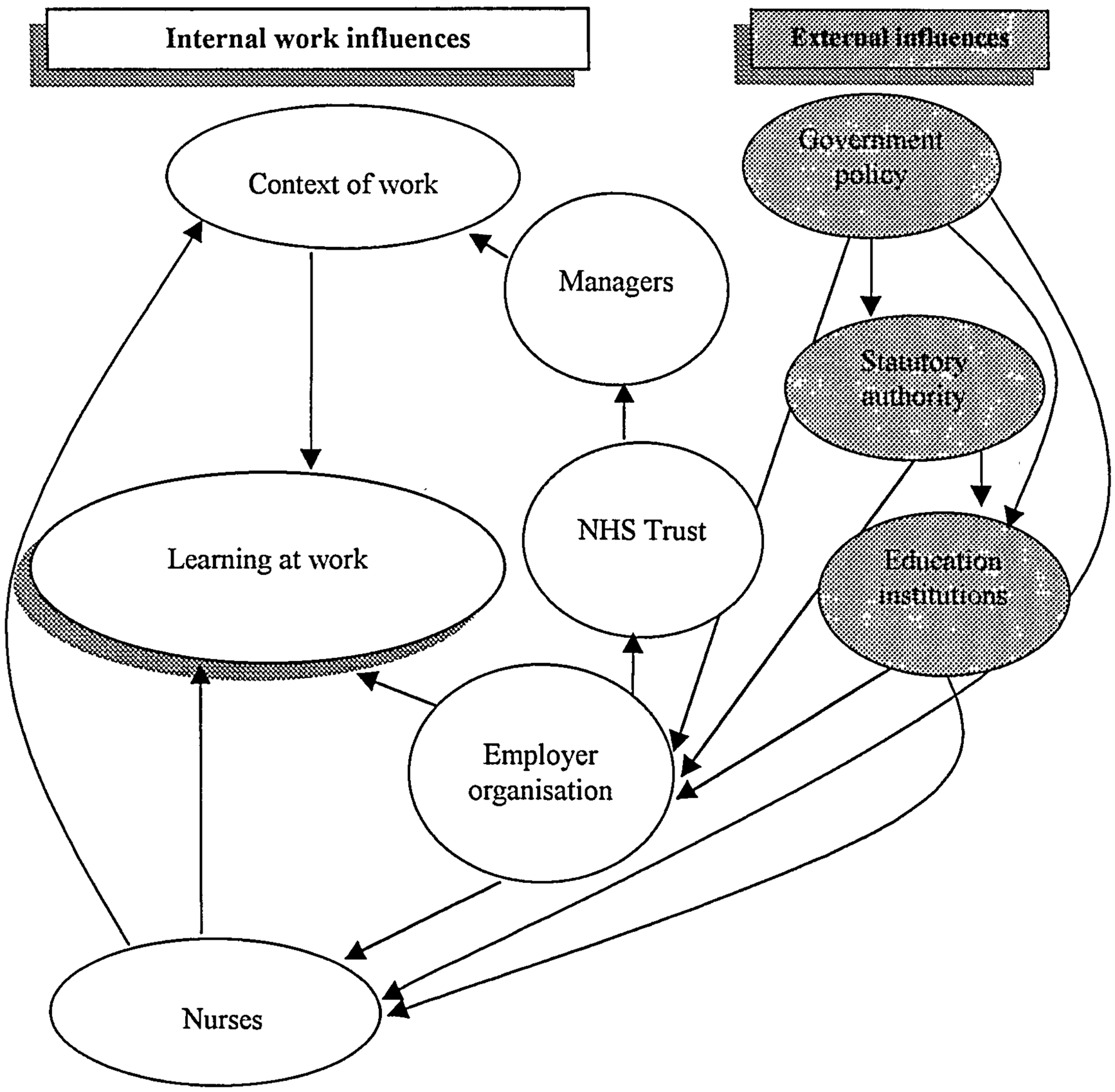
General barriers to learning in nursing, that appear to be global, do exist, such as employment demands, work schedules, anxiety, learning climate, support for learning and lack of job satisfaction (Al-Ma'aitah R and Momani M 1999). These are also components of a 'demand-control' model where the employee, who is in control, is able to make decisions and use their skills and knowledge effectively (Mikkelson et al 1999).

The Scottish Executive has set out the standard for staff governance and the Scottish Health Service Partnership Information Network was charged with the development of the guidelines for personal development planning and review. This includes the personal development plan for every member of staff within the organisation (Partnership Information Network 2001).

It is important to establish the concept of learning through work as a legitimate and accredited continuing professional education pathway for qualified nurses because nursing is a practice based profession. This is critical if education is to continue to offer appropriate programmes of preparation and CPD for nurses in the changing context of the NHS in Scotland (SEHD 2001a).

The recent and relevant context of learning through work that influenced this study began to emerge from this review of the relevant literature. Figure 9 illustrates this emerging context and shows the internal and external influencing factors.

Figure 9: The emerging context of learning through work



Issues

It is clear from the literature that different concepts, models, frameworks and approaches exist in relation to learning at work. With each there are different languages, definitions and descriptions. For example the concept of learning projects as a learning network model (Poell et al 1998) and the self directed learning model (Garrison 1998). The model of motivation and learning in the workplace

(Keeling et al 1998), the apprenticeship model (Wilson and Pirie 1999), the professional CPD model and concepts about professional competence (Castle et al 1998, Eraut 1994) and organisational learning models (Caley & Hendry 2000, O'Hara et al 2001). There may also be benefit in considering the notion that the driving force for LLL is the on-going development and adaptation of mental models that can be nurtured and supported in a LLL context (Barker et al 1998).

The different models appear to have a reductionist, individualist focus (Coffield 1999, Garrison 1998, Jasper 1995, Romaniuk & Snart 2000, Whitston 1998) or pluralist, organisational slant (Gibbs 2001, Keeling et al 1998, Poell et al 1998), and can be related to the all encompassing learning organisation and organisational learning (Nutley & Davies 2001). The study by Wilson and Pirie (1999) about developing competence, examined the apprenticeship model, which considered both the individual and the system in the context of health care, but not organisational competence as described by Drejer (2000), or as addressed in the Cambridge project (Caley & Hendry 2000). These particular conceptual frameworks appear to favour the behavioural competency training based approach, rather than the more holistic approach to the notion of learning that encompasses all domains of learning.

Therefore in terms of learning through work it is important to recognise that even although broad curriculum frameworks do exist and are provided by higher education institutions they may not facilitate LLL and organisational competence (Gorard et al 1998, Turner 1998, Walker et al 1998). For example, the Middlesex University has developed a set of work based studies modules that provide individuals with a

predetermined structure for their studies that reflect the academic award structure within higher education today (NCWBL 1997a, NCWBL 1997b). It is debatable whether or not these frameworks are in tune with the constructivist perspective and the development of self-learning competence (Jarvis et al 1998), and

"Curriculum rooted in knowledge of and knowledge about practice"

(Davies D 1999, page 6 of 19).

This reflects some of the views presented by Wilson and Pirie (1999). In addition individuals and organisations are increasingly advocating individual learning portfolios or plans (Tomkinson 1998). A system of learning and development in employment, based on learning using portfolio and academic credit for organisational learning, could be cost effective and potentially would help employees gain educational qualifications while working (Caley & Hendry 2000, Romaniuk &Snart 2000).

Whitston (1998) refers to the capability movement in relation to the construction of curriculum that facilitates active learning experiences and maintains that the key to curriculum design is the learning process that he sees as the key to the transferability of learning. He also proposes four guiding principles; a curriculum builds on student experience, curriculum develops through critical dialogue between the student and the teacher, teachers should enable the active learning process, assessment should include various modes such as project work and presentations. Coffield would add to this list the need to remove structural barriers and to develop a social theory of learning that requires a shift towards dialogue and debate through social participation (Coffield 1999).

This review of the literature has highlighted that in relation to the learning through work of nurses there is a need to determine what is meant and understood by work-based learning and to identify purpose, process and product in terms of:

a] identification of individuals' personal, professional and occupational learning needs

b] development of a curriculum framework that will facilitate work-based learning through a life long learning strategy for all employees in an organisation.

This is particularly important at a time of change within the NHS in Scotland and the emergence of further policy and strategy formation.

Some of these concepts and issues will be addressed and further explained in this study, through the formulation of questions to participants and contributors about learning at work for nurses. The chosen starting point was the mapping and categorisation of learning at work (Keeling et al 1998), followed by an attempt to identify the features and learning devices within a professional health care learning network (Poell et al 1998) and different kinds of learning (Nutley and Davies 2001).

CHAPTER THREE

INVESTIGATING LEARNING THROUGH WORK:

RESEARCH QUESTIONS AND APPROACH

Personal experience and awareness of the issues related to learning within the NHS for qualified nurses helped to identify some broad research questions. From there, critical insights and issues that emerged from a review of literature allowed a refining of the purpose and ideas about the overall research aims, directed the enquiry and resulted in the formation of specific research questions. The central question formed at the end of chapter two was *"what is meant and understood by work-based learning"* in relation to learning through work for nurses. Therefore, the overall purpose of the research study was to examine the current system of learning at work for nurses from their perspective.

Aims of the research

The general aims of the research, derived from the previous knowledge of the researcher and the concepts emerging from the literature were to:

- examine the key features of learning at work for nurses in the NHS in Scotland
- identify the purpose, process and product of learning at work
- classify the different learning at work activities of qualified nurses
- construct a curriculum framework for the classification of accredited learning programmes at work within the context of the NHS and higher education

The Main Research Questions

From the issues identified through the researcher's experience of qualified nurses workbased learning, awareness about the context of learning at work and from the literature, many questions and sub questions were generated (see Figure 10).

The main questions formed were:

- what are the key features of learning at work?
- what is the purpose of learning at work?
- what is the process of learning at work?

The debate about WBL, LLL and CPD together with professional and NHS developments and issues about organisational learning generated the questions:

- do the nurses and their employers identify different learning experiences at work?
- what are the benefits of learning at work to the individual nurses and their employers?

Reference was made in the literature to structural models for learning and broad curriculum frameworks that appeared to be either individually or collectively focused. However their relationship to curriculum theory did not clearly emerge in the literature other than identifying that the learning process was of key importance. Therefore, the final question was constructed to direct the investigation into the issues and implications surrounding the development of an accredited curriculum for learning through work:

- can learning at work, as defined by nurses and their employers, be incorporated into the higher education system?

Figure 10: The main areas of learning at work - the case study aims and questions

AIMS	MAIN QUESTIONS	SUB QUESTION	METHODS
Examine the key features of learning at work for nurses in the NHS in Scotland	1.What are the key features of learning at work?	What learning has the nurse experienced? *Q 2-5* Is there a structured learning programme at work? *Q 6,7,8*	Semi-structures interview with nurses and employers, audio record and transcribe Individual participants picture maps Researchers field notes
Identify the purpose, process and product of learning at work	2.What is the purpose of learning at work? 3.What is the process of learning at work?	What has the nurse learnt? *Q12,13* What helps the nurse to learn? *Q 7-11* What influences learning at work? *Q14,15 and picture map*	Semi-structured interview with nurses and employers, audio record and transcribe Individual participants picture maps Researchers field notes
Classify the different learning at work activities of qualified nurses	4.Do the nurses and their employers identify different learning experiences at work? 5.What are the benefits of learning at work to the individual nurse and their employer?	What are the nurses and employers experiences of learning at work? *Q 2-5* What does the nurse do to learn? *Q2-5* What does the employer do to encourage learning at work? *Q7-11* Does the employer provide learning, education at work? *Q7,8*	Semi-structured interview with nurses and employers, audio record and transcribe Individual participants picture maps Researchers field notes
Construct a curriculum framework for the classification of accredited learning programmes at work within the context of the NHS and higher education	6. How can learning at work, as defined by the nurse and the employer, be incorporated into the higher education system?	What does the nurse gain from learning at work? *Q12,13 and Interview 2* What does employer gain from learning at work? *Q12,13 and Interview 2* What are the implications for the development of a curriculum in higher education? *Interview 2*	Semi-structured interview with nurses and employers, audio record and transcribe Individual participants picture maps Researchers field notes Structured return interview with all participants to verify initial findings

Letters in Italics show links to interviews. Q = Interview one question

The Research Approach

The researcher's existing knowledge about the topic helped to determine the questions that provided the major themes of the study and subsequently the nature of the approach (Vallis and Tierney 1999/2000). To address the research questions, it was decided that a qualitative research approach and methodology was most appropriate as the nature of the problem under study is concerned with people, that is nurses and their employers within a particular social setting, of work within an organisation (Cohen et al 2000). The alternative approach, that of quantitative research, allows a researcher to focus on the objective world external to individuals and is investigated through experimentation and other traditional methods of enquiry. Dempsey and Dempsey (2000) describe the characteristics of quantitative research as being hard and founded on mathematics,

"order, control, empiricism……and the data collected, quantified and then statistically analysed" (Dempsey &Dempsey 2000, page 28-29).

These approaches and methods have been used, for example, in psychological research where objective and accurate measurement of defined variables are used. The nature of the nurses' learning experience, the need to identify and understand the learning system, the processes and actions associated with learning, does not allow for accurate objective measurement as it deals with individual experiences and thus a quantitative approach would not be appropriate (Cohen et al 2000).

Qualitative research allows the researcher to explore the experiences of the research population without altering any variables within their situation (Miles and Huberman 1994, Polit and Hungler 1991, Silverman 2000).. As this research study is designed

to explore what is meant by workbased learning and specifically the nature and benefits to different people of a system of learning within an organisation and how learning occurred within the organisation the qualitative approach is appropriate (Cohen et al 2000). The nature of the work within the organisation is essentially practice based and from the review of the literature it would seem that the nature of the learning within the context of a professional's work would be dependent upon many different factors (Boud and Miller 1996, Grundy 1987) which cannot be controlled.

It is inappropriate to study learning at work without considering the context and the eclectic nature of the underpinning theoretical concepts (Miles and Huberman 1994). The research therefore needs to be exploratory and descriptive and aims to review and analyse the features and principles of learning at work of qualified nurses within the National Health Service.

The qualitative approach includes several methods of research, such as biography, phenomenology, grounded theory, ethnography and case study (Cohen et al 2000, Creswell 1998). These five traditional approaches have been compared by Creswell (1998) and although initially it seemed that several of these approaches would be suitable, close consideration of the different features and the nature of the research questions led to the choice of a case study approach. For example, biography focuses on a single individual and a series of events throughout their life history. This approach could have been used to investigate an individual's experience of learning through work and potentially their continuing professional development if a

long period of time had been available for the study. This however could not have addressed the more global aspects of learning in an organisation.

Another traditional approach, phenomenology, investigates the 'lived' experiences of a number of individuals experiencing a phenomenon and allows the researcher to investigate the meaning of the experience in relation to the whole person (Cohen et al 2000, Creswell 1998, Dempsey &Dempsey 2000). However, as the researcher had no way of knowing beforehand the nature of the phenomenon and whether or not the individuals had experienced it this method was rejected.

Similarly ethnographic research, traditionally the preferred approach of the anthropologist, looks at a society within its own framework and culture (Cohen et al 2000, Silverman 2000). Potentially a useful approach, but on reflection this was not thought suitable because the researcher wanted to know about learning within one aspect of society using two differing groups within the organisation and not a whole society. Grounded theory could answer some of the questions, such as *'what are the key features of learning at work?'* and *'what is the purpose of learning at work'*. However, as the context of the learning was important in this case, the use of grounded theory would potentially miss this element, because of the focus on generating theory from data collected and the need to develop a central phenomenon.

This research needed to take cognisance of more than one set of individuals, that is the nurses and their employers within the context of their learning through work in an organisation. Thus the case study approach was identified as the most

appropriate method for this study as it allows an in depth investigation of the case as a bounded system (Creswell 1998, Verma and Mallick 1999, Polit and Hungler 1991). The case being the object or system of study, that is learning through work, the boundaries of the whole case, the NHS Trust and the interrelated parts of the organisation, the nurses and managers. Creswell describes a bounded system in the following way,

> *"The 'case' selected for study has boundaries, often bounded by time and place. It also has interrelated parts that form a whole. Hence, the proper case to be studied is both 'bounded' and a 'system'."*
>
> (Stake 1995 cited by Creswell 1998, page 249).

Therefore, a case study approach and method allows the researcher to construct a realistic account of complex social activity, work and learning within a health care setting and the relationships between them (Cohen et al 2000). This approach will enable the researcher to investigate the system of learning through work and to consider the ways in which the components of the system, the knowledge-constituent interests and the development of professional skills, may be explained and possibly related to curriculum development (Cohen et al 2000, Creswell 1989, French and Cross 1992, Grundy 1987, McLean 1992).

The conceptual framework set out in Figure 9 (page 45): The emerging context of learning through work, was derived from the issues emerging from the review of the literature and from the researcher's own knowledge base. It illustrates the multi-factorial nature of the case study. The nature of the case study method of research allows multiple sources of data (Polit and Hungler 1991) and the in-depth

exploration of data generated from within the bounded system (Cohen et al 2000, Creswell 1998, Savolainen 2000), which is necessary in this situation because of the complexity of learning through work in a large organisation.

To summarise, the researcher was able through this approach to:

- take cognisance of the eclectic theoretical base identified in the literature
- consider the size and complexity of the organisation and the context of learning within it
- study two groups of participants who were significant contributors to the learning system that was the case study
- identify unknown variables related to the learning of the different participants
- investigate and evaluate the system and the significance and relevance of the collective experience of people within the system, rather than the experience of an individual[per se]
- potentially differentiate between the different socially constructed frameworks of the participant groups within the case study.

Intrinsic to the case study design and methodology is description and exploration of factors, variables and complex issues of the organisation as a single case (Pegram 1999/2000, Bryar 1999/2000). Case study research has been described as one of the most difficult to undertake. This is because of the time element, the nature and volume of the data generated and the difficulty in tracking and managing the data. Also making sense of the material, evaluating the outcome of the study in terms of the usefulness to the organisation and the generation of relevant curriculum theory

appropriate to the organisation (Bassey 1999, Bryar 1999/2000, Cohen et al 2000, Pegram 1999/2000, Vallis & Tierney 1999/2000). The researcher now has personal experience of such difficulties to a greater or lesser extent and concurs with all these points.

In the case study the observation of individual skills is not included because the dimension of study is the bounded system of learning at work rather than an individual case focus (Miles and Huberman 1994, Creswell 1998). This is in contrast to the case study approach taken by Wilson and Pirie (1999), about learning of novice practitioners in the medical profession, that included observation and interviews with doctors. The purpose of their study was to research the development of competence of health care professionals through practice-based learning, not the system of learning as such. However this study focuses on the bounded system of learning at work. The key research questions, initially developed sub-questions and possible research methods to be incorporated within the overall design are illustrated in Figure 10. The sub-questions form the basis for the main themes of the study and enable the researcher to develop the units of analysis within the first semi-structured interviews. The links between the sub-questions and the interview questions are annotated in Figure 10 to show cross referral.

Ethical Approval for the study

The research proposal was developed and reconstructed to form the research protocol for submission to the different institutions to secure ethical approval and request access.

The protocol was based on the original proposal and all supplementary documentation followed the design and structure advised by the NHS Multi-centred Research Committee (MCRC 1999). Supplementary documentation included the letter to participants, information about the research and consent from. The researcher tracked each draft version, with amendments incorporated into the third and final version (see Appendix VI).

Ethical approval was required from the researcher's own institution as the research study, although being undertaken as a student at the University of Strathclyde was being conducted through my employment. An ethics release form was signed by the researcher's supervisor and Head of Department (representing my employer) [see Appendix VII]. The researcher also contacted the secretary of the local Health Board MCRC and established that ethical approval from that committee was not required because no patients within the Trust were to be included in the research and that the permission needed was that of access to employees through the Director of Nursing. Following ethical approval from my employer a letter requesting access to a defined sample group, with the research protocol, was sent to the Director of Nursing of the selected NHS Trust.

The fundamental ethical principles of research; respect for the person in terms of their rights to confidentiality and assuring autonomy, the principle of justice and fairness and respect for truth, and the principle of beneficence - of doing good and avoiding harm, were adhered to throughout the study. These were principally achieved by ensuring anonymity, allowing withdrawal at any point and potentially

generating new knowledge to assist nursing developments (Bassey 1999, Thompson et al 1994).

Access

Access was gained to the case study through the Director on Nursing. A convenient local NHS Trust was selected because of the immediate relevance to the researcher's on going professional employment and to minimise the effect of travel and interviews schedules on employment and researchers time commitments. The researcher deliberately choose a Trust with which she had limited previous contact to minimise the effect of either researcher bias or participants perception. A positive response was received, with a list of nominated nurse and manager participants.

