Use Of Action Research To Reduce The Theory-Practice Gap In A Nursing Course

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Dorothy Field

M709633X

Use of Action Research to reduce the theory-practice gap in a nursing course

Doctor of Education (EdD)

2003
the vindicating superiority of those who do the enlightening over those who are to be enlightened is theoretically unavoidable, but at the same time it is fictive and requires self correction: in a process of enlightenment there can only be participants.

Jurgen Habermas 1971
Theory and Practice Polity Press p.40
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Abstract

This small scale action research study explored the causes of a theory practice gap in a specialist post registration nursing course, studied in one geographical area in England, and set out to discover how it may be reduced. Educational and nursing literature was studied to focus the aims of the study. Research questions are proposed and investigated using an action research methodology. The action research data is presented in three parts: interviews with the research participants, examination of documentary evidence and the main focus of the study, the action research cycles.

Challenges with the chosen methodology were identified early in the study, and a solution was developed which will also serve to add to the evidential basis of the action research cycles which are presented in narrative form. The study was written in the first person, and acknowledges the researcher’s presence and influences within the data. Past and present students, their managers and mentors all contributed to the study, and have all checked the data for validity. The overall aim of the action research approach was to gather data from educational theorists, and those who participated in the course to adapt or change the nursing curriculum to facilitate the students’ professional development as ophthalmic nurses. The research was not just about the results achieved in terms of course modifications; it was also about our development as a team of people working together to improve the ophthalmic nursing curriculum with the longer term objective of benefiting patients through the improvement of nursing practice.

The research study was focussed on knowledge and the curriculum, and for the purposes of this nursing educational study the curriculum was perceived broadly, as those teaching and
learning activities which take place in the university classroom, and more cogently, within the field of nursing practice. The study examined how current educational theories might be used to relate nursing theory and practice and educational policy at local and national level how might be related to a specialist nursing curriculum. It questioned what influence the Lecturer practitioner might have in relating theory to practice and how the role of the mentor might be used to coach higher levels of nursing practice.

Key conclusions suggested that nursing lecturers need to continue to press for academic validation of nursing practice. The mentoring relationship is seen as the key in the reification of practice and theoretical knowledge. Well supervised clinical practice was seen as an essential part of learning nursing theory. The significant contributions that Mentors have to make to course management meetings in order that the academic study of nursing and the development of clinical practice are in a reciprocal relationship were demonstrated.
Chapter One

INTRODUCTION

The aim of this small scale action research study is to explore the theory-practice gap in nursing and to discover how a nursing curriculum might be used to help students bring nursing theory and practice together in both clinical practice and higher education settings. It is centred on the curriculum development of an ophthalmic nursing course which aims to promote the development of higher levels of professional practice amongst nurses.

Originality and justification for the research

Within the action research account I examine the difficulties of relating theory and practical knowledge within a higher education curriculum which satisfies both academic and professional requirements and I seek to demonstrate how action research was used in practice to develop the curriculum by working in partnership with academic management, local nursing management and the students themselves.

The problems expressed in the nursing literature in relation to teaching both theory and practice are used to demonstrate how the nursing curriculum may be used as a meeting point for interests which may previously have been thought to be incompatible. I set out to investigate how small scale research may be used to advance the understanding of a nursing curriculum by an individual teacher, her students and managers, whilst at the same time showing how changes made in national policies might be effected by a small local Programme Development Team. In doing this, I believe I have proved the effectiveness of harnessing change forces at local level, in contrast to the sometimes clumsy,
ineffective and expensive attempts to implement changes from the 'top down'.

An exploration was made of action research methodology to discover its strengths and weaknesses, and the study itself provides a description and discussion of the implementation of the methodology, ethical issues as they arose and the validity of the findings and analyses. The research questions highlighted within the action research, show how the research findings and the literature reviewed relate to the questions being addressed throughout the study. Within its field, this research is unique as a small scale study of an ophthalmic nursing curriculum and draws attention to the necessity for higher education providers to work with the clinical managers of their local National Health Service (NHS) trusts in developing nursing curricula. It highlights the potential of the lecturer practitioner in reconciling theoretical knowledge with nursing practice.

The study setting
I am a full time NHS employee, a lecturer practitioner with operational responsibilities for clinical practice as deputy Nurse Manager for the Ophthalmic Directorate within a district general hospital. My hospital responsibilities include staff training, quality of patient care, recommending changes to nursing practice, practicing as a senior nurse within all departments of the Eye Unit, and holding a ‘Nurse Practitioner’ role within the Ophthalmic Accident and Emergency Department. Two days per week I am subcontracted to work for the Institute of Health and Community Studies (IHCS) at the local university, where I am course leader for the post registration ophthalmic nursing course, specialist ophthalmic nursing teacher and hold pre registration and post registration teaching commitments for other nursing courses. This study is centred around the former English National Board (ENB)
Ophthalmic Nursing Course. The ENB in fact ceased to exist in March 2002; however it was functional during much of the time scale of the study.

**Lecturer practitioners**

The lecturer practitioner role was described by Lathlean 1995 (p28) as an integral part of a ‘new’ approach to organizing nursing practice and nursing education. A study by Champion (1989 cited Lathlean 1995 p28) suggested that the role truly encompasses the domains of education and practice, with post holders not only having expertise in both areas, but also having the structural authority - the freedom, right and expectation to function and to take responsibility for the way in which they are functioning. In keeping with Champion’s (1989) view, within my role I have responsibility for the ophthalmic nursing curriculum, regularly assume hospital management and clinical responsibilities and influence changes both within the university and my clinical area.

I visit ophthalmic departments at two other general hospitals which send students to study the ophthalmic course, and conduct regular audits on these departments to ensure their continued suitability as learning environments for ophthalmic students. Good personal relationships have developed over the years with their staff, many of whom have studied for their ophthalmic course at the local university. Throughout the ensuing study, pseudonyms are used to define these geographical locations to protect the anonymity of informants, their colleagues and our work places. The university will be known as Sandbourne University, and the hospital trust which employs me as the Sandbourne NHS Trust. The two neighbouring hospitals will be known as Casterbridge and Melchester.
Development of the ophthalmic nursing course

In 1996-7, at Sandbourne University’s request, together with the Ophthalmic Programme Development Team, I re-wrote the Ophthalmic Course into ‘Units’. It was revalidated as four taught theory units and four practice based units. ‘Unitisation’ of the Ophthalmic Course meant that from 1997 nurses could study all the ‘units’ and receive the then English National Board’s (ENB) certificate, or study only the units perceived useful to them. The units provide part time study for nurses practicing within ophthalmic nursing, are placed within the university’s Diploma in Clinical Nursing Practice Framework and, if the nurse chooses to continue his/her studies, may be used in the accumulation of credits towards a diploma or first degree.

Re-writing all the nursing courses into units of learning was seen by the nursing lecturers, their Programme Development Teams (constituted from local NHS Nurse Managers employed by participating hospital trusts, university lecturers and student and clinical assessor representatives) and IHCS management as an opportunity to bring nursing theory and nursing practice more closely together by developing ‘paired’ units of theory and practice. This coincided with a move by IHCS to employ more lecturer practitioners to ensure that classroom teaching of specialist nursing remains up to date and strongly related to nursing practice. This is in line with national initiatives to strategically manage the practice roles of lecturers (Day, Frazer, Malik 1998) and regional support from the NHS Executive South and West (Buttigieg and Vaughan Smith 1999).

Broad focus to the study

This action research study is focussed on those re-written ophthalmic nursing units. The area for consideration is knowledge and the curriculum, with specific attention being concentrated on
theory and practice knowledge within the curriculum. Whilst nursing courses are located within higher education in terms of conceptual studies, course administration and validation, within specialized nursing courses, a greater proportion of the student’s time is spent observing, working and studying within the nursing practice setting. Ophthalmic nursing students are all Registered General Nurses (RGN), working within ophthalmology. They continue their regular work, and are released by the NHS to study one day per week.

**Researcher’s personal stance**

I am a participant researcher of the curriculum. This account, written in the first person as is the practice for action research (McNiff 1993 p37), acknowledges my presence within the research data, and the presence and contributions of the research participants. Not all the research participants had research backgrounds, so the careful use of a narrative approach and the effort to describe the research process with clarity and personal candour is significant as the research participants are part of my personal research review process.

Silverman (1993 pp 171-195), suggested three possible roles for the social researcher, which I examined to identify my personal areas of interest and possible bias throughout this study:

- **The scholar**, a person of liberal political views who pursues knowledge for knowledge’s sake (examples Weber, Denzin)
- **The state counsellor**, with bureaucratic tendencies, committed to social engineering or enlightenment for policy makers (examples Popper, Bulmer)
The partisan, marxist or conservative, committed to using knowledge to support both a political theory and a political practice (examples Marx, Habermas)

The scholar
I began by seeing myself in the role of Silverman’s ‘Scholar’, working as an independent student to gain knowledge for its own sake in pursuit of a personal academic achievement. I see myself as liberal in my educational views, favouring individual liberty and moderate social and political reform, keen to promote both student and nurse empowerment.

The state counsellor
Silverman’s model also challenged me to examine my role as a nurse manager, and to acknowledge my leanings towards social engineering in terms of seeking improved efficiency of the NHS workforce. The NHS is pressed by financial shortages and increasing government demands for more completed patient episodes. The size and quality of the workforce to meet these demands is under pressure with 9% of the workforce leaving every year (Mulholland 2002). The nursing profession has also relieved junior doctors of many responsibilities. Efficiency is being sought through increasing nursing specialization with greater need for nurses taking academic courses to develop higher level nursing practice abilities more quickly. The move to have practice attainments validated by the university in terms of Credit Accumulation and Transfer (CATs) points is a prudent response to this pressure, as nurses are taking for example specialized ophthalmic measurements, diagnosing and treating patients’ conditions without doctor consultation and supplying medicines under protocols which could place them at greater risk of litigation due to increased responsibilities. As a manager I perceive myself
being influenced by this pressure to swiftly increase nursing specialization.

The partisan
I acknowledge from Silverman’s third point, that my views may be partisan, in that I want to see greater legitimation of nursing practice knowledge, similar to that obtaining for medical practitioners, whose higher professional examinations eg Fellow of the Royal College of Ophthalmologists (Royal College of Ophthalmologists 2002) are set by and legitimated by their own professional organizations, and test 50% procedural knowledge (patient examination and viva) as well as 50% conceptual knowledge. In a sense nurse education was liberated by its uncoupling from service provision, but in my own area is facing the ongoing difficulty of legitimating nursing practice achievements within academic settings, which until recently required 2,500 word essays to accompany the evidence from practice for every 10 academic credits. Such strictures do not apply to our ophthalmic medical colleagues.

The above acknowledgements of risks to my personal neutrality as a researcher are essential in a study of this nature, and demonstrate that no researcher can claim to be value neutral in their approach, even when undertaking quantitative research. Since this is a reflexive study, giving this information at this stage in the study will enable the participants and readers to draw informed personal conclusions in terms of the validity of the study. I attempt to make a coherent study of the re-written 1997 ophthalmic nursing curriculum in terms of a study of the nursing and educational literature and an exploration of difficulties with the 1997 course. My intention is to use the study to examine my personal teaching practice and to further develop the curriculum in line with both practice needs and higher education requirements.
The research plan

The current theory-practice gap in nursing is examined, relying on literature dating largely from 1996 to the present, charting the problems identified since nursing's move into higher education. In an attempt to find some answers to the teaching of practical knowledge, a range of influential non nursing literature is identified and explored in Chapter Two, providing progressive focus for the main study, which results at the end of chapter one with the identification of three broad aims to direct the research study.

Prior to commencing the actual research process, Chapter Three discusses and justifies my choice of an action research methodology, identifies the research questions and considers how the action researcher might tackle issues of validity and reliability, and discusses the role of the teacher in curriculum research and development. I share with the reader my early difficulties in identifying the action research cycles. These difficulties in dealing with action research methodology in terms of identifying the areas for research and processing the valuable initial data provided in the 1999-2000 phase of the study are carefully considered. Chapter Four introduces the research participants to the reader, giving relevant background information about the various groups, whilst at the same time preserving the anonymity and professional distance expected within a research which has sixteen participants. Ethical considerations as they may apply to the research participants are raised, to ensure that they are treated with respect throughout the study.

Chapter Five is an analysis of the interview data which was obtained from students, managers, a mentor and a clinical assessor, provides an evidential base for the action research cycles and relates the participants' views to the literature studied. The action
research cycles are identified, and a leitmotiv which arose from the data is discussed. Chapter Six provides a narrative account of the five action research cycles, relating them to the theory studies and to the research questions.

Chapter Seven concludes the study by returning to its aims and critiquing the methodology. The question of the validity of the action research findings is explored reflexively. Areas which are being improved subsequent to the action research study are noted, and areas for further research are identified.
Chapter Two

THE LITERATURE REVIEW

Introduction
Nurse educators and clinical nurses have articulated the problem of a theory-practice gap within nursing since Balme (1937) wrote his Criticism of Nursing Education which suggested that student nurses were being used for their ability to carry out nursing duties rather than to receive a professional education. The aim of this literature review is to briefly demonstrate that the ‘gap’ being described at the present time has altered in terms of its causes and effects since Balme (1937) first identified it. It is my contention that the present gap exists as a result of changes to the delivery of nurse education, expectations that nursing will become a research based occupation and changes to the character of nursing work in terms of taking increased medical responsibilities. It will be noted that most of the nursing education literature used in this review relates to pre registration nursing, but these findings are transferable to post registration nursing education.

Nursing has experienced rapid changes in recent years. Hospital based training was challenged in the Report of the Committee on Nursing (1972) which recommended the placing of nurse education within higher education, to remove nursing education from NHS service provision. This change, delayed on the grounds of cost until the late 1980s, was only completed in England in 1996, causing a number of initial problems and in particular exposing problems with nursing’s theory base. On its move into higher education, nursing’s difficulty in articulating its own unique body of knowledge resulted in dependence on teachers from other contributing disciplines such as anatomy, physiology, sociology, psychology to form the substructure of its higher educational input. Until all nurse teachers had obtained suitable academic credentials, nursing was generally unable to offer a more unifying
approach to pre and post registration curricula through qualified nurse teachers who had taken nursing degrees or degrees in psychology, sociology and anatomy and were therefore qualified to teach the nursing curriculum. (It is important to acknowledge that prior to the relocation of all nursing education to higher education settings, pockets of academic nursing excellence had existed, notably at Edinburgh University.) During the period of transition from schools of nursing to higher education establishments many nurse teachers were engaged in obtaining first degrees, often in non-nursing disciplines, and concentrating on becoming ‘academic’. For some individuals, retaining links with nursing practice was difficult, and clinical confidence was lost.

Nurse teachers were also faced with the challenge of helping slower learners who would not normally have accessed higher education to reach diploma and degree standards in theory, as well as making sure that they were clinically competent. Indeed, the Report of the Committee on Nursing (1972 p82 paragraph e) stated:

We believe that nursing appeals strongly to late developers and to people with average intelligence or more who, though they have few formal qualifications have a high degree of motivation.

Throughout the change process, academic heads of nursing departments have remained in dialogue with senior nurses and midwives via the contracting process whereby purchasing confederations contract with universities for the purchase of nursing courses. Unsurprisingly, clinical competence remains a substantial area for discussion between hospital trusts and university departments of nursing, and was the subject of the Making a Difference report by the Department of Health (DoH July 1999 paragraph 2.26) which commented:
Evidence suggests that in recent years students completing training have not been equipped at the point of qualification with the full range of skills they need.

Additionally, the United Kingdom Central Council for Nursing and Midwifery, Peach Report, *Fitness for Practice* (UKCC September 1999) stated in paragraph 1.9 that newly qualified nurses do not possess the practice skills expected of them by employers and public perceptions about levels of preparedness for practice are sometimes negative.

In 1999 Frank Dobson, (Munro 1999) then Secretary of state for Health suggested that the shift of responsibility for nurse education into Higher Education had been harmful. The crux of this debate hinges on the question of clinical competence on course completion. Defendants of the higher education approach with its emphasis on theoretical knowledge and the use of nursing research to underpin nursing responsibilities feel that nurses should continue to benefit from education delivered in similar settings to other NHS professions. NHS managers continue to press for nurses who are fully functional in practice from the time of qualification, an aspiration unlikely to be met within most other professional occupations. A move away from higher education could be a serious backward step, given that nurses are taking on much of the workload formerly carried by junior doctors since the reduction of junior doctors’ hours, and require an appropriate level of education to meet these responsibilities.

**The theory-practice gap identified within current nursing literature**

Below is a brief summary of the possible manifestations of the theory-practice gap in nursing, but given that in England nursing’s move into higher education was only completed in 1996, the
professional literature explored dates largely from 1996, in order to take a current view and to examine relevant problems as a result of recent curricula changes. Four themes arise. These are:

The difficulties of implementing nursing research in clinical areas

The Report of the Committee on Nursing (1972) first suggested that nursing should become a research based profession. Mulhall (1997) raised what she called the ‘research-practice gap’, and asked whether nursing research was being incorporated into practice or whether nurses remained wary of research and the culture that produced it. It was her view that research reports might be being written in forms that were culturally alien to established nurses. She maintained, correctly, that research needed to become embedded within the culture of nurses and suggested working towards a better understanding of the clinical culture. I would suggest that given nursing’s short history within higher education, attainment of this goal is likely to be through developmental stages as progressive cohorts of qualified nurses become convinced of the value of reading research and capable of evaluating complex evidence and addressing findings which may be in conflict. Mulhall (1997) was probably correct in suggesting that research may be culturally alien to established nurses, and suggests that research needs to be written for audiences of practising nurses. If nursing is to establish a ‘professional’ status however, I feel that its research must be on a par with that presented by other professional groups.

Rafferty et al (1996 p689), suggested that a theory-practice gap in nursing is inevitable, healthy and necessary for change in clinical practice to occur. Their position regarding research was in part disputed by Rolfe (1997) who disputed the quality and relevance of mainstream nursing research on the grounds that the knowledge base of most practice disciplines is predicated on the research
methods used to generate it rather than its practical utility. He believed that research has therefore imposed its own agenda on nursing practice. He preferred ‘informal theory’, generated by practitioners, to make sense of individual, unique practice situations which is judged on whether it brings about improvements to nursing practice. He believed (p427):

One of the many implications of praxis (expert practice) is that the power to legitimize and create knowledge will fall to practising nurses.

Rafferty, Allcock and Lathlean (1996) however were arguing that the praxis view, suggesting that only ‘informal theory’ should have a privileged reciprocal relationship with practice, is flawed. They were contending that Rolfe (1993,1996) was arguing from a radically different personal ideology, which failed to explore the standards by which nursing knowledge is judged and legitimised. They referred to the politics permeating nursing education and nursing practice and see a multifaceted theory-practice gap. Lathlean’s (1994) view of the lecturer practitioner role as a contribution to narrowing the gap is quoted as:

an attempt to combine the sapiential with positional and executive authority.

Rolfe (1993 p176) expressed his view that any gap between informal theory and practice is meaningless, since informal theory not only arises from practice but is refined and tested in practice. He expressed similar views in 1996, when he acknowledged nursing’s failure to ensure that research findings were being implemented in nursing practice and suggested what he felt were four relevant solutions to the problem: involving clinical nurses as research collaborators with experts; encouraging clinical staff to generate small scale, research based projects; using action research to ‘test’ nursing theories in practice settings; the development and
use of 'reflexive action research' by researcher-practitioners. Rolfe (1998 p672) reiterated his views suggesting that nursing required a paradigm of clinical research focussing on individual therapeutic encounters.

Evidently he believed that if research arose more directly from clinical nurses' patient encounters, the gap he visualised might narrow. He failed however to address the means by which practising nurses would become research competent, or the current absence of a clinical research career structure. Rafferty et al (1996) were in fact, through their promotion of lecturer practitioner roles, suggesting that wider solution by putting in post nurses who are competent educators, researchers and practitioners to develop their practice colleagues and provide reciprocal communications between education and practice.

The apparent reluctance of nurses to implement research findings is significant as, following NHS scandals at Bristol, Brighton and Alder Hey, the government has been moving health care providers towards 'evidence based practice', to ensure that nurses and doctors identify and use the most efficient interventions for maximising the quality and quantity of life for individual patients (Sackett et al 1997). This has led to an increased drive to research practice and to improve the research basis of nursing practices and is influencing nurse teachers in terms of both the theory and practice content of their courses. All registered nurses are now required to take responsibility for matching their own continuing professional development (which they undertake as part of the requirement for continuing periodic re-registration) with local trust plans to improve quality (Department of Health 1999 p47). The requirement upon local education providers to ensure that post registration courses meet nurses' professional requirements and the needs of local NHS trusts is manifest.
The Council of Deans (August 1999 Position Statement 9) involved itself in the above debate, acknowledging that a clinical academic career needed to be developed for Nursing, Midwifery and Health Visiting and is taking a leading part in this debate. However, their view is more developmental than that of Rolfe (1997) as nursing's current low base of research activity is perceived and inequalities in research funding are acknowledged.

The difficulty in developing skills competencies
Hewison and Wildman (1996) graphically identified the move of nurse education into higher education as a concrete representation of the distance between education and practice. Their work concentrated on what they describe as the subtle and pervasive separation between the new managerialism in the NHS, focused on throughput, waiting list targets, league tables and financial constraints, contrasting with the values of nurse education which emphasise treating patients as individuals and the importance of implementing research based practice. They predicted that future nurse education will conform to the demands of health care trusts and be orientated to the acquisition of specific skills and knowledge which they suggested, without specifying how or why, might reduce the theory-practice gap, but threaten the future of professional nursing.

A different slant on the theme of skills competency is given by Carlisle et al (1999) who reported on the findings of a national study to examine the level of skills acquisition by newly qualified nurses. Their two year study, funded by the Department of Health, reliably indicated that the practical skills achievements of newly qualified nurses were at variance with what the managers were expecting. The researchers commented (p1262) that in the move away from task orientated care the nursing profession had forgotten that the provision of holistic care also included the
ability effectively to implement clinical psychomotor skills. They suggested the need for identifying (and presumably teaching), essential psychomotor skills for newly registered nurses, but cautioned that the managers’ ideal of appointing newly qualified nurses who ‘hit the ground running’ may be unrealistic given that Clark et al (1997) had identified that the practice skills deficit of the newly qualified nurse is an initial lack which is quickly remedied after a period in practice.

Glasper (1999) addressed this apparent failure of nurse educators to teach what trained nurses need to know to practice clinically. He opinioned (p273) that there was little evidence to suggest that practitioners are any less skilled than they were in the past. Indeed, he suggested that changes to nursing curricula are beginning to erode the theory-practice gap. His brief one page article gave little more detail than stated above. The question however remains to be asked as to whether the demand for highly skilled nursing is increasing. For example, venepuncture, cannulation and intravenous injections, once the preserve of medical staff or very senior nurses are now tasks being devolved to newly qualified nurses. If Glasper (1999) was correct, it is not a question of nurses being less skilled, but of the work expectations of what is now a well educated workforce being raised as a result of other changes, for example reductions to junior doctors’ working hours and shorter, more acute in patient episodes.

The difficulties of facilitating theory related learning in clinical areas

With the removal of nurses’ theoretical education into higher education, two significant changes occurred. Student nurses were given supernumerary status with the expectation that instead of being used as ‘pairs of hands’, they would gain a systematic
knowledge of practical nursing. As a result of this shift, nurse teachers were physically distanced from clinical settings and may tend to be viewed as occasional ward visitors without a practice teaching role. This difficulty is exacerbated when university ‘link lecturers’ are responsible for many clinical areas, some of which lie outside the teacher’s clinical experience.

Landers (2000) elaborated on the dichotomy between what is taught in the classroom and the learning which takes place in the clinical area. She suggested (p1554) that acting as a ‘link lecturer’ between the university and the ward fostered communication but did not permit the facilitation of learning in the ward in any structured way. Corlett’s (2000) study of the perspectives of nurse teachers, student nurses and mentors (see Appendix One, Student Support Roles) demonstrated a discrepancy between the theory pre-registration student nurses are taught in the classroom and what they experienced on their clinical placements in terms of the practice of nursing. This gap is currently being filled by the appointment of clinical educators, experienced nurses who are being employed by trusts to work with student nurses and their mentors to ensure adequate standards of practice learning. A further means of dealing with this problem is the use of university ‘Skills Laboratories’ within departments of nursing to facilitate the learning of skills which are research based. However, this may not be the panacea which it appears to be, as Wallace (1995) and Eraut (1994) suggest that learning acquired in one context may not be immediately transferable into another setting without the requirement of additional learning.

Tensions within the higher education setting
As a young discipline within higher education, the development of nursing scholarship has been problematic. Unlike our medical colleagues the earliest nursing academics were located largely
within academic institutions, and did not carry nursing caseloads, and this has led to observations that nurse education was distancing itself from health care delivery which is leading to a de-skilling of nurse teachers (Camiah 1996). It has also prompted criticisms that nursing research is too academic and does not relate unambiguously to patient care (Nolan and Grant 1992, Rolfe 1996, 1998).

Young's (1999) general examination of curricula as socially organised knowledge considered definitions of 'success' within education, and how methods of assessment of success are legitimised within education. He saw the skills of reading and writing being highly valued within the education system as academics consider that there is a greater possibility of written work being objectively and quantitatively assessed. His views may relate to one of the difficulties within my personal experience, which do not appear in the literature examined. In order to gain academic credit for courses, little credence may be given nursing practice in order to provide reliable academic assessments for university and external examiner validation. Post registration nursing courses at Sandbourne University are awarding fifty per cent of the credits for clinical practice, although most clinical practice portfolios were until recently, expected to be accompanied by a regulation number of 'academic words' upon which the mark was based. Young (1999 p61) questioned how definitions of academic success arise and are legitimised as methods of assessment. He suggested this raises political questions about the distribution of power and the ability of some to define what counts as educational success. He continued (1999 p68),

Academic curricula are as much the products of people's actions in history as any other form of social organisation. They are not given, nor in
today's language do they represent, a gold standard.

Given the size and potential income of university nursing departments, and the increasing academic qualifications of their managers, the balance of power is beginning to shift in terms of the value placed upon, and the means of assessing both practice and academic achievement within nursing courses.

**Early nursing attempts to bridge the theory-practice gap**

**Radical Academia**

The development of 'Radical Academia' as an influence on nursing curricula arose as a contemporary response to the development of some of the rather obscure early academic nursing theories. The phrase 'radical academia', coined by Reed and Procter (1993 pp24-5) is an approach which seeks to reveal nursing knowledge based in the everyday experience of nurses. It recognizes the fact that being a practice based discipline, it has been difficult for nursing to articulate what its scholarship is about. Radical academia is closely associated with the work of Lawler (1991) whose work on 'somology' studied how nurses deal with problems of the body in nursing. These nursing strategies used in practice, and identified and published by Lawler (1991), had been educationally unacknowledged until Benner (1984 p1), one of the earliest nursing writers to make visible the tacit knowledge embedded in clinical practice described this hidden knowledge:

>'that accrues over time in the practice of an applied discipline. Such knowledge has gone uncharted and unstudied because the differences between practical and theoretical knowledge have been misunderstood.'

Benner (1974 p3) and those who have followed her, bases her work largely on the Dreyfus model (Dreyfus and
Dreyfus 1980) which studies a learner’s move from relying on abstract principles to the use of a repertoire of past practical experience as paradigms for future actions.

A critical examination of Benner’s contribution to nurse development

Benner’s (1984) work described the potential development of nursing expertise as progressing through five stages from novice to expert. Her views were received enthusiastically by British nurses as they claimed to chart the development of ‘knowledge embedded in expertise’ (Benner 1984 p3), which would probably have been better defined as ‘clinical judgement’, and is often used to define stages within nurse education programmes (Rashotte and Thomas 2002, Taylor 2002, Priest 1999, Lamond and Farnell 1998). Benner’s work is admired for bringing ‘expert’ nursing practice into view, but using her principles to develop nurse education may be questioned on the following grounds:

Benner (1984 pxix) advocated novices working with experts but her only elaboration on methods of teaching and learning in practice was to note that students require strong preparation in biological and social sciences and in nursing arts and science. She specified that novices need rules to guide their performance and help in setting priorities. Benner’s (1984 p4) list of definitions of practical nursing knowledge did not include psychomotor skills and her approach to facilitating the development of these was distant, suggesting that the student would already have knowledge of principles and rules as the tools needed to learn from experience (pxix).
Benner's (1984 pxx) work was based on risky, situation-specific decisions that are usually covered up but that nurses face daily in their practice, but there was no real guidance as to how nurses reach expertise in dealing with these. Significantly, Spouse (2001 p.514) identified a mentor who did not recognise a role in communicating her craft knowledge. Without access to such knowledge students miss out on the very information they come to their clinical placements to learn. So a cycle of deprivation is generated. Possibly Spouse's (2001) mentor was using her craft knowledge so instinctively that she was no longer able to elucidate the steps leading to her decision making, which may be perceived as weakness in the Benner (1984) approach, which makes no attempt to describe the stages of such learning. Indeed, Benner and Wrubel (1981 pp11-12) suggest that nursing knowledge is practical knowledge acquired without conscious theoretical understanding, through experience in learning situations, and not from the mere passage of time. They give the example:

People learn how to swim without learning rules or understanding the principles responsible.

Their comment is accurate, and relates to McCormick's (1999) qualitative view of practical knowledge.

McCormick's (1999 p112) intention was to develop a greater role for the teaching and learning of practical knowledge given that expertise in the world outside school and college is characterised by the use of such knowledge. The crux of his argument was that students were not being provided with practical knowledge. He illustrated his view using snooker players as an example, by suggesting that the qualitative knowledge acquired by the snooker
player was superior in practice to that of mathematicians and physicists who had undertaken predictive studies of snooker ball movements (p114). McCormick (1999 p118) stated that the qualitative knowledge of the expert snooker players contrasted with the mathematical and scientific theories in both style and ability to deal with complexity. The snooker players’ knowledge was context specific. He did not suggest abandoning the teaching of theory, but advocates examining practice in the light of theory and concludes:

research in a variety of fields indicates that it is necessary to link them both (conceptual and procedural knowledge) for effective action.

In response to the above, the question which needs to be asked of the Benner (1984) approach to practice learning is, could the same result have been obtained more efficiently with educational and in particular, mentor support.