Methods

Case study research offers the researcher numerous methods of enquiry with a potential for generating large amounts of data, however there is no specific methodology for case study research (Bassey 1999, Cohen et al 2000, and Creswell 1998). In this particular study of learning within an organisation data would be generated from the participants and contributors to learning. Therefore the following methods were used to collect and record data: semi-structured interviewing, audio-recording, interview notes, picture analysis, standardised open-ended interviews, field notes and a personal learning log. Some researchers who have used case study approaches have also included focus groups discussions to elicit inferences that emerged during the research (Wackerbarth 1999). However in this study, because of the geographical distribution of participants and the varying

shift patterns it was decided to exclude focus groups due to the complexity it would introduce.

Interviewing

Interviewing of all research participants to investigate their experiences and knowledge of learning through work was crucial to finding out about the learning system within the organisation, whereas observation of individual activity was not appropriate. Because of the intrinsic nature of the case study, the researcher decided that two interviews were needed. The first to help develop the descriptive analysis of the bounded system and the second to verify with participants the initial findings. In addition the participants were given the opportunity to develop a picture map of the factors that influence learning through work. Thus the case study followed three main stages; firstly the initial collection of a wide range of material, secondly the analysis of the initial findings which provided a focus for the final stage of verification of findings with the participants (Cohen et al 2000).

The **first interview** was designed to address with participants the issues emerging from the review of the literature and the researcher's initial ideas. The main themes outlined in the sub-questions in Figure 10, were developed as outline questions for all participants, with different wording being used by the researcher for nurses [an individual focus] and managers, where the focus was on their employees learning (see Appendix VIII). This enabled the researcher to investigate through the individuals within the system, their own learning experiences [nurses] and those of their staff [managers]. The benefits of the guided interview using an outline of the

same structured questions is that the interview is more systematic and covers the same broad areas, thereby allowing for extensive data collection. Supplementary questions acted as prompts, ensuring that the sequence of questions was followed in each interview. It also allowed the researcher to guide the questions in a semi-structured way that offered a flexible conversational approach, thereby picking up cues for issues and probing further in some areas in relation to participants answers (Cohen et al 2000).

The use of a summary guide, given to each participant and a researcher guide and interview notes ensured that topics were not inadvertently omitted. The participants were asked to respond to the same topics, even if questions were presented in a slightly different sequence. The standardisation of questions and approach ensured that each participant followed a similar sequence of thinking. The major benefit of this method of interviewing was the systematic approach to the gathering and collation of interviewee responses, in that pre-codes could be allocated to the major themes of the interview, followed by coding.

The researcher piloted the interview questions with two nurse colleagues to ensure that the questions were understandable and appropriate. This resulted in considerable revisions to the specifics of the questions, the appropriate wording and the sequence, thus increasing the credibility and validity of the research. Following this the revised questions were also piloted through a 'mock interview' scenario with a colleague, at which point the feasibility of the use of recording equipment was also

tested. The pilot interview was subsequently transcribed and coded by the researcher as a pilot of the methods to be used.

The first interview allowed the researcher to explain the purpose of the research and the approach being used, followed by an outline of the main themes to be addressed. Each participant was given a summary of the questions to be asked at the start of the interview. The purpose of this was to allow the participants some reading and thinking time and to ensure that throughout the interview the main areas and sequence were adhered to. Meanwhile the researcher was able to use the time constructively to set the scene for the interview and set up the audio-recording equipment. The researcher was also aware that the participants had not met the researcher before and that the interview, as a social activity, required time for introductions and social interaction.

Audio-recording

It was recognised that some participants might not consent and that they would all probably find the audio-recording constraining if not threatening. Therefore consent to audio-record the interview was sought from each participant before the interview commenced. All participants agreed to the interviews being recorded but unfortunately the final two interviews were not recorded because of technical difficulties [1 nurse and 1 manager]. The purpose of audio recording was to increase the reliability of data and to reduce the dependency on the researcher's memory. The audio-recordings were fully transcribed by an independent person. A copy of the

transcript was sent to each participant to confirm accuracy of the interview and ethicality of the findings (Bassey 1999). The researcher then coded the transcripts.

Interview notes

The researcher used the question guide to note the key topics and words that emerged during the interview. However this was kept to a minimum to reduce the potential barrier that note taking can create to a free flowing conversational interview (see Appendix IX). The interview notes proved to be invaluable in the two instances where the audio equipment failed to record the interview.

Picture maps

At the end of each interview, the participant was asked if they would draw a 'picture map' of the factors that they thought influenced learning at work. This activity carried out by the participants was positively received and enabled them to reflect on the interview, to analyse the key issues, summarise their thoughts and individually document the key areas. The complex relationship between the factors that influence learning in the organisation was then clearly described and mapped through the combined interview transcript and participants conceptual picture maps. The picture mapping approach is similar to the development of concept mapping with learners (Irvine 1995), and methods of matrix analysis of qualitative data (Miles and Huberman 1994). However the level of analysis achieved by participants varied in terms of the factors identified and the conceptual links made between those factors (see Appendix X for examples for individual maps).

The maps were collated for the two main groups of participants by careful listing of the key words written by the participants, collation and comparative analysis. The original pictures were transformed and formalised by the use of computer software and re-presented to each participant for verification at the second interview. Participants were also given the opportunity to comment on the collated map for their own participant group.

A **second return interview** was planned for each participant. This was not possible for all participants because of the work commitments and demands of the organisation. The purpose was to provide the researcher with the opportunity to discuss the initial findings through standardised open-ended questions (Cohen et al 2000) (see Appendix XI). Each question arose from the collated responses from interview one and provided a marker check system to improve credibility of the results and reflexivity of the research (Bassey 1999).

The same questions, with the individuals picture map were sent out to participants in advance of the interview to provide then with the opportunity to consider responses in advance of the interview. The benefit of this type of interview is that all questions are exactly the same with limited responses (Cohen et al 2000). A question sheet was completed with each participant, with the majority completing their own, thereby reducing the possibility of the researcher influencing respondent's answers. The researcher completed the question sheet when asked to do so and when the participant indicated that this was acceptable. All participants had sight of the written answers noted by the researcher. The collation of the responses was also

facilitated through using the question/answer framework as a heuristic device. The participants were not constrained by the questions or answers as additional factors for consideration by the researcher were added by them through the 'others' sections and by the use of a mid-point answer in instances where the 'yes' or 'no' outcome were not thought appropriate or seemed too inflexible.

Field notes

In addition to the interview notes, the researcher kept field notes that were completed immediately following each interview. The purpose of the field notes was to record the researcher's observations of the setting for the interview, impressions about the interview, positive and negative interactions, timing, tensions and difficulties. The field notes supplemented the transcripts and interview notes and provided very useful supplementary data with in some cases some initial analysis noted (Silverman 2000) (see Appendix XII for example).

Learning log

The researcher established a personal learning log for the period of the research (1998 -2001). Personal observations about the progress of the study as a whole and the research activities being conducted were recorded in the log. The learning log acted as a historical development record that was used by the researcher to systematically review, structure and plan the different stages of the research. As such it was an invaluable tool to assist reflection and critical analysis and interpretation of personal learning events, activities and findings (Mezirow 1998, Moon 1999, Palmer et al 1994) (see Appendix XIII). The writing up of the log also

helped the researcher to explore and elaborate on her own learning and to write about that experience (Ely et al 1997).

Confidentiality

Participants were asked to complete a consent form prior to any arrangements for interviews being made. Each participant was given a number on return of the signed consent form. This resulted in a random order numerical list of participants with no association to locality, sector or data set. All information regarding identity of participants was to be confidential. This was confirmed at the start of each interview. The researcher also assured each participant that their anonymity would be maintained by the removal of any direct references to named hospitals, units or type of nursing care that could potentially identify the participant.

Context

The NHS is the main employer of nurses in Scotland and the researcher had to decide which clinical area would be appropriate as a case study. The researcher's own clinical background was community nursing and although it may have seemed more appropriate and easier to seek access to a Trust with responsibility for community nursing care this was not done to avoid potential researcher bias resulting from prior knowledge of the organisation and people within it. Instead the researcher choose to undertake the research in another acute NHS Trust because:

- the researcher had no first hand or recent knowledge of CPD or other learning arrangements in the Trust selected for the study,

- the researcher was not well known in the Trust and had previously had minimal contact with qualified nursing staff or clinical nurse managers,
- greater relevance to the study in terms of potential development of future curricula because of size of organisation and number of staff ,
- to reduce researcher bias thereby increasing reliability of findings.

The case study was therefore located in a convenient NHS Trust within close proximity to the researcher's place of work. The following chapter sets out to explain the research process and the boundaries of the case study investigation into the system of learning.

CHAPTER FOUR

THE NHS TRUST AS A BOUNDED CASE STUDY:

PARTICIPANTS AND PROCEDURES

The research focused on the learning at work of experienced nurses, in one location over a specified period of time. The case study was located in the context of a clinical setting within one National Health Service Trust in Scotland.

Data was obtained from different participants from acute and continuing care settings in order to obtain data about learning within the whole organisation. This included semi-structured interviews with nurses and their managers, where possible from the same work unit. Inclusion criteria for the nurse participants were:

- they will be qualified practitioners in mid-career,
- aged between 35 and 45 years.
- they will be in full time employment
- and working at Grade E, F and G.

The above criteria were selected because the participants will have had considerable work experience, knowledge about maintaining professional registration and CPD, and will be familiar with the organisation, knowledgeable about opportunities and more likely to have had first hand experience of learning through work since obtaining their qualification. Possibly they will have experienced learning differently within the organisation and may also be able to identify the nature and type of learning in relation to life long learning.

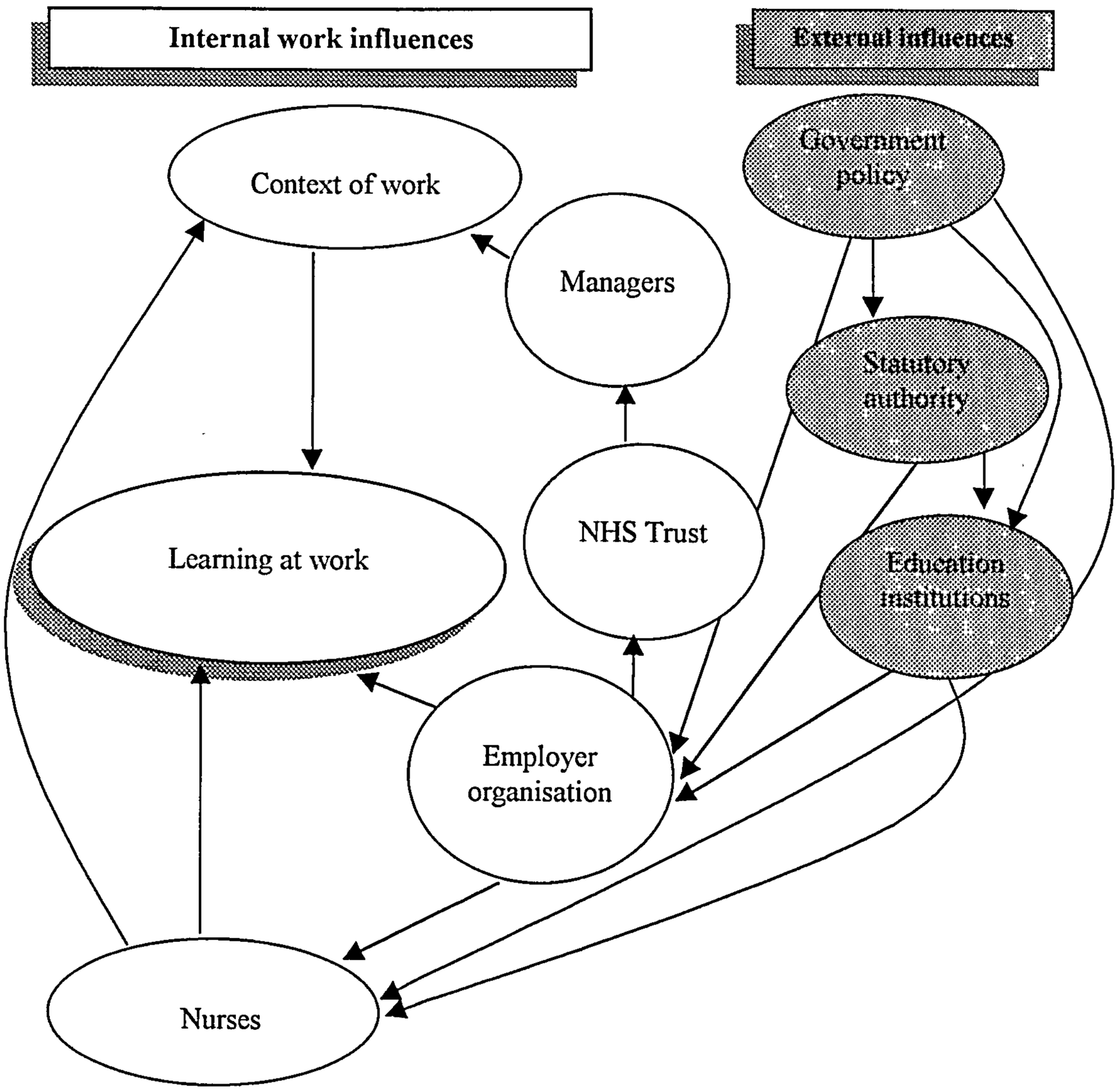
The inclusion criteria for the clinical nurse managers were:

- that they were working in the associated clinical area as the participants and were intended to 'match' the areas of each of the participants
- well established within the organisation, therefore would provide a different perspective
- familiar with the learning within the organisation.

The managers were included because they have different responsibilities within the organisation; they are knowledgeable about the learning needs of the organisation and the learning needs of their staff. Therefore they will provide a different perspective of learning within the organisation. Because of the nature of their posts it was assumed that a more collective and macro view would be obtained. In addition their own experience of learning will be different according to their own individual experience. This allowed the researcher to take full account of the internal factors influencing learning at work, such as all factors integral to the organisation, as well as those external factors such as government policy, professional organisation demands and educational provision that the managers have knowledge of.

It was originally proposed that eight practitioners (and their managers) would be included, four from acute nursing sector, four from continuing care areas. The small number was intended to allow in depth analysis of all aspects of the whole case in relation to the data generated. The time limit of the research also necessitated pre-determining the sample size, given the variables and complexity of the system under study (Creswell 1998, Polit and Hungler 1991). Figure 11, which has been developed from the previous Figure 9 (the emerging context of learning through work) shows

Figure 9: The emerging context of learning through work



Issues

It is clear from the literature that different concepts, models, frameworks and approaches exist in relation to learning at work. With each there are different languages, definitions and descriptions. For example the concept of learning projects as a learning network model (Poell et al 1998) and the self directed learning model (Garrison 1998). The model of motivation and learning in the workplace

The participants

Following the receipt of nominations from the Director of Nursing it was possible to review the location and role of the participants as being representative within the NHS Trust as the bounded system case study. Originally the researcher had intended to use some of the nominees as a pilot sample. However, on close inspection of the whole convenience sample nominated as being representative of the organisation, it was decided to include all rather than exclude some for the purposes of a pilot study. This was because the participants are representative of the different trust directorates and hospital locations across the organisation. The potential number of participants had therefore grown from the original intention, as had the number of managers, to a total of 21. Similarly the total number of hospitals [sites within the case study] was five spread across the geographic location. It was possible to identify the different groups within the study that would generate four sets of data: nurses working in acute care, nurses working in continuing care, managers responsible for acute care and managers responsible for continuing care (see Appendix XIV for details of participant data sets). This allowed a purposeful sampling strategy to be followed to obtain the different viewpoint of participants within the case study (Creswell 1998).

All were invited by letter to participate, provided with an information sheet, and a consent form (see Appendix VI). A stamped addressed envelope was included for the return of the consent form. Fourteen initial responses were received, one of which was an 'opting out', however this included an alternative self selected 'opting in' replacement nomination, which matched the criteria and was therefore invited to

participate. Reminder letters (see Appendix XV) were sent to six nominees, which generated an indication from one that they did not met the criteria and therefore they were excluded. One other did not respond at all and was therefore excluded. A total of nineteen participants finally consented to be participants in the study

The nineteen participants in this study are all nurses; six were clinical nurse managers. Thirteen nurses were E (5); F (7) or G (1) grades, in other words all had work experience, eight of these were from acute clinical settings and five from continuing care settings. Of these, one was a clinical education facilitator and one a nurse practitioner. The senior staff nurses (E grades) all 'acted up' for senior staff grades within the organisation and similarly the charge nurses all 'acted up' for the clinical nurse managers (although not necessarily the same ones as in this research study). An aspect of all the participants' role was therefore managerial responsibility, for example, for a ward, unit or the whole hospital. Additionally they may have specifically stated administration days or weeks and 'bed management' weeks. Many were members of different ad hoc or formal groups or committees within the organisation; for example the charge nurses group, the education committee, or a clinical standards committee.

Of the six clinical nurse managers who participated, three were from the acute setting and three from the continuing care setting. Overall eleven participants were from the acute setting and eight from the continuing care settings. This led to the creation of the four data sets within the case study that effectively ensured that the views and experiences of different parts of the organisation were investigated.

All participants were employed by the same NHS Trust and encompassed by the bounded system. Although the nurses are the main focus of the research the questions relate to the global nurse experience rather than each individual, hence the case study approach to learning at work as a bounded system.

Pilot Study

A pilot study was conducted to test the research tools; the interview questions and researcher's approach to the picture mapping activity for the first interview and later the questions for interview two.

The researcher piloted the semi-structured questions for interview one, based on subquestions as outlined in Figure 10, with two professional colleagues. This led to substantial development and revision of questions into a format suitable that was for a semi-structured interview and allowed the emerging issues to be addressed in a systematic way. Following the initial revisions a further pilot using the reformulated semi- structured questions was conducted with professional colleagues from different care background. Both had teaching experience in the practical setting. Four versions of the questions were developed and each was discussed with colleagues and with the research supervisor before the interviews commenced. Similarly the questions for the second interview were piloted with two colleagues on one occasion.

Data collection

The ability to collect data from multiple sources offered by the case study approach allows for extensive data collection. This study included four sets of participants each generating data. Analysis of each data set, identified emerging themes that needed to be analysed in relation to the main research questions. Data was generated about: the features of learning at work, the nature of learning at work, the different experiences of learning as identified by participants and contributors. Data from documentary evidence was coded [transcripts] or listed and categorised [picture maps] through the identification of key words and links between the emerging themes and the different sources of data. In addition the supporting notes of the researcher had to be integrated to the whole analysis of the case.

The analysis was formed through the categorical aggregation of coded transcripts, picture maps and interviewee responses to the emerging issues put to them in the final interview. The common emergent themes from the whole case study were then interpreted and the conclusions were drawn in relation to the experiences and influences of learning at work. The use of a number of nurses and managers reduced the risk of individual internal factors of each nurse affecting the conclusions drawn from the data.

The researcher used holistic analysis to identify the issues for discussion in relation to the theoretical constructs and conceptual models identified in the review of the literature and to assist in the formation of recommendations. However one of the difficulties of case study research is that of including the one-off learning event that

is significant to the case study as opposed to the frequently recurring insignificant events (Cohen et al 2000). The method and recording of data collection along with the confirmation by participants of accuracy of detail and then verification of emerging themes were an important element in the generation of data.

Reliability and validity of the case study

Case study research by its very nature means that the reliability of the findings is to some extent dependent upon the reliability of the data collected in the first instance and the verification of findings by participants. The procedures followed by the researcher are important in terms of the validity of content and validity of findings. The relevance and utility of the findings to the professional group are also an important outcome that is dependent upon the reliability and validity of the research approach and processes. Consideration was therefore given to the reliability of the methodology and validity of the study in terms of the relevance and acceptability of the findings (Appleton 1995, Hinds et al 1990).

Reliability was assured by the following procedures:

- Piloting interview one questions before full study commenced to ensure clarity and understanding of questions
- Revisions to semi-structured questions
- Audio recording of all of the first interviews and full transcription of the interview
- Returning transcriptions to participants and asking then to confirm accuracy of detail

- Providing participants with a copy of the picture map developed at interview 1
- Inter-rater reliability in the coding of transcripts
- The similarity of responses from the different groups of participants
- Reflexivity achieved through the verification of findings at the second interview that was developed from the initial response at interview one
- The collated participants maps

Validity was achieved through the processes utilised by the researcher to ensure that there was clarity of questions and approach, with some aspects of the semi structured questions and then the open questions being revised on three occasions. The relevance of questions to the participants was confirmed through the responses received and therefore this ensured content validity. Following this the usefulness of the findings and the responses to the second interview indicated that there was also predictor validity.

The Research Process

Interview One

The interview schedule was planned over a three-month period. Initially however it took the researcher approximately four weeks to contact all participants by telephone to arrange the dates and time of interviews.

The researcher, who did not know the individual participants and had limited knowledge about the context of their work, contacted each participant personally by

telephone. Individual appointments were made on a day and at a time that suited them, at their place of work. All sorts of difficulties emerged about interviews.

Arranging the interviews was problematic because of difficulties contacting people who were working at night, had days off, or were on holiday or on a different shift. The whole process took numerous phone calls over many months from start to finish. The researcher's own work and study time schedule also reduced the time available to make contact. The telephone contact periods had to be spread out with the majority being successfully contacted over a three-week period. The spread of geographical locations resulted in the researcher going back and forward between different hospitals on a number of occasions.

Getting to the interviews also presented some challenges, such as, making sure there was sufficient travelling time. Sometimes it took twice as long to travel to do the interview. Finding a parking place was sometimes very difficult and costly. Finding the participant in the hospital unit or ward also took time, particularly in unfamiliar territory for the researcher. Once the participant had been located, the participant had then to find somewhere to conduct the interview. A variety of places were used: such as the charge nurse's or manager's own office, a clinical laboratory, a surgical theatre room, treatment room, clinical room, receiving room, shared office with others present or the 'duty room'.

The format of the interview was the introduction of the researcher to the participant and setting the scene, followed by an outline of the research and the aims and

objectives. Each participant was asked if they had any questions arising from the information and consent was confirmed and permission requested to audio record. Each participant was provided with the sheet of summary questions and a brief explanation was given about the areas of questions before the interview commenced. The audio equipment was set up and tested, while the participant had the opportunity to read the summary questions before the interview commenced.

The questions were framed in the context of the practitioner with the responses clarified and questions re-iterated when clarification was needed. Throughout the interview the researcher kept to a minimum the amount of time spent on writing notes and instead listened to the views of the participant. Key words and any complex issues were noted. Figure 12 provides an overview of the semi-structured questions to the nurse participants. The questions to managers can be located in Appendix XVI.

Figure 12: Interview 1- Nurses Questions

Q1.0 Introductory - *The Work Context*
Q 2 to Q5 *Learning Event Analysis* **Q2** What is your most recent experience, say in last couple of weeks of learning something about your clinical practice at work? **Q3** What other experiences of learning at work have you had? **Q4.1** What has been the most useful learning experience you have had specific to your work, AT WORK? Will you please describe it for me? **Q4.2** What has been the most useful learning experience you have had specific to your work, NOT at work? Will you please describe it for me? **Q5** What was the least useful learning experience you have had related to your work?
Q6 *Classifying Learning Experiences* **Q6** Can you group or categorise your different learning experiences in some way for me?
Q7 & Q8 *Structures Formal and Informal* **Q7** Is there a structured learning programme at work? **Q8** Is there any informal learning at work?
Q9 *Learning Instruments* **Q9** Do you have a personal learning plan, say as part of a portfolio?
Q10 & Q11 *Resources for Learning at Work* **Q10** What resources are available to help you learn at work? **Q11** What resources do you think you need to help you with your learning at work?
Q12 & Q13 *Outcome Analysis* **Q12** How does the outcome of your learning benefit you in the long term? **Q13** If you were asked to provide evidence of your learning what would you produce?
Q14 Is there any other aspect of learning at work that is important to you that I should be considering?
Q15 *Matrix Analysis* **Q15** Can we together draw a map of all the factors that affect your learning at work?

Maps - picture profiles

Participants were asked at the end of the interview to complete a picture map of the factors that influence learning. Some were uncertain about this. All spent time thinking about what they would include, some asked the interviewer for clarification. All found it a helpful way to illustrate their key point and to summarise the interview. Many confirmed previous points made during the interview and some new points emerged. See Figure 13 for an example of a nurse participant picture map and Figure 14 for an example of a manager participant picture map. Individual maps and summary maps can be found in Appendix X.

Figure 13: Nurse Participant 10 Picture map
Learning through work Factors that influence learning

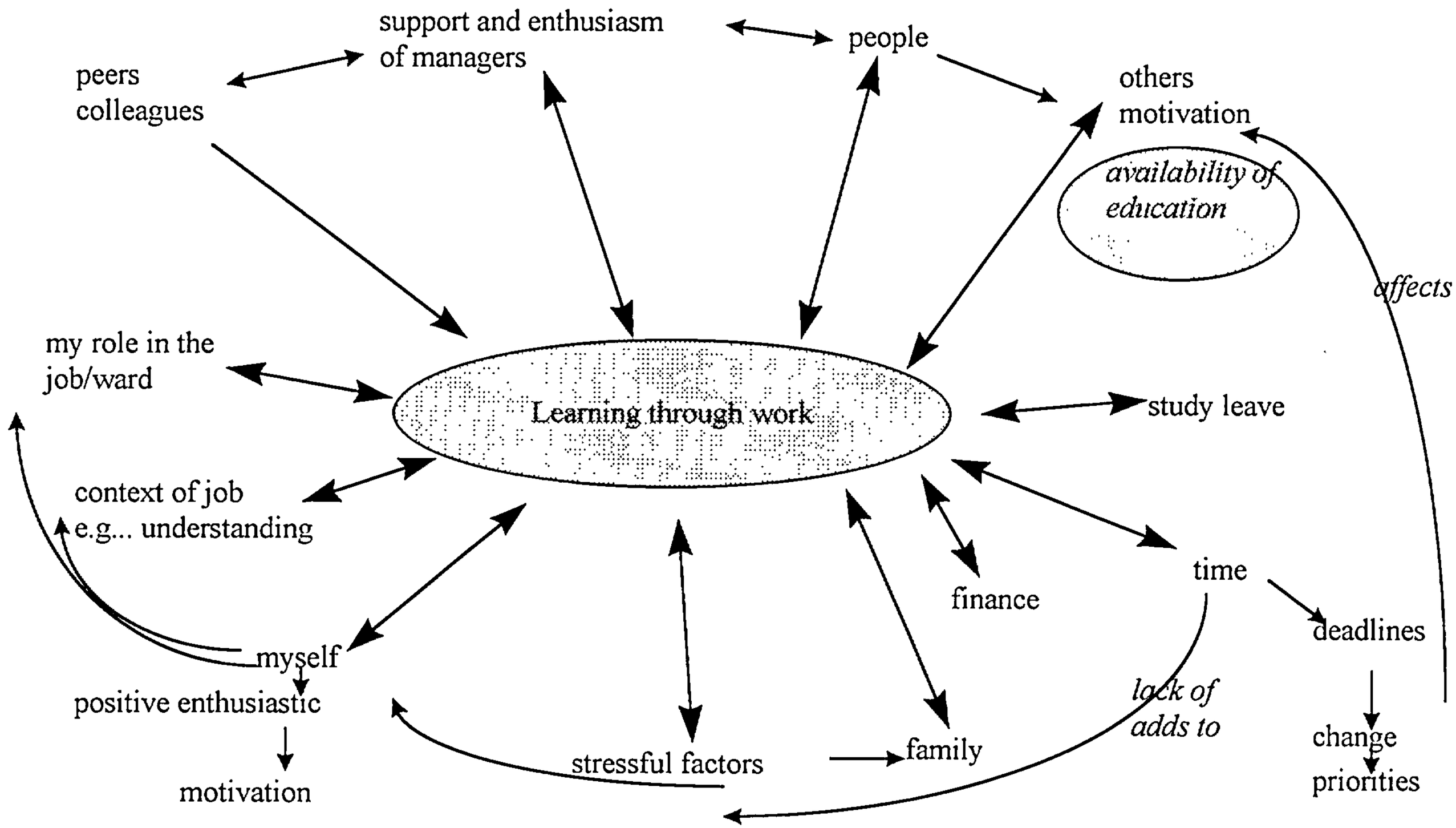
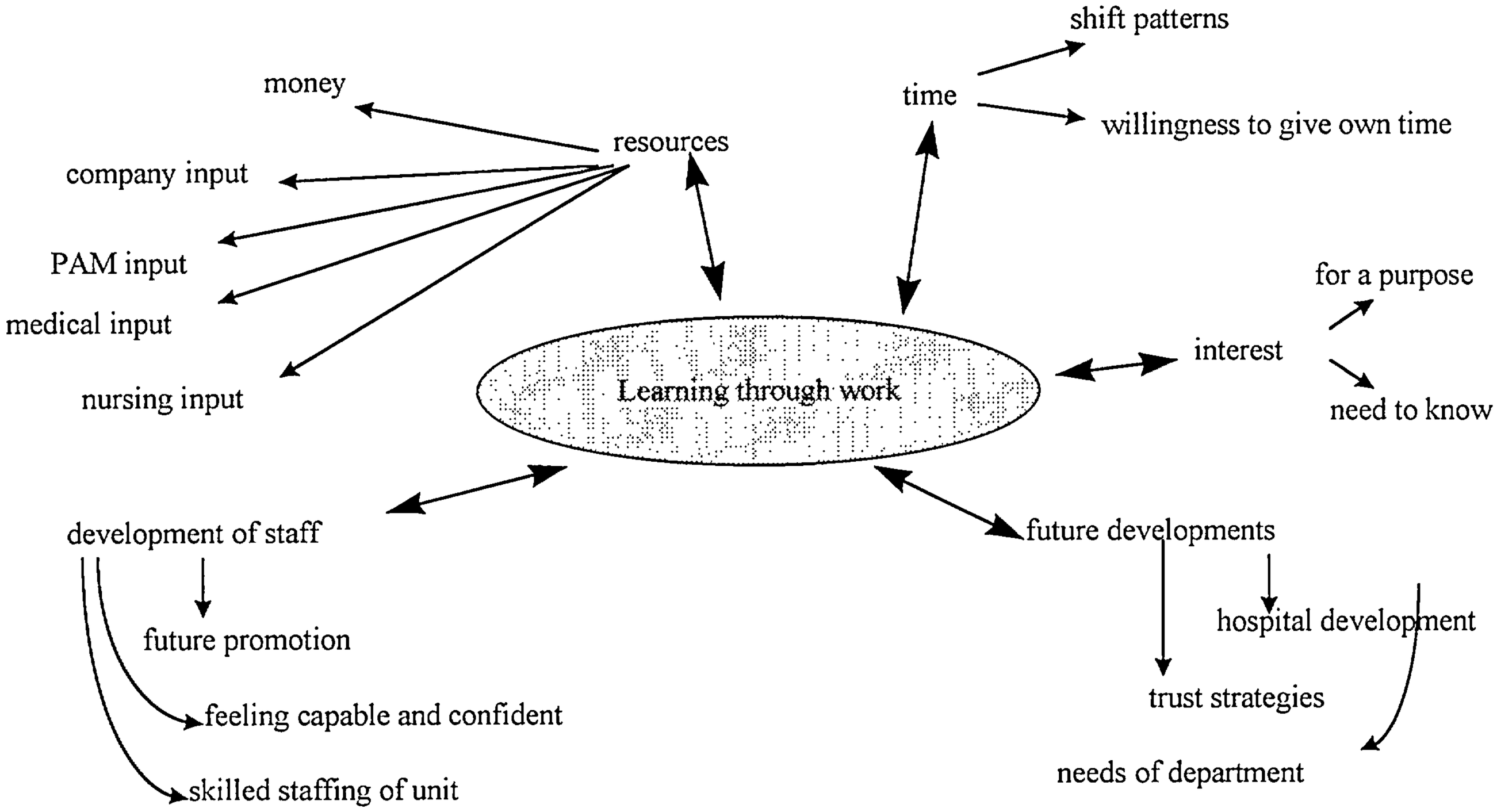


Figure 14:Manager Participant 18 Picture map
Learning through work Factors that influence learning



The interviews were concluded by the researcher thanking the participant and informing them that they would be given a copy of the transcript and asked to confirm the content for accuracy and meaning. They were also asked if they would be willing to meet with the interviewer again to discuss the initial findings at a follow up interview later in the year, all agreed to do this. All participants were sent a letter of thanks with their copy of the transcript (Appendix XVII).

Field Notes

Field notes were completed immediately following the interview once the researcher was back in her car and then the audio tape was listened to again to ensure that the researcher was familiar with the content, before being transcribed. The field notes recorded the factors that affected the conduct of the interview and the nature of the interaction between the researcher and the participant. The extracts below provide some examples.

<u>Participant 15</u> *06.07.00* *Parking £1.00 11.30 - 12.15*

Interview in ward office. Participant having an 'admin.' day, i.e. not clinical, supernumerary. Now a senior staff nurse - top of F grade has been in unit for 10 years. Concept map - major thing is motivation. Links made between most aspects. The map a) acts as a summary of some of the aspects of the interview, b) lets the participant think, c) ends interview on positive note.

<u>Participant 20</u> *19.7.00 (no parking fee)*

*Nurse. Working in high dependency unit at ** hospital. Said she would like to have thought about questions a bit more. Not very enthusiastic - ? stressed out at work - very*

busy. Is studying. NOTE: currently a student but researcher has not met before and has no knowledge of participant. Short interview - all points covered.

<u>Participant 1</u> *05.07.00* *Parking £3.00*

*Participant currently working as a ****. Sharing office with 2 other people, one of whom in and out of office. Telephoning etc. Constant noise outside. High pressure hoses being used. Possibly a nervous participant - no hesitation answering questions, talked readily and freely. Now learning in current **** post. Appeared to have been fed up with ward managers job- strong views expressed. Concept map- straight lines, no connections.*

*<u>Participant 2 Manager at *** - 4 wards- acute</u> 12.07.00*

Acting post. Young, keen. Answered questions quickly and with clarity.

Does not have a degree? Couldn't get credit at university - doesn't want to do (?won't) MSc Nursing. Now wants to do an MBA. Showed me an example of career review form, which has goals, action plan etc. in it. Quite clear that learning needs would be met through this.

Transcripts

Each audiotape from interview one was transcribed, with all details included.

Transcribing difficulties arose from background noise and difficulty hearing the discursive details of the interview particularly when participant's voice dropped.

The transcripts were lengthy, as the average time of interview was approximately 45 minutes. All were checked for accuracy as far as possible before being sent to participants.

All transcripts were coded, using the summary questions as pre-codes initially and then coded according to key words in each pre-code sector. The codes were used across all sectors of pre-codes to ensure that the initial analysis of each section was systematic. Cross sector analysis later allowed the researcher to reduce the codes and identify the main emerging themes.

A colleague was asked to independently code random transcripts to ensure inter-rater reliability. This proved successful as the codes determined by the colleague were on the whole replicated if not similar. An example of a coded transcript is included in Appendix XVIII.

Interview Two

The second interview was conducted six months later. The purpose of the interview was to provide the researcher with an opportunity to put specific open-ended questions to the participants, to verify the initial findings and emerging themes from interview one, to clarify responses gained from the first interview and to explain the next steps for the interviewee.

Arranging the interviews presented the same difficulties as before. It was agreed with two participants that they would respond by posting the completed question sheet to the researcher. This was because of difficulty in staff cover in the unit, annual leave commitments, the particular pressures at work in the organisation such as, off duty, late shift, leave, night duty and overall a very busy time in ward. One

participant returned the question sheet the other did not, but did indicate on the telephone that she agreed with all the questions.

Before the interview each participant was sent a copy of the questions and a copy of the summary map from their main data set [nurse or manager]. Because of the type of interview and the use of a paper based question/answer sheet no audio recording was made. The interviews were also scheduled for 30 minutes each. At the start of the interview the researcher confirmed that the participant had received the letter and sheet of questions for the interview. All had, although some participants had not had time to read the questions and some did not have the questions sheet with them. The researcher provided a copy of the questions.

The participants were asked if they ***agreed*** or ***disagreed*** with the questions related to:

- The key features of learning at work [emerging from research question 1]
- The purpose of learning at work [emerging from research question 2]
- The process of learning at work [emerging from research question 3]
- Positive benefits of learning at work [emerging from research question 5]
- Negative outcomes of learning at work [emerging from research question 1,2,3]
- Recognition of learning through work [emerging from research question 5 and 6]

Should learning events at work be given academic credit?

Should learning at work be incorporated and recognised by the higher education system?

- The points that seemed to present difficulties in standardising learning at work [emerging from research question 4].

The full question sheet is included in the Appendix XI.

A number of participants opted for a mid-point answer, qualifying their answer with reference to complexity of job, or nature of the organisation. Some also identified other areas for consideration not specifically identified in the questions by the researcher. Participants were asked to annotate their responses to ensure that there was clarity of meaning. Following the interview the researcher again completed field notes for each interview (see examples below). One month was spent completing the second round of interviews (commenced 23.11.00, completed 21.12.00).

EXTRACTS FROM FIELD NOTES FOR INTERVIEW TWO

Participant 14 Nurse *23.11.00*

Agree more than disagree. Has had time to think about it. Learning not valued.

***Major** influence employers* *- resource*

- attitude: e.g. staff nurse who would benefit from a study day and asked to go but offered either day off and nurse to pay herself, or fee paid but nurse went in own time therefore learning not invested in by employer (in that ....? only).

Participant 4 Nurse *23.11.00*

*Interview in own office instead of ** this time. Maps verified. Main area of 'fuzzing' seemed to be participant comparing current organisation with others so in relation to 'value of learning' and 'legitimate work activity' -this very much dependant on manager's attitude and organisation. Now interested in own learning.'*

Participant 16 Manager *21.12.00*

Participant thought I was there to discuss transcript. Had not brought summary questions, fortunately I had a spare copy. No real issues. Questions straightforward. Appreciated where 'experienced nurses viewpoint' was 'coming from'.

Answered as per a manager within this organisation.

NOTE: CNM of a very small unique group in continuing care setting.

A letter of thanks was sent to all participants, with a copy of the summary sheet from the second interview. The researcher indicated to all participants that she would provide them with a summary of the outcomes of the research once completed.

The following chapter presents the findings of the case study research.

CHAPTER FIVE

DECIPHERING LEARNING THROUGH WORK:

THE RESEARCH FINDINGS

Introduction

Seventeen transcripts and nineteen sets of field notes were produced [see Appendix XII] in the first round of recorded interviews. The interviewees were sent copies of the transcript or field notes for verification within a few weeks of the initial interview. In addition, the maps drawn by each participant at the end of the interview were converted to picture maps showing the factors identified as influencing learning at work. These were then collated as composite picture maps for the two main participant groups. The outline interview notes and field notes, provided additional observations noted about the different events and overall progress of the study. The researcher's learning log recorded initial thoughts about the features of the study and some initial analysis.

These different data sets created a large volume of data that were then collated to allow a case system analysis. Each individual account was pre-coded for the first interview, according to the main question areas outlined and then coded within each pre-code area [see Appendix XVII]. The codes were developed as the researcher read and interpreted each transcript and were collated on completion of all transcripts. This allowed a review and refinement of all codes.

A number of authors advise to limit the number of initial codes. However, this proved difficult due to the volume and depth of data generated and because the case study research needs to include all seemingly relevant points, rather than risk accidental exclusion (Cohen et al 2000, Miles and Huberman 1994, Polit and Hungler 1991). The codes identified within the 'context' of the research, at the start of the interview and then during the analysis of learning event one were repeated in event two and then used throughout the transcripts to identify emerging themes. More codes were allocated as new themes emerged and then used if that theme recurred later in the interview. This enabled analysis of individual learning accounts and also collation and comparison of the transcribed accounts about the learning system. Following the first interview it was possible to reduce the number of codes on completion of the initial analysis of transcripts, by excluding those that did not occur or duplicated others. This made it easier to manage the data, for example by deleting the non-recurring 'one off' codes that created single categories. This was because the content did not fit other codes and were subsequently found to be not useful (see Appendix XVIII for example of coded transcripts and Appendix XX for full list of pre-codes and completed codes).

The questions for the second, open-ended interview were then identified by analysing the emerging themes from interview one and by categorical aggregation of all data available to the researcher. Participants were to be asked to verify and clarify the relevance of key findings from the first set of interviews, thus ensuring validity. Cross system case analysis of all data following the second interviews led to the final analysis and construction of recommendations.

The research findings

The research findings will be presented in relation to the six main research questions and cross-referenced where appropriate to the interviews. Through the first interview and the development of the picture maps, the key features of learning at work, the purpose of learning at work, the different learning experiences of nurses and managers within the case study and the benefits of learning at work were identified. These findings will be presented in this chapter and illuminated by the use of vignettes and quotes where appropriate. The final research question *'how can learning at work as defined by the nurse and the employer, be incorporated into the higher education system?'*, was initially addressed by analysing the responses to the final questions in interview one and then specifically in the second interview. The sequence used to present the findings will therefore follow the sequence of the main research questions (see Figure 10).