Unfortunately the uncritical adoption of Benner’s (1984) ‘From Novice to Expert’ approach promoted the development of ‘reflective’ approaches to nursing as the new mantra for nursing education in the 1990s (Atkins and Murphy 1993, Burns 1994, Johns 1994). The large part that reflecting in and on practice still takes within nurse education should be seen against the backdrop of responsibility for much of students’ clinical education and all of the clinical assessment being devolved to ward mentors who vary in quality and commitment, nurse teachers being based in higher education and losing clinical expertise and the convenience of ‘reflective essays’ as a proportion of the ‘academic words’ tied to practical assignments. To reflect in reasonable depth and to begin to acquire the levels of nursing practice learning described by Benner (1984), the student requires an adequate practice placement, and a good two way dialogue with an excellent mentor with a good basis of theoretical knowledge who in turn requires good
senior support. These are not always in place, and whilst the reflective approach can be used to relate theory to practice and practice to theory, much reflective work remains shallow. Joyce and Showers's (1988) experimental work suggested that when student teachers were taught theory, watched demonstrations, were allowed to practice skills, received feedback and coaching, the impact on their job performance was a high level of knowledge, skill and the ability to transfer their learning to other situations. Evidently the key to the move from novice to expert is excellent mentor support, otherwise the nursing student may make faulty assumptions based on inadequate reflections, which go unchallenged within practice.

**Refining the focus of the literature studied**

The literature reviewed thus far has revealed the complex nature of the current theory-practice gap in nursing. An evaluation of the findings at this stage suggest that whilst there are difficulties implementing nursing research in clinical areas, the personal views expressed regarding this difficulty are unquantified, and there are no statistical findings to suggest that there have been no recent improvements. The pre and post registration academic assignments set at Sandbourne University are based on researching and developing clinical nursing practice, but it is likely to take at least a generation to base all nursing practices on reliable research. The national study reported by Carlisle et al (1999) on the difficulties of developing skills competencies however, presented hard facts to demonstrate that the practical skills achievements of newly qualified nurses were at variance with what their managers were expecting. The researchers stressed within their findings the importance for nurses of effectively implementing clinical psychomotor skills.
The difficulties of facilitating theory related learning in clinical areas follows the clinical skills problem in that despite supernumerary status, student nurses may still be failing to gain a systematic knowledge of practical nursing. There is strong evidence (Corlett 2000) of a discrepancy between classroom theory and the learning which takes place in the clinical area. Tensions within the higher education setting in terms of the low value some non nursing academics place on clinical practice has exacerbated the above two problems, so it is now proposed to examine wider educational literature to discover how a range of occupational groups tackle practice learning and instruction.

Constructivist and sociocultural approaches to learning
Cobb (1994) raised the question as to whether learning is a mental process, in terms of the constructivist view of learning or whether it owes more to enculturation into social processes as with the situated learning and legitimate peripheral participation approaches to learning. The constructivist view of learning rests on the assumption that there is an inborn tendency to make sense of the world. Billett (1996) suggested that instead of passively receiving knowledge, learners actively construct knowledge by integrating new information and experiences into what they have previously come to understand, revising and re-interpreting old knowledge in order to reconcile it with new knowledge. Cobb (1994) suggested that the sociocultural approach emphasised the homogeneity of established communities, whereas the constructivist perspective emphasized the individual construction of knowledge by actively interpreting individuals. He suggested a co-ordination of perspectives, rather than arguing for one at the expense of another, leading to the view that learning is both a process of self-organization and enculturation. Consideration of both these approaches to learning is germane to the post registration nursing course, given that learning is both culturally situated and
individually constructed from a variety of different sources. The literature concerning the theory-practice gap in nursing Carlisle 1999, Hewison and Wildman (1996), Camiah 1996, DoH, Making a Difference (1999), UKCC Fitness for Practice Report (1999), emphasized a lack of practice skills in nurses undergoing training, and so it is proposed to examine the literature on situated cognition to inform my constructivist view of learning.

**Situated learning and Legitimate Peripheral Participation**

**The Background**

A growing body of educational thought has emphasised the socially and culturally situated nature of knowledge (Scribner 1985, Schoenfeld 1987, Brown, Collins and Duguid 1989, Greeno 1991, Lave and Wenger 1991, Lave 1997, McCormick 1999), and particularly the role that activity and experience play in learning of practical skills. This radical change in current educational thinking is attributed in part at least, to the work of Rogoff (1984), Lave (1984) and others, which explored everyday cognition in a variety of social contexts. Prior to this, most educators had confined themselves to exploring mental changes in individuals with little consideration of the possible influence of social contexts. By 1990 Rogoff was expressing her view that cognitive development (in children) was an apprenticeship, occurring through social activities. She supported her views by drawing on the theories of Vygotsky and Piaget. By studying the work of Piaget and Donaldson, she noted that childrens’ reasoning was affected by the ‘form’ of problems presented to them. They had to make ‘human sense’ to the child.

Does learning have to make ‘human sense’ to adults? Lave and Wenger ‘s (1991) sociocultural examination of the acquisition of procedural knowledge by traditional midwives, tailors and quartermasters would suggest that it does. The learning that took
place was 'situated' within real life contexts and the learners were allowed to participate 'legitimately', as learners. Lave and Wenger (1991) stimulated a reappraisal of the meanings of learning and understanding as they perceived learning as a process that takes place within a framework of social participation rather than within the individual mind. However, their studies, situated in social settings, whilst generating new knowledge regarding social learning, did not address the reciprocal relationship between theory and practice which is key to professional learning.

A consideration of the usefulness of situated learning in nursing practice
Whilst one might see socially transmitted learning as potentially undesirable from the point of view of improving or modernizing nursing practice, it is to be hoped that the mentors within practice areas may change as a result of this facilitation, learning from their students in terms of current theory, and the skills being mastered may be changed, updated and perfected in the process, thus benefiting nursing as a theory and research based occupation.

An uncritical implementation of the Lave and Wenger (1991) approach to practical learning might result in a repetition or perpetuation of a difficulty described by earlier nursing commentators as 'hidden curricula' within clinical areas, suggesting different educational and hospital worlds. Alexander (1983 pp22-24) described the following difficulties within the clinical setting:
- Nursing school teaching that was generally inconsistent with practice on the wards
- Stress and conflict for student nurses arising from these differences
- Evidence of potentially dangerous practice in the carrying out of clinical procedures.
The fact that individual nurses may develop their own modes of working has been recognized for some time (Alexander 1983), and was the original cause of a theory-practice gap when the old Schools of Nursing wrote carefully prescribed nursing procedures. Part of the student nurse’s enculturation into a clinical setting was learning how procedures were actually carried out in the ‘real’ setting. This caused problems with the discrepancy between what was taught and what was practiced and Dalton (1969) noted that conflict between classroom and ward practices was ‘one of the greatest undermining influences in training.’ This situation has been largely overcome by the writing of nursing procedures which stipulate principles of good practice rather than precise methods. However, Scribner (1984 p44) stated that practical thinking became adaptive when it served the interest of economy of effort, and this type of thinking may underlie both improvements to practice and the short cuts which lead to poor professional practice.

On the other hand, Lave and Wenger’s (1991) approaches to practical education appear feasible when either a clinical nurse educator or lecturer practitioner is employed within the practice area to assist mentors in structuring practical learning, and, as Landers (2000 p1554) suggested, takes responsibility for the initiation of a research culture among staff in the clinical area. Landers (2000) also specifically suggested that by participating in practice, the lecturer practitioner has the potential to provide learning opportunities for the kind of application, analysis and synthesis of information which gives students an understanding of what nursing is about. However, it needs to be acknowledged, that as a nurse who is also a teacher in higher education, who may have to work in a variety of settings with different types of clients, the lecturer practitioner may be clinically and academically competent, but lack the clinical expertise of the mentors they are supporting.
An illustration of the efficiency type of knowledge which is
developed in and from practice is provided by Scribner (1985),
and concerned an observational research based on a comparison of
how different groups of customers and dairy workers recall and
organize dairy products into groups. She demonstrated that
different situational factors appear to influence the selection and
organisation of knowledge. In particular, her findings showed that
the dairy warehouse 'preloaders' had organized their work with a
high degree of efficiency, which conserved their physical energy
and saved time, thus serving their own purposes and those of their
management. Working in clinical practice areas I have had the
opportunity to witness similarly effective short cuts, but whereas I
carefully note these to include in practice teaching, not all mentors
have analyzed their work stages in order to be able to do this.

The transferability of situated learning
Rogoff (1984 p4) stated her case that thinking is intricately
interwoven with the context of the problem to be solved. She
believed that the context included the problem's physical and
conceptual structure as well as the purpose of the activity and the
social milieu in which it is embedded, thus perceiving context as
an integral aspect of learning, not a nuisance variable. Lave (1984
p94) pursued a similar theme in a study of arithmetic in grocery
shopping, stating that people and settings together create problems
and solutions spontaneously. Often a process of solution occurs in
the setting, with the enactment of the problem, and may transform
the problem for the solver. (She demonstrated that shoppers'
arithmetic averaged 54% on a test, compared with 98% working
on actual problems in the supermarket). Burton et al (1984 p139-
142) suggested that learning environments could be studied as a
paradigm he called ICM (increasingly complex microworlds). The
microworld described consisted of the manipulation of three
elements: the equipment used for the skill, the physical setting of
the task and the task specifications. It is evident from the work of
Rogoff (1984) and her colleagues, that the notion of transferability
in situated learning differs from that of cognitive theory, being
less obviously immediate, but well able to cope with variables like
environments, skills, problems. The transferability of situated
knowledge appears to rest on the analysis of the whole task in its
context.

Greeno et al (1999), on the subject of knowing and learning,
placed importance on the situatedness of learning, and sustained
participation in the practices of a community of learning, and
pointed to the significance of replicating the practices and
perspectives of the community. They saw problem solving as
derived from ‘seeing the world in a particular way’ (p139), which
is likely to be associated with membership of the community e.g.
being a doctor. Particular communities have their own ways of
making sense of problems, and will participate in collective
problem solving. Greeno et al (1999) continued the work of the
other situated cognition theorists by advancing the understanding of
cognition beyond being a purely mental process, and demonstrating
that knowledge may be viewed as relating to community. They
also emphasized the active construction of knowledge by the
individual rather than its passive acquisition, by using the tools
(language and the way it is used, different thought perspectives)
developed in the community. The notion of transfer - how
knowledge gained in one situation might be applied in another is
implicit in the 1999 article - possibilities are present in the use of
language to communicate with significant others and the thought
processes learned in the community, e.g. learning to think like a
doctor or nurse.
The importance of clinical practice to promote learning

McCormick (1999) suggested that experts use qualitative reasoning, supported by scientific knowledge for problem solving in practice, and that such qualitative reasoning could be improved if it was the focus of practice learning. In fact he noted, much complex knowledge is learned within higher education institutes and geared to completing academic assignments and examinations rather than to solving practical problems. He suggested that ‘transfer’ of learning was the wrong metaphor to use, and that within practice, learning to identify the salient points within practical situations will enable the learner to apply practical knowledge learned in other situations. He therefore recommended valuing practice knowledge more highly and recommended teaching it in its own right.

Nursing procedures, which may initially be taught in university ‘clinical skills laboratories’ require more varied and complex skills than can be taught in classrooms. Rogoff (1984, 1990) stressed the importance of contextual learning, the significance of guided participation in activities (following the Vygotskian approach) and intersubjectivity—the sharing of focus and purpose between the learner and a more skilled partner. She (1990 pp9,39) believed that skilled partners help novices with difficult problems by structuring subgoals of problem solving to focus novices on manageable aspects of the problem and advocated the importance of routine skilled cultural activities, (adding which are not conceived of as instructional, but her prose fails to make clear by whom, mentor or student). Her ideas connect with the notion that clinical practice is good for nurses who are learning their craft, and Rogoff (1984, 1990) and others thus supply a theoretical background for practice learning. They also provide the necessary guidance which was absent from Benner (1984) regarding the framing of learning in and from practice.
Research by Cahill (1996) on student nurses’ experience of mentorship in practice revealed that teaching and learning activities were seen as taking place after the ‘work’ (patient care) was completed, thus illustrating the significance of ‘time’ for mentoring. Unfortunately learning and patient care were seen separately, with one being a reward for the other. Cahill (1996) suggested that within the hospital ward culture, hierarchy and division of labour separated those who have knowledge from those who need it, constituting a barrier to the formation of supportive relationships based on equality and mutual respect. She may only be partially correct. It is possible to infer from her findings that students may not perceive when they are learning practically in clinical settings, and might be referring to ‘learning experiences and help’ in terms of academic assignments and the formulation of clinical learning objectives. Implicit within Cahill’s (1996) research might be the notion that mentors were failing to explicitly connect clinical nursing knowledge with academic knowledge, theories and research. This may be a fruitful area for further enquiry as traditionally it is the professional educators who have been blamed for the theory/practice divide. Rafferty (1992) believed that the role of the mentor in nursing is vital, since unless learning opportunities are used to formulate and guide clinical practice, learners may not make the theory-practice links for themselves.

Motivation is unequivocally important in relating theoretical and conceptual knowledge. The practice environment and the student’s mentor are significant in this process, as the student seeks to endue conceptual knowledge with personal meanings from practice. Earnshaw’s (1995) research noted the importance of the quality of the relationship with the mentor, which he felt to some extent depended on the student nurse’s behavior. As the student showed interest, the mentor began teaching. He felt that the mentors were
letting the student ‘set the agenda’ and were not prepared to waste time on students who showed little interest in learning. Earnshaw’s (1995 p277) findings demonstrated the careful use of the mentor’s valuable time, with the students themselves needing to know that they are the ‘key to unlocking the mentor’s teaching skills.’ Billett and Rose (1997) suggest that learning at work is a constructive process, and that individuals are constructing knowledge for themselves as part of an ongoing and validating process based on experience. Clearly students who begin to ask questions are engaging in this process, and it is at this stage that students are likely to begin to think critically, identifying and challenging assumptions within practice and imagining and exploring possible alternative actions. Rafferty, Alcock and Lathlean’s (1996) assertion that the relationship between higher education and NHS management should be reciprocal aims to maintain this dynamic tension between theory and practice.

**Conclusion to the Literature Review**

The nursing literature reviewed revealed a complex theory/practice divide. The problem areas highlighted were: difficulties implementing nursing research in clinical areas; difficulty in developing skills competencies; the difficulties of facilitating theory related learning in clinical areas and tensions within the higher education setting. The NHS Executive’s (1998) report Integrating Theory and Practice in Nursing demonstrated how important it is for nurses to develop an integrated approach to nursing knowledge. Rafferty et al (1996) and Lathlean (1997) showed that changes needed to be implemented in terms of roles of nurse teachers and greater involvement of NHS Nurse Managers in curriculum development so that beliefs and values can be shared. The Fitness for Practice Report (UKCC 1999) took the debate further forward by fully acknowledging the importance of competent nursing practice and sharing the responsibility for
achieving this by making NHS employees jointly responsible for this with higher education teachers. It is clear that future students need course work and specified practice outcomes that are designed to ensure that they get regularly involved with patient care.

Cooperation between university and practice areas
The study which follows will examine how the 1997 ophthalmic nursing curriculum may be developed to bring together theory and practice knowledge in terms of the knowledge selected for the curriculum and the application of that knowledge within clinical practice. In the case of the 1997 Sandbourne Ophthalmic Nursing Curriculum, and the 1995 version, the three NHS managers involved consulted their staff regarding course content in terms of both theory and practice. Tanner (2000) suggested that course content chosen thus may reflect the subjectivity of the individuals or the power relationships within the group. Her ethnographic observation of theatre nurses in clinical practice generated lists of skills and knowledge required for practice. She discovered that 95% of the content on her ‘knowledge’ list was being covered by the current programme. Her process of analysis was subject to her own interpretation, and findings suggest the likelihood of subjectivity in the selection of procedural and conceptual knowledge for any course. Selection of course content for the ophthalmic course, because it involved wide consultation was, in the view of the Programme Development Team, more likely to produce ‘ownership’ of the course in the clinical areas where students would obtain their practice experiences and begin the processes of reification - the connection of abstract ophthalmic knowledge to concrete experience.
The significance of the lecturer practitioner and the mentor

Research by Corlett (2000) suggested that students perceive classroom based theory teaching as being ‘idealistic and decontextualised’. She argued that the theory-practice gap is merely a function of time, something students have to live with until they have sufficient knowledge and experience to fit the parts together.

Clearly the lecturer practitioner, who belongs to both the clinical and educational worlds, is ideally placed to promote the relation of theoretical knowledge to practice and to reduce ‘that function of time’ referred to by Corlett (2000). Lathlean (1997 p154) suggested that an element of the rationale for the role would be to enhance the integration of theory and practice, to rectify the situation whereby practice has been consistently undervalued in nurse education and to raise the status of clinical practice to equivalence with, (or even superiority over) the theoretical contribution.

She saw the lecturer practitioner as the key person in facilitating theory into practice.

Equally important in terms of relating theory to practice and coaching excellent practice outcomes is the position of the mentor. Study of the literature related to situated learning and legitimate peripheral participation demonstrated the key positions of mentors within communities of nursing practice and the opportunities available to them to coach students from novice to expert performances. Within nursing their contributions in developing students who are critical thinkers, who can make reasoned decisions based on professional knowledge may also reduce the
pressure to conform to any malign 'hidden curricula' within the clinical area.

Focussing the study

Following the literature review, three general aims were identified to provide a broad focus for the study being planned. These were:

- To explore the theory-practice gap in the ophthalmic nursing course
- To discover how the ophthalmic nursing curriculum might be used to help students bring nursing theory and practice together in clinical practice
- To promote the development of higher levels of clinical practice amongst post registration ophthalmic student nurses

Having studied the published difficulties expressed by members of the nursing profession in relating nursing theory to practice, chapter Three identifies the research questions to be addressed, and discusses the rationale for the choice of action research methodology. The study is linked to Stenhouse's (1975) view of the teacher's role in curriculum research and development. The various stages of the research plan are established.
Chapter Three
RESEARCH DESIGN AND METHODOLOGY

Introduction
The research process introduced in Chapter One had a broad focus in terms of knowledge and the curriculum, with specific attention being concentrated on theory and practice knowledge within the curriculum. The intention was stated to make a coherent study of the re-written 1997 ophthalmic nursing curriculum in terms of a deeper study of the literature and an exploration of the rationale underpinning the present course. Consideration of the type of study to be carried out and the number of participants influenced the choice of a qualitative rather than quantitative research approach. My intention was to choose a research methodology which would enable me to work with students and the Programme Development Team to develop the curriculum in line with both practice and higher education requirements.

Methodology choice
I decided to make my enquiry an action research, conducted within my personal teaching practice, initiated by myself, focusing on curriculum research and development. The approach to the study was conceived as 'new paradigm research', in that it would as Reason and Bradbury (2001 p2) suggested, involve mutual sense-making and collective action by the community studied. It would ideally involve all the stakeholders in the questioning and sense-making that informs the research, and in the action which is its focus. The action research approach involved working with individuals in a non hierarchial manner, a dynamic which I felt was critical in terms of producing a research which was relevant to nursing practice and contributed to the understanding of the theory-practice gap in nursing.
Critical Educational Research

Cohen, Manion and Morrison (2000 p28) suggested that the substantive agenda of critical educational research was to examine and interrogate the relationships between school and society - how schools perpetrate or reduce inequality; the social construction of knowledge and curricula, who defines worthwhile knowledge, what ideological interests this serves, how this reproduces inequality within society; how power is produced and reproduced through education.

Research knowledge can serve different ideological functions. Morrison (1995) cited in Cohen, Manion and Morrison (2000 p28), suggested that a ‘technical interest’ can have the effect of keeping the empowered in their empowered position, re-enforcing and perpetuating the status quo, suggesting that research knowledge is not neutral. On the other hand, when there is an ‘emancipatory interest’ as with the action research approach, this may threaten the status quo, in terms of altering power relationships.

Rationale for choice of methodology

In commenting on what they described as illuminative, democratic and other forms of qualitative research evaluation, Atkinson, Delmont and Hammersley (1988 pp23) suggested that it is the view of such researchers that:

The improvement of education would arise not from the introduction of better curriculum schemes but rather from teachers’ own development of their craft knowledge, through reflection on their practices.

Much curriculum change is brought about by major shifts in Government thinking, (e.g Making a Difference, Department of Health, July 1999), the attitudes of professional bodies (e.g UKCC
1999 Fitness for Practice Report) or policy decisions by local educational providers. However, because a commitment is made to 'top down' educational change, this does not necessarily indicate that changes will be effectively implemented at classroom level. Fullan (1994) quoted examples of such difficulties in achieving significant change, suggesting that the more planners are committed to particular changes, the less effective they may be in getting others to implement them if their own commitment is uncompromising in the face of difficulties in implementation.

This study intends to show how effective improvements in nursing curricula can be brought about in response to perceived professional needs and nationally proclaimed policies by working co-operatively with the interested parties. Unlike other qualitative research approaches which separate research findings and recommended actions (which may never be undertaken) action research has an agenda for change and evaluation of the changes. This comprehensive perspective is particularly suitable for a small scale research.

Stenhouse (1975 p142-165) first suggested the possibility of the teacher working within their own classroom using the curriculum to study the problems and effects of implementing particular areas of teaching. He did not implicitly condemn the notion of outsiders examining the effects of teachers' work, but suggested additionally that teachers needed to study their own work. Stenhouse (1975 p32) suggested that the outstanding characteristic of the extended professional should be the capacity for autonomous self-development through the study of the work of other teachers, the testing of ideas by small scale research procedures and through systematic self study.
Stenhouse's (1975) views suggested the possibility of teachers examining their personal teaching practices at micro level. Within my own teaching practice I felt that such an approach might stimulate the Programme Development Team to critique and improve the ophthalmic nursing course. Given that some of the literature studied in Chapter Two, notably Cobb (1994), suggested that learning is both a mental process and an enculturation into social processes as with the situated learning and legitimate peripheral participation approaches to learning, I felt that the opportunity, particularly for the students, to participate in the research would be empowering to them within the higher education setting. I also hoped that the action research process would help me to develop the ability to present carefully reasoned rationales for change at department and institutional level. Elliott (1991 p49) suggested that the fundamental aim of action research is to improve practice rather than to produce knowledge. The production of and utilization of knowledge is subordinate to and conditioned by this fundamental aim. However, Zeichner (2001) suggested that increased numbers of educational action research reports are being published, and action research is increasingly regarded as a legitimate form of enquiry that can potentially inform teachers, policy makers and educational researchers, and Smith et al (2000 p568) stated that action research is gaining credence as a legitimate form of enquiry for health services research.

**Action Research - Methodological Considerations**

Action research is recommended for small scale practitioner research and larger community based studies (Stringer 1996 p17). The action research approach offers the possibility of exploring the socially constructed nature of knowledge and learning by examining the influences exerted upon the curriculum from the university, managers at local hospitals, the clinical assessors, mentors and students. It also offers the possibility of partnership
with those directly involved with the curriculum to identify where changes could be made, and provides the opportunity to plan, implement and evaluate changes. Action research was amenable to being fitted into my practice as part of my job as a lecturer practitioner, providing the opportunity to examine my personal educational practices. The action research approach to research is able to accommodate differing personal experiences and understandings and agendas, underlines the importance of education as a human and social process and recognizes that observation is theory and value laden.

Henderson (1996 p109) suggested that the greatest concern of the teacher is:

How can I help students move forward toward a deep understanding of the content they are studying and away from a superficial learning of isolated facts and skills?

Henderson’s words offered a summary of the aims of the teacher in higher education. The ‘helping’ of students suggests a facilitative rather than directive approach in both teaching and interpersonal relationships with people who are adult colleagues in responsible positions as well as part time students. As it acknowledges the collegial importance of the participants, action research has the potential to advance the personal and collective understandings of all concerned.

**Action Research defined**

Action research was defined by Carr and Kemmis (1986 p162) as: a form of self reflective inquiry undertaken by participants in social situations in order to improve the rationality and justice of their own practices, their understanding of these practices,
and the situations in which the practices are carried out.

Whilst this general definition remains relevant, since Carr and Kemmis (1986) wrote, action research and its definitions have continued to develop. Hart and Bond (1995) developed an 'action research typology' to demonstrate how action research could move from the adoption of a consensus model of society based on rational social management through to a conflict model of society based on aspirations towards structural change. They identified seven action research types for example, educatively based action research and demonstrated through their typology how the research type could move across the consensus/conflict continuum.

In contrast to the complexity of Hart and Bond’s typology, Reason and Bradbury (2001 xxv-xxvi) identified three very broad approaches to action research practice. Their first person approach addresses the ability of the researcher to foster an inquiring approach to his own life, act with awareness and assess effects in the outside world while acting. Third person research aims to create a wide community of enquiry involving persons who may never meet face to face. I offer Reason and Bradbury’s (2001 xxvi) definition of second-person action research to further define my approach to the study:

Second-person action research/practice addresses our ability to inquire face-to-face with others in matters of mutual concern, for example in the service of improving our personal and professional practice both individually and separately. Second-person inquiry starts with interpersonal dialogue and includes development of communities of inquiry and learning organizations.
Following the Reason and Bradbury (2001) definition, the action research which follows will thus move away from 'generalizable' research, into a study of, and emphasis upon the significance of a relevant local subject, namely the local ophthalmic nursing curriculum. An initial face-to-face enquiry with the participants is demonstrated in Chapter Five, and the study develops into an interpersonal enquiry as the action research cycles are developed in Chapter Six. The use of the ophthalmic curriculum provides the framework for examining educational activities thoughtfully, identifying areas for improvement, planning and acting deliberately, observing the consequences of those actions and reflecting critically on the necessity of and possibilities of future actions.

The co-operative perspective

Earlier personal research using Grounded Theory (Strauss and Corbin 1990) revealed in the long term that my interviews had unintentionally changed the way in which participants had viewed their education. This may have been as a result of the 'Hawthorne Effect', (Roethlisberger and Dickson 1939), where the research subjects were shown to respond to the interest shown in them by the researcher, which may affect the reliability of the findings. Such an approach is also unsafe in terms of reporting findings unless there is the possibility of mutual discussion to ensure that findings and conclusions are accurate, and so at the planning stage provision was made to have the research account evaluated throughout by the research participants and during the formative stages of the complete account by two colleagues. This approach is in keeping with the views of McNiff (1988 p68) who stressed that action research is research with people, not on people and advocated the use of colleagues to criticize and challenge findings.

Within the research project I acknowledge my own presence within the data, since to write the researcher out of the report is
to deny the dependency of the data on the researcher’s presence (Ball 1990 p46). Action research aims to value openness, honesty and shared goals and accepts that educational research is likely to change the perceptions of both researcher and researched. This ideal situation is difficult to achieve given that the relationship between teacher and student is already unequal, but I felt that action research, (which has some overlap with co-operative enquiry as described by Heron 1996) offered the best possibility of working to achieve this purpose.

Whilst this study was intended to be co-operative in its approach to the participants, it was not possible for it to be a co-operative enquiry within the definition offered by Heron (1996 p1):

Co-operative enquiry involves two or more people researching a topic through their own experience of it, using a series of cycles in which they move between this experience and reflecting together on it. Each person is a co-subject in the experience phases and co-researcher in the reflection phases.

The reasons for this are discussed below under the subheading ‘Early difficulties’.

**Validity**

There is no single definition in terms of validity for qualitative research, as it covers such a large range of approaches and methods. Within action research, concepts of validity are being developed and discussed as the methodology is used. Reason and Bradbury (2001 pp447-455) asked what they call ‘questions about emergence and enduring consequence’ to produce some clarification:

**Questions of outcome and practice**

What are the outcomes of the research?
Does it work?
What are the processes of enquiry?
Are they authentic/life enhancing?

**Questions about plural ways of knowing**
What are the validity claims of the different forms of knowing and the relationship between different ways of knowing?

**Questions of relational practice**
How have the values of democracy been actualized in practice?
What is the relationship between initiators and participants?
What are the implications for infrastructure and political structures?

**Questions about significance**
What is worthwhile?
What values have been actualized in the enquiry?

The above framework offers the action researcher and the critical reader a reasonably lucid guide for use in terms of checking action research validity. In contrast, Waterman (1998 p101-5) offers a more complex approach to validity which encompasses dialectical, critical and reflexive aspects of action research. In terms of dialectic validity she perceives the representation of and discussion of the sources, evolution and outcomes of the tensions under discussion as being a particular strength of action research in terms of demonstrating its validity, as is the dialectic process of action research which moves between theory, research and practice. The fact that action researchers compare different perspectives and seek out opposing views or practices is more likely to lead to a synthesis of ideas and practice.
In terms of critical validity and moral responsibilities Waterman (1998 p103) suggests that action researchers seem almost to have an evangelical verve to try to do something to influence practice.

Ethical issues are reported throughout the text, not just in a methods section, and action researchers have a responsibility to consider and explain why they take particular perspectives and to argue why these are more beneficial to their cause.

Waterman (1998) suggests that the reflexive stance of the action researcher should ensure that biases or prejudices are identified and analyzed in order for the reader to understand the researchers' influences on the research, and will help the researcher to make a decision on the appropriateness of their influence. Waterman (1998) does however question whether the data collected and the report written is a true reflection of what was studied, suggesting that there is a tension between knowing that one knows something because of intimate and tacit knowledge of the setting and the difficulty of expressing it adequately in words.

Cohen, Manion and Morrison (2000 p239) suggested that reflexivity is an integral element and epistemological basis of emancipatory action research stating that:

What is being required in the notion of reflexivity is a self conscious awareness of the effects that the participants-as-practitioners-and-researchers are having on the research process, how their values, attitudes, perceptions, opinions, actions, feelings etc are feeding into the situation being studied. The participants-as-practitioners-and-researchers need to apply to themselves the same critical scrutiny that they are applying to others and to the research.
This concept of reflexivity is addressed with reference to the action research study in Chapter 7.

It is thus evident from the above discussions on validity that the action research approach shares with other forms of qualitative research a different understanding of 'significance' to the positivist approach which would be expected to base 'significance' on statistical analysis. It is however evident that action research depends on the ability of the person reporting the research to present the account with clarity and candour, since to a certain extent it is incumbent upon the reader to reach a personal conclusion regarding the validity and reliability of the study.

**Early difficulties**

For the purposes of this 'new paradigm research', I intended to explore the emancipative possibilities of the curriculum in terms of teacher/student dialogue regarding the content, methods of learning and assessment that are used. During the process of identifying the areas for study it became clear that this would not be a co-operative research in the sense described by Heron 1996 due to the geographical separations which would have required travel time and costs for the participants and half day absences from a pressured NHS, the academic and practice workloads being carried by the post-registration students, the difficulties faced by the managers in terms of hospital and job re-organizations and government agendas for increased hospital caseloads which made it difficult for us to meet together as a group.