Research Question 1: What are the Key Features of Learning at Work ?

The following quotes, extracted from transcripts, are some of the initial comments made by participants in the first interview and illustrate their views about learning at work.

Participant 8. Nurse

"I think one of my early learning mistakes was ...I wasn't really relating it to why I was doing the treatment. I put a collar and cuff on a patient because I was asked to, not really because I knew why I was doing it".

Participant 19. Manager

"I think its just about asking them what they want and trying to provide it for them because external courses are extremely expensive and we've got to sort of invest in the people we know, the D grades and E grades and .....its about trying to spread that small amount of money as far as possible by using what we've got on site"

Participant 5 Nurse

"I'm learning a great deal as I go"

The quotes also illustrate some of the vast volume of information provided by participants about different learning events; their most recent experience of learning at work, other experiences of learning at work, the most useful learning experience at work and not at work, and the least useful learning experience. This was later interpreted and analysed by the researcher.

At the start of each interview the researcher set the scene by asking questions about the context of the current work of nurse participants and those of the staff of the managers, this was to help the participants relax and focus. This approach revealed some interesting aspects about *job differences over time* in response to the question – 'how has your job changed since you took up this post?'

Examples given by ten of the nurse participants included: self-development, increased professional profile in the ward, management, greater responsibility,

expanded role and change of role. Two nurses indicated that their jobs had not changed. Four of the six clinical nurse managers made reference to staff who were now responsible for new areas of work and staff who now had more people management responsibilities. *Learning on the job* was also identified at this early stage of each interview by eleven of the thirteen nurse participants. Key phrases used to illustrate their learning included: questioning, talking, interacting, prioritising, diplomacy, managing, budgeting, problem solving, clinical care skills, acting up for managers, and developing the role. These phrases illustrate a range of informal learning activities that clearly demonstrate that learning on the job does happen through different events. The learning described was seen as valid learning by the participants, although they did not relate the learning to any formal learning experience.

Following this, questions 2-5 asked specifically about learning events and provided participants with the opportunity to describe and explain their learning experiences. The main themes that emerged were that ***learning on the job, learning by doing the job*** and ***learning from others*** at work are key features of learning through work.

Learning on the Job and By Doing the Job

The majority of participants saw *learning on the job* as being an integral feature of professional work activity. The nurses working in the continuing care sector and all clinical nurse managers identified learning on the job as a positive feature of work in the first learning event analysis. All participants provided examples of positive 'learning points' and 'learning outcomes'. Similarly in the second learning event

analysis, the majority, including the acute sector nurses, again identified these features. It is not clear why the acute sector nurses were negative in response to the first learning event.

Participant 6 Nurse

"So its a case of 'I don't know what these results mean' (laughter) so I got hold of the doctor today and she went over it with me. So she explained a lot about what it was"

Participant 19 Manager

'.. the patient began to get very abusive and aggressive but she handled it very well indeed....and she learnt that it was important not to rush in, she needed to do it in a methodical way'

The number of participants who indicated the importance of *learning on the job* and learning by *doing the job* is indicated in Table 1. Learning by doing the job, a very similar, if not exactly the same, learning activity, illustrated in the examples in Figurer 15, emerged as a different code from participants' responses to the question about the most useful learning at work. As such it correlates with and confirms the initial responses about learning on the job. It is interesting to note however that neither codes emerged to any great extent through later questions, such as those about informal learning at work. This is possibly because of the intrinsic difficulty facing the participants in terms of recognising and interpreting their own learning in relation to their work.

Table 1: Identification of number of incidences of learning at work

Learning on the job (LOJ) and through doing (DOING) the job identified by participants in different categories.

Key: N/A - nurse acute, N/C - nurse continuing care, N - nurses.
CNM/AC - clinical nurse manager acute, CNM/CC - clinical nurse manager continuing care

Code	Category	N/A [8]	N/C [5]	N. total [13]	CNM /AC [3]	CNM /CC [3]	CNM total [6]	Total [19]
LOJ	Learning Event 1	0	5	**5**	3	3	**6**	**11**
	Learning Event 2	2	5	**7**	1	2	**3**	**10**
	Classification of learning	3	3	**6**	0	0	**0**	**6**
	Other aspects	3	1	**4**	0	0	**0**	**4**
DOING	Learning Event 1	1	0	**1**	2	0	**2**	**3**
	Learning Event 2	0	0	**0**	0	0	**0**	**0**
	Most useful learning at work	8	5	**13**	3	1	**4**	**17**

To illustrate what is meant by *learning on the job* the examples given by the participants in the course of the interviews are set out in Figure 15 and similarly *doing the job* examples are provided in Figure 16. These clearly demonstrate the rich diversity of learning experienced by the participants through work. More importantly, it also demonstrates the type of learning activity and the nature of the learning outcomes for individuals and their employers. Communication skills, for example, and the management of people and critical incidents are complex professional activities that are key to a successful outcome for patients and their families in both the acute and continuing care clinical settings.

The fact that participants recognised that this learning had occurred at work is important because, in addition to the type of learning as stated it also points to the nature of the experiential learning that occurs through work. In Figure 15 both the type of learning and the nature can be distinguished from the examples. The nurses provide the former examples and the managers the latter. This will be discussed later in this chapter in relation to research question five.

Figure 15: Participants examples of learning on the job from learning event analysis 1 and 2

PARTICIPANTS	EXAMPLES FROM TRANSCRIPTS	QUOTES
Continuing care nurses	• How to negotiate • Patient care • People skills • Project management • Communicate in different ways/settings • People management	*'in many respects you learn on a day to day basis'* Participant 9
Acute care nurses	• Seeing new things every day • Extending role	
CNM CC	• Critical incident with patient… and family • D &E staff rotate to clinical nurse specialist • Critical incident	*'its a big enough culture shock for newly qualified staff to go into a ward without having to come into a ...unit, where they have all the basic skills to pick up plus the ..skills'* Participant 18
CNM ACUTE CARE	• Acting up • X-ray analysis • Plan of action with other staff • Through an ongoing development	

These learning activities in Figure 15 reinforce the points made by participants at the start of the interview in response to questions about changes to their job 'over time', by providing additional examples of evidence. It is possible therefore; that the job changes over time resulted from informal learning that had occurred through work, rather than formal education. Five participants had benefited from a course of preparation [two acute care nurses and three continuing care nurses] for their current posts, however most participants had been in post for a number of years and the changes identified that are attributed to learning were subsequent to the initial education. Therefore the inference is that learning occurred through work, this will be explored later with Figure 16.

It is interesting to note, that on first examination, there does not seem to be a difference in the types of examples given by the different groups of participants, either in the initial part of the interview, or in response to the questions about recent and other experience of learning on the job. This may be due to the nurse's description of an actual learning activity that occurred for them as individuals. The managers described the context and nature of the learning identified for staff as a collective group. Therefore, the learning described appears to have more to do with the development of the skills of senior staff who have positions of responsibility, rather than the need to develop and maintain clinical, technical skills or to increase or gain theoretical knowledge.

Participant's descriptions of learning through 'doing' the job verified a similar pattern, whereby the learning is described in terms of the development of

management skills, rather than the clinical skills of the experienced nurse. Some exceptions did occur, for example specific to certain specialist areas of work. This shows diversity of learning that includes references made to the use and development of clinical skills.

Participant 5 Manager

"we have introduced emergency nurse practitioners, and these staff have had a huge learning curve to be able to work as autonomous practitioner'.

Participant 4 Nurse

'It's just the knowledge that you acquire, when you go into an area that's quite specialised and you don't know it and then you look at what I know now and what I knew then, and maybe one year in this job you thought oh, I'm really getting to grip – I know about this and I know about that, but then I look back and think well I didn't really know that because now I feel I know so much more just about the subject'

The answers in response to the question about *'what was the most useful learning?'* that had occurred for either the individual participant, or for members of staff of the CNM, provide examples of how the previous learning on the job was applied and integrated by *doing the job*. Doing the job therefore provides the focus for the use of knowledge learned through work and potentially for the generation of new learning. Figure 16 illustrates this by the examples and quotes from participants. The

importance of this data, however, is the relevance attributed to the learning by the participants in respect of their accumulated professional experience.

Figure 16: *Learning as doing the job* from the 'most useful learning event' analysis.

PARTICIPANTS	EXAMPLES	QUOTES
Continuing care nurses	• diplomacy, communication.... • teaching and presentation skills • not to take things personally • working group	*'the single most important thing I have learnt is how to communicate with people'* Participant 7
Acute care nurses	• taking responsibility for clinical events and supporting staff and relatives following critical incident • running an in house mandatory course • how to deal with patients who are ventilated and talk to them • developing a clinical skill • maintaining competence in use of machinery • communications with relatives and patients • time management and managing workload as a staff nurse	*'mainly on the job working'* Participant 4 *'the practical side and having the confidence to deal with other things'* Participant 20
CNM CC	• chairing groups • broad experience by rotating through unit	
CNM ACUTE CARE	• role development workload priorities • expanded practice –chemotherapy	

The most useful learning experience not at work for five of the nurses and four managers was an education programme or course. Six nurses and four managers identified other activities, such as a meeting linked to a professional association, or a professionally relevant conference. Clearly external formal learning activities were

seen as useful and relevant although later evidence (verified in interview two) seems to indicate that formal programmes are not valued.

The question about the least useful learning experiences provoked some interesting responses such as '*all learning is useful*'. In fact five nurses and three managers, a total of eight participants indicated all learning was positive. However the most frequent response was in relation to courses that had been inadequate in terms of the content, delivery or organisation. Potentially this is an example of '*non-learning*' or '*negative learning*'. Ineffective learning from courses was referred to by six acute care nurses, two continuing care nurses, three of the managers from the acute units and one of the managers from continuing care units (12 in total). Six participants also commented on a poor learning environment in terms of negative attitudes of staff who were not motivated. This was also linked to perceived barriers to learning cited by four of the nurses, such as no goals, no learning plans, appraisals not done and no feedback given to individuals.

Learning from Others

The category of 'learning from others' at work emerged clearly in interview one. Different 'others' were identified by all participants, including nurses, doctors, pharmaceutical and industrial company representatives and other professions allied to medicine such as a physiotherapist or dietician and clinical nurse managers.

Examples of learning from others include:

- Clinical practice
- Clinical practice under supervision

- Demonstration of a company's new product and talks and training in use of product
- Expanded role
- Explanations from radiographers
- Management of the ward
- Organised talks e.g about patient education or with the clinical nurse education facilitator
- Specialist nurses – information from
- Study day [for nurses] with presentations from multi-disciplinary staff
- Team work
- Twice weekly meetings of multi-disciplinary staff

The number of times that 'learning from others' occurred are outlined in Table 2. This shows that the most important group of 'others' that the nurses learnt from was their nurse colleagues, with the other workers identified, but not emerging as the most significant group. Doctors are noted as colleagues that the nurses learn from, but not to any great extent. Similarly, it is interesting to note that company representative were identified as a potential source of knowledge and learning, as well as the clinical nurse managers and the professions allied to medicine. However, both nurses and managers in a number of different aspects of the first interview noted the variable quality of teaching and learning provision as an issue. Issues related to the experience and knowledge gained by junior staff undertaking development programmes, in that experience varied between wards and units. There were also the differences in roles and qualifications of practitioners who provided education in the clinical areas.

Table 2: Incidence of learning from others

Key: Learning from others (LFO), nurse, doctor, company representative (REP), clinical nurse manager (CNM) and, profession allied to medicine (PAM), N/A - nurse acute, N/C - nurse continuing care, N - nurses, CNM/AC - clinical nurse manager acute, CNM/CC - clinical nurse manager continuing care

Code LFO	Category: Learning event	N/A [8]	N/C [5]	N. total [13]	CNM /AC [3]	CNM /CC [3]	CNM total [6]	Total [19]	No of refs.
Nurse	One	3	3	6	0	3	3	9	
Nurse	Two	6	2	8	3	1	4	12	(21)
Doctor	One	0	1	1	1	1	2	3	
Doctor	Two	3	1	4	1	1	2	6	(9)
REP	One	2	0	2	0	1	1	3	
REP	Two	0	0	0	0	1	1	1	(4)
CNM	One	0	0	0	2	1	3	3	
CNM	Two	0	1	1	0	0	0	1	(4)
PAM	One	0	0	0	1	0	1	1	
PAM	Two	0	0	0	0	1	1	1	(2)

The summary picture maps also revealed the importance of 'others' for learning at work (see Appendix X). All nurse participants identified learning from others in their maps, including positive and negative role models. The nurses also identified two further categories, patients and their relatives, and experts. The experts identified included internal and external experts who could inform staff about up-to date development. The nurses assumed that experts had the knowledge that could be imparted to them and that the experts would also be able to facilitate their learning. This was potentially an erroneous assumption. Nurses also indicated in their maps that they learnt by teaching others, a factor referred to throughout the different categories of the interview by a small number of participants in six of the thirteen categories. The nurse manager maps, on the other hand did not specifically identify learning from others, but they did identify working with others as a factor that influenced learning.

Participant 8 Nurse

"I'm asking the nurse practitioners to go through things with me"

Participant 17 Nurse

'I think everyone's worked in wards where you think, well I'd never want to work someplace like that again, and then you've worked with excellent staff nurses or sisters .. and in very well run wards and you ... I suppose you look back and think how could that all go so smoothly .. how did they get to know, the processes in place that all just flow in.'

The previous examples provide some indication of the type of learning activities that occur and are seen as useful by participants. The examples alone however do not specify or identify what has been learnt in terms of knowledge, or why it was learnt, or explain the process of learning or how learning is organised within the organisation. The examples and number of references made to learning from others does however imply that learning does happen at work, and that the people with whom the nurse works act as a key learning resource. No differences were identified between the different sets of data, in other words all participants made reference to the whole range of possible others and provided similar examples.

Research question 2: What is the Purpose of Learning at Work?

Questions six, seven and eight in interview one were constructed to help the researcher explore with the different participants, the purpose of learning at work, before examining the process and possible classifications used for learning within the organisation. This section sets out the responses to these questions .

Question six asked participants if they could group or categorise the different learning experiences at work. The nurse participants found this difficult and provided limited answers. However, the nurse managers referred to different types of learning experiences for their staff and seemed to have a clearer notion of possible categories of learning.

Participant 5 Manager

'I think I would categorise them as practical learning experiences of actually hands on work, doing, and the theoretical learning of actually undertaking specific courses'

Ten participants in total [6 nurses and 4 managers] most often identified formal programmes. However these were not always positive comments as the following quote in relation to in-house courses by a nurse from the continuing care setting shows.

Participant 9 Nurse

"One that was instigated by myself.. that was identified need [good and formal] and one was organised by the managers where all charge nurses had to attend [bad and formal]".

Six nurses identified learning on the job as a particular category of learning experience, whereas the clinical nurse managers identified a range of learning experiences at work . These are shown in Table 3.

Table 3: Number of Nurse Manager classifications of learning experiences

CLASSIFYING *learning experiences at work CODES*	**ACUTE AREA**	**CONTINUING CARE AREA**	**TOTAL**
FORMAL *[in-house]*programmes	1	3	4
Mandatory employer training	0	2	2
Courses – formal	1	2	3
Class – classroom learning	1	2	3
Informal learning	2	0	2
Essential – critical learning for competence	1	1	2

The final code of critical learning to achieve competence, as opposed to learning for interest only, was described in the following way by one of the managers from the continuing care area.

Participant 18

"there are the learning experiences you need to be capable and confident in the job and..... there are learning opportunities which are interesting and may indirectly benefit you in the way that you're carrying out your job but the biggest benefit is for interest rather than the need to have it"

As Table 3 shows there is a predominance of formal training identified by the managers as a result of this question being asked. This was followed up in the first interview through questions seven and eight about structured and informal learning at work.

Structured learning at work

Question 7 'is there a structured learning programme at work' generated a large volume of detail about in-house programmes in the different locations of the case study. The common category to all participants was the mandatory employer training that included topics such as; moving and handling, fire safety, resuscitation, drugs and calculations. The mandatory training sessions are offered on an annual basis to all employees who are required to attend and thus be able to provide evidence of 'maintaining their knowledge and skills' as competent practitioners. However as the following quote illustrates the majority of comments about employer mandatory training days were negative.

Participant 15 Nurse

'same repetitive thing every year. And you go once a year and it's the same issues'

Staff were also expected to attend specific clinical update sessions for expanded role activities such as venepuncture and advanced life support. Different views also

emerged in relation to these required updating sessions that reflected the views expressed about mandatory training days.

Participant 7 Nurse

'.. to make sure that people are maintaining their competence'

Participant 9 Nurse

'You were told by management that senior staff had to do that....'

Participant 1 Nurse

'You think that has been a day and someone has paid my salary for a day and what have I got out of that? And you kind of felt you could just have read the handout'

Clearly there was a different perception between the organisation and the employees. Training days were deemed essential and mandatory and yet staff did not seem to value them or see the direct benefit of attending a training day that was designed to ensure they maintained knowledge. This was possibly because no reference was made by the nurses to the development of knowledge. Therefore the assumption is that the mandatory training days did not enable them to progress further in their role.

In addition to these training sessions there was also evidence of induction programmes for new staff and for staff appointed to a new post, such as D, E, F, G grade programmes for development of practitioners once in those posts. Many of the nurses referred to the development programmes as something that was in place for

new staff now and that personally they would have liked the opportunity to undertake similar programmes had they been available when they were appointed to their posts.

The managers also emphasised the importance of the development of these programmes and pointed to them as examples of structured formal provision for staff in the Trust. However, there were clear differences across the five hospital locations visited and between units within the Trust of in-house structured courses, to the extent that ten different codes emerged from the interviews. These are shown in Table 4 and illustrate the difference between the acute and continuing care areas as well as the different perceptions of the nurses and their managers. This may be due to the different needs of the distinct clinical areas or it could relate to the fact that there has been an ad hoc development of provision driven by the separate groups within the organisation rather than a strategic development by the organisation as a whole.

Some of this will be due to the different ways used to describe the in-house structured programmes, however there is clearly great diversity in provision across the case study.

Table 4: Incidence of Structured Formal Learning Programmes

Key : N/A - nurse acute, N/C - nurse continuing care, N - nurses.
CNM/AC - clinical nurse manager acute, CNM/CC - clinical nurse manager continuing care

Code	N/A	N/C	N total	CNM /AC	CNM /CC	CNM total	TOTAL
D grade development programme	3	1	**4**	3 *all*	0	3	**7**
D grade rotation	4	0	**3**	1	0	1	**4**
E grade development programme	3	0	**3**	2	0	2	**5**
F grade programme	2	0	**2**	0	0	0	**2**
G grade programme	2	0	**2**	0	0	0	**2**
New staff induction programme	5	1	**6**	1	0	1	**7**
Mandatory training days	7	4	**11**	2	1	3	**14**
Clinical update days	0	3	**3**	0	0	0	**3**
Professional research and development department training days	5	2	**7**	0	0	0	**7**
Career review/appraisal	2	2	**4**	2	0	2	**6**

There was also a range of terms used to describe practitioners who had an education remit within the different locations. These included; clinical nurse facilitator, clinical nurse practitioner, clinical nurse specialist, clinical practice development nurse, and finally clinical nurse education facilitator. The number of clinical educators varied in different locations, for example four on one site, one per unit on another and apparently none currently in another. It is clear from the evidence emerging that the employer had clearly identified a need for a number of in-house structured programmes to meet a variety of needs ranging from newly appointed staff, staff newly appointed to a new role or in developing roles. Therefore, in addition, to assist staff with their development, experienced practitioners had been appointed in the clinical areas to ensure that the necessary training was available. It was evident

however, that apart from experience, there were no agreed criteria for staff taking up these posts in terms of preparation for the post or teaching qualifications. The managers indicated that if an individual had a particular interest in the facilitation of learning or had demonstrated teaching skill then they had been encouraged to take this route in their career. Some education facilitators had specific teaching qualifications, but this appeared to be the exception rather then the norm.

The last area, included in Table 4, and identified by a small number of participants as being relevant to structured programmes, is career review and appraisal. Staff indicated that there should be links between the objectives agreed with managers and their personal and professional development. This issue also emerged in the evidence about least useful learning experiences as well as evidence from some staff that there was not a clearly defined career review system in place.

Participant 4 Nurse

''You tend to set objectives but they wouldn't necessarily be... (linked to learning)'

Participant 1 Nurse

'its certainly to do with career development...it has just started though so I'm not entirely sure that its been set up to work concurrently'

Some of the examples of the structured programmes provided by participants are shown in Figure 17.