Checkland's (1999) Soft Systems Methodology, developed from his scientific and management background and his knowledge of systems engineering might have fitted into the twice yearly Programme Development Team Meetings, but my discovery of this approach came too late in the research process of the main study.
- the action research cycles had already been identified. Checkland’s (1999) approach had the possibility for dealing with the views of large numbers of people in short periods of time, and had the prospect of communicating through diagramatic representations of ‘problem’ situations, but I felt his approach gave little opportunity for collecting the detailed views of participants. The diagramatic representations of problem areas produced within the Checkland methodology also suggest a strong lead from the front, by a person handling a flip chart, and the possibility of generalised interpretation by the research leader. Checkland’s (1999 pA15) four main activities model is similar to Stringer’s 1996 ‘look, think and act.’

The difficulty presented by being unable to meet together as a large group meant that a co-operative enquiry within the definition offered by Heron (1996 p1) was impossible. This change in research design resulted in the participants having only a sketchy knowledge of the actual research methodology, but consultation with the participants was still possible, taking place through other means such as interviews, classroom discussions and questionnaires. It was agreed that all future meetings of the Programme Development Team would be recorded and daily written lesson evaluations were obtained throughout the 1999-2000 and 2000-2001 courses from the students. Classroom discussions relevant to the curriculum would also be tape recorded. However as an ideal for fully democratic research, co-operative enquiry principles informed the ways in which the participants were informed and consulted throughout the study. Within the research it was intended that the participants would influence which areas were studied, since they themselves are the authorities within the local hospital and university ‘culture’, and are privy to its values and practices in ways that a teacher never could be. It was also planned that they would validate the data analysis. Participants were to be given copies of the research
data when it had been written up, and they were consulted and informed throughout the research process. No data would be released without their consent. This was to give them the assurance that they could revisit what they had said, and change or clarify it.

**Planning the action research**

**The Pilot Study**

A pilot study was made early in the process (1998-99), which concentrated on classroom teaching. Methods of data collection included:

- Tape recordings of university classroom teaching and learning sessions
- Videorecordings of university classroom teaching and learning sessions
- Observations by fellow teachers

The objective of the above was to discover, by examining classroom proceedings and student feedback, ways in which theory and practice could be brought together in the classroom.

**Changes made to the research design as a result of the pilot study**

My examiners remarked on the subjectivity of a study which was largely a commentary on my own work, making occasional reference to students. Arguably this could have fitted into Reason’s (2001 p.xxv) definition of First Person action research, but the definition was unpublished at the time. After reflecting on the approach I had been taking, I decided that the main study should take a broader perspective on the ophthalmic nursing curriculum. This followed a reading of the definition of curriculum by the OECD (1998 p33) which suggests

The curriculum is a field of enquiry and action on all that bears on schooling, including content, teaching, learning and resources
This change in approach enabled the participation in the main study of managers, clinical assessors, mentors and previous students.

**The main study**

The Action Research - building the picture

Appendix Two gives a detailed breakdown of the calendar of activities which were undertaken, both planned and unplanned. Elliott (1991 pp 72-77) and Stringer (1996) provided useful descriptors of the activities involved in an action research cycle used to inform the research study, which followed these steps:

Identification of the focus of the action research.

At the outset, the research was broadly focused on the theory-practice gap in nursing. The research aims were generated from the literature review, and the research questions (below) followed a further consideration of the literature and the research methodology. My original research proposal highlighted the theory/practice divide within nursing education as a possible area for improvement. As I continued to study the educational literature, and my view of the curriculum widened, the research approach also widened. I was aware from the outset that my research participants' views would steer the direction of the main research study, and that the methodology might require changing to accommodate those views. The following research questions were identified to guide the main study:

- How may current educational theories be used to relate nursing theory and practice?
- How might educational policy at local and national level be related to a specialist nursing curriculum?
- What influence has the Lecturer practitioner in relating theory to practice?
• How might the role of the mentor be used to coach higher levels of nursing practice?

**Constructing the general plan**

It was difficult initially to construct a general plan given the nebulous characteristics of this research. I expected to use Stringer's (1996) 'look, think, act' approach once the areas for study had been identified, but initially I had to cast my data gathering nets widely as I was uncertain exactly how to identify the action research cycles or what data would be required to substantiate an action research.

Adelman (1989 p176) suggested that an uncritical acceptance of the methodology of action research has obscured fundamental concerns with quality, relevance and honesty in the practical ethic of teaching. He believed that even a democratic approach such as action research could be used to promote and exacerbate inequalities of opportunity, process and outcome. He further stated that whilst there are plenty of published rationales for democratizing educational research, at the time he wrote, few quality case studies by teachers to show the sources and practical outcomes of their reflections on curriculum, pedagogy or educational management existed. He felt that action research should demonstrate relevance to the practical ethic of education as well as its reliability and validity as a methodology. It was my purpose to refute Adelman’s (1989) criticism by working to demonstrate the development of a collaborative study, grounding the cycles presented in recorded and analysed data.

**Identification of ‘Problem’ areas for study**

The initial literature studied on action research methodology proved thin in providing information and exemplars regarding how to
identify ‘problem’ areas. Atkinson and Delmont’s (1985 p28) critique of action research methodology seemed particularly apt: they would appear to be a ‘paradigm’ with none of the requisites for a paradigm—agreed subject matter, methods, theories, or exemplars. Such definitions that do appear are quite extraordinarily imprecise.

Because of the participative design of this study, and the reality that it is based on actions, it was not possible initially to plan exactly what data would be collected and how it would be analysed. An inductive approach was used in the first instance to, as Field and Morse (1985 p5) suggested, ‘bring knowledge into view.’ Written course records existed, were a good place to start, and helped to identify the issues for the action research cycles. Taking issues from the above documentary records addressed the ‘etic’ perspective in that it described what had actually been happening during the years preceding the study.

**Examination of previous course records**
The written records examined included:

- Minutes of all Programme Development Meetings 1995-1999
- Annual course reports submitted as part of Sandbourne University’s quality monitoring process 1995-1999
- Student evaluations of individual units of the course 1995-1999
- External Examiners’ comments 1997-1999

It seemed prudent also, given the participatory nature of this research to consult the students, managers, mentors and clinical assessor, as they might have opinions hitherto unshared in the public arena. I decided to tape record as many of the participants’ views as possible.
Interviews

The 1999-2000 students were interviewed 10 weeks into their course. Three managers, one clinical assessor and one mentor were interviewed shortly after this. Dreher M (1994 p166) suggested that both emic and etic views are important to help the ethnographer to understand and accurately describe situations. These contemporary interviews were to derive (Dreher M 1994 p166) 'emic' data from the co-researchers, in order to try to address the 'meanings' they ascribed to phenomena, the social rules, values and typical motives that guided their actions in their practice settings.

The data provided confirmation that the research questions derived from the study of the literature were reasonable. The action research cycles were identified from the course records and the interview data provided evidence that the action research cycles identified had a broad base of support, and added depth of information regarding the problems identified. The interviews were also the forum used by the participants to suggest solutions to problems. Miles and Huberman's (1992) work on qualitative data analysis eventually offered the best rationale for the data analysis of both the course records and the interview data. They (p151) suggested that field research is a process of progressive focusing and funneling, and that as data are collected and studied we can see the factors that bring the apparent flotsam and jetsam of local events into a meaningful pattern.

In using what appears to be another methodology within an action research, I offer justification from Denzin and Lincoln (1998 p3).

Qualitative research is multi method in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural settings,
attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them. Accordingly, qualitative researchers deploy a wide range of interconnected methods, hoping always to get a better fix on the subject in hand.

Within their work, Denzin and Lincoln (1998 p4) defined the use of more than one method as 'bricolage', a close knit set of practices to produce solutions to problems in concrete situations.

I analysed the interviews personally rather than using electronic data analysis. The reasons for this choice were fourfold:
- Lack of access to a suitable computer programme
- Reservations as to whether electronic data sorting would be as sensitive as a personal approach to the data
- The need to become intimately acquainted with the contents of all the interviews
- The relatively small size of the project

Full transcription of all the project data and interviews may be felt by some researchers to be an onerous chore, but I found this to be helpful, as it allowed me to add my initial thoughts to the typescripts for later consideration.

I initially favoured a phenomenological approach to data collection and then moved to the possibility of making a grounded theory analysis of the views and attitudes expressed. Both of these approaches were rejected, simply because use of either of these methods for data handling would cause confusion in the description of the methodology - I would have to make a detailed description of both the action research methodology and the secondary methodology that was being employed. Using either of these two methods of data gathering and analysis would also be expected to produce phenomenological findings or a grounded
theory which would require separate conclusions and discussions with the result that the study would be fragmented and lack focus. It was to retain the focus of what is a very short action research study that the above method described by Miles and Huberman (1994) was adopted as it permitted me to concentrate on the action research throughout.

Interview data from the six students who studied all the units leading to the ophthalmic nursing qualification (1999-2000) was transcribed and analyzed to generate substantive data to inform the action research cycles. Analysis of the student interviews produced concepts which were identified and named, using the approach suggested by Miles and Huberman (1992 p57). I examined the transcripts and marked areas which seemed to me to have thematic coherence using coloured pencils. I collapsed these subtopic codes into more abstract categories, with titles which I had chosen myself as descriptors. These will be described in the following text as categories and subtopics. The validity of action research depends on evidence to support its claims to have made changes in complex social situations. The categories and subtopics discovered from the data are therefore presented in Appendix 3, and an example of the interview data is presented in Appendix 4.

Miles and Huberman (1994 p35) advised that for an exploratory study such as this, (the interviews were purely exploratory) heavy initial instrumentation or closed end devices may be inappropriate and they recommended that exploratory approaches be used at the outset, and more confirmatory devices towards the end. For this reason the interview questions (see Chapter 5) were deliberately designed not to lead the participants' views in any particular direction, but to give them a forum to express their personal feelings. I had realized early on that data collection and analysis would be limited by few group meetings and opportunities for
discussioThis within the time available. As meeting was a problem, I felt that the personal interviews would permit each participant to engage in a dialectic exploration of their views.

**Progressing the Action Research**

This involved the transcription of the participants’ interviews and identification of emerging themes (see Chapter Five). Course Management Team meetings from July 1999 onwards were tape recorded and fully transcribed, prior to issuing the minutes of the meetings.

This was done to produce valid, reliable records:

- I take the minutes, and it can be distracting chairing a meeting and trying to keep accurate minutes of discussions.
- As my comments also formed part of the data for analysis, I had to ensure as much impartiality as possible.
- I had to make sure that the minutes were not biased in terms of my own memory or interpretation.
- I required to be able to look carefully at the actual words of all the co-researchers.

Using Miles and Huberman’s 1994 pp50-88 suggestions, I coded the course records into broad headings which might be converted into action research cycles. These were confirmed following the analysis of the interview data. The following areas were thus identified for the action research cycles:

1) Clinical Practice Portfolio
2) Combining theory and practice
3) Academic Assignments
4) Reduction of Visual Impairment unit
5) Clinical Practice Study Day
A huge amount of data was progressively sifted in order to arrive at five action research cycles to improve areas of difficulty within the ophthalmic course. The cycles were mainly identified from the course records, evidence for which will be cited in Chapter 6. Research participants’ views have been represented faithfully, and even where comments which I found personally rather uncomfortable have been made, such as the ‘more ophthalmic’ leitmotiv, which I describe as an underlying course criticism, I have made every effort to incorporate participants views.

The action research process
This is described in detail in Chapter 6, and was heavily influenced by Elliott’s (1991 pp71-89) lucid description of the process, using five steps:

- Identifying and clarifying the general idea
- Reconnaissance
- Constructing the general plan
- Having defined the areas for improvement, we explored and described the facts of the situation and constructed an initial general plan of action steps.
- The action steps were followed and the situation re-evaluated.
- Further action steps were implemented if required, and the cycle continued until a satisfactory resolution of the problem was reached.

Data collection throughout the action research process

Classroom discussions
When the action research process was started, tape recordings were made of classroom discussions to record verbal feedback on proposed course changes.
Questionnaires

Questionnaires were used to record participants opinions regarding the action research changes.

Having set the scene with a description of the research processes, Chapter Four will introduce the research participants, and tell the reader a little about their backgrounds. Given that my approach to curriculum development is reliant upon social constructivist theory, and that action research emphasizes the value of individual group members, some understanding of their educational and professional backgrounds may enhance the reader’s understanding of the opinions they express later in the research.
Chapter Four
THE RESEARCH PARTICIPANTS

Introduction
In action research there can be no carefully chosen, random sample of people to be researched. Within all qualitative research approaches, phenomena are studied in considerable detail, and since people are the constituents of these phenomena, they constitute the main body of the research and contribute actively throughout the research process. This contrasts with the more quantitative approaches, where attitudes may be measured on scales, and carefully designed questionnaires may give little opportunity for respondents to suggest new lines of research. Action research differs from other qualitative approaches as those studied also contribute more overtly to the research and in the fully democratic form of action research, co-operative research, are also the researchers. The sections below provide descriptions of the research participants, who were integral to the research, since the study of the curriculum, the basis of this action research, is based on a social constructivist approach. Within this approach the knowledge of and reality of the changes made are seen to be contingent upon social relations between the members of the action research team. Social constructivism acknowledges the social foundations of curriculum development.

The research participants
The research participants consisted of three groups:
b) The clinical assessors and clinical supervisor (mentor)
c) The ophthalmic nurse managers.

There was some overlap in group membership between the clinical assessors and managers, which will be explained below.
The Ophthalmic Students 1999-2000 (six in total)

Typically within an academic year in any post registration nursing course there will be a mixture of four different categories of students:

a) Nurses who have ‘converted’ from Enrolled Nurse to Registered General Nurse. These nurses sometimes have a less academic background. At the time of course commencement they have achieved educationally - 60 CATS (Credit Accumulation Transfer system) points at level 2, but still sometimes feel academically uncertain of themselves despite good experience of recent study. They have plenty of clinical practice knowledge, but this may be less developed than group (b). This is because some of group (a) may have been employed at lower grades. Group (b) may have more knowledge of higher levels of nursing practice, and may be more accustomed to questioning their own and others’ actions and running a team of nurses as well as taking responsibility for their own work.

b) Qualified for some years as Registered General Nurses, group (b) may have little evidence of recent study. They may however, be more academically able than group (a), having originally had a wider school education via GCE and ‘A’ levels which they have had the opportunity to use and build on in a personal sense throughout their professional lives. Some may possess a variety of other educational attainments including post basic nursing courses or non nursing degrees. All have plenty of practice knowledge.

c) Recently qualified nurses have studied at level 3, but the Ophthalmic Course is at level 2. Although they lack ophthalmic nursing practice knowledge, which makes it difficult for them to attain clinical practice at level 2, they are advantaged educationally.
The 1999-2000 student group was fairly typical of the above, except that there were no recently qualified nurses in the group. The student co-researchers were all taking the four classroom based and four practice based modules leading to 80 credits at level 2 in ophthalmic nursing. They were female, native English speakers, who are all experienced nurses, and were not ‘chosen’. They represented the entire, small course membership. They are the group who participated in the student interviews which led to the identification and development of the action research cycles.

The 1999-2000 student research participants’ backgrounds
One of the six research participants shared the fact that she liked to be told the ‘right’ answers. This was unsurprising given the nursing history of the group members, who had all been nurses for some years. All been ‘trained’ rather than educated, through a formal lecture system where material was delivered by doctors or other authority figures. Two of our number had fairly recently ‘converted’ their initial registration as ‘Enrolled’ nurses to ‘Registered General Nurse’ and had benefited from and were accustomed to progressive student centred methods of learning.

The group came from three different hospitals, where all the Nurse Managers have slightly different ideas in terms of their expectations of the nurses’ clinical and academic competence at the end of the course. During the academic years studied - 1999-2000, 2000-2001, all the ophthalmic students were female, white and English, but in the past all but two classes have contained a male student and a student whose birthplace and education was from outside the UK. It has been suggested that males and females may learn differently. Jarvis et al (1998 p67) suggested that male students are commended for being active, adventurous, energetic, curious, or inventive and females are praised for being appreciative, considerate, co-operative, poised, sensitive and dependable, but this
view is not research based. Certainly the classes lacked multicultural and masculine perspectives.

The 2000 – 2001 student research participants
There was a shortage of applications to the 2000 – 2001 course. The reasons for this are twofold. At Melchester all the relevant members of staff have completed the course. Casterbridge and Sandbourne are facing a dramatically increasing workload (financial cost) against a background of reduction in ophthalmic nursing staffing due to changing working patterns (saving). There were no Casterbridge applicants. Sandbourne Eye Unit was still able to support three students.

IHCS would normally expect a specialist nursing course to have at least six students to ensure effective classroom discussions and the possibility of groupwork. The 2000 – 2001 course started late, with just the three students following a discussion by the local Educational Confederation - where the local hospitals (purchasers) meet the University (provider). The 2000 – 2001 course eventually ran as six places had been purchased, but not filled, and because it formed a part of my doctoral studies which are being supported by IHCS.

The three female students in the 2000-2001 cohort were all qualified for some years, and one had recently ‘converted’ from Enrolled Nurse to Registered General Nurse. They are the group who are involved in the evaluation of the action research cycles described in Chapter 6. The research outcome was not undermined by this recruitment problem since the action research methodology used has the capacity to extract quality data from small numbers of participants. Triangulation was used in the manner described by Elliott (1991 p82) in terms of collecting observations/accounts of situations from a variety of angles or perspectives in order to
compare and contrast them. The Managers and Mentors thus provided a vital function, and in addition the data has been checked, discussed and verified by all the participants.

The general background

Nursing is an essentially practical occupation. However, to give first class nursing care the nurse requires both practical skills and theoretical knowledge. As Benner (1984 p. xix) commented, experience based nursing skill acquisition is safer and quicker when it rests upon a sound educational base. My students and I shared the experience of an apprenticeship style training 'on the job', and later worked in situations which were frequently hierarchically organized, with work delegated to us by doctors and ward sisters. Over recent years, responsibility for decisions regarding nursing of patients has been largely devolved to Registered Nurses who care for small groups of patients, and are legally accountable for their actions to the patient, their profession, their employer and the law. In the past, many nurses saw professional knowledge in terms of facts, rules and procedures applied non problematically. Schon's (1987 p39) comments illuminated the kind of situations faced by today's nurses:

If we focus on the kinds of reflection-in-action through which practitioners make new sense of uncertain, unique or conflicted situations of practice, we will assume neither that existing professional knowledge fits every case nor that every problem has a right answer. We will see students having to learn a kind of reflection-in-action that goes beyond stateable rules - not only by devising new methods of reasoning, but also by constructing and testing new categories of understanding, strategies of action, and ways of framing problems.
Today's students are being challenged by having to realize that classroom knowledge is not going to be hierarchically imparted, and in many clinical nursing situations there can be no given 'right' answer.

The ophthalmic course offers students the opportunity for broadly based study. It has to satisfy the requirements of the university and the nursing profession in terms of both academic and practice skills. Within nursing practice some nurses see themselves as 'permanent' in their departments and want to look at issues relevant only to their day to day work and find broader learning opportunities rather challenging. There is sometimes resentment about being asked to look at practice in other hospitals which may be associated with problems of time, fitting in child care and travel in getting to the other hospitals. Travel expenses are reclaimed, but often repaid after a lengthy interval.

The clinical assessors and mentor (Four in total)
Those involved in clinical assessment of the ophthalmic course are all holders of relevant nursing degrees. This is a requirement of the nursing profession. Two are also included in the managers' group below, as they hold management roles in addition to direct involvement in clinical nursing practice. The third held ward sister responsibilities and did not attend Programme Development Team meetings due to the requirement to provide senior nursing cover in the Sandbourne Eye Unit whilst the Nurse Manager and I are absent. The ophthalmic casualty mentor is involved in autonomous nursing practice, holds an ophthalmic nursing qualification, but has no Diploma in Higher Education and therefore has not taken on a clinical assessment role. This is held by the ward sister. The ophthalmic casualty mentor holds a particularly significant role as each student spends two weeks in practice in this area, their work
requires careful monitoring and supervision, and she has together with her colleagues, a practical role teaching clinical practice skills.

**The Managers** (Three in total)
The managers are concerned with the running and development of a specialist ophthalmic nursing service. Important issues for them are recruitment, retention, motivation and development of qualified nurses - offering the ophthalmic nursing course may help with this, and this gives them a greater vested interest in the continuing success of the ophthalmic course. Two of these managers are also clinical assessors (see above) and hold degrees. The third manager holds a Diploma in Management studies and is currently working for a nursing degree. The managers are all permanent members of the Programme Development Team.

**Programme Development Team**
The IHCS mechanism for course development and monitoring provides for the use of a Programme Development Team. In the case of the ophthalmic nursing course this is composed of the three local ophthalmic nurse managers, the lecturer practitioner, any course teachers who wish to attend, a student representative and a clinical supervisor representative. This is one of the steps made to ensure that Sandbourne University’s definition of quality as ‘fitness for purpose’ is put into practice. Academic Regulation B3.4.2 subsections (reference withheld to maintain anonymity of study).

(iii) Student feedback is regularly elicited and acted upon and
(iv) Contact with employers in maintained and their needs kept under review

are thus fulfilled.
**Possible dangers to the success of the research**

Territorialism or competition might be suggested by an outsider as a possible problem within Programme Development Team meetings. This is because the ophthalmic course represents three main hospital sites, plus others occasionally. The Sandbourne ophthalmic unit is able to offer a fairly full range of ophthalmic in-patient and outpatient services to patients. The two other hospitals, whilst being equally busy offer a more restricted range of surgery. Early on, the managers noted that each hospital had something special to offer, for example Melchester was in the vanguard of daycase cataract surgery and undertakes extensive ophthalmic facial surgery, and Casterbridge provides a particularly good understanding of the problems of a largely rural population.

It is important to have professional and collective ownership of the course. This is assisted by the fact that all the clinical assessors, the mentor and managers are alumni of Sandbourne University, which therefore acts as a unifying force. Venues for meetings have been discussed, and by mutual agreement are held at Sandbourne University because, although it is very convenient for Sandbourne Hospital, it is roughly equidistant from the other two units, and is seen as 'neutral' territory. Setting up the ophthalmic nursing course in the beginning was the result of the close co-operation and friendship of the local nurse managers who constitute an informal support mechanism for each other if there are problems in practice. As a group we learned together about the processes of writing a nursing curriculum and the indicative content of present and past courses is based on the suggestions of practicing ophthalmic nurses in the three hospitals. Agreement on the way forward is not always easy to reach, but respect for each person’s point of view makes diversity possible, without the development of personal animosity.
Implementing this action research has been a gradual process. In a sense it has been an ongoing since we formed as a group to prepare the first ophthalmic nursing curriculum. It has been assisted by the fact that we have already helped each other with research for first degrees and are committed to excellence in personal, educational and clinical practice and are interested in research for its own sake. We meet at least annually to discuss, amongst other things, the external examiner's report and the students' evaluation of the most recent course, and how we can make improvements to the course. Whenever possible a student and mentor representative are present to contribute to what amounts to a quality management process.

**Power within the Programme Development Team**

The establishment of the locally run ophthalmic course was the result of the friendship between group members which resulted in entrepreneurial moves directed by the ophthalmic nurse managers towards the Nurse Directors at their own NHS Trusts to raise the possibility of running a local course with the local purchasing consortium. I was involved in this process, as I had an NHS practice base and educational qualifications. As part of the process of developing the ophthalmic course I was subcontracted by the University as a lecturer practitioner. I thus remain an employee of one of the managers for 0.6 of my time. I visit the other managers' clinical areas, as the university 'link lecturer'. I chair the Programme Development Team meetings and have an influence within the group as a result of being an ophthalmic nurse, a part time university employee, and being registered as a Nurse Teacher.

**Classroom difficulty**

The difference between the kind of research described by Stringer (1996) and my own is that he is accustomed to drawing together committees of people. I am unable to get together all my
‘stakeholders’ at one time, so I have to take the part of ‘honest broker’ in drawing together their views. My role is supervised by the research participants as I distribute records of meetings for checking, and having a student and mentor representative at the Programme Development Team meetings provides a further check.

With just 21 ‘taught’ days for my students, and much of that time shared with other specialist teachers, I could snatch no more than the occasional few minutes for classroom discussion with my 1999-2000 students within their ‘taught’ time in the classroom. It was a moral difficulty. The students were very supportive of the research, but three travelled long distances to the University, two by train, and child care was involved for some, so to meet after class would have been unfair. Meeting at lunchtime (other than to be interviewed) was difficult, as being part time students, this was also their university library visit opportunity. Meetings and discussions were therefore held informally, as frequently as time and opportunity allowed. The opportunity to have more meetings would have given the research participants a greater understanding of the action research process earlier in the study.

**Ethical considerations**

Within the research, my aims were to deal sensitively with those involved within the project as research participants, and at the same time to faithfully represent their views, aims which do not necessarily complement each other. Any difficulties with the above will be discussed within the research text. I planned to make the research process transparent to both my research participants and my readers, and at the outset of the project I felt that it was unlikely that personal information would be disclosed that would cause upset to a research participant. The research participants all read the manuscript and any revisions offered will be discussed within the text.
All the research participants were asked if they would be willing to participate in the study. They were told that we would be looking at how theory and practice are brought together in the curriculum. Consent forms and details of research participants' rights to withdraw at any time were distributed six weeks before the study was due to commence so that they would have plenty of time to meet together and decide whether they wanted to participate or not (See Appendix Five). In such a small course, students in particular might feel pressured to co-operate, and I thought that if they felt pressured, they might wish to withdraw as a group. A pilot study had been conducted with the 1998-9 group, and I hoped that some comments and reassurances would have reached the ears of the 1999-2000 and 2000-2001 groups. One nurse (1999-2000) stated clearly that she would participate, but did not wish to have any of her views tape recorded, although she was happy to have them written down. All research participants within this study are protected by code names, and use of pseudonyms for geographic locations within the text of the research. The NHS managers were not asked to sign consent forms. We have known each other for about ten years and already have histories of reciprocal help to each other in various projects. The ward sister and casualty department mentor were treated as adult equals, well able to withhold consent without the requirement for the particularly cautious treatment given to the students.

My University management and support is via the 'Critical Care Group', comprised of other lecturer practitioners and headed by two senior lecturers. I raised my research proposal at a peer support meeting, and was encouraged to proceed with the project. I feel that as far as possible I have dealt honestly with the research participants, having chosen a methodology - action research - which gives them involvement as research participants. Some
methodologies involve covert observations on unconsented subjects, constituting a major invasion of privacy. I have been honest with my university employers and have not consciously done anything which is likely to affect their good reputation, or that of the Open University as my supervisors and examiners.

**Conclusion**

As a process, action research may be life enhancing, enabling participants to demonstrate their worth to themselves and their colleagues provided the person initiating the research can facilitate them to participate as much as the participants would like. The action research methodology was chosen as it has the potential to empower participants, and I wanted to enable them to understand that they do have the ability to make changes to their local ophthalmic course. My role was to stimulate the fourteen colleagues included in the study by involving them in this issue, getting them to express their own views, and persuading them to analyze their own situations by encouraging them to assist me in implementing the action plans and getting feedback into the action research cycles.

Chapter Five marks the beginning of the data presentation and analysis by demonstrating how processed data was used to construct the plan for the action research cycles and describes the surprise finding of a leitmotiv, 'more ophthalmic' which runs through the research.
Chapter Five

THE INTERVIEW DATA

Introduction
This chapter introduces the interview data, and relates it to three of the four research questions which were developed in Chapter Three. The fact that when the interview data was analyzed it was allowed to create its own patterns (see Appendix Three and Appendix Four), allowed the participants to 'speak' through the data. Had it been collected and analyzed purely in terms of answering the research questions, the leitmotiv 'more ophthalmic', which was particularly informative to the action research process might never have emerged.

Students' interviews
The 1999-2000 student cohort were interviewed ten weeks into their course to allow them to begin to form some ideas about the nature of the course they were engaged upon. Prior to the interviews I spent time with the whole class explaining action research, and discussing how their participation could improve the ophthalmic course for future students. To share my personal views with the research participants I displayed an overhead projector slide which said:
My aim is student centred learning

I have the vision that ophthalmic nursing theory should influence clinical practice, and clinical practice should influence taught classroom sessions.

I want to make the future ophthalmic nursing curriculum more relevant to your needs

I want you to influence the content and delivery of taught classroom sessions

I want you to influence the way practice is assessed in the future

Diagram 1: Communication with research participants

I hoped that the above would contribute to liberating the students into expressing their views. I answered any questions as they arose. I have already explained how difficult it was to get time with the students without alienating them against the research process. Due to the few teaching hours available for the ophthalmic course it was not possible to use much classroom time to discuss the research, as this time correctly belonged to the students and their academic studies. Showing the students the above overhead projector slide made my intentions very clear to them, and its effectiveness was manifested in that as the course progressed their observations became progressively more honest. Eventually I found the whole process quite difficult to tolerate and said in some anguish during my interview with Managers S and M:

*People have criticized this course quite a lot.*

I was grateful for the balanced remark of Manager M

*You think that the course has been heavily criticized, but that has been invited. Most people*
have done a course, accepted it for what it was, and moved on, but every step of the way, you have asked for opinions. If you have had criticism, I think that's why you have got it, because you have encouraged it, not because it's a bad course.

I tried to approach the interviews with few pre-conceived ideas of my own, other than three questions to use as conversation starters, which I posed to all the students. The students were given the questions prior to the interviews and it was their decision to be interviewed in pairs, having already discussed the questions. Their rationale was that they might spark ideas off one another, and thus be able to give elaborated opinions. Included within the student data are reflective comments from 1997-1998 Student M(A) which were offered to me for inclusion in the study during my routine visit to Melchester.

The interviews allowed me to immerse myself in the reality of the situation from the participants' personal viewpoints. They were given the opportunity to expand on their views concerning ophthalmic nurse education issues which provided me with the opportunity to verify whether the provisional ideas for action research cycles already developed from the documentary data were likely to have broad support, and to gain information relevant to the research questions posed in Chapter Three, concentrating in particular on the questions: 'How may current educational theories be used to relate nursing theory and practice' and 'How might the role of the mentor be used to coach higher levels of nursing practice.' The interviews fleshed out the documentary data and allowed the possibility of other action research cycles to be generated inductively from the interview data. Coughlan and Casey (2001 p678) suggested that not all issues are blatantly obvious
and it is important for the researcher to get a sense of both the obvious and the less obvious. It may be that the obvious is but an outward manifestation of a deeper issue which hospital members are not so willing to embrace publicly. The suggestion for having a clinical practice study day arose directly from the student and mentor interviews and was adopted as an action research cycle.