Figure 17: Examples of Structured Programmes

CODE	EXAMPLE
D grade programmes	• 3 day orientation programme and 3 month period of working with education co-ordinator for 1 session a week
D grade rotation	• 3/9 month experience co-ordinated programme – depending on experience • 6 months surgical/medical/ high dependency & within unit
E grade programmes	• 3/9 month experience co-ordinated programme – depending on experience • study days • in-house clinical course /classroom
F grade programmes	• monthly meetings • 2 study days a year
G grade programmes	• monthly meetings with different speakers &study sessions • 2 study days a year, study days/afternoons
Programmes for new staff	• orientation programme for newly appointed staff • includes expanded role • induction programme • to help staff feel confident to work in any part of the hospital
Senior staff nurse programme	• 2 days a year
Mandatory	• manual handling • moving & handling • fire safety [not specific to unit] • resuscitation [specific to unit] • drugs and calculations
Clinical Update	• yearly update for expanded roles e.g. venepuncture, advanced life support training
Professional Development	• sessions on: appraisal, clinical effectiveness, clinical governance [difficult to get to] • published list of teaching sessions for all Trust sites
Study day	• how to manage aggressive patient
Career review	• there are goals that can be discussed with education facilitator • personal development and objectives identified but no formal link to learning
Professional lectures in an in-house programme	• expanded roles: IV therapy, nurse verification of death, symptomatic relief policy training, continence assessment, compression bandaging • nurses lectures one afternoon a month

One issue that emerged was the non transferability of in-house certified courses, such as a venepuncture course, between Trusts or in some previous cases between hospitals within what is now the same NHS Trust. This had resulted in nurses having to undertake a similar course for a previously acquired skill again with a new

employer because the previous course was not recognised. There was a need expressed for courses to be recognised or accredited as a previous professional diploma course for charge nurses had been by the professional authority.

One nurse manager briefly referred to external structured programmes, such as specialist accredited modules or a short course. One nurse made reference to a previous professional course that had attracted academic credit. Another referred to the fact that recognition of the in-house course did not extent outwith the trust.

Participant 16 Manager

'I think it perhaps needs a bit more structure to these clinical courses, you know, ...our course.. its not really recognised if you went to another area and you would probably have to do it again'

Participant 9 Nurse

'you're having to work through a programme of competencies and be supervised for a number of sessions until you become deemed competent, so there is evidence to show that you've come through that successfully'

The purpose of the structured courses referred to by the participants seemed, at this point in the research study, to fall into the following categories:

- To do the job better
- To maintain professional skills

Informal learning at work

The initial response to the question about informal learning at work was positive from four nurses and one manager and negative from five others, mainly in the acute care area. The participants attributed the negative responses to an absence of staff and a lack of time. This was a theme that recurred later in the first interview in relation to resources.

However a total of ten participants identified meetings and networking as providing opportunities for informal learning. The types of meetings that participants identified as providing them with learning opportunities were: with clinical nurse specialist, with senior G grade staff, weekly departmental educational meetings, informal afternoon meetings, link nurse meetings - responsible for pain or infection control, with the in house education committee.

Participant 10 Nurse

'Interestingly enough some people feel that its just a meeting they don't see that, the other side of its quite nice to see you, even if its only two hours a month, but they see that as a real pressure on their time and some of them don't see it as a benefit'

One participant identified informal discussions at ward rounds with the medical staff and another participant the hand-over report time. Report time, is when information about each patient is given to the next group of staff [shift] responsible for patient care and when traditionally staff have an opportunity to question and learn.

The opportunities for informal learning that the researcher expected to find that were **not evident** were: journal clubs, reading and discussing journals or magazines, updating from internet sites or computer learning, learning from hands on clinical experience, multi-disciplinary learning, learning from company representatives, asking questions of others and teaching others. This may have because the participants felt that they had already addressed this in the previous questions about learning events.

Informal learning did feature in the composite picture maps for both the nurse and manager participants with seven nurses identifying informal teaching and learning through tutorials, reports, bedside exchanges with other staff and meetings. This was dependent upon the availability of staff and time. Five of the managers identified internal, informal learning and cited examples of informal presentations to staff, as well as ad hoc opportunities to learn from others. In addition three of the managers identified networking as an important factor that influenced learning through work. It seemed that the informal learning that took place provided opportunities to develop new technical and clinical skills and to develop personal confidence.

The purpose of learning at work emerged clearly from the employer's perspective in the examples given by all participants about structured learning. The development and induction programmes for new or junior staff were referred to positively and were seen by the participants as fulfilling a specific purpose to prepare individuals for the posts to which they were appointed. This is commensurate with professional

and government recommendations that newly registered staff have a six-month period of preceptorship. Interestingly apart from the mandatory training sessions that all staff had to attend and the specific programmes for new staff, the others examples referred to did not appear to have such a universal or indeed collective focus.

For the nurse participants in this study, who were senior nurses, there was no specific structure or provision for their on-going learning, or continuing professional development within the organisation. Their learning was therefore dependent upon the context of their work and the learning opportunities presented and to their personal individual ability and motivation. In both cases they appeared to have to seek and negotiate learning opportunities, either through their work or external to work.

It is possible that the collective view about the purpose of learning can be more clearly defined when the outcomes of learning are identified. The outcomes of learning [interview questions 12 and 13] were analysed in relation to the process of learning. It is interesting to note that twelve nurses and five managers stated that there was a professional benefit from learning and nine nurses and two managers personal benefits. Increased personal confidence was highlighted by eight of the nurses as a benefit of learning that helped them with their work. The managers did not identify this at this point. Further cross category analysis will help to clarify the purpose of the learning through the analysis of the learning activities, the outcomes and benefit analysis and evidence of learning.

In concluding this section it is important to note that all participants acknowledged that learning on the job took place. However for the senior nurse who participated it was not through the structured learning programmes of the employer as these were not positively identified in relation to this group of experienced staff.

Identifying how learning was organised or occurred for this group is therefore problematic. Exploring the process of learning may illuminate the organisation of learning within the case study. However the emerging issue would appear to be similar to that of the learning organisation versus organisational learning, in that it would appear that no-one knows how best to organise the learning to effect the learning of the individual within the context of the organisation's strategic goals.

Research question 3: W hat is the process of learning at work?

The process of learning at work was explored with participants through interview one. Questions seven to eleven about the formal and informal structures, the use of learning instruments, the resources for learning at work, and outcome analysis of the benefits of learning were included. Also questions about the evidence of learning and finally the picture maps. Additionally this was revisited at the second interview for verification and possible clarification.

From the previous analysis of the formal and informal structures it would appear that the process of learning within the organisation was routinised to provide packages for particular groups of staff, or regular points of contact in familiar modes arising from custom and practice. The process of learning was therefore standardised

through routine, but not structured, as part of the collective behaviour of the organisation.

Learning instruments

Further evidence of the process of learning was sought by asking participants about personal learning plans and professional portfolios. These particular instruments were identified as familiar learning tools or devices within the nursing profession.

Seven nurses indicated that they had personal learning plans. On the whole these were informal personal plans, although some participants linked their plans to the discussions they had had with their managers following career review meetings when objectives had been set for the year. One nurse manager indicated that she had a training plan for the year for all her staff.

Participant 7 Nurse

'I have a goal if you like; I'm aware of things I would like to do next'

Participant 4 Nurse

'It's not formally written down, but yes I know what things I want to be able to do'

The question about personal and professional portfolios generated a number of different responses. Table 5 shows the number of yes and no answers to the question about whether or not the individual participant or the staff of the nurse manager had a

personal learning plan or a portfolio that they used as an instrumental learning device.

Table 5: Identification of the number of learning instruments

Key : N/A - nurse acute, N/C - nurse continuing care, N - nurses.
CNM/AC - clinical nurse manager acute, CNM/CC - clinical nurse manager continuing care

Code	N/A [8]	N/C [5]	N total [13]	CNM /AC [3]	CNM /CC [3]	CNM total [6]	TOTAL [19]
Personal learning plan	3	4	7	1	0	1	**8**
Professional portfolio *YES*	5	2	7	3	2	5	**12**
Professional portfolio *NO*	2	2	**4**	1	1	2	**6**
Career review	2	0	**2**	2	2	4	**6**
Responsible for own learning	1	2	**3**	1	0	1	**4**
Reflective practice	1+ve 1-ve	0	**1**	0	1	1	**2+ve 1-ve**

The majority of nurse managers indicated that all staff had portfolios, indeed the portfolios seemed to be supplied by the organisation. Additionally it is a professional requirement that staff maintain a professional portfolio that demonstrates they have maintained competence through continuing professional development activities. However the above table shows that a number of nurses did not have a portfolio and that managers were aware that not all staff had portfolio. It should be noted that there was no requirement from the employer for staff to produce their portfolio and some managers acknowledged that the portfolio, although a professional requirement was a personal document and that they [the managers] had no right to ask to see the nurses portfolios.

The following quotes demonstrate how portfolios were viewed as a historical record of learning activities and not necessarily as either a composite record of evidence of learning or as a means of generating an on-going plan through reflection.

Participant 2 Manager

'.. the Trust actually supplies them, we've had them for years and to my knowledge most of the staff have some sort of portfolio, even if it's a collection of certificates that they've attended study days etc. I don't know that everybody has a full understanding of what a portfolio should contain'

Participant 12 Nurse

'I do, its not complete, and it sits, its one of those things that I keep looking at and thinking oh ... I really must do that'

Participant 1 Nurse

'.. it's just a ring binder .. so if I have gone to study days I at least have the programme and the certificate and while I might not have anything about reflective practice at least you know you can rely on notes and stuff that you may have written '

This lack of standardisation in the use of portfolios seems to indicate a lack of clarity about the purpose and function of a professional portfolio.

The managers did identify a relationship between annual staff appraisal, individual learning plans and portfolios. However, it was acknowledged that this was not pulled together in a systematic way. Two nurses referred to staff appraisal in a positive way as a means to set goals and objectives for the following year. However the remainder of staff indicated that either appraisal did not happen, or if it did then the goals set with the manager were then not followed through in practice with a mentor or supervisor. The exploration of possible learning instruments in the form of plans, portfolios and structured appraisal did not reveal standardised practice in relation to the facilitation of learning through work.

Resources for learning at work

The researcher was interested in establishing through the first interview questions '*what resources were available to help nurses learn at work?'* and *'what resources the participants thought they needed for learning at work'*. All participants had a great deal to say in relation to the resources available to support learning. Resources for learning at work were seen as fundamental to making that learning happen and greatly influenced learning through work. The types of resources identified can be described as physical, financial and human. The various responses are set out in Table 6.

Table 6: Identification of types of physical resources for learning at work

Key : N/A - nurse acute, N/C - nurse continuing care, N - nurses.
CNM/AC - clinical nurse manager acute, CNM/CC - clinical nurse manager continuing care

Code	**N/A [8]**	**N/C [5]**	**N total [13]**	**CNM /AC [3]**	**CNM /CC [3]**	**CNM total [6]**	**TOTAL [19]**
Personal computer	6	4	**10**	2	3*all*	5	**15**
WWW access at work	3	1	**4**	1	1	2	**6**
Network electronic mail	1	1	**2**	0	0	0	**1**
Library	5	3	**8**	*1*	2	3	**11**
Books:access at work	5	1	**6**	*1*	0	1	**7**
Journals:access at work	3	1	**4**	1	1	2	**6**
Accommodation – lack of	1	2	**3**	0	0	0	**3**

The access to personal computers is potentially misleading. For example three of the acute care nurses reported that there was access to a computer in the ward [one only], or the in-service education department or in the library. Three of the continuing care nurses also reported that there was a computer in the office for all staff or in the resource centre. Likewise the managers reported that the computers were available to all staff in the office.

However the location of the computer, an office, was used as a shared office and for other purposes such as seeing relatives. Also the number of staff who may wish to use one computer could be as high a 45 in one unit. Access to the Internet and the World Wide Web was similarly limited by virtue of the location in offices or library and the number of people wishing to make use of the resource. Nurse participants seemed unclear about the availability of electronic mail either locally or to a wider

network. Some nurse managers did refer to e-mail access but not within the context of learning resources.

The more traditional learning resources such as library, books and journals were commented on by a significant number of participants. Specialist books and journals appeared to be generally available at work in the acute sector, more than the continuing care areas. Access to an onsite library or local higher education library was possible for the majority of participants, but limited use was made of these facilities because of the need to be present in the clinical area and the lack of time to visit either the library or the local resource centre. Time, money and people were the other major resource factors identified. The occurrence is shown in Table 7.

Table 7: Identification of the major resource factors affecting learning at work

Key : N/A - nurse acute, N/C - nurse continuing care, N - nurses.
CNM/AC - clinical nurse manager acute, CNM/CC - clinical nurse manager continuing care

Code	N/A [8]	N/C [5]	Nurse total [13]	CNM /AC [3]	CNM /CC [3]	CNM total [6]	TOTAL [19]
Time +ve	2	1	3	0	*1*	1	4
Time –ve	6	5	11	3	2	5	16
Money +ve	6	3	9	3	3	6	16
Money –ve	3	2	5	*2*	3	5	10
Human resources	6	1	7	*1*	1	2	9
Education facilitators	1	2	3	1	0	1	4
Company representatives	0	0	0	1	2	3	3

Insufficient time to devote to learning, was the most commonly occurring theme from sixteen participants. This was identified as an issue on a day to day basis and in terms of blocks of time for study leave. It seemed to be a factor that particularly

affected the senior nurses within the case study because of their responsibilities on the ward. In other words if they were on duty as the senior nurse then they could not always leave the ward area. They were also expected to be available for other staff. In six cases however the senior staff described specific working arrangements that were already in place to alter or rotate duties, for example for administration days or weeks or to act as a bed manager for a week at a time. The overall perception however was that there was no time to learn. The managers supported this view.

Other reasons given for the lack of time included shift patterns, lack of staff, replacement costs of staff and time needed to get to library. One manager indicated that staff used their own time to pursue learning and another indicated that time used for learning had to be offset against other working hours.

One nurse indicated that they could get study leave if requested, another stated that she had been given a study day a week to undertake an external course. One manager explained that staff support for learning was usually either in terms of time or money. In other words if the employer funded a course then the member of staff was expected to contribute own time or vice versa. A number of difficulties faced staff therefore in relation to the management of their learning at work and through the context of work. Some of these are illustrated in the following quotes.

Participant 12 Nurse

' but if I'm away for a week, then I have a week's work waiting for me when I get back. You think .. Is it worth doing that .....? '

Participant 6 Nurse

'You might get half an hour here and there but you probably think I must do that instead'

Participant 9 Nurse

'Time is a major issue. I think most people find its what sets you back from doing courses'

Participant 1 Nurse

'that's been my objective for the last two years and still never been able to do it and that's to get a week out the ward'

No clear pattern for the use or allocation of time specifically devoted to learning for experienced practitioners emerged from the evidence. Indeed it could be said that there was no evidence of a commitment to devote specific time to learning within the organisation.

Financial support for learning was however available as indicated in Table 7. This was stated by all of the managers and nine of the nurses who participated. However five out of the six managers also indicated the difficulties associated with the use and allocation of money, as did five nurses. The positive aspects about money were: there were training budgets in all areas, there was also the trust lottery fund, endowment funds, separate funding for degree studies, hospital funds, unit funds,

nurses league funds, and central funds. Also if staff worked in specialist units there may also be additional government funding. With the exception of the managers in the acute areas all participants implied that this funding was however limited. One manager indicated that in some areas there were no resources and that in others it was insufficient. This was clearly an issue.

Participant 1 Nurse

' In some ways you would rather have the time than financial backing because we were working'

Participant 5 Manager

'We've got to think of other ways of learning, whether that is by getting an education nurse specialist into areas and helping staff to learn – well that doesn't cost so much'

Participant 16 Manager

'We are increasingly approaching charities for some sort of funding towards promoting us and that's just been a basic fact of life'

Human resources and accommodation were other themes. The general view expressed by the majority of participants was that there were not enough staff employed to allow the nurse to be released to go to the local library or the hospitals learning resource centre or to try and access the internet on the units computer. Also, even if time was available while the nurse was on duty in the clinical area there may not be the accommodation available to study at work. The researcher experienced

this lack of suitable accommodation while trying to conduct interviews in the clinical areas.

Some factors were identified as being beyond the immediate control of the nurses or their managers. For example, the variation in the needs of patients, therefore the demand on staff resource could be higher, a shortage of staff due to a variety of factors and the particular type of unit. One manager from a continuing care unit, made the point that the professional development needs of the staff were not accounted for in terms of the development of the unit, future manpower planning and the staffing budget.

The evidence, therefore, to support a process of learning within the organisation in terms of allocation and use of resources for learning was not consistent. What was consistent was the emphasis placed on the negative effect that the absence of resources had on learning. This emerged through interview one, within the production of each individual picture maps and later during interview two. One other area that may point to a process of learning at work within the case study is the exploration of the outcomes of learning and the potential benefits of learning to the individuals and to the organisation. These aspects were addressed by the researcher through the fifth main research question.

Research question 4: Do the nurses and their employers identify different learning experiences at work?

This research question was addressed by the researcher through the majority of the questions in interview one and later in interview two. The questions explored the different learning events of the nurses and the events that the managers identified as the learning experiences of their staff. It also included the nature of that learning in terms of formal and informal activities, the context within the clinical area and the factors that influenced learning. In Figure 15, both the type of learning and the nature was distinguished from the examples.

The main responses to the questions indicated that all participants identified the experiences through which nurses learnt at work. No discrete differences were identified between the nurses working in the acute or continuing care areas. However there were differences between the nurses and the managers that were identified by virtue of the nature of the questions asked and because the managers' knowledge and perception varied. On the whole the managers firstly presented a wider collective view of learning as it occurred within the organisation. Managers also have their own experience of learning through work and can identify instances of staff learning that has occurred through work. Many illustrated the views presented at interview with reference to a personal account.

However the nurses were asked to present their personal view and they chose to augment that with reference to the experience of nurse colleagues. The nurses all

talked about their learning from experience of working within the organisation and the difficulties that presented.

Participant 7 Nurse

'I think that most of the way we learn is experiential'

Participant 4 Nurse

"Its just the knowledge that you acquire, when you go into an area that's quite specialised and you don't know it and then you look at what I know now and what I knew then, and maybe one year in this job you thought oh, I'm really getting to grip I know about his and I know about that, but then I look back and think well I didn't really know that because - now I feel I know so much more just about the subject"

Emphasis was placed by the nurses on the difficulties in undertaking external formal programmes and the lack of support for activities like that in terms of financial and human resources. It appeared that the success or otherwise of an application to a manager to undertake a formal external course was dependent on the individual's motivation, the view of the manager and the immediate human and financial resources available. Concerns were raised by the nurses about the value and usefulness of internal formal programmes. In particular the lack of availability of formal internal programmes for the experienced nurse was noted by them. Informal learning was the key feature of learning through work identified by the experienced nurse participants. It seemed that this was sometimes ad hoc or opportunistic

learning as described previously, or through negotiation with peers and colleagues. Negotiation being used in this context to mean to discuss, to decipher and to work out by using problem solving approaches.

Three of the managers identified external courses and the others, study days and conferences, as external formal education, and expressed the view that if the learning was appropriate to the needs of the clinical area then staff would be supported. The managers however did acknowledge that the type of support varied. The following quote illustrates one manager's view on staff demand for learning.

Participant 18 Manager

"People fall into different categories, there are those who require study days and what have you simply to conform to what is required if they are re-registering with the UKCC and are very fixed on going on study days for that reason, there are those that are dying for knowledge full stop"

In addition to the differences identified through interview one, clear differences emerged during the compilation of the individual picture maps. For example in the collated maps in Appendix XXI it can be seen that seven of the nurses identified personal factors that influence their learning and the managers did not identify the personal aspects affecting staff as a factor in their learning. Also the managers identified the influences arising from the strategic development of the Trust and the nurses did not.

Two managers talked about the potential contribution that effective clinical supervision could have to staff development. Clinical supervision can be loosely defined as the regular supervision of a nurse's work by a member of the peer group, and it is used to ensure that professional development needs are identified and that the practitioner is supported in practice.

> *Participant 5 Manager*
>
> *"We've been slow to pick it up I think Clinical supervision is exceptionally important ...even if staff are not getting the time to have individual sessions for clinical supervision, I think within their wards they need to be doing group supervision'.*

Four managers identified the significance of staff development, and three the opportunity that experience provides for reflection as influencing factors. On the other hand none of the nurse participants referred to clinical supervision at all during interview one or when compiling the picture map of influencing factors. Neither was staff development noted as an important or influencing factor. However all nurses identified the context of work and clinical experience as influencing factors.

One manager referred to motivation as an important factor and another identified the influence that negative and positive factors can have. Seven nurses identified that having the motivation to learn was significant and some of them linked this to intrinsic and extrinsic factors. Only one manager and two of the nurses referred to

the professional requirements for on-going learning. Clearly this was not an important issue for either of the main groups.

The second interview provided the researcher with the opportunity to verify some of these initial findings and to seek clarification of the emerging views of the two main participant groups. This was illustrated in the responses to the questions in interview two (see Appendix XXI).

All participants who contributed to the second interview (18 in total) agreed that **the key features of learning at work are**: *learning from doing the job and learning from others at work.* The majority (17) also agreed that *networking with colleagues* and *problem solving* were key features. Fourteen agreed that *negotiating at work* was a key feature. Similarly twelve participants thought that *learning from mistakes and reflection* also featured in learning at work.

The second interview verified the findings of interview one and clarified the main purposes of learning at work. The findings revealed that there was no disagreement about **the purposes of learning at work** identified as:

to do the job better, to maintain professional skills, to develop new technical/clinical skills, to develop personal confidence, to motivate staff, to provide better patient care.

One manager from the continuing care area did not fully agree with three of the above aspects and opted for a 'midline' answer, in other words she did not disagree

but was reluctant to agree. The areas were 'to do the job better', 'to develop personal confidence' and to motivate staff'.

Therefore the majority of participants were in agreement about the purpose of learning at work, although there were differences in view about **the process of learning at work.** In this part of interview two the majority(13) agreed that *experienced nurses learning appeared to be fragmented and unstructured* and that *learning at work meets the organisations needs rather than the individuals*(10). There was however some midline views expressed (4 former and 6 latter) and some disagreement (1 manager former and 2 managers latter). Table 8 outlines the whole of the response to this section and demonstrates the weighting of the responses.

The main area of difference illustrated in Table 8 is the view of the managers. Two of the managers did not agree that *learning at work meets the organisations needs rather than the individuals* and three would not commit to agreeing. However the opposite interpretation is that four managers did not fully disagree with the statement and therefore were in sympathy with that view. Similarly half of the manager group disagreed that *individual learning needs appear secondary to the organisations* and the other half did not commit to agreement, but as above did not wholeheartedly disagree.

Table 8: Indication of participants views about the process of learning at work

Key : N/A - nurse acute, N/C - nurse continuing care, N - nurses.
CNM/AC - clinical nurse manager acute, CNM/CC - clinical nurse manager continuing care, [ ] numbers in these brackets indicate mid-line responses

The process of learning at work is not clear:										
	AGREE					**DISAGREE**				
	N/A 7	**N/C 5**	**M/A 3**	**M/C 3**	**Total**	**N/A 7**	**N/C 5**	**M/A3**	**M/C3**	**tot**
Nurses' learning appears fragmented & unstructured	7	3 [2]	2 [1]	1 [1]	13 [4]	-	-	-	*1*	*1*
Learning at work meets the organisations needs rather than individuals	6 [1]	3 [2]	1 [1]	[2]	10 [6]	-	-	*1*	*1*	*2*
Individual learning needs appear secondary to the organisations	4 [3]	3 [1]	[1]	[2]	7 [7]	-	*1*	*2*	*1*	*4*
Learning does not seem to be valued	1 [3]	3 [1]	-	[1]	4 5]	*3*	*1*	*3*	*2*	*9*
Learning is not seen as a legitimate work activity	3 [1]	3 [1]	-	1	7 [2]	*3*	*1*	*3*	*2*	*9*
Learning at work needs a recognisable outcome	5 [1]	5	3	2	15 [1]	*1*	-	-	*1*	*2*

The majority of managers did disagree with the statements that learning *does not seem to be valued* and *learning is not seen as a legitimate work activity.* The nurses were equally divided in their views of both of these, although there were some that opted for the midline rather than agree or indeed disagree.

The majority of participant's (15) agreed with the final question in this section that *learning at work needs a recognisable output/outcome.*

The process of learning at work was not clear because there did not seem to be a clear series or sequence of events, particularly for the experienced nurse. The overall approach was fragmented, with no learning trajectory or life long learning pathway. Learning at work seemed to focus on in-house training to meet the organisational need rather than the needs of the individual, but without a clear learning strategy in place.

Learning as such did not seem to be valued, therefore, learning at work was not formally recognised. The process of learning was product driven in terms of recognised traditional input, throughput and output, rather than, say, developed for the adult learner or through experiential learning.

The participants in the research study identified and described similar examples of learning at work for the experienced nurses, based on the nature and purpose of the work undertaken in each area. However the two main groups, the nurses and their managers emphasised different aspects and expressed different views about the structure and process of learning. This was found from the collation of the evidence from interview one, the analysis of the collated picture maps and the verification of emerging themes in interview two.

Research question 5: What are the benefits of learning at work to the individual nurses and their employers?

The fifth main research question addressed the benefits of learning at work to the individual and their employer. The researcher asked the participants about the long-term benefit of learning and about the evidence they would either provide [nurses] or expect in support of the learning [managers]. The analysis of these outcomes of learning provided evidence in respect of the benefits of learning at work.

The major benefit cited by 17 of the 19 participants was professional benefit, followed by personal benefit. The nurses also identified increased confidence as a benefit, although the managers did not identify this. Half of the managers on the other hand identified promotion prospects as a benefit of learning, but this was not acknowledged by the majority of nurses (see Table 9).

Table 9: Identification of the benefits of learning at work

Key : N/A - nurse acute, N/C - nurse continuing care, N - nurses.
CNM/AC - clinical nurse manager acute, CNM/CC - clinical nurse manager continuing care

Code	N/A [8]	N/C [5]	Nurse total [13]	CNM /AC [3]	CNM /CC [3]	CNM total [6]	TOT AL [19]
Professional benefit	7	5	**12**	3	2	**5**	**17**
Personal benefit	4	5	**9**	2	0	**2**	**11**
Benefit –confidence	5	3	**8**	0	0	**0**	**8**
Benefit – promotion	2	2	**4**	2	1	**3**	**7**

Undoubtedly there was a shared perception that learning did benefit the professional aspects of the work that the nurse was employed to do. There was also

acknowledgement that there was a personal benefit to individuals, although, from the first interview the specific aspects of these benefits did not clearly emerge. It should also be noted that financial benefits were not identified and that three nurses stated that there was no personal financial benefit resulting from learning. The specific examples given of benefits are provided in Figure 18.

Figure 18: Benefits of learning at work identified by nurse and manager participants

BENEFITS	NURSE	MANAGER
Professional	Increased competence Wider picture of things Improved quality and standard of practice Increased opportunity to develop Better ward sister To be able to do the job To practice safely Keeps you up to date	Better service to the patients Expanded practice Ensuring knowledge is benefiting others Better working environment Happy staff benefits patients
Personal	Increased awareness More organised out of work achievement Depends what is wanted out of job	Possibly long term More fulfilled staff
Confidence	Clarification of existing knowledge More eloquent On a par with others	Support at work provided staff with motivation
Promotion	'looking for learning for promotion'	Staff can move to a higher grade post Possibly promotion in the future long term prospect of promotion

The following quote illustrates the view of one nurse in the continuing care area who could see no benefit to external formal learning in terms of their own promotion prospects.

Participant 9 Nurse

' I don't see any, you know, fast tracking through the system of people with Honours degrees or whatever ....you're more acknowledged if you're actually learning the practical things and developing through the Trust and developing their competencies. '

This view seemed to develop further the theme that emerged earlier in relation to the value placed on the in-house programmes and the expectations of managers that staff must attend these. One nurse had a more enlightened view about the overall benefit of learning to practice.

Participant 7 Nurse

'I think the most important thing about learning is not for you to keep to yourself, you have to be able to pass it on to other people, otherwise it is a useless commodity if you can't pass on knowledge and skills to other people'

The major source of evidence of learning was thought by the whole cohort to be certificates, mainly from study days or in-house courses that stated that the nurse was competent(see Table 10). Five of the nurse participants identified the presentations they had given to other staff as evidence of their own learning and knowledge. The manager's favoured type of evidence was direct verification of evidence, for example through certificates and maintaining a database of study leave and courses completed.

Table 10: Identification of sources of evidence of learning at work

Key: N/A - nurse acute, N/C - nurse continuing care, N - nurses.
CNM/AC - clinical nurse manager acute, CNM/CC - clinical nurse manager continuing care

Code	N/A [8]	N/C [5]	Nurse total [13]	CNM /AC [3]	CNM /CC [3]	CNM total [6]	TOTAL [19]
Certificates	3	3	6	2	0	2	8
Portfolio	2	2	4	0	1	1	5
Presentation	3	2	5	0	0	0	5
Verification	1	0	1	2	2	4	5
Practice	2	0	2	1	1	2	4

Only two nurse and two managers from all participants identified improved practice as evidence in itself of learning. The examples of evidence given are set out in Figure 19.

Figure 19: Examples of evidence of learning at work provided by nurse and manager participants

EVIDENCE	NURSE	MANAGER
Certificates	Something to say you are competent for attendance – a study day or course	Formal learning certificate For completing in-house programme Completing workbooks
Portfolio	Folders	Document with their competencies in it
Presentation	To do a lecture Put together a piece of work and present it To show the literature available Conference presentation	
Verification	Ask the manger to make a statement about individuals learning	Data base of all study leave as documentary evidence
Practice	Observing practice	Working with someone and observing

One of the issues in relation to evidence was the perceived need to have certificates that provided evidence of competence and therefore legal protection. This emerged

in relation to the professional requirement to maintain a portfolio and therefore the need to produce certificates of attainment.

Another issue was the identification of variation of standards of education provision both internally and externally. One manager thought the variability of education and training particularly in the clinical areas affected the level of teaching and the level of learning. This issue had also emerged in relation to the formal structured learning activities discussed earlier in this chapter. Some participants were clear that they would like to directly witness the practice that was supported by documentary evidence.

> <u>*Participant 19 Manager*</u>
>
> *'obviously its about witnessing how or looking at how that might have affected their practice, have changed their practice, or you know if someone has been on a module .. have they come back and put theory into practice'.*

The benefits to individuals and the organisation and the evidence of learning, were identified in a limited way that described, on the whole, possible short-term outcomes. No organisational strategy became evident during the first interview.

In house courses/training/role expansion seem to be encouraged, recognised and respected. In particular they seemed to be seen as a route to role development and role expansion with benefit to the employer in terms of retention of staff and potentially to the individual in terms of career progression. The benefits of formal external higher education were not always recognised or identified in staff who had

undertaken higher education. None of the participants identified the benefits of learning at work as a factor that influenced learning through work in the individual picture maps.

The follow up interview did focus on the positive benefits of learning at work and the negative outcomes of learning at work. This was to clarify the views expressed by the participants through the descriptive learning events, the structures and outcome analysis in interview one. Four main themes emerged as benefits of learning through work and the majority of participants agreed with these. These are firstly; *staff recognition and respect gained on the whole through in-house courses*, secondly; *role development and expansion,* thirdly; *the retention of staff* and finally *the potential for individual career progression.* Two managers disagreed with the first theme (staff recognition), one nurse with the third (staff retention) and one nurse with the last (career progression).

The two questions about the negative outcomes of learning at work generated a mixed response to question one and a fairly unanimous response to question two. Eleven participants (10 nurses) supported question one, the organisation does not always recognise or respect formal external higher education undertaken by staff. Five managers and two nurses disagreed. Therefore, it would appear that the individual experienced nurse within the organisation had a different perception from that of the employer. The second question was supported by the majority (14) who believed that *'personal benefit in terms of career progression, financial reward or*

promotion were not seen as outcomes of higher education'. Two nurses and two managers did not agree with this statement.

Therefore the participants agreed that in pursuing higher education, there was no personal benefit for individuals in terms of their work. In addition the nurses believed that the organisation did not value the achievements of individuals in terms of the formal external education completed by them.

Research question 6: How can learning at work, as defined by nurses and their employers, be incorporated into the higher education system?

The final research question was intended to focus the research work in terms of the utility of the findings to the development of curricula for qualified nurses within a higher education framework. It was recognised by the researcher early in the research and before the first interviews commenced, that a definitive answer to this question would probably not be an outcome of the research. It was however, considered a relevant question to ask because the overall purpose of the study was to examine the current system of learning at work for nurses. Also, higher education is relevant to the learning of adults within the concept of life long learning generally and more specifically to nurses within the National Health Service in Scotland, because initial nurse education is now located within the higher education sector.

The initial interview revealed that participants thought that there was significant learning through work and that current recognition of learning at work within the organisation was an issue. Therefore the researcher aimed to explore with

participants whether or not learning events at work should be given academic credit and whether or not learning at work should be incorporated with and recognised by the higher education system. The researcher hoped that the answers to these main questions would confirm whether or not it was considered relevant and useful to the profession to proceed along this route and to verify the need to construct a curriculum framework specifically for the incorporation of learning through work for nurses.

From the first interview the researcher had formed the view that there was potential to accredit learning events, such as rotational experience, in house clinical skills training courses and experiential learning. It seemed that the categories of learning that were beginning to emerge were firstly *clinical skills development [in house training courses for technico-rational outcomes]*, secondly *role preparation*, thirdly *role development* and finally *role expansion*. These could possibly be developed as discrete areas of continuing professional development and incorporated as part of an organisational life long learning strategy that attracted accreditation from higher education.

The responses to the questions asked at the second interview are outlined in Table 11. These clearly demonstrate that the majority of participants thought that the learning events at work should be given academic credit and that learning at work should be incorporated and recognised by the higher education system. Table 11 also shows that some participants, although uncertain, did not disagree with the majority view.

With each example given there were one or two participants who disagreed. Four participants did not agree with the notion of rotational experience being given academic credit. However the majority thought that the in-house clinical skills training and learning through practice experience should be given academic credit.

Table 11: Recognition of Learning Through Work

Key : N/A - nurse acute, N/C - nurse continuing care, N - nurses.
CNM/AC - clinical nurse manager acute, CNM/CC - clinical nurse manager

Recognition of learning through work:	**AGREE**					**DISAGREE**				
	N/A 7	**N/C 5**	**M/A 3**	**M/C 3**	**Total**	**N/A 7**	**N/C 5**	**M/A 3**	**M/C 3**	**Tot**
Should learning events at work be given academic credit	6	4 [1]	2 [1]	1 [1]	13 [3]	*1*	-	-	*1*	*2*
e.g rotational experience	5	4 [1]	1	2 [1]	12 [2]	*2*	-	*2*	-	*4*
e.g. in-house clinical skills training	6	5	1 [1]	2 [1]	14 [2]	*1*	-	*1*	-	*2*
e.g. learning through practice experience	5 [1]	4 [1]	1 [1]	2 [1]	12 [4]	*1*	-	*1*	-	*2*
Should learning at work be incorporated & recognised by the higher education system?	6	4 [1]	3	3	16 [1]	*1*	-	-	-	*1*
e.g. clinical skills development	5 [1]	5	3	3	16 [1]	*1*	-	-	-	*1*
e.g. role preparation	5 [1]	4 [1]	3	3	15 [2]	*1*	-	-	-	*1*
e.g. role development and expansion	5 [1]	5	3	3	16 [1]	*1*	-	-	-	*1*
others: reflective practice				1	1					

Participants were asked about four main examples of learning through work that could possibly be incorporated and therefore recognised by higher education. These were confirmed by the majority as appropriate and valid. The examples given were;

- *clinical skill development,*
- *role preparation, and*
- *role development and*
- *role expansion.*

Finally the researcher asked participants about a number of issues that had emerged in the course of the first interview that seemed to present difficulties for the accreditation of learning through work. These are shown in Table 12.

The participants verified that the major difficulties seemed to be the variation in the quality and standard of learning provision by staff who facilitate learning, the assessment of learning through work and the criteria to measure practice achievement. Identifying staff who can and who will facilitate learning did not seem to be so significant as seven participants did not think that was an issue and four were uncertain. What was an issue was the preparation of clinical staff to teach. Fourteen participants confirmed that this was an issue. Seventeen participants confirmed that awarding credit for learning through work as an issue.

Table 12: Identification of difficulties in accrediting learning through work

Key : N/A - nurse acute, N/C - nurse continuing care, N - nurses.
CNM/AC - clinical nurse manager acute, CNM/CC - clinical nurse manager

The following points seem to present difficulties:										
	AGREE					**DISAGREE**				
	N/A 7	**N/C 5**	**M/A 3**	**M/C 3**	**Total**	**N/A 7**	**N/C 5**	**M/A 3**	**M/C3**	**tot**
Possible variation of standard & quality of learning provision by staff	7	5	3	2 [1]	17 [1]	-	-	-	-	
Criteria to measure practice achievement	7	5	3	3	18	-	-	-	-	
Assessment of learning through work	7	4 [1]	3	3	17 [1]	-	-	-	-	
Identifying staff who can/will facilitate learning	5 [1]	[2]	1 [1]	1	7 [4]	*1*	*3*	*1*	*2*	*7*
Preparation of clinical staff to teach	6	4 [1]	2 [1]	2	14 [2]	*1*	-	-	*1*	*2*
Credit for learning through work	7	5	3	2	17	-	-	-	*1*	*1*

The following quotes illustrate some of the views expressed during the first interview and later confirmed by the majority of participants.

Participant 17 Nurse

'I don't think there is any substitute for what you learn on the ground floor ... on the shop floor. But how you quantify that and how you say someone has the most experience I don't know, I don't know how they get recognition for that, and I don't know how you would ever go about that because everybody's experience is different'

Participant 5 Manager

'Charge nurses have such a lot, wealth of experience to be giving over, you know, and just sort of reiterating things from time to time'.

Participant 6 Nurse

"Well you very much learn in your job, and a lot of it is talking to staff members and asking questions"

Participant 9 Nurse

' You learn on a day to day basis and your learning is never complete'.

The significance of these findings will be discussed further in chapter six that will explore the recommendations arising from this research. Issues to be discussed include the apparent technical rational approach within the learning organisation, and the need to take cognisance of the emerging humanistic, interpersonal and pragmatic nature of learning through work and 'doing the job'.

CHAPTER SIX

THE CRITICAL ISSUES ABOUT LEARNING THROUGH WORK: DISCUSSION AND ANALYSIS

From the analysis of the research findings a number of issues have emerged in relation to learning through work for qualified nurses. These relate to the research approach and methods and the context of the whole case study with the nurse and manager participant's perceptions of learning within the organisation providing the supporting evidence.

In this chapter the main issues will be discussed in relation to the context of learning through work and the cognate development and construction of a curriculum framework to facilitate the ongoing learning and professional development of experienced nurses in employment.

The research findings are specific to the case study and the particular context described by the participants about their own experience of learning through work, or that of their employees. Their reality of learning through work provides insights that have allowed the researcher to describe the features of the system of learning. The major strength of the research is the categorical aggregation that led to cross participant analysis and the assertions emerging from the context of the case as a whole. This holistic analysis enables the researcher to acknowledge the social complexity of the case and to make naturalistic generalisations about the lessons learned from the case [Cohen et al 2000, Creswell 1998, Vallis and Tierney

1999/2000]. However the findings cannot be generalised because of the nature and limitations of the study.

The limitations are intrinsic to the nature of the research, the descriptive case, the context of the work and the nature of learning as known by two main participant groups.

Implications can be identified for the individual practitioner, the health service as the employing organisation in the form of the immediate NHS Trust employer, the United Kingdom Central Council and the National Board for Nursing, Midwifery and Health Visiting for Scotland. Each stakeholder has responsibility for the continuing professional development of qualified nurses and the maintenance of registration.

The critical issues and the inter-related elements arising from the research study will be drawn together and integrated to provide a structure for this final analysis of the bounded system of learning within an organisation. This will include the structural, institutional, cultural, personal and curriculum perspectives that influence learning through work and that were identified in this study. Professional perspectives have not been addressed separately because the issues are addressed throughout the other perspectives.

Structural Perspectives of Learning through Work

The structural perspectives relevant to the system of learning through work were identified in the study as internal; the organisation architecture and physical accommodation, and external; the professional and governmental frameworks for CPD and LLL (see Figures 1 and 9). The education perspectives that emerged in the former stage of the study were related to individual commitments and in the latter stage of the study (research question 6) to the collective accreditation of learning through work. These will be discussed as curricular perspectives later in this chapter.

In terms of the organisational learning architecture there was no evidence of clinical supervision as a structural feature within the system. Also there was limited evidence from the nurse participants of systematic development of professional profiles, or of the potential use and integration of professional development portfolios as learning devices within the structure of the bounded system. There were examples given by participants of internally driven programmes that were accredited by higher education. These were defined pathways that led to specific outcomes for participants. There was no evidence of higher education accreditation for the internal customised programmes for staff.

The accommodation aspects were identified through the evidence in terms of the variation and standard of the physical location of learning through work, such as the accommodation that was available in the clinical area, the ward or office, or in some cases a seminar room or learning resource centre.