**Current Students (1999-2000) were asked:**
- Why do you wish to study on the ophthalmic course?
- What do you think is the significance of an ophthalmic course personally, professionally and to our patients?
- What sort of nurses would you like to be at the end of the course?

Soltis-Jarrett (1997 p47) suggested that the process of guiding conversations with informants in action research should be implemented within a structure that shares authority and a balance of power since authority is usually construed as having control, power and expertise in a traditional sense. The above questions were therefore chosen as being broad, in an effort to elicit students' views on motivation and views on theoretical and practical knowledge without leading them into giving any specific answers, or revealing the proposed action research cycles.

**Management Interviews**
Further interviews were recorded with the three Nurse Managers, one Mentor and one Clinical Assessor. As with the students, simple questions were asked, and the participants were encouraged to respond in detail. These interviews produced complex information, contributing ideas which also influenced the action research steps described in Chapter 6.
Interviewing the managers second enabled me to obtain practical advice and opinions from them regarding the areas highlighted by the students in their interviews and to discuss difficulties in the 1999-2000 course. As the data collected tended to be discursive, my comments as Course Leader also appear in the data analysis. The questions used as triggers for discussion were:

**Managers, Clinical Assessor and Mentor were asked:**
- What theory should an ophthalmic nursing course contain?
- What practice knowledge should an ophthalmic nursing course contain?
- Have you any concerns about current course content?
Would you suggest any changes?

Again, the questions were broad, conversation starters, designed to allow the respondents to express their personal views. Categories and subtopics were identified and named from both series of interviews, and are identifiable in the text below as italicised headings. In the interests of clarity for the reader, interview information has been arranged below in order to show how it relates to current educational theories and the role of the mentor in practice. The interviews gave early guidance in terms of answers to three of the research questions. A summary of the categories and subtopics which emerged from the interview data are supplied in Appendix Three and Appendix Four.
How may current educational theories be used to relate nursing theory and practice?

The Importance of Context

'Relating things back' appeared as a subtopic in the student interviews, as the students described how they supported their learning. Student S(S) suggested

"You must be able to relate things back"
in terms of associating theory to practice and Student M(J) clarifies:

"You think back to a patient you've looked after
or an instance, and everything falls into place."

That the 1999-2000 group of students felt able to do this is pleasing, but in the course of this research I discovered that this is not always so. 1997-1998 Student M(A) presented (in September 2000) three points following reflection on the course:

- The weight of knowledge she had to acquire and maintain in her head throughout the ophthalmic course was greater than she was currently needing for level 3 studies
- The ophthalmic course requires the nurse to make clinical observations and there are difficulties acquiring that knowledge.
- Difficulties if the nurse has not seen a theoretical problem clinically

If you can't see what's happening in the eye,
it's a clinical subject, then you lose it before its cemented into your brain.

My contemporary observation reads thus:

I'm amazed and excited at what I'm learning here. I always thought the Clinical Practice Portfolios were inadequately tackled because of poor student application. I truly never appreciated
the problems some students might be having with practice.

These very problems of learning about something in one situation, and transferring it to another were highlighted by Gruber et al (1995 p168) and Westwater and Wolfe (2000). They suggested that there was a close conceptual connection between experimental research on transfer of learning and situated learning approaches. They suggested that the low solution rates in experimental laboratories as well as in classroom instruction raised the problem of how to design learning environments so that knowledge application (transfer) becomes probable. Students M(J) and S(S) had identified that for them, working in clinical practice facilitates that transfer of theoretical knowledge, but without a memory bank of suitable practice experiences to facilitate that transfer, Student M(A) suggests that the time scale in obtaining relevant experience is critical:

If you can’t see what’s happening in the eye, it’s a clinical subject, then you lose it before its cemented into your brain.

This remark influenced my support of the student suggestion of a Clinical Practice Day immediately following the lessons on anatomy and physiology, and in trying to help students make the links between the theory and practice very early on in the course so that they could get the knowledge ‘cemented into their brains’ more readily. This importance of contextualizing nursing learning is endorsed by Cope et al (2000 p853-4) who suggested that the process was not straightforward and linear, but cyclical, with nursing theory being situated in a context arising from a placement and this contextualisation then stimulated re-examination of the theoretical basis of the knowledge, encouraged and supported by the mentor as part of a variety of strategies for learning.
Unfamiliar Contexts

Students' motivations for studying the ophthalmic course tended to be personal. They were committed to improving standards of professional practice by sharing knowledge gained on the ophthalmic course with other team members in the clinical area. Their professionalism underpinned this personal motivation to gain knowledge which could enhance their roles as patients' advocates. They were prepared to use their knowledge to take on more responsibility for higher level decision making in patient care, which can be more professionally 'risky', particularly for the Night Nurse, Student C(L) (below).

Students perceived the usefulness of the ophthalmic course in terms of its provision of both theory and practice. They discussed personal and professional confidence, increased knowledge in practice and the usefulness of 'theoretical back up'. Data examples included:

*I am more aware of what to look for. I do not always have to ring the doctor in the small hours!*

(Student C(L))

Schon (1987 p34) discussed some of the difficulties that may be faced by a professional in unfamiliar situations where the problem is not initially clear and there is no obvious fit between the characteristics of the situation and the available body of knowledge. He wrote of ‘thinking like a doctor’ and using present and previous knowledge to arrive at reasoned decisions.

*(the course) should provide us with a variety of different things and give us the opportunity to learn the basics so that we can go out there and practice what we’ve been taught in the departments and integrate what we’ve been*
taught within the classroom. Student S(J)
Student S(M)

Within this discussion of personal and professional confidence the importance to the students of context may be perceived. Bredo (1994 p25) suggested that there is a possibility of language (teaching) and reality (practice) becoming separated and treated as separate entities within the educational process. Clearly, for the nursing students above, what is learned in the classroom acquires meaning within practice. Bredo (1994 p26) suggested that symbol processing (the mental interpretation and application of information contained in e.g. textbooks, computers, diagrams) approaches to learning may result in a view that thinking is 'something that goes on in the head.' The nursing students above are also viewing learning as being completed by having 'intimate physical interaction with their surroundings' in the words of Bredo (1994 p26).

Situating theory in practice
Students stated their expectations of the course content. They wanted anatomy and physiology of the eye, an understanding of the nurse's role related to common eye conditions, treatments and basic practical skills. Interestingly enough, the students did not separate theoretical from practice knowledge. They stated that they were 'Eager to learn' and revealed their intrinsic and extrinsic motivations to study on the course. Examples from the data ranged from

'I got a taste for it' and
'I want to increase my confidence and increase my knowledge

Student S(J)
Students spoke of 'using knowledge in practice', which demonstrated the effectiveness of the 1997 ophthalmic course in providing a bridge between theory and practice. The fact that assessments of competence are theoretical and practical and require demonstrable connections to be made between the two alerts students to the reciprocal relationship between the two areas of knowledge. This point was supported by Brown et al (1989 p32) who suggested that by ignoring the situated nature of cognition, education defeats its own goal of achieving useable, robust knowledge. Indeed, they go further by suggesting that approaches that embed learning in activity and make deliberate use of the social and physical context are more in line with the understanding of learning and cognition that is emerging from research.

The managers felt that there was 'essential ophthalmic knowledge' that all qualified ophthalmic nurses should have by the end of the ophthalmic course. There was agreement on this from all except Clinical Assessor S(L), who also mentioned more abstract areas such as sociology, psychology and the political and economic setting of health care. All informants identified what they felt were the basic building blocks of ophthalmic knowledge in such statements as:

You need the theory underlying the technical, the task orientated things that nurses do, so if you're going to use a slit lamp (specialised equipment to examine an eye) the knowledge underlying

I am being pushed to undertake more ophthalmic work
Student C(J)
technical skills is important. Clinical Assessor S(L)

You’ve got to secure that all the nurses have got the background to the anatomy and physiology – it’s the very basics that you’re building on

Manager M(L)

This was an area of course content about which this group felt very strongly, and discussed at length. Within this discussion I expressed concern that those who had completed the course in 1999-2000 felt that more time should have been spent ‘teaching’ them anatomy and physiology. I was surprised at the initially deficient knowledge of those entering the course for 2000-2001, whom I pre-tested during the Foundation Unit of the ophthalmic course:

There are people who have slit lamp skills and are already looking at eyes, but don’t know the names of the layers that they’re looking at

Course Leader

Students had requested more anatomy and physiology as part of their final course review, and Mentor S expressed in her interview personal concerns about the anatomy and physiology knowledge of some 1999-2000 students. All of the ‘management’ co-researchers had copies of the relevant timetable, and were aware of the percentage of teaching time that had been devoted to this subject. Incredulity was expressed by Manager S.

My first reaction is didn’t they open a book and have a look?

My teaching strategy had been to rely on the specialist anatomy and physiology teachers for ‘the basics’ and enter into revision/
more detail in relation to specific ophthalmic conditions. I relied on students' cognitive skills, as expressed by 1997-1998 Student M(A) to relate what they had learned to real patients so that the knowledge could be 'cemented into your brain.' I was surprised to learn that for some students, by the end of the course this had not been the case, and they associated their inadequate knowledge with insufficient teaching. Manager M. commented philosophically:

*I think that's right that it is highlighted. Maybe it should be a pre-course requirement that they should know something like this?*

I later surveyed most of the nurses working in Sandbourne Ophthalmic Unit by means of two diagrams. The Theatre nurses obtained the highest scores which they attributed to dealing with the anatomy of the eye daily, giving weight to Lave and Wenger's (1991) views that learning may not be identified with abstract knowledge, but takes place through legitimate peripheral participation in ongoing social practice. Ex student S(L) commented that she learned her anatomy in practice too, which suggested to me that learning by association is the best way for students to proceed. Again, this endorsed the wisdom of having a Clinical Practice Study Day early in the course.

If theoretical knowledge is regarded as a tool for nursing practice, then what Brown et al (1989 p33) had to say is apt:

*People who use tools actively rather than just acquire them, by contrast, build an increasingly rich implicit understanding of the world in which they use the tools and of the tools themselves.*

Ex student S(L) who told me that she had learned her anatomy and physiology in practice, is an example of that active use of knowledge described by Brown et al (1989), but what all the literature studied seems to omit is the necessity for conscious
effort to be made on the part of the learner in order to obtain and increase knowledge. This is implicit in Brown et al (1989), who suggested that learning is a lifelong process, resulting from acting in situations. However motivation to learn is not tackled explicitly within the literature on situated learning.

The culture of teaching and learning

A typical student comment was that she wanted to

\textit{Encourage everybody to provide excellent care}

\textit{.....Hopefully I can have the knowledge and skill}

\textit{to teach others}

Student S(M)

Bruner (1999 p162) wrote of a subcommunity that specialises in learning amongst its members, suggesting that the teacher should not monopolise teaching, but that students could ‘scaffold’ learning for each other and emphasised learning self reliance and learning to work with each other. He envisioned a cultural psychological approach to learning as an interactive process in which people learn from each other, not just by showing and telling. In speaking of ‘everybody’ and ‘excellence’, Student S(M) and her colleagues seem to have some perception of nursing as a community of practice.

Within the interviews, students discussed ‘the care they deserve’, relating to what they hoped to learn on the course, both theoretical and practical, which they hoped would improve patient care. They were altruistic, revealing their personal professional beliefs. For example, Student C(L) felt that

\textit{At night, I am better able to give patients the care that they deserve}

which gave a feel of constantly pressing for perfection within her clinical practice. This was endorsed by Student C(J) who now felt
better prepared to cope with the condition and more able to recognise complications,
suggesting commitment beyond task orientated care. The concept of specialist nursing care was developed:

Patients deserve to be given specialist care......the ophthalmic course is to provide us with the necessary skills and knowledge in order to be able to do this

Student S(M)

This suggests that the students regarded the ophthalmic course as a quality standard, and that patients would have confidence in the person known in the clinical setting as 'the eye trained nurse', which is implicit in

they need to know..........you are capable.

Patient education and empowerment was also brought into the interviews, which emphasized the primacy of the patient and the development of professional / patient partnerships.

This information relates to Scribner's (1985 p199) view of 'knowing and doing' which proposes that the starting point of the analysis of such specialist activities should be 'culturally organized human activities'. It is plain from the above that practical nursing is that culturally organized activity, providing what Scribner (1985 p199) describes as intellectually planned sequences of behaviour, serving dominant motives, directed towards specific objects— in this case patients. The individualized nature of nursing care (in terms of its assessment and delivery to patients) is implicit in the student statements, as is the suggestion that formal knowledge is being mapped onto the spatial (Scribner 1985 p206) by the individual nurse to organize and regulate their actions within nursing practice.
Areas of potential difficulty within the ophthalmic course

'You can't learn it all on the course' highlighted some of the areas of difficulty. These included less 'taught' time than the much earlier qualification, the Ophthalmic Nursing Diploma, and the fact that it is currently more difficult to move experienced nurses around and make them supernumerary for the purpose of learning. Ophthalmic nursing is now so specialized, that to move a nurse skilled in one area to learn skills in another may leave the first area in difficulties, an example of the fact that nursing education remains strongly tied to service provision. Elmore (1999 p264) however, made the useful suggestion that students need to discover not only knowledge of the subject, but also the thought processes and methods of inquiry by which that knowledge is constructed. If an ophthalmic nursing course can do this, to a certain extent a student is prepared for learning throughout their careers. To promote this independent learning, Elmore (1999) suggested that teachers become co-investigators with their students, and that students' work relies on experimentation, inquiry and a study of original sources.

'More Ophthalmic' is a leitmotiv which arose from study of all the interview data, and was discussed with the managers. The students were suggesting that their course was insufficiently 'ophthalmic', and showed a preference for studying medical rather than nursing texts, which some reproduced at length in their assignments. Manager M felt that the ophthalmic nursing timetable reflected the course that had been planned. Regarding problems of students reproducing passages from medical textbooks for academic assignments she opinioned that they were using this as a method of learning, and suggested setting a short, factual 'homework' every week to assist in this process. However, I felt that reproduction of passages from medical textbooks was symptomatic of some
students' failure to connect theory with practice. Spouse (2001 p.513) suggested that the educational challenge is to facilitate the adaptation of theoretical knowledge to practice to develop phronesis (soundness of judgement, especially in practical contexts). Until this happens, the student has clearly failed to relate theory to effective practice. As a result (Action Research Cycle 2) I decided that I would insist that students spent five supernumerary days in Clinical Practice for every unit of the course, to meet the practice outcomes of their Clinical Practice Portfolio, and to improve the possibility of theory transfer.

Developing ‘Hidden skills that come with practice’ was an area identified by Manager M, who used as an example the overall skill of being able to manage staff and patients through a half day session of Outpatient Clinics, discussing the importance of delegation and the allocation of patients to the appropriate Doctor’s clinic. The importance of being an ‘all rounder’ was highlighted by Manager S, who felt that this might be another ‘hidden skill’, unappreciated by doctors. I emphasized the importance for students of learning from nurses who were skilled in practice by asking clinical questions and discussing dilemmas to reconcile theory and practice learning. Boshuizen (1994) described abstract, problem solving ‘scripts’ used by doctors to solve patient problems which connect conceptual, perceptual and strategic knowledge, parts of which are learned from books and journal articles, but the scripts themselves are formed through practical experiences. On examining the above skill identified by Manager M, with its diverse components, it appears possible that nurses may be developing and using similar ‘scripts’ within their professional practices.

‘Behind the times’ was a subtopic which included the co-researchers’ views of the ophthalmic course. Manager M.
commented that her students, M(A) (1997-1998) and M(J) (1999-2000) felt that I, as Course Leader was

*behind the times in teaching them nursing theories or highlighting it when we'd moved on.*

As we were having a research discussion, I was able to draw on my previous notes and read out to her my marginal note on an earlier tape recorded debate I'd had with the students which went as follows:

*A session was devoted to current research in nursing practice in which students were asked to critique papers on current nursing research in an attempt to broaden the way in which students tackled their assignments. The session was criticized for irrelevance in students’ evaluations, and students still reverted to Roper's Model which dates back to the early 80s.*

The above had been an attempt at collaborative learning and fostering autonomy in learning, covering the development of nursing theory. Murphy (1999 p260) suggested that using such methods will result in students engaging in more open, extended discussion and exploration of alternative meanings when allowed to construct and reformulate tasks for themselves. Unfortunately, in this instance, this approach was not successful, possibly due to the complexity of the material studied. The literature reviewed in Chapter 2 identified what Mulhall (1997) called the ‘research-practice gap’. She questioned whether nursing research was being incorporated into practice or whether nurses remained wary of research and the culture that produced it. She suggested that research reports might be being written in forms that were culturally alien to established nurses. Perhaps Mulhall 1997 was right, research may be culturally alien to some established nurses.
'What's out there for them' brought together ideas for bridging the theory / practice divide. I emphasized the value of ‘protected time’ in practice, and showed how I was expecting students to spend their study days in clinical practice working towards clinical practice objectives. Manager C said

*One of our jobs in the Outpatient Department
we’re going to use as a rotational post, for people on the course, so that’s going to give them more time down there. We’re going to give them a whole week in Outpatients’ every other week.*

Manager M, in support of the re-adoption of the ‘Skills Workbook’ emphasized:

*So that they know what they’ve got to achieve, and how much they still need to learn about.*

Glaser (1999 p97) suggested that proficiency requires experience, practice, long hours and hard work, and that ‘practice’ within a training course may not be very efficient. He suggested that on the basis of knowledge of the specific aspects of competence and expertise, it should be possible to find ways to compress or shortcut experience, or to present experience in a more systematic fashion, so that its impact is optimized. The re-adoption of the Skills Workbook, would in my opinion, supply students and mentors with a powerful tool to identify skills to be learned and to alert other practitioners to call students to watch and participate in skilled situations.

Manager M suggested introducing the Government publication ‘Action for Cataracts’ to update the study of nursing theories and models, and to stimulate students think of ways to apply it to their current nursing practices. Managers M and S and Mentor S. suggested ‘pre course learning’ of simple anatomy and physiology
which they felt would help students to appreciate earlier in the course what was happening in eyes they were examining.

**How might the role of the mentor be used to coach higher levels of nursing practice?**

The importance of being proactive
The interviews related to the proactive nature of much clinical learning on the students’ behalf.

*I just watched everything. ...I just followed a nurse and I looked at the patients first and the nurse stood behind me and I learned a lot.*

Student S(M).

Present in a supernumary capacity, Student S(M) initially watched. Later, legitimate peripheral participation (Lave and Wenger 1991) gave her the opportunity to join in the social practice of nursing. Lave (1997 p19) said that such forms of learning are based on the assumption that knowing, thinking and understanding are generated in practice, in situations whose specific characteristics are part of that practice as it unfolds. She also suggested that students will learn to think, argue, act and interact in increasingly knowledgeable ways, with people who do something well. Mentor S also commented:

*I find that (a keen student) so much more stimulating and interesting rather than feeling I’ve got a big fat potato to cart round with me all morning – that’s how it makes you feel when they don’t ask questions.*

This symbiotic relationship between mentor and student was researched by Earnshaw (1995) who observed that development of the relationship depended to a certain extent on the student’s behaviour. If the student showed interest the mentor began teaching. He showed that in some instances mentors were prepared
to let the student set the agenda and were not prepared to 'waste' their time on students who showed little interest in learning. The above situation does require the student to know that they are the key to unlocking the mentor's teaching skills. Earnshaw (1995) additionally showed that the relationship between mentor and mentee worked best when both parties contributed equally to the relationship and recognised each other's strengths and weaknesses. This related well to Rogoff's (1990 p8) view of intersubjectivity, that there needed to be a sharing of focus and purpose between the learner and their more skilled partner, which again highlights the importance of motivation in both partners in the learning situation.

A Tool for Mentors

Mentor S made a suggestion to stimulate the above relationship by reminding me that the 1995-7 course had a 'Skills Workbook' which was discontinued when the course was re-written in 1997. It was replaced with one page for each practice related unit. Mentor S suggested re-introducing the 'Skills Workbook' as did Managers M and S. She felt that with uncommunicative/shy students the book would provide a basis for initial dialogue, planning of clinical experience and a joint evaluation of achievements.

On hearing of this suggestion, Managers S and M in their interviews recognised the vast areas of practice covered by the 'Skills Workbook', and wanted to offer it again as a help to learning:

*I think it can focus the mind about the vast amount of skills you need as an ophthalmic nurse......they might not get from novice to expert with each one, but at least they know how much they've got to achieve, and they still need*
to learn about. It can be quite focussing for them.

Manager S.

The ‘Skills Workbook’ was ‘dropped’ from the course in 1997 following the re-write, having been criticised for being wordy and repetitive. In reducing it to four pages I had responded to managers’ opinions and aimed for simplicity. What is now being said connects well with students’ classroom comments. (See Chapter 7, Action Research Cycle One subsection : Student Suggestions for incorporation into the ‘Alternative’ Clinical Practice Portfolio). The students liked what they called the ‘tick boxes’ which related to the identification of basic ophthalmic equipment and carrying out basic ophthalmic skills. The ‘Skills Workbook’ is a more comprehensive presentation of the ‘tick boxes’.

Assessment

‘Someone to assess you’ refers to the reassurance novices draw from working with and being assessed by an expert in practice. Nursing literature has in the past expressed concern with the ‘gap’ between what is being taught by nurse teachers and the professional knowledge and competencies that are required within nursing practice. Student S(M) expresses how ophthalmic course nurses work to attain clinical competence

Finding someone (credible within clinical practice) to assess you and say that’s fine when you’re working, trying to learn.

Roth (1999) suggested that Vygotsky’s (1981) ZPD and an apprenticeship approach to learning may be yoked together by the notion of joint activity, whereby more capable participants guide novices in such a way that they are able to participate in authentic practice until they are able to manage the particular activity on their own. This approach to learning has an inherent
continual assessment role built into it, appropriate to the mentoring approach adopted in nursing.

Problems in Practice
When not working with their regular mentor, students expressed the fact that:

_Some of the nurses don't want you to try something new when they're responsible for you_

Student S(M),

which expresses some of the difficulties of professional accountability within a mentoring relationship. This difficulty was discussed at length by Cope et al 2000, who analysed inclusion into the community of nursing practice as being 'social acceptance', which could be achieved on day one, and 'a sense of professional incorporation' where there was often a sense of 'earning' the incorporation by demonstrating competence. For the student above, clearly the relationship with her mentor had proceeded faster than the relationship with her other colleagues. Chillingly, Spouse (1998 p347) who based her comments on research findings, stated that without effective sponsorship by a mentor, legitimate peripheral participation in any form of meaningful activity was impossible, and consequently nursing students found it difficult to engage in clinical activities or to learn. It is thus clear that the relationship with a specific mentor is crucial to learning in nursing practice, and that social acceptance into a community of practice may be superficial by comparison.

'Everyone's an individual' was a subtopic from the Managers' and Mentor's interviews, which recognised the varied learning needs of nurses from different geographical locations, with differing prior experiences and aptitudes. Mentor S. observed:

_You've got a huge range of skills and knowledge base variance there, and it makes it difficult to_
teach them. One week I’ve gone back to real basics and I haven’t even asked X to use the slit lamp. I wouldn’t dream of putting her under that pressure.

It is interesting to note that, given that much of Rogoff’s (1984) work was built on Vygotsky’s (1981) views of social learning, Mentor S had gained information about students through dialogue and observation, and in the case of the student above has instinctively estimated her zone of proximal development (ZPD). The ZPD is the distance between actual developmental level determined by independent problem solving and the level of potential development determined through problem solving under guidance. She therefore adjusted her teaching in practice to her student’s individual readiness and capacity to use current knowledge and learn more.

‘Where they’re coming from’ related to practice learning objectives linked to the proposed new Clinical Practice Portfolio which were discussed in terms of

They’ve got to choose for themselves—what they think would be useful for themselves and their department and practical

Course Leader.

‘The whole big picture’ was a subtopic which emerged from the managers’ interviews, and demonstrated why nurses need knowledge that is wider than the identification and satisfactory completion of ophthalmic related tasks. Manager M (also a mentor) discussed this need in a humanistic context, as

a thinking nurse who has the consideration of the patient at heart and everything that goes around it.
This was reiterated by Mentor S who explained

\textit{In nursing we apply our practice holistically, so we're not just looking at a pair of eyes. We look at the whole big picture.}

Manager C. particularly wanted to ensure that nurses were aware of the 'whole big picture' given that

\textit{we are a nursing speciality that probably does more than most other specialities..... We do discharge them (in-patients) from hospital without a doctor having seen them}

and therefore wanted nurses who were

\textit{...able to practice safely, confidently and competently.}

Clinical Assessor S, a Ward Sister, wanted

\textit{Somebody who has been given the encouragement to develop and become a thinking practitioner. I don't want somebody who just knows how to put eyedrops in and clean an eye.}

Benner's (1984) concept of the expert nurse gave the example of recognition signs of impending shock before documentable changes in the physiological state were evident. She suggested that perceptual grasp of a situation is context dependant, that is, the subtle changes take on significance only in light of the patient's past history and current situation. In a nursing setting, situated learning has its strengths. As Benner (1984 p1) acknowledged, this kind of knowledge accrues over time. My study of situated learning suggests that this type of knowledge, although not acquired immediately is well able to cope with variables such as environments, skills and problems as its strength lies in the analysis of the whole situation, which I believe is what informants meant by 'the whole big picture' here. The above concept also resonates with McCormick's (1999) description of the kind of
knowledge acquired by expert snooker players, through constant experimentation. However, I would suggest that in addition to the perceptual grasp of a nursing situation, the development of what Brookfield (1987 p13) called critical thinking is equally important. This would involve recognising assumptions underlying our beliefs and behaviours, justifying our ideas and actions and trying to judge the rationality of these actions. For the nursing student, such learning would ideally be facilitated by the mentor sharing aloud their own thought processes with the student.

**How might educational policy at national and local levels be related to a specialist nursing curriculum?**

'A Doctor's perspective' arose only during the interview with Managers M and S and followed discussion of the suggestion from the Royal College of Ophthalmologists' Ophthalmic Skills Working Party 2000 that they should run skills based courses for nurses and health care support staff who work with ophthalmologists. Manager M suggested:

*Their idea of a good nurse is somebody that will respond to their requests the minute they ask*

and Manager S remarked that doctors like

*nurses who still jump to attention, nip in and out to make the doctors' coffee and wait on them hand and foot because its habit.*

The Doctors' proposal (Royal College of Ophthalmologists, 2000) that they should organise nurse preparation follows the evolution of an Ophthalmic Medical Assistant (OMA) role in some hospitals where experienced Ophthalmic Nurses have been recruited to work on a one to one basis with ophthalmic consultants. Manager S commented

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The doctors like the OMA model, because they've got a person working for them who can do what they like. But they don't see the bad side of that, what happens when that person is sick, or they leave and you've got to train somebody else. There's no flexibility at all.

The comments made by the research participants in 'A Doctor's perspective' need to be seen in context with the fact that degree level nurses, with specialist nursing qualifications are beginning to run clinics of their own, and are obtaining limited roles in the supply of medicines. At Sandbourne Eye Unit nurses treat 40% of ophthalmic casualties without doctor involvement, hold a Glaucoma Clinic at a GP practice and manage without doctor involvement a significant number of simple ophthalmic clinic visits. These developments have been implemented in conjunction with the consultant ophthalmologists, and were in the vanguard of government proposals published in the NHS Plan (June 2000) Section 9.5:

'The new approach will shatter old demarcations which have held back staff and slowed down care. NHS employers will be required to empower appropriate nurses, midwives and therapists to undertake a wider range of clinical tasks including the right to make and receive referrals, admit and discharge patients, order investigations and diagnostic tests, run clinics and prescribe drugs.'

Perhaps some of 'a doctor's perspective' relates to Bahn (2001 p112), who suggested that in the past nurses were only encouraged to reproduce precisely what they had learned, without question, reflection or critical evaluation of their actions. The aim was not to develop nursing practice, but to preserve past practice.
It is possible, given their overall patient responsibility, some doctors would prefer to return to the cultural practice of being in charge of nursing developments. Managers S and M felt that doctors as a class had a narrower view of nursing than nurses envisaged for themselves and nurses needed both the theoretical and practical knowledge offered by the ophthalmic course. Given the powerful position of doctors within society, it is possible that doctors have a different view of the contribution of nursing to health care. Young (1999) suggested that competing interests and value systems found in a modern society are expressed in school curricula, systems of government and occupational structures. The aim of the NHS Plan (June 2000) is to change the culture of the NHS. It was Henderson (1966) who began the shift of the nurse as the doctors assistant to the nurse as the patients’ helper. Work at Sandbourne University (Andrewes 2001) on developing ‘a clinical university’, as much based in clinical settings as it is in the classroom, is seen as a further step in enhancing the role of lecturer practitioners to reduce the theory-practice gap identified by the Royal College of Ophthalmologists (2000).

A Serendipitous Finding within the Interview Data

A serendipitous finding arising from the written data, was coded as ‘More Ophthalmic’. ‘More Ophthalmic’, an area which rankled with two 1999-2,000 students, was subsequently noted to exist as an underlying course criticism with two of the three managers in the Course records. It was insufficiently defined to become an action research cycle on its own, but did present issues which required to be addressed. An historical account of ‘more ophthalmic’ is presented diagramatically on the next page.
1998 – 9 Six students want 'more ophthalmic' related content

Reconnaissance 1999
2 areas identified by students
1 area identified by manager

Action Step 1999 – 2000
Orthoptist engaged for 2 lectures
RSCN for 1 lecture
Visual Fields testing 2 lectures

Evaluation 1999 – 2000
The 5 sessions above are well evaluated by all students

Further Reconnaissance 1999 – 2000
Students dislike learning what they call 'the basics' of nursing
Want more medical research

2000 - Dorothy Questions
- Should a 'medical' course be taught?
- Course Guidelines
- Personal thoughts
- Other Ophthalmic courses

Amended Plan
- Copies of timetables to managers and mentors
- Educate managers, students and mentors re. Expected course outcomes
- Make better use of student managed learning time
- Practical Study Day

Diagram 2: Illustration of the origins and methods of dealing with students' requests for 'more ophthalmic' course content
'More Ophthalmic' has connection with course content. When it was initially raised by students in the 1998-1999 cohort, students were asked for clarification and changes were made. Following these changes, which were well evaluated, a member of the 1999-2000 cohort raised criticism of the course as being insufficiently ophthalmic with their Manager, who raised the matter directly with me. I was perplexed, since the course followed the headings as originally agreed with the Programme Development Team, and provided the manager with copies of the indicative course content and the 1999-2000 timetable. The timetable showed how the agreed content had been covered, and the time spent on each area so that it could be compared with the indicative content validated in 1997. The manager said that her criticisms had been answered.