There was evidence that the employer required staff to maintain competence within the scope of their professional practice and undertake the in-house mandatory update sessions each year. These requirements are integral to the organisation. Similarly, there was awareness within the system that there were statutory professional requirements of the UKCC and NBS for individuals to maintain competence, to meet the standards for CPD and to be accountable for their individual practice. These legal and professional issues are aspects of the contextual structure of the learning system.

An awareness of the life long learning agenda of government, articulated through employment and professional politics, policies and strategic implementation at organisational level was identified. The NHS health plan, the learning together strategy and aims, the changing education and training remit of the existing national authorities for nurse education in the UK, all indicate that there is an overall structure for the employment and on-going education of nurses. However, the articulation of this structure through the development of a LLL strategy, within the bounded system of the case study did not emerge. For example, the introduction of personal learning plans for all staff during the year 2000 was not evident. This was possibly because of the timing and stage of development of the employer's strategy.

Within the case study the economic accounting for LLL and CPD was not transparent. Indeed the economic support for learning through work was found to be inadequate by participants and despite the economic enterprise culture, there was evidence of hidden economic exploitation of some individuals, that is learning done by the individual on behalf of the employer. These are the practitioners evidenced

in the study who generate knowledge, through their own learning, that benefits the organisation as a whole by contributing to the organisational memory. However, they donate a considerable personal investment to the organisation because they are asked to pay for that learning experience, either financially or by using personal time. Inequality clearly exists between the different parts of the organisation through the perpetuation of this structural omission. This could be reinforced if the employers' LLL strategy is viewed as an economic investment in NHS staff. There was also the potential for inequality arising from a one sided view of human capital theory, rather than the collaborative principles of life long learning as set out by the National Advisory Group (Fryer 1997, Pratt et al 1999, Woodrow 1999).

However, there were also staff who considered that they had a shared, if not, collective responsibility for their personal professional development and therefore, they were willing to contribute financially. This willingness could be attributed to the perception that by furthering their knowledge they were of greater value to the employer, therefore more likely to be secure in their employment. This partially reflects the principles of LLL that will be achieved if there is a shared responsibility for learning.

Some staff also recognised the personal benefit of learning and the value of investment in education from an individual perspective, as they would also be more attractive to other potential employers. This confirms the view that, if an individual has the knowledge base that equips them to be self-directed in their own learning, then they will be well placed to secure employment (Davies D 1999).

In summary it appears that what the NHS needs is its

> *"Own practical models of the learning organisation, models which accept the political nature of the NHS rather than seek to ignore it"*
>
> (Nutley and Davies 2001 page 40).

It is recommended in relation to the structural perspectives that;

- The effect that the culture of economic enterprise has on organisations should be recognised and the implications arising from human capital theory identified for individuals
- The need for capital investment in the structure of education through work and in partnership with the higher education sector is addressed.
- Professional development portfolios based on career review are developed as learning devices and should be professionally accredited
- The portfolios should contain personal learning action plans that will consist of learning outcomes, learning strategy, learning activities and criteria for assessment.
- The learning action plans should be developed by individual practitioners with support from clinical supervisors and education facilitators and approved by managers and higher education representatives where combined professional and academic accreditation is sought

Institutional Perspectives of Learning through Work

The normal practices of the organisation as an institution include the formal education and training remit for the national initial pre-registration qualification

programme, post registration specialist programmes at undergraduate and post graduate levels. In this study the pre- registration requirements were excluded and the post registration specialist programmes were not addressed because the focus was the learning that occurred through work opportunities for experienced nurses. Other conventional practices within the case study, including in-house structured learning for staff and informal learning, did emerge through the evidence about the system of learning. Some of this was attributed to the statutory professional requirements of five statutory study days every three years.

The learning through work examples identified in the research that are aggregated components across the different perspectives are shown in the learning through work continuum in Figure 20.

Figure 20: Learning Through Work Continuum

Defined individual learning pathways	**In –house customised learning for staff groups**	**Informal learning from others**
←	→	
Pre-registration qualifying programmes	Induction programmes	Talking
Specialist programmes	Development programmes	Questioning
Accredited NBS/HE courses	Rotation programmes	Observing
Approved internal or external CPD short programmes	Internal teaching sessions	Doing/practising

Some of the specified programmes that had defined educational pathways were clearly integrated within the normal practices of the bounded system. However, the short courses and accredited CPD programmes were not synthesised in the same

manner. The in-house structured development programmes appeared to be rigid, traditional and not fundamentally productive. Other current practices that included informal learning tended to be ad-hoc and would not lead to organisational learning because of the lack of direction. However the learning could be beneficial to individuals within the case study as informal learning includes many possible variables and can lead into structured and defined programmes for individuals.

The employer normally employs qualified nurses with the expectation that they will be able to meet their contractual obligations. To ensure that this does happen the employer in the case study provides induction programmes, development programmes and annual update days. These are undertaken during the employers working time and the cost met by them. In addition the managers identify individuals who have the potential and who can develop further in their role and learn to teach and manage others.

In some instances this was formalised through the appointment of staff with specific remits, such as an education facilitator. This was not a universally integrated feature of the system, but there were instances across the organisation. The remit of these staff as described by some of the participants, appeared diverse, rather than universal, being distinctive in accordance with the nature of the clinical area. Recent research indicates that the adaptation of clinical guidelines to local contexts does require facilitation and would seem to support the development of this role (West et al 2001). The focus of the education facilitator role did appear to be on training and instruction related to the development of clinical skills rather than professional education

principles. One common feature was the discernible lack of educational preparation for the education facilitator role. This has recently been addressed by the UKCC in the introduction of standards for the preparation for lecturers, practice educators, preceptors and mentors (UKCC 2000b). Hopefully employers will be encouraged to ensure that the education facilitator of the future has adequate preparation for the role of practice educator.

The participants did not positively identify the value or worth of the in-house customised programmes. Criticisms were made of the routinisation of content and attendance, thereby reducing the value of occupational knowledge. One possible reason for this was the employer-controlled focus, combined with no motivational element for staff, apart from the inherent belief that there was value in adhering to the norm within the institution. The lack of learner control would also contribute to a reductionist view of the provision. Also the lack of reward or recognition of the learning and achievement would inhibit progress towards a more positive collective view. Clearly the move towards structured CPD as advocated by Wilson and Pirie (2000) would need to be considered with learner motivation and control at the forefront of discussion, alongside the development of a system that recognises learning and the acquisition of knowledge as well as skill development.

The normal practice within the bounded system appeared to be based on rigid traditional approach to learning. The variability of the teaching and learning standards across the study, the lack of evidence of clinical supervision being undertaken and the absence of the development of career plans or learning plans

supports this view. There was also evidence of a traditional approach in the mixed mode of employer provision for formal and informal learning. This did provide flexibility for some participants and was claimed to meet the employees needs. However, the emphasis was on in house provision, rather than collaborative or partnership arrangements. Additionally the quality of provision and of outcome did not appear to be measured.

The broad categorisation of learning through work, developed from the participant responses, was set out in the previous chapter as being: to do the job better, to maintain professional skills, to motivate staff. These can be classified as

Category I: Skill Development and the Maintenance of Professional Practice

[Maintaining professional skills]

Category II: Role Development

[Enhanced and expanded roles through learning from others]

Category III: The Development and Improvement of Professional Practice

[To do the job better]

All three categories can be linked to the different modes of learning within the case study. Categories I and III also relate to the structural professional requirements to maintain registration. The classification of postgraduate skills developed by Cryer (1998) can also be associated with the above categories: Category I – generalist, Category II – self-reliant, Category III – team and specialist.

It also important to consider the different modes of learning within the organisation that were identified during the study and those that were not. For example, from the analysis of learning events all participants provided examples of interactive adaptive, participative, or ad hoc, exploratory, experiential and negotiative learning events. Many could be said to lead to a minimal solution outcome in terms of learning about things and how to deal with everyday difficulties without understanding the cause and effect or the integration of theory and practice (Paton &McCalmon 2000, Nutley & Davies 2001). These examples would fall within Category I, the maintenance of professional practice. Most of this type of learning also occurred during the normal working day and did not require dedicated institutional time.

Other Category I types of learning identified included single loop learning facilitated by company representatives. This was instrumental and adaptive and described earlier by Senge as learning that changes [the individual] their 'theory of action' but not ' theory in use' (Senge 1990). It is a basic form of learning, restrictive and non-challenging where the problem of the day is solved without taking time to understand the root cause and taking action to ensure that it will not be repeated and as such could be described as maintenance learning. Total quality approaches have also been described as adaptive learning because of the single loop effect that results in inflexibility.

There was also the identification, by some participants, of learning through mistakes and through negative role models. Shock learning, responding to crisis situation and learning from mistakes are all forms of learning that can be negative and lead to the

need to unlearn or positively re-learn (Nutley and Davies 2001). This is the opposite of the transformational institutional outcomes sought after through LLL strategies, that would result in Category III learning.

Other institutional perspectives included examples provided of structural learning that was bureaucratic, such as learning by routine. This was possibly favoured because the institution could rely on the knowledge that all staff had the same base line knowledge and were functionally and economically efficient. Some of these structured institutional programmes did prepare staff either for their role at particular grades, or for the development and enhancement of their role and therefore, can be classified as Category II learning. Similarly the clinical update sessions for expanded role functions would be Category II learning through work.

One of the interesting features was the utilisation of time for different categories of learning. Category II and I had specific mandatory time elements allocated to it. Category II also had specific time for expanded role development and clinical skills updating. Whereas Category III was not accounted for within the normal shift patterns and study leave arrangements for the experienced practitioner. This omission perhaps explains why there was limited evidence of Category III learning apart from defined accredited pathways. This disadvantages and potentially discriminates against the older experienced nurse, who has other personal family commitments.

Other modes of learning through work, such as analytical learning that was rational, linear, formal or deductive, or the synthesis of knowledge through the double loop learning that happens when participatory, collective joint learning experiences occur, were not identified across the bounded system, although there were isolated instances. Institutional learning, such as symbolic vision building, through collective strategic planning based on shared values and ideologies were not generally evident at institutional level, but they were evident within one clinical area that had developed a shared governance approach to institutional development. Reflection, as a professional activity that would facilitate meta-cognition, through clinical supervision, or team learning, could potentially promote Category III learning (Eraut 1994, Tsang 1998).

Nutley and Davies provided some useful definitions of knowledge in an organisation (Nutley and Davies 2001). This included formal knowledge gained through institutional codes such as procedures and guidelines. Informal knowledge that was embedded in systems produced 'standard practice' that shapes employment activities and functions alongside the tacit knowledge that emerges through others, their capabilities and particular skills.

Each of the above forms of institutional knowledge can be identified through the organisational memory developed from individual personal development combined with collaborative inquiry and collective experiential learning. Anticipatory learning that is participatory, future oriented and long term should reduce the current negative institutional perspectives identified in this research study.

However for the organisation to achieve a shift in its approach to learning, perhaps through changes in perceptions and behaviour, requires recognition of the relationships between the categories and to the other perspectives within the bounded system of the case study. The participants all need the knowledge and personal mastery to develop their roles within the organisation and to share beliefs about learning through work and the value of that to the institution and to the individual participants. The development of collective experiential learning, constructed earlier (see Figure 7), could possibly be promoted through a participative approach to learning achieved through the discipline of team learning and the use of learning sets.

It is recommended in relation to institutional perspectives that;

- Consideration is given to the effective introduction and utilisation of organisational learning through a collaborative approach that will achieve organisational goals and LLL for individuals as opposed to the existing inappropriate, traditional, rigid framework
- A holistic approach to organisational learning through co-ordinated collective learning activity to achieve organisational transformation should be adopted
- A system that initiates and develops individual and collective experiential work-based learning is developed
- Professional and academic accreditation of learning through work is sought

Cultural Perspectives of Learning through Work

The cultural dimensions evident through the shared meanings and assumptions of the nurses and their managers and the behavioural norms of the nurses in relation to their

own learning through work demonstrated that certain customs and practices existed. Cultural knowledge, the customs, values and relationships with clients and other stakeholders within the institution, was specified through the benefits of learning expressed by participants. Namely that nurses were expected to learn 'on the job' often by virtue of 'doing the job' and then to 'teach others' on the job about how to do the job, but not to necessarily understand why work was being carried out in a certain way. This apprenticeship approach to learning illustrates the stereotype of the nurse who was trained to work in the wards and to follow the instructions of others and by doing so to learn by following in their footsteps.

Learning from others emerged as a major activity within the case study. However, the nature of the knowledge imparted and the outcomes in terms of the organisation was not clear as it was assumed that the learning would result in improvement to patient care because the participants would be able to do their job better. For example some participants identified the potential for learning from positive role models. Some also pointed out the effects on learning from negative role models. The claim that learning through work will lead to the improvement of practice as in Category III learning through work was therefore somewhat idealistic and in some cases ambitious, given that the evidence was generated through custom and practice, rather than transformational learning.

The charity funding or self funding approach encouraged by the employer to employees learning ignores the rights of the individuals to education in the form of continuing professional development as part of employment, and is incongruent with

the investment in employees ideal now propounded by the policy makers. Some of the more traditional custom and practice aspects may be due to the perceived position of the nurse in general within the health service that continues to be dominated by the medical professional. The assumption being that the nurse does not require education. However, the requirement from the professional bodies for degree level studies that are accredited for all post registration defined programmes has existed since 1994 and the standard for CPD now reinforces those aims (UKCC 1994, UKCC 2001a). The debate about an all graduate profession continues to this day, with the Scottish Executive recently stating that 80% of the profession would be graduates within the next five years (Scottish Executive Health Department 2001b).

From the experienced nurses in the study there was some evidence that there was a professional and personal benefit from learning. Also in terms of benefits, some participants thought that having a qualification at the same academic level as the newly qualified registered nurse, or a degree would help them with job prospects and promotion. A recognised award was thought to be more beneficial than experience. There was possibly some unrecognised covert peer pressure to undertake studies in their own time, whether or not the employer supported this. The organisational ethos favoured the in-house programmes rather then accredited development programmes, identified or structured by individuals who could identify own learning needs. The culture of the organisation also seemed to focus on the development of skills and competencies.

Emphasis was placed on NHS codified knowledge, that is the mandatory activities and informal personalised knowledge gained through internal organisational networking. The learning routine in the organisation, through the in-house courses acted as a mechanism for deploying knowledge. It would appear that the overall benefit from the in-house courses was perhaps superficial and potentially ineffective for these experienced staff because the learning was not formalised or valued. This is supported in the evidence that nurse participants pursued their own formal higher education themselves, not necessarily because the organisation supported them (Castle et al 1998, Douswell 1998).

The participants agreed that learning was not valued in the organisation and the emphasis was on meeting the needs of the organisation and not the individual central to the organisation. Some of the barriers to learning that reinforced this view were identified by the participants as being the absence of goals, learning plans and staff appraisal as well as no feedback on day to day progress. This perhaps explains why the process of learning was not clear, because there was no obvious structure. The culture of undervaluing the worth of learning to the organisation was very clearly articulated by the nurse participants and on the whole supported by the managers.

Networking was identified as a key feature of learning through work. This included positive and negative interactions with peers who were located in the organisation and externally. Networking examples from within the organisation included interactions that were informal, near at hand and part of the custom and practice of work. Specific examples provided included, meetings of senior staff nurse or charge

nurses and attendance at conferences. However this type of networking did not lead to the identification of a formalised learning network as described by Poell (Poell et al 1998), because there was no formal modus operandi, in that it was not organised and not structured. So the learning climate and willingness to learn was evident in the responses from participants but there was no structure or organisation. The construction of a work-based curriculum for the organisation, to ensure that the balance between a rigid inhibiting framework and the unproductive casual informal approach is achieved, would need to be undertaken with knowledge of the present cultural perspectives identified.

It is recommended in relation to cultural perspectives that;

- Learning networks should be established that have a formal structure and processes, developed by staff groups with a view to developing and improving professional practice (Category III)

Personal Perspectives of Learning through Work

The personal perspectives of learning through work were identified from the participant's accounts of learning through work and the behaviour and attitudes described. Many of these personal experiences were identified in the learning events and were calibrated and categorised for the case study analysis. However it is useful to summarise the personal issues that emerged for the participants within the system of learning. These are both positive and negative and relate to each of the other perspectives in this case study.

Fundamental to the findings is the collective participant's view that they had learnt through their work over time. Therefore, the evidence from the learning event analysis, such as the job differences over time and learning on the job, support Mumford's definition of learning as being something that happens

> *"When people can demonstrate that they know something that they didn't know before and/or when they can do something they couldn't do before"* (Mumford 2000 page 2 of 8).

These examples of learning through work given by the nurse participants and verified by their managers provide evidence of personal learning through work.

Participants also provided examples of learning outwith work, for example, learning through personal family experiences that they could later transfer to the work context. Therefore life long continuing learning can be related to continuing personal and professional development that is relevant to the work context of the experienced nurse. It should be noted however that this is also dependent upon a number of different factors such as, individual motivation, a positive attitude to work and the identification of the benefit of learning, as well as personal family and financial circumstances. Continuing learning is also dependent on the support of the employer in terms of ongoing professional development, career progression, dedicated time and financial support. However, the benefits to all participants in the organisation, particularly the individual as a key player within the organisation, need to be clearly identified.

Of particular significance was the identification that the experienced nurse learnt from others and from working with others. These aspects of learning, when linked to nurses other attributes, such as communication, negotiation, people skills and management skills are indicative of the personal process of learning that the individuals experienced (see Figures 15&16). The difficulty appeared to be identifying how and when learning occurred. Therefore, within the case study there is evidence that learning through work occurred continuously, yet experienced nurses could not be described as competent learners. This is because there was no significant evidence that they know how to learn or that they were reflective practitioners.

Factors that appear to have acted in the obverse for individuals and employers include; the employer – employee interactions, structural employer control, the lack of professional autonomy for individuals, limitations of staff and time and money, discrimination against certain groups of staff and condescending behaviour. Other significant factors include the intrinsic nature of the learning itself in terms of personal challenge and the commitment required of individuals and the organisation as a whole. These negative aspects are perhaps indicative of employer control and structural authority and the overall learning ethos and values of the organisation.

The structural omission referred to previously in terms of supporting nurses learning was potentially reinforced through the charity paradigm. That is, actively pursuing funds and donations from charities, business and individual staff to pay for or subsidise learning in the form of course fees, conference fees or in-house training programmes.

The personal commitment of staff was recognised and acknowledged by managers. It was also expected because learning was seen as a professional responsibility. This reliance on the personal motivation, goodwill and circumstances of individuals perpetuates the charity paradigm and undermines the worth of the individual in the organisation. The individual then has unclear and mixed messages from the organisation that are incongruent with the individually held belief that learning will benefit career prospects. It can also be argued that incongruence exists in terms of organisational learning, as the employer is not seen to be promoting, developing or investing in learning. The recognition of achievement through learning was personally and professionally important to individuals. Therefore the certificates of attendance that are provided at study days are considered of little value because of the negative worth attributed to these courses, but on the other hand these certificates are lodged in portfolios as legitimate evidence of maintaining competence. Again indicating a dichotomy in the individuals belief about learning. The informal, but considered important, learning through work, because it helped people to do the job better, was not formally recognised or given any credit by the employer or by higher education. However if practitioners can provide evidence of their learning through experience then the evidence can be assessed and accredited by higher education and acknowledged by the profession.

The employer control and structural authority of the organisation, perpetuated through learning routines that had been established by custom and practice, does not generate a positive learning ethos in the organisation. Some examples of this are employer –employee interaction, the overall attitude of some staff to learning and the

personal motivational factors. Overwhelmingly however the view expressed in the final interview was that learning was not valued and that the needs of the individual experienced practitioner were not being addressed. This is an uneasy position for a professional group that has a professional ethical framework, a code of practice and statutory requirements for maintaining registration that necessitate on-going professional development and life long learning.

The theme that emerged in regard to the use of company representatives to teach qualified staff or the use of money from registered charities to fund staff attending at conferences was seen by managers to be positive. However another view emerged and can be reasonably identified as another aspect of the charity paradigm (see Figure 21) as condescending and patronising.

Figure 21: The Charity Paradigm

BENEFICENCE ⟷ **MALEFICENCE**	
Staff Donations	**Employer Provision**
Contribute own time	Give staff some time off to learn
Pay own fees and other costs	Limited financial support
Select own courses	Provide mandatory courses

For example one nurse, who was not able to obtain a place on a course because there was no funding, was later asked to participate in a short course offered by a company, because it was available and offered an opportunity for the nurse to develop a particular skill. Unfortunately this opportunity was seen as an offer to

keep her content rather than support her participation in a specialist programme of study at a University. Clearly it was not the specific degree level studies that the nurse had identified that would have provided the knowledge required for the job and enhanced promotion prospects. However, the practitioner did agree to participate because of the intrinsic value the employer placed on these courses provided at no cost to staff or the employer by external companies.