'More Ophthalmic' exhibited itself as a leitmotiv within the written data, although I have subsequently connected it within the students' interviews with the subcategory 'Medical Knowledge' although only two interviewees mentioned increased medical knowledge as a possible curriculum improvement. I shared the discovery of this leitmotiv with two of the management interviewees. Due to the time intervals in data collection and analysis, once it had been discovered in the course records, I wished to ensure that the management participants discussed it, in case it was seen to have crucial importance.

'More ophthalmic' was effective at exposing my own strong feelings about what an ophthalmic nursing course ought to contain. One student, as a reason for wanting more 'medical' and less nursing knowledge said:

_We have junior doctors, and they're only there for six months, and they do rely quite heavily on the experienced nurses although they are seeing the._
patients, and really you've got to teach them as well.

My contemporary comment is thus

I see what she means, and she's right, experienced nurses do this, but I don't see why a nursing curriculum should be tailored to needs doctors may have.

I added later:

Her expectation that she might be able to do this at the end of the course is inaccurate based on the interviews with Mentor S(M) and Manager C(R)

In a more recent reflection I added in justification for not making 'more ophthalmic' an action research cycle but choosing to use it as a leitmotiv to inform the research as a whole:

I've been simplistic to assume that I/we could act on all the data. It would also be unwise! As a teacher I can be democratic, but I'm also the paid, responsible person. Can we ever eliminate hierarchial control systems (like myself) in educational research?

Clearly, given my responsibilities to other members of the Programme Development Team, the university and my profession I could not develop a course designed to underpin the practices of medical colleagues. As nurses our responsibilities are primarily towards our patients. Student comments such as the above whilst not providing scope for further overt action, enhanced my understandings as a teacher of students' concerns. The concerns expressed by students and managers in 'more ophthalmic' were helpful in providing an underlying direction to the action research cycles that were pursued. For example, Student M(A) from the
1997-8 course made the following observations following personal reflection:

... But the ophthalmic course is actually asking you to make clinical observations for yourself, rather than drawing on other peoples' ideas. And I think one of the difficulties is actually to have the opportunity to get that knowledge. And here it's difficult because you don't have a nurses' slit lamp. You don't have the opportunity to actually sit a patient down and do an examination on them.

(Interview September 2,000)

This tied in well with student M(J)'s comments at the end of the 1999-2000 course when she was asked if she would enlarge on her 'more ophthalmic' views:

I would have liked more hands on e.g. the suggestion of a day practising the slit lamp, IOPs, syringing etc.

Thus it may be seen that although 'more ophthalmic' existed as a subcategory, it was really more of a leitmotiv, and will be seen later to underpin the action research cycles which follow.

Summary of changes proposed from the interview data

Re adopt the Skills Workbook which covers a vast area of practice and was recommended as a help to learning by both managers and students. The Skills Workbook is an attempt to give students a broad knowledge base in practice and a view of the potential scope of ophthalmic nursing beyond the completion of the ophthalmic course at level academic two and for uncommunicative/shy students, to provide a basis for initial
dialogue, the planning of clinical experience and a joint evaluation of achievements. (Action Research Cycle One).

Tests for Anatomy and Physiology throughout the course both in the academic and practice settings This arose as a suggestion from the discussions under the Managers’ category ‘Essential Knowledge’ and the students’ subtopic ‘A sound foundation’ which contains students’ expectations of the course content in terms of anatomy and physiology of the eye. It is also influenced by the leitmotiv ‘more ophthalmic’ discussed above. The aim was to support the Clinical Practice Study Day with underpinning theoretical knowledge and to help students ‘cement things into their brains’ in terms of applying theory to practice early in the course. This in turn would hopefully assist with earlier completion of the Clinical Practice Portfolios.

Time ringfenced for practice outcomes is initially associated with the subtopic ‘Relating things back’ which described how students associate theory with practice and the Managers’ subtopic ‘more ophthalmic.’ The difficulties expressed by 1997-1998 Student M(A) in terms of making clinical observations sufficiently promptly in a clinical setting in order to internalize that knowledge and develop her mental schemata prompted the change that is described in Action Research Cycle Two. 2000-01 students were given one practice day per week for five weeks immediately following the theoretical sessions to meet the practice outcomes of their Clinical Practice Portfolio and to promote the process of reifying theoretical knowledge into practice. (Action Research Cycles One and Four).

The development of a Clinical Practice Study Day
The idea for this came from the interview with Student S(J) who listed practical skills that should be developed on the course, but
were sometimes problematic for students in terms of obtaining initial instruction and practice. Student S(M) also spoke about the importance of what she called 'the basics' and elucidated the difficulties of learning in practice. I linked this with the difficulties some students were having learning anatomy and physiology and relating it to practice and suggested to Student S(J) a Practice Day early in the course. The idea was endorsed by Mentor S(M) and the two Casterbridge students. (See Action Research Cycle Five)

Chapter Six details the action research process, by clarifying to the reader how the cycles were developed and changes were made and where appropriate modified. The evidential bases of the cycles are shown to be based on course documentation and interview material, and the cycles are related to the educational theories studied in preceding chapters.
Chapter Six

THE ACTION RESEARCH CYCLES

Introduction
The action research cycles are described comprehensively within this chapter to manifest the evidential basis of the areas for enquiry and change. For reasons of reading coherence this extensive chapter has not been divided. In Chapter Three I implied an interest in critical educational research by stating my intention to explore the emancipative possibilities of the curriculum in terms of teacher/student dialogue regarding the content, methods of learning and assessment that are used. I have tried therefore within each action research cycle described to make clear what influence was exerted by myself, the managers, students and mentor on each of the changes. Because of the nature of action research, in terms of its unpredictability - it is a partnership between the researcher and participants, it will not be possible to address the research questions directly with the research cycles. A concluding section will summarise and apply what has been learned from the etic perspective, that of the researcher, by applying the knowledge generated to the research questions.

Action Research Cycle One
The Clinical Practice Portfolio
Background
The Clinical Practice Portfolio, an assessed piece of coursework, is designed to demonstrate a student’s progression within clinical nursing practice. Students complete a section of the Portfolio following each theoretical component of the ophthalmic course. The 1995 version of the Portfolio was complex, causing a monstrous workload for the Mentors, the students themselves and the Lecturer practitioner. ‘Extra time’ was normally granted for the completion and assessment of these Portfolios. This 1995 Clinical Practice
Portfolio was adopted uncritically by the Programme Development Team from existing IHCS documentation during a rush to meet a
deadline following the sudden death of the designated Ophthalmic Lecturer.

When the ophthalmic course was revalidated in 1997, the Portfolio was redesigned, giving written specifications of the practice outcomes students were expected to achieve to reduce the workload for all involved. Students completed part of the portfolio for each stage of the course, and by the end of the course, their ability to reflect critically on practice, suggest and enact changes within clinical practice demonstrably improved. The 1997-8 students gave the ophthalmic course a good overall evaluation, but student evaluations recorded in the Annual Course Report 1997-8 still said that

*The Clinical Practice Portfolio (1997) caused a lot of work for little gain.*

Significantly students stated that they wanted the course *structured to their individual knowledge and practice needs* and said they wanted *to write learning needs and outcomes to be achieved during a placement, with review dates.*

My contemporary comments recorded:

*Students can be difficult to please. The Portfolio was revalidated in a simpler form, as students were spending more time writing their learning outcomes than they were learning. Each outcome from the 1997 Clinical Practice Portfolio will be tied very firmly to each unit of the course next year, to see if that works better (i.e. that the sections will be completed on time).*
Academic assignments put before clinical practice

From 1995-1997 instead of working on their Portfolios in conjunction with their other academic work, students were leaving the Portfolios until the end of the course, and concentrating on their academic assignments first, saying they were 'too busy' with academic work to write their Portfolios. This recurred in 1997-8 following the course redesign in which this problem had been carefully considered by the Programme Development Team. The original course had been of twenty four weeks duration. The Team decided that a course with 90 level 2 academic credits should be spread over a longer period and from 1997 the course ran over forty weeks, but was 'unitised' into stand alone 10 and 20 credit units of theory and practice. Notwithstanding the additional time, students did not work on theory and practice together, appearing to study theory at the expense of practice, resulting again in student negotiations for later submission of Portfolio sections.

Further attempts to connect theory and practice

During the 1998-99 course, students were issued with course 'diaries' following a Programme Development Team recommendation, to illustrate that their employers were providing sufficient time for course completion, with suggestions as to how the time might be structured. Four students took the complete course, and of these, one student had difficulty in completing both theory and practice units. The other three submitted each part of the portfolio promptly, but the assessments relating to clinical practice, although gaining a pass, demonstrated little 'depth' in the areas documented. There was bare fulfillment of the requirements, with little attempt to enquire into issues raised. Eg Care of an alcoholic day patient was described adequately, but no attempt was made to question whether such patients should be referred to the anaesthetist for supportive medication whilst abstaining from alcohol, or to explore the possible sequelae of sudden unsupported
alcohol withdrawal until the student was advised to revisit this section.

Three areas caused me concern. The 1997 Portfolio was prescriptive, students were not setting goals for themselves, and this may have contributed to students’ apparent lack of full engagement with the goals and just adequate achievement. Some students appeared to be spending the time earmarked in their diaries for supernumary practice completing their written work. Significantly two nurses from general Accident and Emergency departments attended some theory units of the programme. Their managers had not entered them for the practice units of the course.

Questioning the adequacy of the 1997 Clinical Practice Portfolio

These matters were raised at the Course Development Team Meeting July 1999. I asked the team whether they felt the 1997 Portfolio was working satisfactorily. Manager M. commented:

*It's cut and dried and its easier to follow and it's a lot more specific. Previously they (the students) were all at sea with the way they were doing things......This is much more easy to work from.*

I continued:

*I'm worried whether it's removed from the student the ability to steer their own learning and reach their own goals*

and questioned whether we should return to a simpler version of the 1995 model, allowing students the opportunity to steer their own learning by making their own goals.

The discussion which followed elicited the following points to be considered if the 1997 Portfolio was replaced.
• The university's policy was to base credit for level 2 clinical practice skills on a minimum of 2,500 academic words per 10 points. The clinical assessors, who were validating practice, felt that succinct evidence of clinical achievement accompanied by evidence eg documentary records of skill attainment in for example, measurement of intra ocular pressure would make robust assessments without a vast number of words.

• Students should collect evidence of their developing practice, to demonstrate that they've understood what they have been doing, linked practice actions to relevant theory and shown that their knowledge will be transferable to similar situations, so that the external examiner can see proof of what was done and how it was assessed in practice.

• Thorough questioning of the student should accompany the assessment of the Portfolio, to check whether the student can provide quality care, patient education and well documented patient records as well as demonstrating ability to transfer what has been learned to other patients or settings. Future assessment should be restricted to nurses educated to degree level, in the expectation that they will have these questioning and checking skills.

• Continuous assessment was recommended as a means of formative development.

Difficulties with 1997 Portfolio - evidence summarised

_The Clinical Practice Portfolio caused a lot of work for little gain_

Student C(L) 1997-8 Course Evaluation

_One of the difficulties is having the opportunity to get that knowledge_

Student M(A) 1997-8 (Interview September 2,000)

_Students wanted to write their own learning needs and outcomes_

Course Report 1998
Submission delayed by students

Tackled separately from academic work

No personalised goal setting

Inflexible to practice

Difficult for students to understand sequencing

Student performance only 'Average'

No mechanism for grading

Clinical practice avoided altogether by those studying units of the course

Diagram 3: Concept map - summary of the difficulties with 1997 Clinical Practice Portfolio (discussed above)

Phase One
Following this initial identification of problems above, using Stringer's (1996) suggested framework of look, think and act the following action step was taken:

Dates for the submission of the academic assignments and Clinical Practice Portfolio were separated by two weeks to allow students clear time to complete their practice records.

Result
Seven students took the Ophthalmic Foundation Academic unit 1999-2,000. One student, from a Minor Injuries Department in
Sherton, was registered for two academic units. Her manager had not enrolled the nurse in the clinical practice units. Another student requested to delay submission of her Portfolio for one year. Under the present rules it is possible to complete the course over a two year period. Her reasons were that she was new to ophthalmic nursing and worked part time. She and her Manager, felt that it would be difficult for her to obtain the practical experience required within the time scale of nine months.

The remaining five students submitted the first section of their Portfolio promptly, to a good standard. However, as the course continued, problems emerged. During the second academic unit, two students requested to delay the rest of their Clinical Practice Portfolio Units for a year. They worked in an ophthalmic unit which was hard pressed due to the illness of their manager, dramatic increase in workload, chronic shortages of nursing staff, winter bed pressures and a flu epidemic. This resulted in the impossibility for them, of gaining the specialist experience required for the clinical practice units because of lack of time for supernumary practice. The other three students submitted their clinical practice sections on time throughout the course.

**Evaluation**

There was no improvement on the previous year when three students also succeeded in submitting their Portfolio sections on time.

**Phase Two**

The identification of an alternative Clinical Practice Portfolio for the ophthalmic course

At the February 2000 Team meeting, I distributed copies of an 'alternative' Clinical Practice Portfolio for consideration by the team.
Result

Recorded comments included:

*Prefer 1997 version because its cut and dried, easier to follow and a lot more specific*

Manager M, Course Development Team Meeting
1999

*This (1997) one is more specific isn’t it?*

Manager S, 1999 Course Development Team Meeting

In spite of the misgivings expressed above, I went ahead with Phase Three, adapting the ‘Alternative’ Clinical Practice Portfolio, based on the expressed feelings of the previous students, who wanted to set their own goals, the fact that I hold overall responsibility for the quality of the course and because I felt students would benefit from further work on my part to bring theory and practice more closely together. Mentors were fully consulted in the hope that with the setting of suitable individual practice goals, they would be able to coach higher and more relevant practice achievements from their students.

**Phase Three**

Adapt the ‘alternative’ Clinical Practice Portfolio discussed in Phase Two for the ophthalmic course

Whilst adapting the ‘Alternative’ Clinical Practice Portfolio I made it into sections which included the academic assignments, thus making an assessment booklet which combined theory with practice (see Action Research Cycle 2). Unlike the 1997 Portfolio, The ‘Alternative’ Portfolio concentrated primarily on practice
achievements rather than a number of 'academic' words. Students were to concentrate on achieving substantial clinical practice skills, which they would choose themselves, in conjunction with their mentors/clinical assessors. Documentary evidence of the complex skills attained had to be supplied, such as series of intraocular pressure readings, mentor statements, examples of patient education materials, cameo studies of patients. In order to achieve these skills in practice, students would need to work closely with their mentors, apply theoretical knowledge to practice and demonstrate the amount of time spent achieving the skill.

The new clinical practice Portfolio was designed to meet the following points from the literature review, Chapter 2.

- By encouraging students to choose challenging practice goals, they would be more likely to engage as far as possible with the 'community of practice' (Lave and Wenger 1991) within the clinical setting, which it was hoped they would use for collective problem solving to resolve questions relating to classroom theory, arising in and from practice in the ways described by Greeno et al 1999. This would be beneficial in terms of learning to both students and established practitioners.

- It was important to ensure that students spent as much time as possible in clinical practice. Whilst time spent in supernumary clinical practice will not itself produce a capable nurse, it is significant in the process. Corlett (2000) argued that the theory-practice gap is

  'merely a function of time, something students have to live with until they have sufficient knowledge and experience to fit the parts together.'

- McCormick (1999) recommended valuing practice knowledge more highly and recommended teaching it in its own right. Corlett (2000) suggested that students perceive classroom based theory
teaching as being 'idealistic and decontextualised'. One of the objectives of the 'Alternative Clinical Practice Portfolio' was to teach ophthalmic students the value of clinical practice and as McCormick (1999) suggested, improve their reasoning skills by focusing on clinical practice.

The 'new' documentation was sent out to the Course Team, Mentor Representative and Student Representative prior to the next Team meeting. Managers took the documentation back to their clinical practice areas for further evaluation. The proposed 'alternative' Portfolio was discussed at length with the 1999-2000 student research participants.

**Students' Evaluation**

The 1999-2000 students applauded the possibility of choosing individual practice goals. As research participants they felt responsible for the practice outcomes that could be achieved by future students if they recommended the 'alternative' Portfolio. Student comments suggested the necessity for future students of careful self evaluation and the identification of weaker practical areas for development. The development was seen as particularly useful by nurses working in the smaller ophthalmic units, who quickly saw the possibility of identifying key skills for their own areas such as assessing patients prior to surgery and recording biometrics and 'K' readings, and the possibility of devoting supernumary practice time to such projects. The 'Alternative' Clinical Practice Portfolio was also designed to ensure that students would be well motivated to spending their supernumary time in practice in order to collect 'evidence' of their achievements.

Student M(J) whose comments included

*the chance to work on basic skills*
had obviously already identified many of her own needs, but she went on to say students should be

*allowed to be guided and do what you felt was best for you*

This suggests how carefully her Mentor's advice and guidance would be sought in the planning of her practice learning were she to use this 'alternative' documentation herself.

A comment made about 'a lot less writing' was not explored, to allow students as research participants to make as many comments as possible without being questioned or steered by myself as teacher. This student was spending more time on academic assignments than her peers and excels practically, demonstrating high level ophthalmic nursing skills developed as the result of her excellent self evaluation skills and ability to concentrate on practice issues. A practical assessment which involved less student writing but which provided adequate documentation would leave such a student more study time for her academic work. Students who could be disadvantaged by a change to the 'alternative' Portfolio might be those who were better at writing about skills than demonstrating them, but equally, like the student above, they could balance their strengths (the academic side) against the areas requiring development (practice).

The two students who were having difficulty in completing their clinical practice due to staffing shortages in their unit enquired what would happen if future students faced similar problems. It was explained that the course could still be completed over two years. Future students would delay the next 20 credit theory and practice unit until they had finished the first. The objective being to ensure that each theory section was related by the student to practice before proceeding to the next.
Student suggestions for incorporation into the ‘Alternative’ Clinical Practice Portfolio:

Students wanted to retain what they called the ‘tick boxes’, from the 1997 Portfolio, which refer to recognising basic ophthalmic equipment and carrying out basic ophthalmic nursing skills. They definitely felt that these should be imported from the 1997 Clinical Practice Portfolio into the proposed ‘Alternative.’ Their comments included:

*I think that you need to keep them, otherwise they (future students) may skip things that they need to know. Things that we think are basic.*

*I think it could be a good opportunity to go and actually do something, so that you can say yes, I’ve been helped to do that, or seen what equipment it is, and you’re actually going and doing it. If you’ve achieved it, it’s good in my experience.*

*I think if you’ve no idea about something, you want to go and try.*

*As an eye trained nurse they expect that you will not only know what is in your own department, but to have a wider knowledge.*

As may be seen from Chapter Five, the question of the ‘Skills Workbook’ had already arisen, and it was decided at the Programme Development Meeting in October 2,000 to re-introduce the ‘Skills Workbook’ used during the 1995 Course. It was felt that this would meet the students requirements above more fully, as well as facilitating the mentor/student relationship within clinical practice.
Mindful of their responsibilities to later cohorts of students, the student participants checked the proposed changes, questioning and suggesting as appropriate. They were positively supportive of the ‘Alternative’ Portfolio. They were aware that their Managers and Mentors were also involved in the discussion process.

Result
The students supported a change of Clinical Practice Portfolio.

A final check
Clearly the action research cycles proposed presented a lot of work in terms of course modification and I did not want to enter into the validation of another portfolio without absolute certainty that this was what the research participants wanted, especially since the university’s Course Approval mechanism does not allow for pilot studies to be made prior to curriculum changes. I was concerned in case I had been leading the Programme Development Team in my own chosen direction, and wanted to make sure that they really had adequate time to consider these large changes. I therefore sent out a ‘Response Sheet’ to all the Managers with a reply paid envelope for a quick reply, asking the questions below.

- What are your views on combining theory with practice to produce four 20 credit ophthalmic units?
- Would you like me to begin the process get the ‘new’ Clinical Practice Portfolio validated, or wait until our next meeting?
- Do the essay instructions look reasonably clear?
- What do you think about writing some clinical practice competencies for your ophthalmic unit? In your view, will competency attainment keep ophthalmic students ‘on task’ on clinical study days?

Plenty of space was allowed for replies. Two Managers discussed their responses with nursing staff in their ‘home’ units, and
provided me with unequivocal documentary support for the major curriculum changes. One Manager gave verbal approval.

I approached the Director for Post Registration Nursing to enquire about the procedure for altering the Clinical Practice Portfolio. She replied:

Any amendment to the assessment of a programme will need to be considered by the School Quality Committee. You need to present a rationale and the new assessment, you also need to get the approval of all the students it affects and the external examiner should be consulted and the ENB as it is an approved course.

Implementation

Arrange University validation of ‘alternative’ Clinical Practice Portfolio

In itself, University validation of course changes is an important test of quality. See Action Research Cycle 2 for further details of this process. The changes to the ophthalmic course were validated in October 2000.

Evaluate ‘alternative’ Clinical Practice Portfolio

The 2000-01 cohort of students were the first to tackle the ‘alternative’ portfolio, (the course did not run in 2001-2) and the students, having set their own goals were self-directed towards achieving higher practice outcomes than in the past. Of the three 2000-01 students, one left the course after the first unit for another job due to personal circumstances. One completed the written work for two units and requested to complete the course over two years due to family problems, although she was present for the classroom sections of all four units. Given the maturity of our nursing students, such difficulties arise occasionally within the
student population, and it is wise for nursing courses to be able to provide additional time within their course frameworks. All students adopted closer relationships with their mentors than had been noted in the past, getting them to ‘coach’ practice. The third student finished the whole course, and has been acknowledged by her manager to have developed an excellent theory base and practical knowledge. The fourteen students on the Ophthalmic Foundations course in 2002-3 have used the coaching system well, and some achieved significant specialized skills by the end of the unit, which previously would have taken them until the end of the course to achieve. This, is a hopeful indication of the success of this curriculum improvement.

As part of the validation process I was obliged to produce a detailed marking grid for the Portfolio, which instead of being graded as pass/fail will now be accorded a mark. This has caused two problems:

- Whilst students are observed by their mentors to have met the criteria within practice, ‘paper work’ is required from the student to demonstrate the depth and range of what has been learned so that achievements can be checked by the External Examiner. The first students have required coaching to produce written evidence for their practice. Additionally, whilst I never specified a number of words for the practice assignments, it looks as if in the long run, the University may require 2,250 words, as this is the ‘standard’ by which it operates. I have some ideas as to how this may be met in the future in terms of ‘evidence of achievements’. Given the progress made in practice so far, I don’t want students to take a step back and see this merely as another ‘academic’ assignment.

- The Ward Sister who acted as ‘Practice Assessor’ has left, and practice assessments are now partly the responsibility of the
Mentors who have no previous experience of assessment. They have needed support and work time allocated for this responsibility.

Other problems
Failure to get goal plans signed
A similar problem has arisen as with the 1995 Portfolio in terms of the time required to discuss goal plans. Students have discussed their goal plans for their portfolios with me, and suitable areas of practice to study have been broadly identified. As the student has not immediately written up the plan to have it signed, and failed to do so by the 'hand in date' problems have arisen in terms of the evidence provided being rather sketchy due to inadequately written goal plans. Further student support has been required to remedy the situation. To date this has not been a problem with the 2002-3 course.

Revision of changes
The 'alternative' Portfolio has been validated and changes are impossible without undertaking a further re-validation process. Problems concerned with implementation such as those above can be dealt with using further action steps.

Personal Reflection
Since commencing this research cycle, I have continued to reflect on possible reasons for the late submission of assignments in the past. I deal with a largely female, mature set of students. In 1980 Spender and Sarah pointed out some of the differences between boys and girls in classrooms. Lee (1980 pp125) suggested that girls were encouraged to do 'appropriate' activities such as tracing, word and picture puzzles which were of a repetitive and quiet nature, which may account for the fact that girls' work is generally neater than that of boys. As a teacher for the last seven
years I am aware of the perfectionism of some nurses, possibly following the high standards some girls set themselves for schoolwork. An example of this comes from a student's e-mail about her coursework

*I handed it in at the assignment office but was very concerned when the person taking it casually chucked it in the assignment box, ignoring my concerns that it might be damaged by doing this. Therefore I just wanted to make you aware of this and to let you know that I took the utmost care in the presentation of the work, which was why I did not post it but delivered it by hand.*

Nursing, by its nature is based on perfectionism, which may explain the obsessive care some students take with their assignments and the need expressed by former students to delay their portfolio submission within the provisions set out in the 1997 curriculum document.

Jarvis et al (1998 pp66-73) suggested that girls learn differently to boys. Part of their discussion related to research by Belenky (1986) who suggested that women's emotional and moral development can be seen as proceeding through five 'ways of knowing' listed as Silence, Received Knowledge, Subjective Knowledge, Procedural Knowledge and Constructive Knowledge. Women were seen as proceeding from a 'Silent' condition of unknowing, into a condition of 'Received Knowledge' where they learned by listening and seeking a single, 'right' answer without having a notion

't of understanding as a process taking place over time and demanding the exercise of reason.'

(Belenky et al 1986 p42)
The above may account for the students' desire for more 'medical' (the 'more ophthalmic' leitmotiv) and less nursing knowledge given that medical knowledge is male dominated and deals with more scientific certainties than nursing which tends to be highly patient focussed and contingent. Later in the discussion, Belenky (1986 p142) saw women moving through the other stages to Constructed Knowledge where they established a communion with what they were really trying to understand. Given that such theories may be viewed as being based on continua, it is possible that those who wish to delay submission of their Clinical Practice Portfolio feel less certain about themselves and their practice initially. Two of the 1999-2000 delayed submissions demonstrated the writers' ability to relate very complex theory to clinical practice. The standards reached exceeded those of the students who submitted work within the initial time frame. Perhaps the prompt students had more realistic expectations of the standards they were expected to achieve in the time. On the other hand, given the standards achieved by those who delayed submission, and possibly worked through the stages described by Belenky (1986 p142) there may be a case to argue that more time should be allocated to achieve such excellent theory-practice linkage.

Student Feedback

Having read the study, a student replied to the above to add some qualifications to my views of perfectionism:

I was not too convinced with the reason for the delayed handing-in of assignments for female nurses being due to females being 'perfectionists'. Women of a 'mature age' are quite busy with home and family life as well as working hours. A 'perfectionist' would want to complete any assignment in the allotted time.
Manager Feedback

I'm not sure that I agree with your views on female students completing assignments and perfectionism. Based on experience from my present course most of us work on the basis of getting the assignment finished and achieving a pass mark. The main reason for delays in submission are due to personal circumstances rather than a desire to be perfect.

Further discussion with individuals revealed that full or part time working may influence late submission of assignments as do family commitments or a single nurse's need to work additional hours in order to be able to pay a mortgage. Clearly the problems are multifaceted, and may connect with the discussion in the literature review of Carlisle et al's (1999) research findings which indicated that the practical skills achievements of newly qualified nurses develop more slowly than their managers expect, but are quickly advanced after a period in practice.

Action Research Cycle Two

Combining theory and practice

Background

As evidenced throughout this study, nurses, their teachers and managers still have difficulty in applying practice to theory and theory to practice. Managers purchasing units of courses, when short of cash purchase theory units only, and those who have purchased both, when times are hard, sacrifice the practice units of the course. In the past some nurses have been slow in completing their Clinical Practice Portfolio sections, possibly due to academic difficulties in terms of the number of words to be written to justify their clinical practice when they already have a demanding academic assignment to complete.
Documented difficulties with separate theory and practice units

Students from outside the specialist area of ophthalmic nursing are accessing theory units, but not being entered by their managers for the practice units. This is not a formula for good learning outcomes in either theory or practice.

Course Report 1999-2,000

One student attended two theory units which were not combined with practice, thus causing both a personal accountability and Trust accountability issue.

Course Report 1999-2,000

Course Leader I think she spent one day (in practice) and now finds she is being put forward as the 'expert' in ophthalmology because she's done a week's course on it.

Interview with Manager S. May 2,000

Manager S. Oh my God!!

Interview May 2,000

Action steps

Phase One

Examine the possibility of combining the theory and practice units into four 20 credit units.

IHCS management is reducing the number of 10 credit units being marketed and requested that our Team examine the possibility of reducing the number of units being offered and offer 20 credit units instead. This would bring IHCS into line with the rest of the university. The matter was discussed at the February 2000 Programme Development Team meeting.
We identified three options:

- Argue the case for retaining the course in its present format.
- Combine the four 10 credit theory units into two 20 credit units, and do the same with the four practice units.
- Theory and practice could be combined to produce four 20 credit units.

The team agreed that if the ophthalmic course was to be rewritten into 20 credit units, logically theory and practice units should be combined. This was felt to be a moral decision to prevent future students and managers separating theory from practice for their own convenience without consideration for the possible consequences on the quality of patient care. From the teaching and learning point of view, the team felt that this approach would have the advantage of discouraging students from viewing theory and practice separately. It was felt that this combination of theory and practice might reduce course applications from Minor Injuries Departments and general Accident and Emergency Departments who sometimes purchased theory units but did not invest in practice because of the difficulty of releasing staff for supernumary practice at our specialist ophthalmic sites. As course recruitment is a continuing preoccupation for the team, changes which could affect recruitment are of great concern. Additionally, as may be seen from action research cycle one, students were considering the theory and practice work separately, with the result that the sections of the practice portfolio were sometimes handed in late. The purpose of tying the two together was so that students would consider the assignment as a whole, and work on both parts with equal enthusiasm, rather than using their supernumary practice study days to work on academic essays.
This presentation may cause separation in student's minds

Separate Theory and practice units

Managers have the option not to purchase practice units

Some students not accessing practice units

Purchased as separate units

IHCS asking for change to 20 Credit Units

Diagram 4: Concept map - summary of the difficulties with separate ten credit theory and practice units (discussed above)

Phase Two
Integration of theory and practice assignments within the 'alternative' clinical practice portfolio - now called an assignment booklet.

Initial evaluation
1999-2000 students were shown how I had put the theory and practice assignments together into the assignment booklet, and I pointed out that future students would have the same time scale to work on each section as they had experienced.

The class noted that students from Community Minor Injuries units might be less likely to apply for the course if it was marketed as 20 credit units of integrated theory and practice for the reasons already identified by the Course Team (above). However, as such
applicants and their managers obviously intended that the knowledge gained in the classroom should be put into practice, it was deemed preferrable that such nurses proved that they had also met a required level of practice and that this was verified through formal assessment. This is particularly relevant in view of the Nursing and Midwifery Council’s code of professional conduct for nurses and midwives 2002 paragraph 6.2 which states:

To practice competently, you must possess the knowledge, skills and abilities required for lawful, safe and effective practice without direct supervision. You must acknowledge the limits of your professional competence.

An example of the value ophthalmic students placed on theory and practice together may be seen in a student’s interview. *I was asked to put 10% Phenylepherine in a patient’s eye. The patient had a heart condition and hypertension. I questioned the consultant who agreed to reduce the prescription to 2.5%.*

It was my opinion that enabling students to bring theory and practice together in the way suggested above would contribute to satisfying the expressed desire for a ‘more ophthalmic’ course. I also hoped to promote more fruitful relationships with mentors in practice as described by Spouse (1998, 2001). Previously students had used their mentors more to support academic work. In the 2000-2001 and 2002-2003 course, greater use has been made by students of mentors to support practice. Students have also chosen mentors who are better able to coach practice rather than mentors who are helpful with academic assignments.

The course requires that time should be ‘ringfenced’ for supernumary clinical practice, so that the student has the opportunity to observe and work with a more experienced
practitioner such as Mentor S. Previously the course ‘diary’ issued to students stated in detail how much supernumary time should be spent, and also included some days to study the ‘distributed learning’ aspects of the Visual Impairment Unit. For simplicity, 2000-01 students had a study day once a week for 5 weeks, and for the next five weeks have one day per week to meet the practice outcomes of their Clinical Practice Portfolio. Their objectives for this were discussed with their mentors prior to being signed by me. My view is that if (as in the past) students can be spared from their practice areas to complete the course theory, then they should also be supported by their employers in supernumary practice.

Support expressed for Combining theory and practice

*That part of the course, theory - is a springboard.*

. It's the basic. Then you go to your practice areas and depending on what your experience level is, that's when you do your ongoing learning

Mentor S Course Development Team

Meeting February 2000

*I like this idea enormously and can see a lot of benefits to the students in that both the theory and practice are more focused...* Written response from Melchester Manager.

*I think it is an excellent idea,* Casterbridge Manager.

*I think combining theory and practice is a good idea. I'm sure I would have benefited from this.*

Former Casterbridge student
I think it is good for new ophthalmic nurses to combine theory and practice. Also for those experienced ophthalmic nurses with a wide range of practice it is always useful to review the theory. Casterbridge Mentor B

Clearly this change gained wide support from students, mentors and managers, possibly because they were coming to see as I was, that very often structural separations of theory and practice (as with separate documentation and submission dates) are like seeds sown in students minds from the very beginning of nursing courses. It is necessary to demonstrate to students that theory and practice in nursing belong together.

Implementation

• Re-write Ophthalmic Course Definition Document into four 20 credit units, combining theory and practice.

The above is complete and was validated by Sandbourne University IHCS School Quality Committee in November 2000. The External Examiner for the ophthalmic course was consulted. Her reply stated:

'Looking at these changes I totally approve these moves forward. I was pleased to see a proposal for the integrated theory/practice modules. This type of module is the way forward. I personally have been using them for some time and they do encourage theory and practice to be more interrelated.'

This reply endorsed my personal opinions above. Nursing is in the fortunate position of being both a theory and practice discipline. Rogoff (1984 p4) stated her case that thinking is intricately interwoven with the context of the problem to be solved. When I first started teaching I began to notice how clinical problems
looked very different from those illustrated in text books, and how symptoms sometimes vary, yet as nurses we obtain our expert clinical knowledge from both sources. Over the past years I have been instrumental in the purchase of what are known as ‘bench books’, high quality ophthalmic textbooks to be used in practice, which are kept in convenient practice locations. This has resulted in the possibility of nurses puzzling over both patients and textbooks to answer questions in context, where textbooks and the use of such are also part of the learning context, as is the ophthalmologist’s advanced theoretical knowledge. The teaching and learning approach is to encourage that intricate interweaving of thinking identified by Rogoff (1984), so that theory and practice are seen as part of a complex whole.

**Action Research Cycle Three**

**Academic assignments**

**The background**

In the first ophthalmic academic assignment students used to fill their pages with ‘ophthalmic’ information presented uncritically from medical textbooks. This resulted in descriptive rather than analytic knowledge, due to the misconception on the students’ part that ophthalmic medical knowledge has greater value than nursing knowledge, and they were not grounding the knowledge they presented in nursing practice. This was despite spending at least one hour during each unit explaining what is required in terms of ophthalmic nursing knowledge. During the 1999-2000 course one student repeatedly requested for the assignment focus to be ‘more ophthalmic,’ and found it difficult to reconcile the sources of knowledge required for the academic assignments. The external examiner has commented in her reports for the past two years:

*I would have expected more analysis at level 2*
A new difficulty arose with the 1999-2000 course. From the background to this cycle, in a tape recorded classroom discussion, I noted that one student had been confused by the printed information received at the beginning of the course. The course content was listed on the same page, and the student felt she had to include the whole of the unit content in her assignment. This misunderstanding was revealed just prior to her beginning work on her third assignment. Obviously assignments are designed to test the student's understanding of all the aspects that have been covered, but it is critical that the student should concentrate on the actual wording of the assignment task.

**Summarized evidence**

**Difficulties with academic assignments**

*Recent students have experienced more difficulty in reaching the course outcomes, and the quality of work has been lower than in previous years.*

Course Report 98-99

*Would prefer to concentrate on ophthalmic conditions rather than topics such as nursing models and reflective practice.* Student's Evaluation 1997-8

*The difference in expectations between students and university resulted in lower marks than many students expected resulting in disappointment for students and criticism of the assignments from both students and their managers* 1999-2000

Course Report.
Marking levels have been discussed at Course Development meetings, and in conversation with the students. At a 1998 meeting it was stated:

*Dorothy is a particularly hard marker,*

and again

*Student M(A) has found going from level 2-3 really quite easy in comparison, and she felt, now that she’s doing her degree course, that the ophthalmic course was the hardest that she’s ever done!*

These remarks, made kindly and pleasantly, at the end of most meetings by the same person, evoke jocularity amongst the team. The person who makes them holds a reasoned point of view and requires regular answers. During the 1999-2000 course some students expressed dissatisfaction with the marking levels. The students felt that they had worked hard tackling large amounts of complex medical information. They failed to understand that the copious use of facts from ‘difficult’ medical textbooks did not address the level of nursing analysis required within the assignments set.

For example, a student holding an arts degree had difficulty understanding the concept of ‘analysis’ in relation to nursing assignments, and others in the present and on previous courses have needed help to develop this skill. Chanock (2000) writing on the subject of whether students understand the comments tutors write on their essays suggested that different academic subjects may require different types of analysis. She discussed how the focus of history and politics is change, for which reasons must be sought, and art history essays are expected to consist mainly of visual analysis, which is a close and detailed description of a
work of art. She concluded there is no simple description of analysis which would be valid across a range of disciplines.

A further difficulty for students is the recognized university standard for the return of student assignments of six weeks. Nearly a week is lost between the assignment being handed in and it reaching the first marker. First and second markers have the balance of the six weeks to complete and agree their marks. This does not permit students to have the benefit of formative guidance in sufficient time to incorporate the advice into their next assignment. Ideally this advice should be returned in writing with the assignment, and be accompanied by a tutorial to ensure the advice is understood, and to discuss the next assignment.

Integration of theory with practice remains an important area to tackle, and presents a particular difficulty for students pursuing vocational studies in academic settings. Unfortunately some students still see achieving success in the ophthalmic course as being dependant on academic assignments. Students find it difficult to relate theory to practice in their academic assignments. In the past, linking of the two did seem to take place effectively a little time after the end of the course, and is evidenced by changes within clinical practice implemented by former course members.

Some students experienced difficulty with the tutorial system in terms of retaining the advice given in the classroom or in tutorial time, particularly regarding the first academic assignment. They listened and forgot, or made notes and mislaid or misunderstood them, possibly due to the work stress they were under, and lack of previous academic experience. With small classes such as the ophthalmic course each student will be given as much time as they feel they need, but advice was often not followed, or
students were reluctant to show draft copies of developing assignments, which may have been due to poor self concept developed from previous educational experiences. They appeared to prefer the impersonal final marking system to formative tutorials. Some students, due to lack of previous academic experience found difficulty in structuring their assignments to provide balanced answers to all parts of the question.

Diagram 5: Concept map - summary of the contributors to the quality of academic assignments (discussed above)

Support for a change
A Classroom Discussion in 2,000 elicited some useful suggestions for change. Student M(J) felt that

some word guidelines for each section would be helpful.

Students also agreed that they wanted more ‘student friendly’ assignment documents, which they felt would help them

...to be sure you’re on the right track. I wrote too descriptively in the first assignment. Student S(M)
The above comments illustrate the importance of student consultation, in that they have identified two key areas which were immediately addressed in the first action step below.

**Action steps**

a) **New approach to foundation assignment**

The new ‘Foundation assignment booklet’ (See Appendix Six) attempts to overcome the above problems. People like myself who write such documentation sometimes fail to understand that each individual will interpret instructions according to their own viewpoint. Unfortunately course design procedures may fail to test out all documentation on students. Stringer 1996 (pp 154) said:

> People such as administrators, teachers, social workers and other practitioners, who control the rules and procedures by which their subordinates, students or clients are expected to work or live, fail to understand that each of the participants will understand those different ‘texts’ according to his or her own framework of understanding. Even where participants accept what is said or written, they may enact their interpretation of the text in ways that seem to conflict with the perspectives of the authors of the text.

Since 1997, students have had a ‘Student Managed Open Learning Day’ as part of their ‘taught’ hours which required them to study the readings specifically required for their academic assignment, prior to making a visit to a nursing area where clinical nursing practice has been expanded to meet patient needs. Their first essay is based on the readings and visit. For the 2000-2001 course this documentation has been re-written with specific questions to help students begin to analyze the factors involved in such a nursing development. The weighting given to the two areas within the
assignment which used to be given as verbal advice is clearly printed.

Evaluation

Prior to issuing the essay documentation to the research participants for comment I consulted a university colleague and a former lecturer practitioner who is now a consultant nurse - see Appendix 7, Consultation with colleagues. They were enthusiastic about the changes, which they felt made my expectations clear, encouraged deep learning and structured analysis, and particularly commended the use of colour on the pages which they said made the most important areas stand out.

1998-9 and 1999-2000 students and their managers were asked to 'make comments' on the previous and new student managed open learning day/ and assignment documentation.

Manager M.: The new documentation is as clear as day September 2000 Melchester

The 2000-01 students used the documentation for the first time and commented:

Helpful to have the assignment broken down into pointers Student S(SW)
I understood clearly what was needed Student S(LP)

Regarding linking the essay to the day in practice they said:
I looked more intensively at nurse practitioners while working – seeing more what they did 'above' the call of nursing Student S(SW)

Hands on experience worked well and helped me to understand my subject Student S(L)
It is clear from the above that the students were now seeing their academic essay from the point of view of ophthalmic nursing practice, and beginning that intricate interweaving of thinking identified by Rogoff (1984). From the remarks recorded above it is possible that the essay may have been perceived as being 'more ophthalmic.' No large quotations were made from medical textbooks by the 2000-2001 class, but average marks remained largely unchanged for the 2000-2001 cohort due to difficulties with the academic skills of critical analysis.

b) Ensure that students have their assignments returned within three weeks, and that they are given clearly typed advice on areas where they have done well, and areas for future improvement.

Evaluation
All students during 1999-2000 had their work returned within three weeks. This involved the development of excellent relationships with second markers. I have been a slow marker in the past, but have gained extra experience teaching and marking for other, larger courses. My enthusiasm for marking has increased as I now clearly see it as part of the teaching/learning process for students, and I am working on the skills of providing academic guidance to coach better levels of critical analysis in my students.

The action research format has proved helpful for facilitating discussions with the Programme Development team and the students. It is not always possible to make adjustments in line with other people's expectations, for example marking, the criteria for which are laid down by Sandbourne IHCS, but students and mentors are all given copies of the detailed marking criteria used for both academic and clinical practice assignments, so that they
may better understand what is required in terms of student performance, and where marks have been gained or lost. I have discussed how academic standards have risen since some of the managers took their first degrees. This is partly due to the presence of more graduate nurses within the nursing profession, raising standards and expanding their roles and responsibilities and the levels of education being obtained by nurse teachers themselves.

My first marking rarely results in a wide disagreement with the second marker or the external examiner. Most students are studying for the first time at university, and need to understand that university marks are commensurate with an honours weighting, and that what might appear to be a 'low' mark in a university setting would be the equivalent of a high mark within a school setting. The external examiner has commented on every report that the marking and feedback is good. An example comment reads

'As usual the feedback is excellent for the students. , very comprehensive and constructive. It gives them an ideal notion of the way forward.'

Student feedback (1999-2000) included the following comments:

*Its good to have them returned to you promptly so that you can correct yourself before the next one.*

*Its nice to hear what I've been doing well so that I can repeat it.*

The above demonstrates the clear importance of prompt, helpful feedback, but a poorer performance in terms of speedy return of student work during 2000-2001 has resulted from a change in the administrative staff which will need to be tackled with another action cycle during 2002-3.
c) Share the Examiner's Report with individual students and the Course Development Team

It has only been in the last three years that the ophthalmic course has benefited from the advice of an interested external examiner. I have moved from referring to the examiner's reports in Programme Development Team meetings in general terms such as 'the marking was deemed accurate and fair' to letting the team read the whole report, and the students read the parts that concern them. Since this time there have been no further references to my 'hard marking', but minds have been better concentrated on the difficulties of the course and how to overcome them. Due to administrative difficulties in the university during 2000-01 and the illness of the External Examiner, to date there has been no feedback on the standards of work or the marking.

d) Check the academic assignments for other, similar post registration courses within IHCS and other universities offering ophthalmic courses.

Evaluation

The assignments from other nursing courses at IHCS demonstrated that integration of information from a wide number of sources is necessary in order to write a nursing assignment at academic level 2. I checked ophthalmic assignments from other universities which all contained elements from other disciplines in much the same balance as the Sandbourne ophthalmic assignments. One of the difficulties faced by nursing as a 'new' academic discipline is that in the past it was closely controlled by medicine, many lectures were given by doctors and examination papers along narrow disease specific lines were set by doctors. This emphasis on the study of disease remains strongly within the psyche of some nurses and is thought to be a more important area of knowledge.
as it belongs to the patriarchal medical profession. I feel that this view of knowledge is another contributor to the 'more ophthalmic' viewpoint expressed in the student interviews.

Three of the ophthalmic academic assignments remained unchanged during the period of course modification. The above investigation into assignments was instituted following the 'more ophthalmic' comments and has served two purposes. I was morally correct to question the nature of the assignments following comments made by both students and course team. As a group we now know that our assignments are within the range of what would be expected from a specialist nursing course at academic level two.

It appears that the basic difficulty with the academic assignments is the problem of practice and theory being viewed separately and valued differently by nurses. Clearly there are cognitive difficulties in relating theory to practice and practice to theory. However much teachers advocate the making of these links, the knowledge being transferred needs to make 'human sense' to the student. Landers (2000) specifically suggested that by participating in practice, the lecturer practitioner has the potential to provide learning opportunities for the kind of application, analysis and synthesis of information which gives students an understanding of what nursing is about. Greeno et al 1999 demonstrated that knowledge may be viewed as relating to community, and emphasised the active construction of knowledge by the individual, using the tools of language and different thought perspectives. The notion of this transfer - how knowledge gained in one situation might be applied in another is implicit in the 1999 Greeno et al work - showing the possibilities of language to communicate with significant others and the value of thought processes learned in the community, e.g. learning to think like a doctor or nurse. Again, it appears that the keys to bridging the gap between theory
and practice is the mentor, supported by the lecturer practitioner and the community of practice. The difficulty is that the persons who may represent the keys for the student may be unaware of their responsibilities.

**Action Research Cycle Four**

**Reduction of Visual Impairment Unit**

**The background**

The Visual Impairment units of the ophthalmic course have been evaluated by students at the end of their course as ‘average’ since it was first presented in 1997. Visual Impairment units gave 20 credits for theory and 10 for practice. The other units had 10 credits for theory and 10 credits for practice prior to our current changes. The decision to make the Visual Impairment Units worth 30 credits was taken by the Course team in 1997 on the recommendation of senior university colleagues.

**Teaching difficulties**

Providing the equivalent of sixty hours of teaching on the ‘Care of the Person with a Visual Impairment’ proved problematic due to my personal feeling that much of this learning should be experiential. I addressed this difficulty by developing a ‘Distributed Learning’ folder, issued to each student, containing copies of some of the best available literature, together with ‘menus for visits’ from which the student would choose four, each of which was related to a section of the literature and there was a series of questions to promote deeper thought. The unit had the advantage of flexibility. Students come from three counties, and the ‘Distributed Learning’ folder allowed them to study at home and make visits to local facilities that were relevant to their client groups.
Students' difficulties managing their time

It became clear in 1997-8 that not all students were using their allocated study days for Visual Impairment, but were working at home on their academic assignments, or using the time for family commitments. They complained that they had not been given enough time for studying the Distributed Learning folder. This was highlighted as a problem at the 1998 Course Team meeting, when it was decided to give students, mentors and managers diaries showing how students were expected to spend their time.

Flexibility appreciated

The 1998-9 Students' course evaluations showed how much they liked the folder, and how helpful it was towards their academic essay. Student S(P), Representative to the Course Management Committee for the 1998-9 course said of the diary:

It was helpful. You knew you had a day for this and a day for that. You knew you had to fit them in, but you didn't work exactly as planned.

You used the little book for guidance.

Manager M. said of the diary that if she knew the student did not have to attend the university, she could negotiate between the student's needs and the needs of the department regarding which day she allocated for study.

Possibility of change raised

The relevance of Visual Impairment to nursing was questioned as a neighbouring university only award five credits to the subject. The possibility of reducing the credits for this part of the course next time it was re-written was mentioned by a manager during the 1999 Course Team Meeting, but not discussed at length. In February 2000 the subject of reducing the number of credits awarded to the Visual Impairment Unit was re-opened, following analysis of the research participants' interviews. This was based on
the comments made by Students S(J) and S(M) and Mentor S(M), who all emphasized the importance of 'A sound foundation' and 'Essential knowledge'. It was suggested that we reduce the Distributed Learning/visits associated with Visual Impairment, and use the time 'saved' for student clinical practice competencies development which would again contribute to the students' desire for a 'more ophthalmic' course and give them more time to spend working with their mentors. This would result in reducing the Visual Impairment unit to 20 credits total (theory and practice) to give greater value within the course to clinical practice rather than studying how people with a visual impairment manage in the community. This suggestion was agreed by the student co-researchers.

The 1998-9 Course Report stated the team's intention to seek to reduce the Visual Impairment Unit when the course was next re-validated. Manager S. stated:

It always seemed a bit crazy to me that Visual Impairment, which is just one aspect of looking after an ophthalmic patient, was weighted more heavily than the rest of it.

Course Development Team Meeting October 2000

Student Representative S(M) felt the same:

Regarding the points, I don't think anyone is particularly bothered about that, because at the end of the day, you've got to do the Integration Unit anyway (in order to obtain a Diploma)

February 2000 Course Team meeting

I confess that I was rather glad that they expressed these views, since I personally had always felt that there was too much credit allocated to this section of the course, and following my exploration of the literature was heartily in favour of Mentor S's
suggestion for more time to be used on building practice competencies. Following discussion at the October 2000 Programme Development Team meeting it was agreed that the theoretical unit would be reduced to 10 credits and integrated with the 10 credit practice unit into a new 20 credit unit of theory and practice.

The Students' Views

The 1999-2000 students felt that the 30 credit Visual Impairment Unit had been helpful and stated:

'It's very useful. It wasn't so much at the beginning of the course, but at this stage of the course. When we went to Blind Aid, you find out more as a single person. You fitted in better, talking to people and joining in.'

The visits were stated to have been a 'real eye opener'. Another student said:

'It was really, really interesting, then going back to clinic and meeting some of those people again. We hadn't realized how some of them have to live, and how important hope was to them.'

On the other hand two of the six students spoke of the time consuming nature of arranging the visits, and one admitted:

'I haven't done half of it.'
Diagram 6: Concept map - summary of factors associated with Visual Impairment Unit discussed above

**Action steps**

- Re-write the current 20 Credit Visual Impairment Theory unit and 10 credit Visual Impairment practice units into one 20 credit unit which contains both theory and practice.
- Re-write the present 20 credit assignment into a 10 credit assignment.
- Re-write the Distributed Learning Folder to reduce the number of student study hours and community visits.
- Submit proposal to the School Quality Committee - Changes now ratified.
Evaluation of the change

Example Student comments include:

*I have found this unit the most varied as it has covered much of what I work with now, and a lot of research into areas that I have not had much to do with yet.*

*There has been a LOT of reading (self discipline) required for this unit, but the handout with questions on the articles has been most useful and motivating.*

*There appeared to be more time within this unit for self exploration e.g., visit to Sandbourne Society for the Visually Impaired and 'hands on’ due to slightly less structured study days.*

From the student comments above, it did not appear that the quality of this unit had been seriously compromised by the reduction in academic credits for this unit, and students appeared to have enjoyed the learning experience. It did reduce a large academic assignment by 50%. The rationale for this change was to permit more supernumary time to be spent in clinical practice, building up skills acquisition and giving students more opportunities to work with their mentors and within the community of practice. This would demonstrate the high value placed on practice (McCormick 1999) and hopefully, facilitate the transfer of theoretical knowledge into practice.
**Action Research Cycle Five**

**Clinical Practice Study Day**

**Background**

The suggestion for a Clinical Practice Study Day, came from the student interviews where Student S(J) gave a long list of practical skills she felt all students should develop. Student S(M) spoke about the importance of what she called *'the basics'* and elucidated the difficulties of learning in practice. These comments raised for me initial questions which I jotted down for later reference:

*Do we need a practical day to help them learn faster in practice? eg. Schirmers Test, sac washouts, eversion of eyelids?*

In her interview Student M(J) spoke about her requirement for *'basic knowledge',* and the difficulties of her limited time in practice:

*The more understanding you have of the basics, you have a much better foundation to build on which ultimately makes you more experienced and more confident.*

The above comments were endorsed by Students C(L) and C(J), both of whom felt they needed more practical experience at basic procedures.

My interview with Mentor S(M) further convinced me of the useful possibilities of a Clinical Practice Study Day as she commented:

*I can only speak for my area. I suppose that's all you want really. I expect them to be able to achieve the basic history taking and this business with the slit lamp, that is going to be variable. But you really have, if you want them to have those skills, I don't know, to have a session with*
them when they come on the first day or something. Its a bit of a huge thing for them to try and achieve.

The student and mentor comments above were a little worrying. Within my personal experience, ophthalmic nursing skills have never been taught away from patients, and such a step could be viewed as increasing the theory-practice divide. However, I had long seen the possibility of using some of the simpler nursing procedures to enable students to connect their textbook knowledge to the structures of a real person’s eye, and the additional knowledge and confidence in handling the eye and the structures around it would give students a ‘flying start’ in practice.

The possibility of reducing the Student Managed Learning Days (two) in the Ophthalmic Foundation Course and substituting a ‘Clinical Skills Day’ was discussed at the February 2000 Course Management Meeting and the suggestion was adopted. Manager S. offered the facilities at Sandbourne Eye Unit as the most central location for all students.

**The Action Steps**

Make changes to the two student managed learning days associated with the Ophthalmic Foundation unit. The original two student managed days in Foundation Unit were used to promote independent learning at an early stage of the course, and to relieve some of the travelling to Sandbourne for those who lived a distance away. Discussion with the students (1999-2000) resulted in the agreement that the Health Education student managed day remained a highly important part of the course, but would be more beneficial studied in conjunction with the Accident and Emergency unit of the course. As Student M(J) said:
I think later on in the course. I think they (health promotion skills) relate well to A & E and the types of patients you get there and they blend in well with (ophthalmic) conditions and patients who don't comply well with their treatment either in A & E or clinic, no matter how many times you tell them.

Students also requested that the amount of work associated with the Health Promotion Study Day be reduced. Health Education was thus moved into the Accident and Emergency Unit, and a Clinical Practice Study Day planned for the 2000-2001 course.

Implementing the changes
The changes above made no fundamental alterations to the taught content of the course, it was therefore unnecessary to validate them.

Evaluation
Personal reflection persuaded me that inclusion of a practical day on the Ophthalmic Foundation unit of the course would fit with the taught components of the course, the major part of which is the anatomy and physiology of the eye, knowledge of which is essential for carrying out practical procedures and basic diagnostic tests safely. It would be a means of relating theory to practice and satisfying the 'more ophthalmic' leitmotiv by boosting the students' practice learning. Bearing in mind the comments by Mentor S above, it would also contribute to the productivity of the mentoring relationship.

It also occurred to me that most ophthalmic students were not in possession of personal copies of 'ophthalmic nursing procedures' which I benefited from as a student. Everyone learns differently, and not only might these be beneficial to some students, but the
broad principles described in the procedures are also explicitly related to referenced published ophthalmic research/knowledge, thus demonstrating the research basis of our practice.

In the past I may have been too concerned with providing academic knowledge at level 2, particularly in practice. From what the students say, they are having difficulty mastering the ‘basics’. The new clinical day might enable them to reach level 2 practice quicker. This approach would be advantageous to those with little ophthalmic practical experience, and would enhance the communication and teaching skills of those students who already possess some of this practice experience and would help their colleagues. An obvious difficulty would be if a student were absent on this day as it would be difficult to make up.
Diagram 7: Concept map summarizing difficulties with clinical practice basics discussed above

2000-2001 and 2002-3 Student cohort consultation following Clinical Practice Day

As for normal course evaluation, students were asked to identify the strengths of the session and to suggest areas for improvement. The comments were all positive, but both the 2001-2002 students who attended the Practical Day wanted more practice, and one added 'with supervision of tutor.' My own evaluation of the day noted that:

This has been a learning experience for me too. These days local ophthalmic nursing students usually enter their specialist nursing course with some years experience within the speciality. I was surprised to note their difficulties with fine handling skills -eg the Schirmer's papers.
Further observation has not clarified this (to me) surprising observation. Whilst the students in both cohorts had not had the opportunity to carry out the nursing procedures before, I was surprised that other aspects of their ophthalmic nursing work had not caused them to perfect fine handling skills. I was also excited to have discovered this dissonance between what I would have expected of them and my actual observations. As a teacher one seeks to understand the student's experience, and I had clearly failed understand students' difficulties with practical work in the past. Although they had worked in the speciality for a while, they were not getting sufficient experience with expert ophthalmic nursing tasks until they began the course. As registered nurses there is no professional reason why they should not have done so provided that they received expert tuition and supervision in practice. Clearly this has not been happening. The above emphasises the wisdom of re-adopting the Skills Workbook and linking it with the approved ophthalmic nursing procedures which have now been published for the ophthalmic course. The second Clinical Practice Study Day, held in 2002, generated a detailed evaluation which is included in Appendix Eight, supporting the comments made above with reference to the first Clinical Practice Study Day, but providing a greater breadth of confirmatory statements due to the size of the group. The 2000-2001 and 2002-3 groups stated that they would like another, similar day. I did ask an additional question: Did the day help you to connect/learn ophthalmic anatomy and physiology? Nine out of the ten students attending agreed that it had, but I regretted not providing a formally structured questionnaire as I felt in hindsight that an attitude scale and a more neutral approach to that particular question would have provided more accurate data. (See Appendix Eight)
The Clinical Practice Study Day was able to produce what Burton et al (1984 p139) referred to as an increasingly complex microworld (ICM) where the equipment used, the physical setting for the skill and task specifications allow the student to focus on the factors that are fundamental to learning the skill, rather than factors that are not immediately relevant—other patients and relatives. Such learning environments, (Burton et al p141) provide stepping stones or intermediate levels of expertise to provide challenging but attainable goals. The experiences of the first Clinical Practice Study Day also highlighted the importance of Rogoff's (1990 p8) views that the active use of social guidance is essential. The importance of tacit and routine arrangements for students' learning needs to be stressed, and their participation in skilled cultural activities. Rogoff (1990) also suggested the use of Vygotsky's (1978) Zone of Proximal Development (ZPD) where learners participate in activities slightly beyond their competence with the assistance of others and 'scaffolding' of activities where a more competent person gives help but as the student learns, the scaffolding diminishes and the role of teacher and learner becomes increasingly equal. (However, according to Gruber 1995 et al, the research data regarding the efficiency of guided participation are rather inconsistent, depending on the readiness of the expert partner to take their leading role and the motivation of both partners involved in the participation.)

Conclusions
The 'more ophthalmic leitmotiv'
Within this study I became aware that action research is a developmental process for the individuals concerned as deeper understanding of the issues is sought. The 'more ophthalmic' leitmotiv may be seen to run through the research cycles, in terms of increasing student involvement in clinical practice through the portfolio development. With the 'new' portfolio
students are developing greater practice competence than ever before particularly with skills that are notoriously difficult to master such as Goldman applanation tonometry. Their achievements are thus 'more ophthalmic' in terms of clinical practice, which is emphasised through each ensuing cycle.

Instigating the Clinical Practice Day made me realize that the 'more ophthalmic' debate was not purely referring to the use of more medical knowledge in the curriculum, but also nursing practice skills. The students were finding it difficult to achieve these, and presented a list of areas for initial help. The reduction of the Visual Impairment unit was another step towards helping students to achieve these and achieving a 'more ophthalmic' course.

Nursing is developing its own theories and knowledge base, but given the amount of work that nurses are doing with doctors, the students are right to question what knowledge is appropriate for their use in practice. However since most nurses see their profession and their broad function in terms of patient care to be distinct from that of doctors, the debate is likely to continue.

The research questions addressed

How may current educational theories be used to relate nursing theory and practice?