There were mixed views expressed by the different participant groups about enhanced promotion prospects as a result of learning. The main factor that emerged was that if a nurse had a degree then they were thought to have a better chance of being selected for interview. However having a degree was not seen as an advantage in terms of financial reward, so potentially there was incongruity of participant responses, that may indicate an overall uncertainty of the personal benefit of obtaining a degree as no professional benefit could be identified.

Some participants who were continuing their own studies, seemed to be undertaking courses and attending classes despite all the difficulties presented by the context of their job and family commitments. This group of participants seemed isolated from the system of learning within the organisation. Their learning activity was seen as personal and peripheral to the organisation, by themselves and possibly others. This may be because their personal goals would not have been incorporated within the annual staff development and therefore the learning was potentially covert or hidden and not part of the organisation's strategy.

It is recommended in relation to personal perspectives that;

- Consideration should be given to the social construction of LLL and CPD, with a framework for learning through work, as opposed to unstructured learning with drift.
- Learning should be accredited, certificated and rewarded to develop staff motivation and increase collective learning activity.
- Consideration is given to how the learning of individuals within the organisation can be supported

Curricular Perspectives

The curricular perspectives that appear to be relevant to learning through work have emerged during the research in a somewhat oblique way, because the context of the learning within the organisation has been influenced by the work and employment agenda.

The key points that have emerged relevant to curriculum theory are that:

- learning events within the context of work can be identified
- learning can be located on a continuum of activity within the organisation
- learning tensions that exist between informal and formal arrangements can be both internal and external to the organisation
- the nature of that learning for experienced nurses can be categorised
- different types of learning can be identified, such as, adaptive or transformational

- the knowledge base [knowing what employees need to learn] and the use of individual and collective knowledge within the organisation is not clearly articulated
- structured omission in relation to the resourcing of learning within the organisation is detrimental to the organisation and individuals within it
- learning is of benefit to individuals and organisations

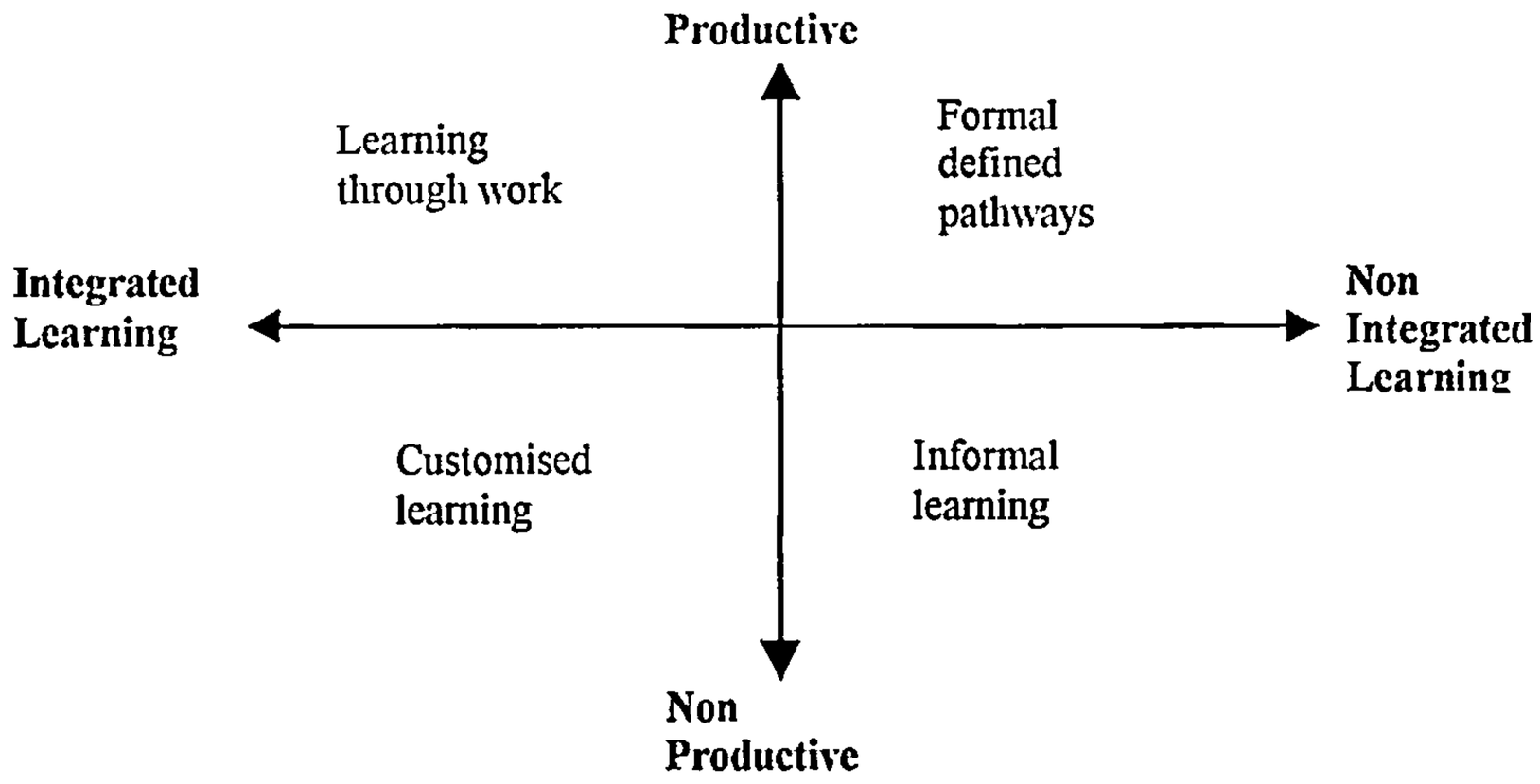
Broadly the individual and collective approaches to learning within the organisation did not appear to lead to productive integrated organisational learning, despite the fact that learning did occur within the organisation. Education and learning were not primary activities within the organisation. Many examples were provided of structured learning activities that were overt within the organisation and many other learning events occurred that were almost hidden within the context of the work.

The structured activities, such as mandatory in-house, annual update or induction programmes seemed to have been established for a specific purpose and presumably had a curriculum that was designed to meet the needs of the organisation (see Figure 17). Similarly the structured learning of individuals through externally defined programmes were selected by them for a specific reason, presumably undertaken to help them achieve personal and professional goals.

On the other hand the unstructured (in terms of the organisation) obscured learning achieved by individuals through informal ad hoc activities had no strategically devised curricular framework and it did not lead to transformational learning. Figure

22 illustrates the learning matrix within the case study that includes the different components of the system of learning within the organisation.

Figure 22: - Matrix of learning system within the organisation



Learning through work that was productive for individuals and the organisation through the integration of learning was not identified in this study. Each of the other sectors was identified and could be associated with the product of learning as opposed to the critical social process of learning.

There was no framework that incorporates the conceptual components of a curriculum for learning, such as beliefs, purpose, cognate content, directional strategy and potential learning outcomes. There was no process of learning that equated with the principle of life long learning or of the professional standards for CPD. Identification of the key skills of the experienced practitioner did however seem to equate with the skills expected of graduates and the skills of postgraduate students; self-reliant, team worker, generalist (Cryer 1998). The systematic construction of a curriculum that provides learning opportunities for experienced

practitioners in each of the categories identified previously may ensure that LLL is sustainable within the organisation and that the strategic goals of the organisation are met.

From the collated evidence and key points that emerged, the researcher has surmised that different paradigms/models are relevant to the curriculum development of learning through work for experienced nurses. The programme specifications, curriculum design and framework for defined profession pathways, or structured short CPD programmes, need to be accommodated within a strategic organisational learning model. However no one prototype was identified as ideal. The categories of learning provided a means for aggregation of findings and allowed the illustration of findings. The categories were therefore useful as a heuristic device but they do not provide a blueprint for a curriculum for learning through work. This reflects the broad context of the learning and the need to emphasis the role of the employee as a learner who can identify their own learning needs. Similarly the employer needs to develop cognate collective learning in order to develop the potential of the whole organisation.

To conclude this section it is useful to acknowledge that the curricular issues that emerged initially from the literature were verified through the first and second interviews with participants. The implications arising from these research findings for the different stakeholders include the following concerns.

Learning as a social construction within the organisation can be facilitated and achieved through work, depending on the structural, institutional, cultural and

personal perspectives. Therefore a framework for learning is needed to promote effective, relevant learning experiences that will result in productive integrated learning. This is relevant to all participants within the organisation, the NHS as a whole and higher education.

The benefits of LLL/CPD will only be achieved through the development of organisational learning using collective strategies to facilitate learning. However the process of learning, of knowing how to learn is a key skill for the continuing professional development of the nurse and a core competence of employment. This is relevant to the organisation and to higher education.

Learning facilitators within the organisation require preparation for their role in order to ensure that the expectation of practitioners and the standards of different stakeholders are met. This is relevant to the experienced nurses, their employer and to higher education.

The experienced practitioners' learning should be assessed against a recognised professional standard as specified by UKCC and determined by the NBS or equivalent statutory authority. Likewise professional recognition for CPD should also be articulated in terms of the practitioner's lifelong learning.

Meritocracy matters to individuals, therefore the accreditation and reward for learning are considered important, in terms of demonstrating progression in learning and future employability. The recognition of learning and professional achievement

should therefore be articulated within the overall Scottish Credit Qualifications Framework by the learning organisation in conjunction with higher education and the professional bodies.

It is recommended in relation to curriculum perspectives that;

- Individual and organisational learning will be best achieved through collaborative strategic learning activities that are valued and recognised by the stake holders
- Curriculum frameworks for learning through work are constructed to reflect context and purpose of learning for individuals and the collective organisation.
- Programme specifications for learning through work need to be developed
- Learning is accredited in alignment with the Scottish Credit and Qualifications Framework

Key questions emerging from this analysis of the curricular perspectives and for the construction of any curricula are *what do we want people to learn* and *how* or *who is going to devise the curriculum*? Traditional approaches to curriculum development may then be relevant in terms of the identification of forms of knowledge, professional outcomes, structure, product and processes that can be considered. However, what must be acknowledged is that if the curriculum for LLL and CPD for experienced nurses is to be valid and relevant, then it is a social construction and as such needs to be developed by all stakeholders. The sustainability of the curriculum will then be achieved through the strategic development process that relates to and interacts with the organisations systems, the participants within it and the specifications for learning through work.

This chapter has progressed from the presentation of findings and initial analysis in the previous chapter to an in-depth discussion about the constructs of learning through work. This has been achieved by exploring critically the different perspectives of learning through work that in turn have led to the identification and development of major conceptual paradigms. These conceptual paradigms have been illustrated by presenting the evidence that emerged in the case study and developed by using the learning through work continuum, the categories of learning and the charity paradigm. These heuristic devices will hopefully help in the further development of knowledge and understanding about learning through work.

The final chapter of this thesis will bring together in conclusion the major elements of this research study about learning through work.

CHAPTER SEVEN

CONCLUSION

This research study was designed to investigate the system of learning at work for experienced nurses. The research aimed to:

- *examine the key features of learning at work for nurses in the NHS in Scotland*
- *identify the purpose, process and product of learning at work*
- *classify the different learning at work activities of qualified nurses*
- *construct a curriculum framework for the classification of accredited learning programmes at work within the context of the NHS and higher education*

Six main research questions and a number of subsidiary questions were developed and pursued through a qualitative approach using case study methodology that focused on one organisation within the NHS in Scotland. The case study design allowed an in-depth examination of the bounded system of learning for experienced nurses within the organisation. The research findings provide a description of the learning that occurred within the system, the purpose of the learning, the processes that were followed and the outcomes for individuals and the organisation. Following the presentation of the research findings in Chapter Five, the implications for the system of learning explored through this case study were then discussed in the penultimate chapter through the analysis of the structural, institutional, cultural,

personal and curricular perspectives, with professional perspectives being synthesised throughout the discussion.

The major factors influencing the bounded system were identified through the interviews and the creation of picture profiles, drawn by the participants and collated by the researcher. A large volume of evidence was produced from the first and second interviews and the picture profiles. These were aggregated with the evidence from both interviews. This included the transcripts of interview one; the completed question sheets from interview two, field notes and the researcher's learning log. The research findings were produced from the interpretation and analysis of the data and the categorical aggregation of themes. This resulted in the identification of the main features of the system of learning, set out in ***the learning through work continuum***, followed by the development of the ***learning through work categories*** developed from the analysis of the learning events.

The discussion about the implications and the relevance of the findings to the case study participants and the wider professional group was focused through the different perspectives identified as being relevant to the system. Recommendations were developed, through the final discussion about the system of learning through work, its structure and possible mechanisms. The recommendations were formulated and aligned to the relevant constituents.

The recommendations from each perspective are collated and presented in this chapter for ease of reference:

It is recommended in relation to the structural perspectives that;

- The effect that the culture of economic enterprise has on organisations should be recognised and the implications arising from human capital theory identified for individuals
- The need for capital investment in the structure of education through work and in partnership with the higher education sector is addressed.
- Professional development portfolios based on career review are developed as learning devices and should be professionally accredited
- The portfolios should contain personal learning action plans that will consist of learning outcomes, learning strategy, learning activities and criteria for assessment.
- The learning action plans should be developed by individual practitioners, with support from clinical supervisors and education facilitators and approved by managers and higher education representatives, where combined professional and academic accreditation is sought

It is recommended in relation to institutional perspectives that;

- Consideration is given to the effective introduction and utilisation of organisational learning through a collaborative approach that will achieve organisational goals and LLL for individuals as opposed to the existing inappropriate, traditional, rigid framework
- A holistic approach to organisational learning through co-ordinated collective learning activity to achieve organisational transformation should be adopted
- A system that initiates and develops individual and collective experiential work-based learning is developed

- Professional and academic accreditation of learning through work is sought

It is recommended in relation to cultural perspectives that;

- Learning networks should be established that have a formal structure and processes, developed by staff groups with a view to developing and improving professional practice (Category III)

It is recommended in relation to personal perspectives that;

- Consideration should be given to the social construction of LLL and CPD, with a framework for learning through work, as opposed to unstructured learning with drift.
- Learning should be accredited, certificated and rewarded to develop staff motivation and increase collective learning activity.
- Consideration is given to how the learning of individuals within the organisation can be supported

It is recommended in relation to curriculum perspectives that;

- Individual and organisational learning will be best achieved through collaborative strategic learning activities that are valued and recognised by the stake holder
- Curriculum frameworks for learning through work are constructed to reflect context and purpose of learning for individuals and the collective organisation.
- Programme specifications for learning through work need to be developed
- Learning is accredited in alignment with the Scottish Credit and Qualifications Framework

The recommendations highlighted and addressed the need for **collaborative collective approaches to structured learning through work** in order to overcome the structural omissions and other barriers identified. The recommendations were advocated in terms of achieving individual continuing professional development, life long learning and transformational learning for the organisation. These were attributed to the internal context of the case study and the external stakeholders (as originally shown in Figure 11). The effects of these were finally discussed in relation to the matrix of the learning system within the organisation (Figure 22). It is clear that for productive and integrated learning through work collaborative collective approaches are needed. CPD and LLL could then be achieved by core transformational learning through work within the organisation.

The macro and micro influences of the society in which the learning is situated affect the design of any curriculum. The issues discussed in Chapter One recurred continuously throughout the study and were found to have a direct effect on the learning system within the organisation. Key features were the knowledge economy, economic enterprise and investment in learning through life long learning, and the learning organisation. The learning resource and the immediate personal and employment resources to support learning within the organisation were also significant influencing factors. A key aspect that can adversely affect the learning through work of qualified nurses is the inequitable availability of the resource to invest in and support learning. The *Charity Paradigm* is presented as a mechanism for describing these features of the system. The construction of the charity paradigm

allowed the researcher to articulate and present these issues that should not be ignored if effective learning through work is to occur.

The research study also aimed to explore whether or not it was feasible to construct a curriculum framework for learning through work, that would facilitate the accreditation of learning and articulate with the higher education system. It appears that for learning through work to be integrated and productive a curriculum model is required that is socially constructed rather than driven by investment in human capital and takes into account the context of the learning.

The components of the **collaborative curriculum model** will include the:

- *purpose of the programme,*
- *programme specifications, and the intended outcomes*
- *learning events appropriate to the social and work context,*
- *design of learning devices,*
- *facilitation of learning within the organisation*
- *measurement of the outcomes of learning*
- *articulation of the learning outcomes with recognised professional and educational frameworks.*

Learners as contributors within the organisation must be able to participate in the strategic development of the system of learning. This will allow the participants, such as experienced nurses and managers, to identify the *purpose of the programme* and *the programme specifications* from an individual and collective stance.

Identifying relevant *learning events* and determining how these can be structured and appropriately facilitated, can then be designed and mapped out against organisation and professional requirements. *Learning devices* such as work portfolios that include strategic learning development plans and *learning outcomes* can be used to provide a framework for the construction of learning events and the collation and presentation of evidence of learning. The approach taken by the organisation to the *facilitation of learning* within the organisation and the provision and preparation of facilitators is of crucial importance. Facilitators are needed in order to support the learning of individuals and groups within the organisation, through different approaches to learning and the measurement of the outcomes of learning. The *outcome of learning* through work would then be identifiable and measurable in terms of the personal and professional benefits to individuals, the organisation and its purpose and the profession. However for this learning to be valid the organisation will need to articulate its learning system within recognised professional and educational frameworks.

The worth and value of the learning system could be demonstrated in terms of its educational processes and the quality and relevance of outcomes. The validation of the system can be achieved through the organisation's internal quality assurance mechanisms. This can be endorsed through external peer review and the quality enhanced by working with external education providers and approved by the relevant professional authority. The recognition of learning through work can then be accredited within the policy dimensions and emerging national frameworks. For this

to be achieved, **collaboration with education providers and professional bodies is required**. However if life long learning is to become more than a *political party piece* employers must learn to invest in the system of learning and the people that are the organisation.

In addition the researcher has identified the following major personal outcomes in terms of knowledge gained by undertaking this research study that has resulted in personal and professional benefits of direct relevance to her role as a curriculum developer responsible for the ongoing education and learning of qualified nurses. These are:

- Knowing about the issues currently facing the practitioners and managers in relation to learning within the NHS as an organisation: individual and collective views
- Recognising that learning through work is dependent upon learning with and from others
- Acknowledging that effective learning through work is facilitated by individuals and organisational structures (Nutley & Davies 2001), therefore curriculum development must be undertaken in collaboration with the organisation
- Being strategic and recognising that external and internal strategic decisions and policies influence learning and are important
- Differentiating between the various socially constructed frameworks of different participants in professional health care education who are also contributors to the National Health Service

- Professional credibility matters - working with clinicians to their educational benefit has reinforced the benefit of networking and collaborative practices for higher education and future developments.
- Recognising that critically appraising the issues related to maintaining knowledge and gaining additional or new knowledge within a complex, large organisation is crucial to the facilitation of learning in that organisation
- Knowing that 'organisational learning' is needed - for qualified nurses in practice and for initial entrants at undergraduate level and that nurses need to construct relevant, learning experiences that are well managed and will result in useful learning at work and external to work
- It is challenging to generate relevant, professional curricula, in collaboration, that will be appropriate to the organisation and provide an accreditation framework that will articulate with all academic and professional levels
- Appreciating the value of undertaking research that focuses on the context and worth of learning to nursing and higher education and the significance of analysis, discussion and dissemination of findings
- Specifically knowing about case study research, the difficulties of conducting research using NHS participants and the need to be able to negotiate and communicate ideas effectively
- Knowing about the personal difficulties of managing ongoing work, progressing own learning and carrying out research activities that are associated with but external to employment.

Many of the issues that have been identified through this research study have not been addressed in depth because of the limitations of the size and scope of the study.

Further research is therefore recommended:

- To evaluate the effectiveness of collective strategies such as learning sets to facilitate individual and collective learning within an organisation
- To explore the effect of incentives on motivation and learning through work
- To evaluate the outcomes of learning within the organisation for individual nurses and their employers
- To explore meta-learning and the transformational effect of learning within a health care setting
- To identify and describe appropriate learning specifications for CPD and LLL for experienced nurses.

The researcher intends to disseminate a report about the research outcomes to the case study participants, representatives of the NHS Trust and representatives of the professional body. It is hoped that this will raise awareness of the issues that emerged from this study about learning through work and contribute towards the development of a collaborative curriculum for experienced nurses who will continue to learn through their work.

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