The literature reviewed in Chapter Two has proved useful in providing focus for the action research cycles in terms of placing a greater emphasis on the situational context of much learning which is acquired. An initial example of this would be the institution of a Clinical Practice Study Day, but other examples follow with the reduction of the Visual Impairment Unit to provide more 'time' for practice, and the tying together of theory and practice assignments so that theory may influence practice and practice may interrogate theory. For the 2003 course tying the
assignments together has resulted in students choosing to study elements of theory and practice which complement one another and has, for the first time resulted in two students achieving marks for the Ophthalmic Foundations assignment of 70% and above. Knowledge gained in the university classroom used to be associated with academic assignments, and until the course changes in 2000, students appeared to be placing a lesser value on practice. With the tying of theory to practice from 2000 onwards, it is interesting to note that to date no student has failed a theory-practice assignment. Both sections have been passed outright. The educational theory studied has made me, as a teacher, more aware of the clinical learning opportunities which are likely to be helpful in relating theory and practice, for example encouraging students who have chosen to study glaucoma for their theory assignments to participate in Nurse-led Glaucoma Clinics and learn the skill of Goldman applanation tonometry for the practice part of the assignment. McCormick’s (1999 p132) advice to value practical knowledge more highly and teach it in its own right has been implemented through the use of a Skills Workbook, the development of an ophthalmic Nursing Procedures Booklet, the Clinical Practice Study Day and more thoughtful use of the Clinical Practice Portfolio. Lave and Wenger (1991) and Greeno et al (1999) have been heeded and a high value is placed on the practice setting and participation in practice in terms of skills development. Rogoff’s (1990) suggestion of using Vygotsky’s notion of scaffolding practical learning is being accomplished through an increased emphasis on the role of mentor in clinical practice by both the students and Lecturer practitioner.
How might educational policy at national level be related to a specialist nursing curriculum?

National policies
‘Fitness for Practice’ (UKCC 1999) Chapter 5, stated the importance of higher education providers working in partnership with NHS staff to enhance educational provision. The actively involved Course Development Team and the action research cycles described above demonstrate explicitly the possibilities of such a partnership. The ‘Fitness for Practice’ (UKCC 1999) document stipulates that practice staff should be briefed about educational matters, but in the case of the ophthalmic course, practice staff were involved from the beginning in the course development, through Course Development Team meetings and through their relationship with me as lecturer practitioner they are able to question and keep abreast of wider policy matters.

‘Fitness for Practice’ (UKCC 1999) 5.9 suggests that learning objectives set by university lecturers do not always translate into realistic learning opportunities for students in practice. The long discussion on difficulties with the Clinical Practice Portfolio above, demonstrates that even when clinical staff are fully involved, problems may develop in practice. However, the advantage of working co-operatively means that all interested parties can contribute their expertise to the development of practice learning assignments. When problems arise they are shared, which avoids a ‘blame’ culture between higher education and practice. Co-operation is productive. As a result of the interview with Mentor S I have accepted the responsibility to teach skills like Schirmer’s Test and eyelid eversion, within a Clinical Practice Study Day, and it is clearly necessary ‘Fitness for Practice’ (UKCC 1999) (5.9) to define responsibilities to support learning in practice. The provision of the Clinical Practice Study Day fulfils ‘Fitness for Practice’ (UKCC 1999) 5.27 which requires that students should be
equipped with basic knowledge and skills to enable them to function safely and effectively, and that these skills should be taught early in the programme. This is demonstrated in detail in Appendix Eight, the Practical Skills Study Day Evaluation.

Making a Difference (DoH 1999) 2.26 suggested that in recent years students had not been equipped at the point of qualification with the full range of skills that they needed, and suggested a stronger practical orientation to pre-registration education. Although the Making a Difference (DoH 1999) document was written for pre-registration students, the above five action research cycles demonstrate that the Programme Development Team is taking this responsibility seriously by working to improve practice outcomes. Paragraph 4.3 (DoH 1999) reiterates the requirement for educational providers and clinical staff to work closely to develop nurses with the full range of skills required for effective practice, suggesting the need to increase the level of practical skills within training programmes. This suggests that Glasper (1999) was correct, nursing is becoming increasingly complex. The Skills Workbook which was particularly commended by Mentor S. for helping ‘quiet’ students has been re-written and re-issued (2003), but version two will not be evaluated until the end of the 2003-4 course. The Ophthalmic Nursing Procedures booklets which I suggested at the end of Action Research Cycle Five might be useful, have been written, and were issued to the 2003 course.

They are fully evaluated in Appendix Eight, and were received very enthusiastically, and a typical example comment reads thus:

Well presented with easy to follow instructions.
Useful to refer back to.
Interesting to learn about the ones (nursing procedures) we’ll hardly see, but need to know
demonstrating the utility, for the novice, of giving written instructions to re-enforce clinical practice.

**What influence has the lecturer practitioner in relating theory to practice?**

Lathlean’s (1994) view of the role of the lecturer practitioner as being an attempt to combine the sapiential with positional and executive authority is reasonable as the above action research cycles demonstrate in practice. Subject knowledge, in this case ophthalmic nursing and educational knowledge has been combined with my position in Sandbourne Eye Unit and Sandbourne University to make the meaningful changes described in the action research cycles above, following collegial discussions. The role of lecturer practitioner places that value on practical knowledge emphasised by McCormick (1999), which is endorsed by the fact that as a lecturer practitioner I continue to work with patients in clinical settings as well as teaching in an academic setting.

Landers (2000) suggested that by participating in practice, the lecturer practitioner has the potential to provide learning opportunities for the kind of application, analysis and synthesis of information which gives students an understanding of what nursing is about. One of the difficulties of my position is the number of different hospital trusts for which my students work, the difficulty of spending time in them all, and the difficulty of working clinically in trusts where I am not employed, which does affect my academic and clinical credibility in these settings.

Within my employing trust, I have the ability to enable access for students (and visiting students) to specialised clinical areas for specific learning experiences (often related to theory), can make clinical equipment and disposable materials available for students.
to practice with (for example the Clinical Practice Study Day), can persuade clinical colleagues to release students for practice learning experiences etc. I am present to work clinically for part of every week, to question practices, advance the application of theory to practice and participate with staff in small scale researches and audits of clinical practice.

In order to fulfill Lathlean's (1997) vision of the lecturer practitioner as the key person in facilitating theory into practice, I have to develop the learning environment in terms of availability of books, journals, computer and internet access and CD ROM ophthalmic learning packages. Earnshaw (1995) suggested that the student is the key to unlocking the mentor’s skills. I believe the lecturer practitioner is also a key to unlocking the mentor’s potential by supporting the mentor’s work. Andrews and Wallis (1999) suggested that nurse teachers, in addition to monitoring the quality of their courses have an ongoing responsibility for mentoring practitioners undertaking a mentoring role. This is clearly addressed in pre-registration courses by means of mentor study days and updates but is less clear in post registration education.

Spouse (1998, 2001) gave good and bad examples of mentoring, which demonstrated the importance of the mentor’s communication with the student. I regard myself as ‘mentor to the mentors’ and try to communicate with mentors on educational matters clearly and honestly, acting as a role model. Spouse (2001) noted within her study that clarity and candour were two of the essential characteristics of mentors. I try to work as a role model within the community of practice at Sandbourne Eye Unit, and from this point of view, am highly accessible, and in a structural and educational position to assist in the resolution of problems. Camiah’s (1997) study indicated that many mentors rarely saw any staff from the university.
In practical terms the position of the lecturer practitioner has been used throughout this study to demonstrate how theory and practice may be melded together through the use of this role. The Clinical Practice Portfolio, which had been criticised for a little while, (Action Research Cycle One) and was failing to produce more practical nurses, needed a change. The role of the lecturer practitioner is credible with both clinical and university colleagues, and changes were agreed and the revised documentation was re-validated by the university. If the lecturer practitioner role had not existed, change may not have taken place until the entire course was re-validated in 2003. However, work with the revised Clinical Practice Portfolio (Action Research Cycle Two) has demonstrated that the role of the lecturer practitioner extends beyond changing paperwork. Students are now writing individual ‘action plans’ to meet their practical objectives, and to relate theory to practice, which has resulted in increased time having to be spent by mentors and the lecturer practitioner in helping the student to set realistic objectives which will result in clear practice learning achievements, and related academic studies, thus using the practical and academic knowledge bases of both the lecturer practitioner and the mentor.

With respect to Action Research Cycle Three, again it would have been more difficult for a person with a purely clinical or academic base to bring together the Student Managed Learning Day and the first assignment as illustrated in Appendix Six. Within this action research cycle, which examined the quality of academic assignments, I noted a poorer performance in terms of the return by the university of marked student work, which I have been able to tackle in 2002-3 due to my ‘official’ position within the university.
The reduction in size of the Visual Impairment Unit of the ophthalmic course, which is described in Action Research cycle Four would not have been possible without the academic knowledge and university position of a lecturer practitioner. Arguably this work could have been carried out by a university lecturer, but one could question whether this work might have been saved for the quinquennial course review. Arguably the 'specialist' lecturer practitioner has a strong feeling for the clinical speciality in which they are actively involved, is involved on a day to day basis with patients, students, mentors and clinical managers and is more likely to work on changes which are perceived to benefit clinical nursing.

The Clinical Practice Study Day, described in Action Research Cycle Five was only made possible through my close working relationship with Manager S., who agreed to provide the learning environment and the disposable equipment necessary for this learning to take place. Again, this could have been arranged by a university lecturer, but would have raised questions of the university having to pay for what the hospital was providing, or the use of a Clinical Skills Laboratory within the university, which lacked the specialized equipment of the clinical setting. Given that the clinical setting in itself provides learning as practical questions are likely to be asked and further demonstration or reference to equipment is likely to be made, the lecturer practitioner, in a familiar clinical setting, may be the ideal teacher. As the lecturer practitioner is also an academic, the valuing of clinical practice and the willingness to work with patients in practice indicates the worth of nurses' work and the importance of the theory practice relationship.
How might the role of the mentor be used to coach higher levels of nursing practice?

The value of mentors and their role as the bridge between theory and practice is a significant strand running through the action research cycles. The mentor is the person who coaches clinical practice performance but prior to the action research study students often chose a mentor with academic credentials to coach their written work. Mentor S. was chosen by Manager S. to work with all visiting students to the Sandbourne Ophthalmic Casualty Department as she is highly regarded by her colleagues within the department for her practical expertise, knowledge of ophthalmic theory, communication skills and patience. Notably since the refocusing of the Clinical Practice Portfolio one student chose her as a 'permanent' mentor throughout the 2001-2 course, and the second student chose a nurse of similar calibre. Tying theory and practice together in course assignments has demonstrated the importance of working with clinically expert mentors during the periods of supernumary practice.

In the interview data, Mentor S. demonstrated her ability to assess students' levels of practice attainments and instinctively use an approach to teaching which is similar to Vygotsky's (1981) ZPD. It is also evident that as Lave (1997 p19) suggested, Mentor S's students learn to think, argue, act and interact knowledgeably when she said

*I find that (a keen student) so much more stimulating and interesting*

Within the field of clinical learning, Rogoff's (1990 p8) view of intersubjectivity, is being practised, to the extent that Mentor S. made a viable suggestion to stimulate the mentoring relationship by the use of the 'Skills Workbook'.

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The skills within the Skills Workbook are taught by and assessed by the mentors, thus providing a concrete record of the student’s learning in practice, and are now handed in for inspection by the lecturer practitioner at the end of the course. Action plans for the Clinical Practice section of the Portfolio (see Action Research Cycles One and Two) have to be agreed with the student by the mentor and lecturer practitioner, so that a range of suitable practice learning is engaged upon throughout the course. (See page 112 for students’ expectations regarding mentor guidance). This is to ensure that students do not concentrate their practice learning only on areas which they like or find easy. When evidence for the action plan has been completed by the student, it must be verified by the mentor’s signature prior to submission to the university. The mentor is thus fully aware of exactly what the student is aiming for in terms of clinical practice through each section of the course, and has already agreed the criteria for their assessment with the student. Their signature indicates their satisfaction with the student’s attainment. See Action Research Cycle One, Phase Three, page 110-111 for more details of this process.

Evaluation of the Clinical Practice Portfolio in Action Research Cycle One suggested that all students adopted closer relationships with their mentors than had been noted in the past, getting them to ‘coach’ practice. This is a hopeful indication for the curriculum improvement. On page 111, I suggest that ‘By encouraging students to choose challenging practice goals, students would be more likely to engage as far as possible with the ‘community of practice’ within the clinical setting.’ Students are now routinely expecting to learn the advanced skills of Goldman applanation tonometry and biometry and are using their Clinical Skills Workbooks, and so mentorship and the use of associate mentors is essential. As stated above, this has accelerated learning as students
are being encouraged to seek the links between theory and practice, and practice outcomes achieved are demonstrably higher in terms of the marks attained for clinical practice than before the changes to the Clinical Practice Portfolio. As may be seen in the evaluation on page 117, some of the fourteen students on the Ophthalmic Foundations course in 2002-3 have achieved significant specialized skills by the end of the unit, which previously would have taken them until the end of the course to achieve, demonstrating the learning power of a good student/mentor pairing.

Chapter Seven returns to the aims of the study and offers an in depth discussion of reflexivity, a critical factor in terms of the validity of the research. A critical approach to the curriculum should become a habit of mind, and so changes in my personal practice as a result of the study are briefly enumerated and further areas for study are indicated.
Chapter Seven
CONCLUSIONS AND IMPLICATIONS

Introduction
The findings from the research questions have already been presented in Chapters Five and Six, and so, within the first section of this chapter it is proposed to briefly review the three aims of the study:

- To explore the theory-practice gap in the ophthalmic nursing course
- To discover how the ophthalmic nursing curriculum might be used to help students bring nursing theory and practice together in clinical practice
- To promote the development of higher levels of clinical practice amongst post registration ophthalmic student nurses

Exploration of the theory-practice gap within the ophthalmic course
The first aim was met through the exploratory interviews and the study of course documentation, which revealed the students' perceived difficulties with completing the practical aspects of their education at the same time as the theory. Given the time taken to obtain, type and process all the tape recorded interview data, classroom discussions and meetings, and that I was delayed by deciding on a method to process the data which would not detract from the action research process, I had misgivings about adopting such a cumbersome approach to explore the gap (see Chapter 5). At the end of the study, I am particularly glad that I persisted with this approach. The questions asked of the participants were broad, and no attempt was made to lead them in any particular directions, but the data produced an important evidential base for the action research cycles.
Rafferty et al (1996) offered their views that theory and practice were in dynamic tension which was essential for changes in clinical practice to occur. They suggested (p 689) 'lose the tension and the impetus to learn is lost.' Indeed, it is in the study of theory, or an immersion in the problems of practice that dissonance between the two forms of knowledge may be noted by the student, and further study or practice may be entered into in order to regain mental equilibrium. This very tension is likely to stimulate higher studies and research projects, and might be likened to the tiny grain of sand that stimulates the oyster, over a period of time, to produce the pearl. This analogy demonstrates the folly of studying one without the other – as with the nurses who were previously only entered for the theory units of the original ophthalmic course who were going to miss the immediate stimulation of exposure to practice and the opportunity of working with a mentor within a community of practice.

**How might the ophthalmic nursing curriculum might be used to help students bring nursing theory and practice together in clinical practice?**

This aim was met by developing three action research cycles which were designed to facilitate the bringing of theory and practice together in the curriculum. This was done by developing a Clinical Practice Portfolio, the sections of which could be completed at the same time as the academic work. Theory and practice assignments were tied together so that practice could not be studied separately from theory, and no academic credit would be awarded until both sections of the assignment were complete. The Foundation assignment was re-presented in 2000 to relate it more clearly to nursing practice and to promote theory based reflection on practice by offering a list of suitable readings and questions. Evaluation of these three changes is possible only to a limited extent. All the curriculum changes required as a result of
the action research cycles were ratified by the School Quality Committee in 2000, a test of quality in itself, the only amendment required being the submission of a grading plan for the Portfolio. The 2000-2001 course had only three applicants, one left her employment, the second deferred completion and the third completed, thus no early data was generated regarding the usefulness of the changes. The 2001-2 course did not run due to lack of applicants. The Ophthalmic Foundation Unit of the 2002-3 course was attended by 14 students, all of whom submitted and passed the 'new' combined theory and practice assignment and demonstrated the ability to make strong theory-practice links.

Evaluation of the Clinical Practice Study Day is complete. The results are presented in Appendix Eight, and demonstrate its strengths and weaknesses. On the whole, the respondents felt that it helped them to connect theory (anatomy and physiology) with clinical practice. More days of a similar nature were requested by the students.

The role of the mentor

Cobb (1994) quoted Saxe (1991) regarding the Oksapmin's people's computational strategies. The Oksapmin do not at the initial level see the point of their own counting. They have not reified their counting acts. Perhaps nursing procedures are like this initially, being seen on their own rather than as part of a greater whole. For example, a student might see inserting a bandage contact lens as a task, but the mentor would view it as part of the greater whole of caring for a fragile elderly person with corneal disease, reified knowledge, and would ideally question the student to produce some feeling of dissonance in the student's assumptions which might lead to further learning. In a similar way to the Oksapmin people, who do not initially see the point of their own counting, it is clear (Spouse 1998, 2001) that many mentors do
not perceive the significance of their role and fail to give students appropriate support.

Mentorship proved to be such a significant role in terms of practice learning, that as the study progressed and was written up, I could see that it looked as if only one mentor had been interviewed, Mentor S, when in fact it was not always obvious to the reader that Manager M and Manager C also acted as mentors. Shortage of time had convinced me that the mentor role would be well represented by these three, but examination of the data shows that as members of the Programme Development Team, the managers generally spoke from their managerial roles, rather than their mentoring roles. Mentor S was a considered choice for interview as she was the only mentor who related to all the students on the course, as Sandbourne Hospital has the only dedicated ophthalmic accident and emergency department. (Melchester and Casterbridge can both offer a slightly different approach to this work, but there is a smaller role for nurses.) However, as I learned so much from Mentor S, it is clear that much potential learning has been missed from the Casterbridge and Melchester perspectives.

The role of the lecturer practitioner
Sandbourne University IHCS has chosen to employ an increasing number of lecturer practitioners at my level of seniority to address the closure of the theory-practice gap. This is because we hold both academic and clinical credibility with nurse manager colleagues, and a high level of understanding and co-operation is possible in vital areas such as curriculum and student assessment discussions as, in a sense, the lecturer practitioner speaks both languages. My role in helping to bring theory and practice together is evidenced by the action research cycles. A reading of the research process will demonstrate how hard all parties have to work to achieve this
level of co-operation. My 'voice' provides the narrative, and the implementation of the changes was my responsibility.

A difficulty with evaluating the role of lecturer practitioner is that as identified by Lathlean (1995, 1997), there is no standard pattern for the role responsibilities even within IHCS. The standard Sandbourne University Course Definition Document description of the role of a lecturer practitioner within a post registration nursing course makes no mention of a clinical teaching role, and as a result there is no standard interpretation of the job. Less qualified and experienced nurses are employed on lower salary grades as lecturer practitioners and given one day a week at the university’s expense to work with students in clinical practice and are not carrying course management responsibilities.

Promoting higher levels of professional practice
The action researchers worked to promote the third aim which was met by reducing the number of credits awarded to the Visual Impairment unit to enable more time to be spent in clinical practice. A Clinical Practice Study Day was developed to enable students to relate the theoretical knowledge of anatomy and physiology to actually working with peoples’ eyes early on in the course, thus also relating to the second research aim.

The above is only a brief summary of the achievements of the study, and the areas which could have been improved upon. The section which follows will discuss the validity and reliability of the action research approach by addressing reflexivity within the study.

Reflexivity in action research
Maguire (2001 p65) cautioned researchers to
‘avoid producing more alienated knowledge which gives no trace of the conditions of its production or the social conditions from which it arose.’

The conditions in which ‘knowledge’ and social ‘understandings’ are arrived at in action research are crucial to its validity. Silverman (1997 p29) suggested that all constructions of social reality are potentially open to being contested and changed, pointing to the instability of meaning in everyday life, due to the practical, moral and political implications that different social realities may have for individuals and groups. The section which follows is an attempt to examine the truthfulness and reliability of the action research which has been described. In order to provide some structure for the discussion of reflexivity of this research, I will connect it to the development of personal knowledge (my own), relate the research to the participants and discuss the ability of the study to critique social/political structures.

**Personal knowledge**

Reflexivity is about the self. Skeggs (2002 p350) stated that it is through the telling of the self that the social processes (of positioning, of value, of moral attribution) are put into effect. The action research study of the theory-practice gap in an ophthalmic course was started in response to the kind of pressures identified by Waterman et al (1995) who described the conflict between the altruistic reasons for engaging in action research (improvement of educational and nursing practices, participation and partnership) and the need for the writer to earn academic recognition for her profession following nursing’s move into higher education. Smith et al (2000) additionally discussed the pressure to publish in peer reviewed journals and the need for university staff to satisfy the requirements of the research assessment exercise. Whilst one might condemn oneself for not having purely altruistic motives, Reason (1998 p 283) cautioned that
Many Participative Action Research (PAR) projects would not occur without the initiative of someone with the time, initiative, skill and commitment who will almost inevitably be a member of a privileged and educated group.

He went on to caution that

Authoritarian attitudes (even unconscious) may lead to actions that reproduce current domination patterns.

The following section will discuss, with reference to the action research cycles, how far the research was 'front led.'

I was disappointed not to be able to conduct a PAR, but individuals have their own agendas - for the students it was success in their studies, for the managers and Clinical Assessors it was getting the NHS work done, whilst for myself the interest was in learning to be a better teacher, finding out about action research and obtaining a higher qualification. I felt that the research participants were indulgent towards me, as those were not their objectives. Sieber (1992 p96) suggested that benefits are owed, (to the participants) should be easy to bring about and will benefit future research.

Arguably, at the same time as meeting my own objectives, I was working for the benefit of the research participants and the ophthalmic departments in which they work and trying to improve the knowledge base of my profession.

Lather (1991 p 150) challenged her readers to develop the kind of self reflectivity that would enable them to look closely at their own practices in terms of how they contributed to dominance in spite of their liberatory intentions. Action Research Cycle One gave me cause for concern in this respect:
In spite of the misgivings expressed above (by the managers), I went ahead with Phase Three, adapting the 'Alternative' Clinical Practice Portfolio, based on the expressed feelings of the previous students, who wanted to set their own goals, the fact that I hold overall responsibility for the quality of the course and because I felt students would benefit from further work on my part to bring theory and practice more closely together.

This question of potential bias of the researcher towards their own objectives was addressed by Frazer (1997) who suggested that her practitioner research on a midwifery education programme might have been biased towards the programme for which she was responsible, but she counter suggested that as a practicing midwife she had a responsibility that the needs of childbearing women were met. She could also have been tempted to focus her course management team's attention on aspects of the course she supported whilst ignoring the problematic areas, or even 'not to tell' if the standards of the institute she worked for seemed inadequate. However Kelly and Simpson (2001 p657) suggested that the researcher who is also an 'insider' may have an added incentive to produce conclusions that are more rigorous, balanced and grounded within the shared perceptions of those who make up the setting in question.

I was aware of how authoritative I was being over the 'alternative' Portfolio, but I tried to mitigate this. The action research cycle records that

The 'new' documentation was sent out to the Course Team, Mentor Representative and Student Representative prior to the next Team meeting.
Managers took the documentation back to their clinical practice areas for further evaluation. The proposed 'alternative' Portfolio was discussed at length with the 1999-2000 student research participants.

Although subsequent discussions revealed enthusiasm about the adoption of the 'alternative' Clinical Practice Portfolio, I remained concerned about democracy. The action research cycle records:

I was concerned in case I had been leading the Programme Development Team in my own chosen direction, and wanted to make sure that they really had adequate time to consider these large changes.

However, here again, self interest was confessed— I did not want to enter into a course re-validation unless there was sufficient support for the changes.

Relating to the participants
Rowan (2001 p121) advised that the researcher should treat people as if they were human. I cannot state with any certainty what the objectives of the participants were, other than that they were unselfish. They were helping to improve the ophthalmic course for future students and they were helping me. Ahar and Buck (2000 p328) stated that gaining the perspective of our students is the foundation of democratic and collaborative relationships with those whose education we shape, and a means of self awareness. Whilst the above statements by Rowan (2001) and Ahar and Buck (2000) may appear to be obvious, the responsibility on the action researcher is great in terms of the responsibility of not exploiting participants and in being committed to telling the truth from the participants' points of view, as the actual validity of action research.
depends on representing the views of the participants and the action research cycles accurately. A reflexive example is presented below.

'More ophthalmic' was an area that was difficult to deal with. 

Instigating the Clinical Practice Day made me realize that the 'more ophthalmic' debate was not purely referring to the use of more medical knowledge in the curriculum, but also nursing practice skills.

The conclusion that I drew here appears to be more of a leap of faith than a matter of fact, and would have merited more exploration. I could, in this instance, reassure and remind my reader that the whole action research document had been subjected to respondent validation, but Silverman (1993 p157) criticizes the 'respondent validation' suggested by Hammersley (1990) on the following grounds:

- Respondents may be unable to follow a report written for a sociological audience and their level of interest in the report may be variable
- Feedback cannot be taken as direct validation or refutation of findings, but should be treated as another source of data and insight.

In order to counter Silverman's (1993) first point, in the early stages of the research, as the action research cycles were being written up, only this data was given to the research participants to read in order that they wouldn't become 'bored' with research jargon from the early stages of the report, and lose concentration on their own contributions. They were asked explicitly whether their views had been accurately represented and whether there was anything they would like removed from or added to the text. The full text was put on a circulation list to all the research participants after its publication as a 'first draft' of the whole...
research and I have consulted with all the participants and made changes and additions to the text. Comments were given in writing with the exception of the Melchester staff, who called me over for a verbal discussion.

However, Silverman (1993) suggested that some informants in social settings may speak more freely than others. The views of the outspoken participants may be unrepresentative of the views of the less open participants. He also felt that observers may change situations merely by their presence. My students are ‘weak’ members in the institutional settings of hospital/university where I am a lecturer and Senior Nurse. Readers of this research account will question whether the research participants may have been frightened to compromise themselves in terms of expressing attitudes and views which were likely to become part of the data. I was pleased that the research participants were prepared to make very critical comments. All the students have expressed strong views at one time or another, and when the initial drafts were written only two students (2000-2001) were awaiting course marks, which might theoretically have affected their responses, if they wanted to ‘please’ me. The managers and mentors are particularly uncompromising, speak up strongly for the importance of nursing practice and champion their students views as they deem necessary. It appeared throughout the study that the participants were speaking honestly and professionally, working with me altruistically to improve the course for the benefit of their successors. I believe that the study was conducted in a beneficent manner.

My reflexive approach to the research resulted in creating spaces for research participants to speak. For example, at the course meeting March 2001 I felt that Student Representative S(SW) had wanted to say more about the ‘alternative’ Clinical Practice
Portfolio, but was unable to do so as I replied to her comments without really allowing her to elaborate on what she wanted to say, and other more powerful voices then entered the debate without allowing her another opening. As the meeting was tape recorded, the problem was identified during the transcription process, and she was given a further, confidential opportunity to share her thoughts.

Where subjects do verify one’s findings, Hammersley (1990) argued, one can be more confident of their validity. This method is known as respondent validation. When the action research data had been written to create a text which contained my attempt to make sense of what happened during the research process, it was opened to scrutiny by all the research participants and two peers, both university lecturers, one of whom is a nurse researching the role of the lecturer practitioner and the other a sociologist who is also a Doctorate in Education student.

Two participants on reading a draft of the finished work found the process informative, but felt that it was
difficult to get the plot.

It was all a bit sad after a lot of work—all
these changes—you could end up back at the
beginning again. The results were not an answer.

However both agreed
You wanted to tell the truth—that’s what you
have done.

As graduate nurses with some research knowledge they were surprised at the methodology which ran counter to their previous experiences and confessed to being surprised at my personal candour, an area generally missing in other research methodologies.
The majority of participants agreed that what had been written was a true account of the research process. Small corrections have been made at participants' request e.g. Melchester nurses wanted changes in the way their department was described, and a student participant asked for a change in my text, which she thought suggested she might be a slow learner. This was not my personal impression of her capabilities, and I was pleased to make the change suggested.

One set of written comments stated:

*I felt that this was an extremely honest report of your findings with no frills attached. I've learned an amazing amount about Action Research. Your evaluation and action taken is clear throughout the report—conclusions and outcomes are obvious all the way through. As you know I do not have much experience of research but I feel that this is an accurate reflection of meetings and interviews that I participated in."

*Critique social/political structures.*

Action research can be little more than a systematic way of getting things done with scant, if any, attention to its emancipatory possibilities according to Brooker and McPherson 1999. A researcher's mind is filled with personal experiences, attitudes and prejudices, and for this reason action research can never claim to be totally impartial. Heikkinen et al (2001) presented an example of this problem in a discussion of farming methods on an American Indian reservation. Indians had rejected modern farming methods as contrary to their view of nature. However, when action researchers combined the Indian view of nature with modern
farming methods, farming on reservations produced larger harvests with less work. Heikkinen et al (2001) questioned whether this is a story of success in developing modern agricultural methods on Indian reservations, or whether it is another story of the violation of the Indian lifestyle by the White Man. The report was written by the White Man, based on his way of thinking and living.

Was the action research on the ophthalmic course a covert means of social control? Popkewitz (1984) pp129-30 believed that where problem solving approaches to change are used at the periphery of organizations, concensus and stability assume greater importance, and the actual structure of institutions may be left unscrutinized. He said, p148:

Change is the manipulation of the internal mechanisms of the systems to ensure continual concensus and legitimacy of the organisation; for example, change becomes a way of increasing efficiency and functionality of teaching or learning. As the boundaries of enquiry are prescribed to the boundaries (and assumptions) of the existing system, the act of change becomes motion and activity within the ongoing relationships of the school. The social outcomes are to conserve the status quo by creating an illusion that activity is change.

I would counter such views of this research by stating that the action research approach meant that I did not have control over the whole research process. I was able to prepare the ground for the research by studying the literature and the course records, and did look at the concerns and issues of the stakeholders which influenced my choice of methodology, but once the study began I had no real certainty about the direction it would take. The
research participants played important roles at all stages. The potential for loss of control over the research might have had consequences for me, as the focus of the study could have been changed completely if different ideas had emerged from the interview data. I had initially been expecting to change some of the teaching methods and possibly the Clinical Practice Portfolio, but I had not been expecting to re-write the course documentation which would have to go to the School Quality Committee. This lengthened the time frame for the research project, considerably added to the work and had political consequences for me in that I'd 'rocked the boat' at the university by requiring a course re-validation outside the time frame of the IHCS planned cycle.

It is evident from the research report that my study is 'independent', does have to be responsible to the research participants in terms of communicating and working with them, but isn't dependant on a manager for funding and no 'outside authority' has control over the results. I was not aware of having any hidden personal agenda. The findings belong to the action research group. The study did not seriously attempt to transform power relations in higher education other than by the remediation of actual problem situations and through its ethical goal of a liberating outcome in terms of giving its participants the confidence to engage in making changes using similar processes for themselves. At this stage as a researcher I was concerned in facilitating relatively small scale changes with the research participants and learning more about the methodology. It would not have been appropriate to take on a political agenda which did not come from the participants themselves. I believe also that the IHCS approach to curriculum development is already inherently social constructivist in promoting the Programme Development Team approach. The choice of methodology therefore was
appropriate and contributed to the development of a potentially democratic structure that was already in place.

Areas which have been developed since the action research

New Course

A forty credit level three ophthalmic nursing curriculum is being developed, which will replace the current level two course in September 2003. Response from ophthalmic nurses has been positive, stating that the new course is 'more ophthalmic.' This is as a result of more general areas of study such as Law and Accountability being offered separately, to all post registration students which will make more efficient use of teaching resources. Two lessons learned from the action research have been developed. Theory and practice assignments have been developed together, and complement each other. Two of the practical assignments will be assessed in practice by the lecturer practitioner and a senior clinical practice representative. A tape recording will be provided for the external examiner to deal with the problems of assessment reliability. Response is awaited from the School Quality Committee.

Nursing Practice

I have examined what the action research participants have had to say about the importance of practice, and mentors in particular, and responded to it. My university manager, on questioning, has agreed that where students are to study for credits in practice, thirty hours per ten credits can be spent by the lecturer practitioner working in practice. Hitherto I had not been allocated any specific hours in practice. Theoretically this will reduce my classroom teaching hours for the future, but given teaching pressures in higher education, but it may be difficult for me to implement.
Mentors

The action research highlighted the need for better course information for mentors/clinical assessors. This will include timetables and copies of assignment questions and advice given. Mentors and Clinical Assessors need to see which areas have been covered, so that they can assess what the student's expected knowledge base should be. I will be spending my university clinical teaching hours visiting students and mentors at their 'home' units, to work with them on developing the learning environment within practice, and to generally support students and mentors and to stress the importance of routine arrangements being made for students' learning and the importance of their participation in skilled ophthalmic nursing activities.

I also feel that mentors would benefit from being involved in the marking process of clinical practice assignments in the future, to enhance their formative relationships with students. I will be working towards assignments being consciously used by teaching and clinical staff to bring theory and practice together in the minds of students.

Given that mentors carry a full clinical load, and that teaching takes time, I have arranged an honorary contract for myself at Casterbridge, and hope to do the same at Melchester and the other hospitals that are sending students for the 2002-2003 course in order that when present on these premises, I can work clinically with students and relieve pressure on the mentors.

Student Badges

I now supply all ophthalmic students with large badges to be worn in addition to their regular hospital identity badges on the days when they are supernumary in the practice setting. The badges state 'Sandbourne University Ophthalmic Student' and are said by
the students to have reduced interruptions to their supervised clinical practice.

**Classroom teaching at Sandbourne Eye Unit**

During 2000-01 as the class was small, and the revised ophthalmic course had integrated theory and practice within each course unit, I held some academic sessions within the Sandbourne Eye Unit. This enabled doctors to participate in teaching and for the orthoptic teaching to take place within the Orthoptic Clinic, with access to the specialized equipment and tests referred to within the lecture. The Orthoptist commented how much easier it was to use her large consulting room as a classroom for her specialist presentation of theoretical and practical issues, and suggested that some of the so called theory-practice gap may be of our own making, given that theory and practice teaching are so often artificially compartmentalized. Lack of facilities will prevent this in 2002-3, but I was able to exert some influence in the planning of a seminar room for the unit which the ophthalmic class will be able to use when it is completed.

The use of opportunities for formal studies within the practice setting is useful but should not be at the expense of working within an academic community at the university. To achieve the best from both settings, the contributions from full time academic lecturers can be clustered together so that whole days of the course can be spent within the university with access to the library and sophisticated computer equipment. The aim is to produce within the students a feeling of the complementary nature of theory and practice settings.
Areas for further research

Individual learning styles

Students are individuals, and have different preferred learning styles (Kolb 1975, Honey and Mumford 1986, Gosby 1989, Riding and Rayner 1998.) Puzzling over Mentor S’s quiet learner who stimulated her to suggest the re-use of the Skills Workbook, I remembered that I had asked her and her classmates to complete Honey and Mumford’s 1986 learning styles questionnaire at the beginning of the ophthalmic course to check if there could be any correlation between preferred learning style and the ability to relate theory to practice. This line of investigation was not pursued as I was unable to think of a way to relate the two to the action research. My notes record that this particular student had scored 19 on the theorist and 19 on the reflector scales, giving a very skewed approach to learning. Students with even scores on the theorist, pragmatist, activist and reflector scales appeared to participate in practice better. The IHCS Mentors’ Course teaches mentors about these different learning styles and about ways to help students learn in practice. Gosby (1989), herself a nurse, has published, but the area deserves further attention.

Models for mentor use

Wallace (1995) suggests that the transfer of experiential learning to other, different situations is not automatic, and suggests that support of the learner is critical to obtain good learning outcomes. He provides two models as a structured means of supplying this support. I will be advocating their modification and adoption for the IHCS Mentors’ course, but researching their effectiveness in practice could be problematic in terms of research design.

What does it mean to be an educated ophthalmic nurse?

What are the tangible, positive outcomes? This has never been researched. Data exist regarding powerful teaching and learning
approaches, but do we need to look at the long term changes in students as a result of the educational processes?

The logic of practical learning
Personal observations in practice suggest that mentors present variable qualities of explanations in terms of describing the logical sequence of actions to be taken in performing nursing tasks. They do not always describe how they themselves have sequenced and adapted those actions to produce efficient practice. An observational study could produce a set of pointers which might improve mentor awareness when giving instructions.

Nurses’ story telling
Benner (1984) and Lawler (1991) both used story telling from clinical practice as examples to inform their readers what expert nursing practice is. Indeed, Benner (1996 p233) offered a chapter on the subject, and suggested:

One must study everyday ethical expertise and narratives embedded in the practices of communities. The practices and stories told within a community provide the necessary background and understanding for everyday ethical comportment and for formal ethical judgements.

Within nursing practice, nurses often exchange clinical stories as a means of discussing dilemmas in practice, how they dealt with emergencies etc. Clearly this is a means of retaining practice knowledge in memory and re-applying it to similar situations. I encourage story telling in the classroom and in practice as a means of learning, however in the study of the educational literature, story telling is rarely cited as a means of learning practice. It might be a rewarding area for further examination.
Taking the current action research forward

In the past I, and probably my university colleagues, shied away from teaching individual clinical skills, as our mission was to teach holistic nursing care, at academic levels 2 and 3, but my research is pointing to the fact that without the individual building blocks which comprise that holistic knowledge, past students were having a hard time learning in practice. The September 2003 ophthalmic nursing curriculum will have less face to face classroom teaching, and there will be a greater reliance on learning resources accessed via Sandbourne university web sites. This could become a future action research cycle. The change will obviate some of the student travelling currently undertaken.

As a result of the above changes, some of my classroom teaching time will be released, which might enable further time to be spent in practice, if honorary hospital contracts can be obtained. This would supply greater mentor support and allow me to do some limited coaching in practice, thus generating a further action research cycle, building on the work of Rogoff (1990) in terms of situated learning within nursing practice and Cobb's later (1994) ideas of combined constructivist and sociocultural approaches to learning.

Conclusion

The action research structure proved a useful framework for improving the research knowledge of the participants and given that the approach is collaborative a large portion of the 'knowledge' generated within the research is in fact participants' improved understanding of each others' views and responsibilities. The knowledge that has been produced therefore has relevance to all the participants and has been fully shared with and validated by them. Knowledge of research methodology and the educational and nursing literature have been used to give structure and
generate questions and suggest some answers, but the research itself has produced no new academic theory. Unlike some other research it has produced not just recommendations, but also actions which will then continue to be evaluated as part of other action research cycles, which is synonymous with a view of the curriculum as existing within both a professional and a local cultural setting and continuing to change and adapt.

The process of curriculum development has been made manifest in my report. Action research tackles teaching as a practice ethic in the way envisaged by Stenhouse (1975), who stressed the importance of teachers studying their own work if they are to be regarded as extended professionals. Evaluation of the validity of a work such as the one described above, depends largely on the strength of the description of the processes of the research. I trust that the reader will find this action research account sufficiently detailed, honest and transparent to make their personal evaluation of its validity.

It takes a long time to become an expert at nursing practice, and clinical practice tended to be undervalued by universities when nursing first moved into higher education. Now, however, with the increased confidence of senior nursing lecturers and their acquisition of PhD level qualifications the case for the academic validation of nursing practice is being presented at the highest levels. The mentoring relationship is clearly key in the reification of practice and theoretical knowledge, and the representation of mentors and students at Course Development Team meetings is particularly helpful in the consideration of practice issues.

It is my view that nursing knowledge and nursing practice should be valued equally and tackled together within the curriculum. Indeed, Vaughan (1994 p 3) stated:
It is unacceptable for formal (nursing) education and practice to follow separate paths.

Nursing has worked for recognition as an academic discipline within higher education and the value of supernumary working for pre and post registration students is being slowly acknowledged. In order to achieve these gains academic departments of nursing re-located to university settings and their management has necessarily separated from service provision. Sandbourne University is now considering the possibility of fusing this relationship as equal partners through the idea of a clinical university. (Andrewes 2001)

This development will clearly demonstrate to clinical and academic staff and students the equal value that will in the future be placed on both theory and practice and give opportunity for innovative teaching and learning practices. The development of Lecturer practitioner roles, where the expert nurse can offer the credibility of nursing knowledge and teaching skills is ongoing. Combining theoretical and practical knowledge within a lecturer practitioner is a reasonable initial approach to the problem of theory/practice separation.

In the meantime, there is work to be done convincing some managers of the importance of supervised clinical practice as an essential part of learning nursing. My students are all trained nurses, governed by a professional code of conduct, and as legally registered nurses have a ‘duty of care’ to their patient group and to their employers. As people who are fully salaried throughout the course, it is difficult to insist on supernumary status, especially when uniformed as trained nurses and available in the workplace. It has not been unusual for students to be recalled from clinical practice at Sandbourne Eye Unit to fill clinical gaps at their own hospital. As salaried employees they are not in a position to refuse. I am waiting to judge the effectiveness of tying theory and
practice together for each component of the ophthalmic course to see whether clinical colleagues will be able to find alternative solutions to the above dilemmas as lessons on university premises are not interrupted.

A largely practice led ophthalmic nursing curriculum might be the ideal for some Consultant Ophthalmologists if nursing is to be an adjunct to medicine, and many people do still see the nurse as a physician's assistant. Nationally our medical colleagues are expressing interest at what nurses are being taught. The doctors correctly note that there is no 'national curriculum' for ophthalmic nurses, and given that the role of the specialist nurse is expanding annually, medical colleagues are concerned over their own legal accountability should a nurse make a mistake. Legally the doctor may consider that they are accountable, but the nurse may feel that they should be responsible for their own practice. At present with the absence of case law the situation remains cloudy. Where nursing practice continues to expand into 'shared' areas, many consultant ophthalmologists prefer to validate nurses' higher level skills themselves. The fact that these debates are taking place gives weight to my contention that nursing knowledge is reliant upon both theory and practice. If the medical profession took responsibility for a specialist nursing curriculum, it might become weighted purely towards the practicalities of 'doing the job' but fail to address other significant professional nursing issues and debates.
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Appendix One

Assessors of Practice
Assessment of practice at level 2 will be undertaken by a clinical assessor, a senior practitioner who has been approved to assess clinical practice at level 2, and who is working alongside the student in the clinical area. G Grade nurses qualified to first degree level in nursing have been identified for this purpose in each geographical area. Assessment may be carried out in conjunction with the Lecturer practitioner (Ophthalmology) where appropriate.

Assessment of practice will include the collection of a range of information to serve as a basis for student/assessor discussion about the requisite knowledge, skills, attitudes and understanding. The assessor will directly observe the student’s performance in the practical setting on a regular basis in order to provide formative feedback as well as summative assessment to the student. The assessor will also consult relevant colleagues about student progress; this will include allocated clinical supervisors.

Clinical Supervisors
(Note: These different roles involving student support are specified within the Ophthalmic Course Documents. For purposes of clarity for non nurse readers this role is referred to throughout the text of the dissertation as ‘Mentor’)

During the clinical time the student will work with an allocated clinical supervisor. The supervisor will be a skilled practitioner who observes, advises and practices with the student to enable him/her to attain professional skills. This will involve constructive
monitoring of student performance to aid learning, self awareness and personal development. The supervisor will also perform a role in formative assessment, identifying with the student areas of strength and weakness in order to make optimal use of available learning opportunities. Supervisors will be allocated according to the structure of the student's clinical placements.

Role of the Clinical Supervisor

1. To enable the student to identify key learning opportunities within their work environment

2. To support and encourage the student as they progress through their learning experiences

3. To enable the student to take a proactive role within these learning opportunities

4. To facilitate the student to identify their learning outcomes and document this process through the use of a personal portfolio.

5. To assist the student to identify suitable learning objectives when undertaking academic work

6. To give constructive support to the student during, and on completion of an academic assignment

Role of the Lecturer Practitioner / Personal Tutor Ophthalmology

1. Discuss and help students formulate suitable learning objectives in order to complete an academic piece of work.
2. Act as a resource person and provide psychological support for the student

3. Mark and comment on the academic work, and negotiate the grade with the clinical supervisor if appropriate

4. Encourage the clinical supervisor/student relationship

5. Discuss the student's progress with the student, clinical supervisor and programme leader.

6. Contribute to the evolution of the ophthalmic programme
**Appendix Two**

**Action Research Plan**

**September 1998-99**
Initial Literature Review
Identify research aims

**September 1999**
Explain the research aims to participants
Answer students’ questions
Allow thinking time
Obtain student participants’ consent to participation within the study
Examine previous course records

**Late October 1999**
Interview students

**November 1999**
Interview mentor

**December 1999**
Interview clinical assessor

**January 2000**
Interview managers
Finally identify action research cycles

**February 2000**
Begin work on Action Research cycles

**June 2000**
Final participant consultation on course changes
Initial data presented to respondents for validation

**Unplanned Work**

**July/August 2000**
Modify Ophthalmic Nursing Curriculum

**October 2000**
Modifications to Ophthalmic Nursing Curriculum validated
September 2000-2001
Modified course presented

January 2001
Research 'write up' commenced
Literature review re-visited

June 2001
Initial research report given to participants and two colleagues to check

August 2001
Suggested modifications incorporated into final report.

2002-3
Further revision of report
Appendix Three

Categories and subtopics arising from student interviews

Motivation

It gives you confidence
A sound foundation
Eager to learn
I learned a lot
Teaching others

Using Knowledge in Practice

The care they deserve
Relating things back
Someone to assess you

Problems in Practice

Daunting

Medical Knowledge
Appendix Three

Categories and subtopics arising from managers’ interviews

**Essential knowledge**

The basics in ophthalmology
No-one was 100%
That kept you on your toes

**Professionalism**

Regard to ethics and accountability
The whole big picture
We are a profession
Even if it isn’t their job

**Individual Learning Needs and Choices**

Everyone’s an individual
Where they’re coming from

**Current course opinions and suggested changes**

A doctor’s perspective (Managers S & M only)
More ophthalmic (Introduced by Lecturer Practitioner following analysis of student interviews)
Behind the times

**Theory and Practice**

You can’t learn it all on the course
What’s out there for them
Hidden skills that come with practice
Appendix Four

Example of interview data

Interview with S(M) and S(J)
(My personal thoughts, recorded immediately after the interview, appear in the text in red italics.)

Why do you wish to study on the ophthalmic course?

J. I find ophthalmic nursing fascinating. I want to remain in the field indefinitely. I'm eager to learn about eye conditions and I regard the course as the quickest way to achieve this, academically and practically. It will also give me job security and possible upgrade in the future from annualised to permanent part time post. I believe it shows a commitment to my ophthalmology.

M. I wanted to do the eye course to increase my ophthalmic knowledge, and especially theoretically in order to compliment my practical skills. I also wanted to prove my worth in the hospital and be able to offer specialist ophthalmic care to eye patients.

D. Do you wish to question each other?
M. I think J. said a lot of the things that I would have said had I thought about it a bit more. J. went through all the relevant things.

D. What learning experiences do you think an ophthalmic course should contain?

J. Well, I've a long list. Full anatomy and physiology of the eye and all common eye conditions with some of the less common eye conditions.

(Dorothy what about laser information for this group?)

All forms of treatment and investigations. Practical work in all ophthalmic areas - wards - day and night to get the 24 hour picture, outpatients, general clinic, laser, photos, glaucoma, orthoptics, prosthetics, botulinum clinics, cataract clinics, pre-assessment, daycases, post op visits, minor ops, theatre and Eye A & E. Visits to all areas involving outside of hospital - social worker, charity organisations, opticians, more time with children and the Low Visual Aid Resource Centre. Practical skills - VA, visual fields, I would like to do IOPs, slit lamp examination and history taking. Schirmers and SWOs, first dressings, RAPD, epilation of lashes, Ishihara, foreign body removal, irrigation of eyes etc, etc.

(Curriculum influence here - we can do the Schirmers, SWO etc in class this week, as the Community Nurse can't come.)

M. I interpreted this question slightly differently to J. I think that the course should provide an overview to give a sound
foundation for ophthalmic nursing, combined with an understanding of the nurse’s role within that practice and how we can improve our practice and personally I feel it’s necessary for me to learn as much as I can about ophthalmic nursing in order for me to be able to provide good ophthalmic nursing skills to ophthalmic patients and give them the care that they deserve.

J. I believe that at S. we really get all these but I was thinking about other nurses who come from hospitals who don’t have an Eye A & E, minor ops, and I feel as if they must really view all these subjects to gain their full knowledge. We are fortunate that at S. we get the majority of these things don’t we?

M. Yes. What the course is giving us at the moment it should provide us with a variety of different things and give us the opportunity to learn the basics so that we can go out there and practice what we’ve been taught in the departments and by integrating the allocations to the different departments. And visits to other hospitals I think its going to enable us to integrate what we’re being taught within the classroom.
D. What do you think is the significance of an ophthalmic course personally, professionally and to our patients?

J. Personally the recognition of a gained academic knowledge and practical skills and its the recognition of the achievement of a commitment to ophthalmics and gives you the confidence because of the increased knowledge and makes you less scared of the changes in nursing. Professionally it helps you to gain your PREPP and it opens better career prospects. It keeps you abreast of changes in nursing and towards the patients they get better ophthalmic nursing care – expert specialised care. They can get more information from the nurses and they gain reassurance, confidence, trust when they are attended by knowledgeable nurses and I think they are helped emotionally, psychologically, when nurses fully understand their condition and their difficulties and feelings of being stigmatised.

M. I've just realized that I've already answered this Q. in the first part. Personally I think it gives me more confidence in my practice if I know what I should be doing and obviously there's guidelines and good sound theoretical knowledge and professionally I think that these days you need to prove that you're able to do your duty in whichever role of the nurse in whichever sphere of where you're working really. For the patients I think that they deserve to be given the specialist care by us as nurses and therefore the significance of the 346 (ophthalmic course) is
to provide us with the necessary skills and knowledge in order to be able to encourage this.

D. What sort of nurses would you like to be at the end of this course?

J More knowledgable in ophthalmics and be able to give this knowledge to new patients and new nurses and more understanding of the visually impaired and their difficulties. I'd like to be more forward thinking, and improve my nursing skills and techniques all the time and to accept change more easily if it proves to be for the better. To continue learning such as journals, study days and become more expert practically. To continue gaining practical skills and to learn to recognise and diagnose eye conditions.

M. I think when I started ophthalmic nursing, once I got a taste for it, it creates more interest for me anyway, and gave me a taste to learn, and the more you learn, the more you want to know, and the more you realize what a speciality it is. I think at the end of it, hopefully it will give me more confidence and ability to be a dynamic and good nurse. Hopefully I can have the knowledge and skill to teach others, and you know, encourage everybody to provide excellent care to our patients.
M. Are we the first two you’ve tried this out on?

D. Yes, you’re right. I may have got the Qs wrong, so if I have, I may need to come back and ask you a supplementary qQ. That thing that you mentioned that you’d like to do, which was to take pressures J., I think that’s very reasonable. Whilst we were talking, I was thinking, gosh, it would nice to be able to get everybody to do that.

(Which is why it would be a good idea to have a Practical Day on the Foundations Course, and get everyone up and going with the slit lamp and other things.)

I think the whole problem is, though, getting that slit lamp knowledge, which everyone wants so much, and isn’t easy to teach or provide the time for people to learn is it? They have to practice, practice, practice.

M. Again, I think its not just a question of being able to do pressures. Its also a question of knowledge of what pressures are, problems, eye conditions, and you need to make a judgement of when to take the pressure and when to refer that patient to the doctor if its outside normal limits. You also need to know about the drops and their actions and things like that. Its not just about doing pressures.

J. I think you should understand about pressures, but I should think that when you’ve done an eye course and you may
want to move to another hospital, you’re an ophthalmic trained nurse, and you go there and you can’t do a pressure, because you’ve worked in a particular ophthalmic area and you don’t need to do pressures. I should have thought that with an ophthalmic training you should know how to do them. It’s like a general nurse. If they can’t do a blood pressure then.....................

D. It’s a difficult one, but I wouldn’t say I came off an ophthalmic course able to do very much. With an ophthalmic course, it makes you more teachable in practice. J.C. says you can come off an ophthalmic course, and you can’t be an Expanded Role Nurse, but J.C. reckons in 3-6 months if she got somebody working in her dept. who was ophthalmic trained, she could very quickly get them up to expanded role status.

M. I’ve worked in all ophthalmic depts, and I’m quite lucky, and when I worked in Theatres, they nurtured me and they taught me and I can quite competently scrub for any operation quite competently without anyone standing next to me, and that gave me confidence to go out in my next experience in Casualty. When I was in Casualty, I just watched everything. Every off duty I had, I just followed a nurse, and I looked at the patients first, and the nurse stood behind me, and I learned a lot. Now I’ve gone into the Cataract Clinic, and after all my experiences in all the other depts, I’m using the knowledge I’ve gained from those depts to do pre-assessments, but I have been quite lucky, because I can do quite a lot. I’ve been doing pressures for a couple of years, and I’ve been doing
biometries on my own, and all sorts of things. I still do
sometimes feel a bit frustrated and undervalued.

(Assessment – make sure they get these things documented
in their Practice Profiles.)

D. How difficult is it for you, J., learning some of these
skills? What difficulties do you face?

J. Being Annualised, sometimes you might be in one area,
and be shown how to do the IOPs and then 3 months later
when you’re given the opportunity to repeat it, whereas if
you’re permanently in one place, especially full time, you
can do these things again within the week, then you’ve got
these skills straight away. (Mentors)

M. I think it depends on who you’re working with as well.
Maybe some of the nurses don’t want you to try something
new when they’re being responsible for you. I think I’ve
managed to build up a confidence in most of the nurses I
work with. They will let me have a go at most things,
which is quite nice. But you are
very................................but you are nearly full time.

D. Have you got any suggestions for how we
might improve things for people who have to move
round the hospital a lot?

M. People would have to spend a few weeks in each
area.
D. Have you both got mentors?

They both had. M. said she had always had a mentor wherever she’d gone. She was quite happy to move around, and said ‘It’s just the views I have in some departments. I am quite a critical person. I think it’s good that everyone should rotate, then they could keep up to date with everything.

J. I think you’ve got to have a mentor when you’re annualised, because you move around a lot.

M. I think you still have to gain the confidence of your mentor, and whoever is with you in order to be able to do new things really, because if you haven’t gained their confidence so that they’re supporting you. And then you’ve got the Profiles, but sometimes you don’t go back to the department. I think that in my Casualty one I’ve got hardly anything filled in, but I’ve done loads of it, at quite a few levels, but you don’t get the opportunity for someone to assess you and tick it and say that’s fine or anything else, so that when you’re working, trying to learn, do the learning side as well as working as well.

J. It’s difficult for the nurses from other hospitals because when they come to A & E, they’re only there for such a short time.
Will they know about change?

Will they be better able to do presentations? speak publicly?

Do we need a ‘Practical Day’ to help them learn faster in practice?

Can we do some of that this week? E.g., eversion of eyelids, Schirmers, Ph, sac washout etc?

Should we bring back the Skills Workbook?

Are there any particular skills we should concentrate on?

Dear [Name],

As a postgraduate student at [University], I am working towards gaining a qualification in education over the next two years. My chosen field of study is Knowledge and the Curriculum, and in particular I will be looking at the Theory/Practice gap as it concerns the Critical Thinking Modules. My plan is to work with the students to create a better fit of theory to practice. Would you consider giving your support to the following:

1) An essential formative module regarding what you hope to learn from the course.

2) Part of this module could include tape recording occasional sessions within the clinical environment. Adult and Child and Occupational Health Nurses. This may be the part of the day when you would like to engage in a reflective discussion.

You will be given access to all of the data which concerns you directly, or that you may wish to debate or observe on anything you’ve said. I am happy to discuss each one of us can learn from our interactions and what we will enjoy taking part in an Action Research discussion.

Yours sincerely,

[Your Name]
Dear Student,

As a part time student of Open University I am working towards gaining a Doctorate in Education over the next two years. My chosen field of study is Knowledge and the Curriculum, and in particular I will be investigating the Theory/Practice gap as it concerns the Ophthalmic Nursing Modules. My plan is to work with my students to ensure a better fit of theory to practice.

Would you consider giving your consent to the following:

1) An interview during October regarding what you hope to learn from the course.

2) Part of this research may include tape recording occasional sessions within the Visual Impairment, Adult and Child and Ophthalmic A & E modules. This may be the part of the day when you are contributing to a reflective discussion.

You will be given access to all of the data which concerns you directly, so that you can correct or elaborate on anything you’ve said. I am hoping that each one of us can learn from our colleagues, and that you will enjoy taking part in an Action Research process.
I enclose two copies of the Consent Form that participants are requested to sign. This is so that you can return one to me, and keep the other to refer to, so that you will be reminded that you have the absolute right to withdraw from the research at any time should you so wish. A withdrawal would be confidential as far as other course members are concerned, and would not affect your participation in the Ophthalmic course in any way.

A copy of an initial research carried out last year is available for those who decide they would like to help this year. As you will see on checking the earlier document, all the information was treated confidentially. If you require any more details, I will be pleased to meet with you to discuss any concerns that you may have.

Yours sincerely
Knowledge and the Curriculum - The Theory Practice Gap

Research Consent and Rights

I ..................................... agree to be a participant member of an Action Research project on ‘Knowledge and the Curriculum’.

I understand that this will involve me in several tape recorded discussions and one or more interviews.

I expect that anything written about me will be shared with me, and my confidentiality will be protected by use of my research name.

My rights as a participant are:

☐ To be fully informed of the purpose of the research

☐ To be able to terminate my involvement at any stage

☐ To anonymity (protected by pseudonym above)

☐ To ask for information to be changed or recalled to me as the research progresses.
☐ To know who the audience will be i.e. who will be receiving the finished research project.

☐ To have my comments and information safeguarded

☐ To have my views objectively reflected

☐ To express my opinions on the research

☐ To discontinue tape recording at any stage

If I wish to contact Dorothy at any time in respect of the research I am at liberty to do so. I have Dorothy’s home and work telephone numbers.

Signatures Date
Sandbourne University

Student Managed Learning

Ophthalmic Nursing Role Development

Ophthalmic Units

Nursing Foundation Unit
Help With Your Assignment

This Student Managed Learning aims to help you

THE ASSIGNMENT
Negotiate your subject with your ophthalmic tutor, and :

i) Demonstrate application of relevant anatomy, physiology and pharmacology to people with a specific ophthalmic condition leading to:

ii) A discussion of the expanded role of the ophthalmic nurse within their normal area of practice.

The marks will be weighted thus: Section i) 15% Section ii) 35%

begin to complete part ii) of your first academic assignment to a satisfactory standard (and possibly part i as well). Just to remind you:

• To complete the above assignment satisfactorily, you will use some of the recommended readings for the Ophthalmic Foundation Unit and relevant theory sessions from this part of your course to critically appraise a nursing development which involves ophthalmic patients. The setting chosen for your observations should be within the ophthalmic
practice setting at your own hospital. You should negotiate one study day, and use half of it to study some of the papers or chapters suggested, and the other half to observe nursing practice in the area you have chosen to study for your academic assignment.

- You should research an area of ophthalmic practice where the nursing role has developed over the last few years. You could look for example at how Ophthalmic Triage has been developed, the use of a Telephone Advice System, 'Nurse Practitioner' roles and Accountability, the Nurse Led Glaucoma Clinic, 'Nurse Prescribing' etc.

- If you are really wise, the visit you make will also contribute to the completion of the first section of your Clinical Practice Portfolio.

**Deciding which clinical area to visit / subject to study for your essay**
Remember that your visit should be an exploration of role expansion, involving ophthalmic patients. Think carefully about new developments within your unit, e.g. the development of a Nurse Practitioner role in Ophthalmic Casualty, Nurse led Glaucoma Clinics, Fluorescein Clinics, Ophthalmic Out Patients' Nurses offering a 'Work Up' of new Ophthalmic patients prior to their consultation with the ophthalmic specialist, Cataract preassessments and follow up clinics etc.
**General Preparation**

Remember that some of the work has to be done in your own time. Arrange a visit to the library for a couple of hours to make copies of some of the journal articles and check out some of the recommended books for some specific information regarding the patient group and the area of practice you will be examining.

**Readings**

*Castledine G. 1996* Nurses must not become the mechanical hands of doctors British Journal of Nursing Vol 5, No 6 28 March pp 386

*Crinson I 1995* Impact of the Patients' Charter on A&E Departments 2: The Emergency Nurse Practitioner


*Jones S. Davies K. 1999* The Extended role of the nurse: The UK perspective International Journal of Nursing Practice December, 5:4 pp184-8


We will be having a group discussion on 30th October to share what we've learned prior to writing up our essays.

MacDonald M, Bodzak W 1999 The performance of a self managing day surgery nurse team Journal of Advanced nursing April, 29:4 pp859-68


Rushforth H, Glasper EA 1999 Implications of Nursing Role Expansion for professional practice British Journal of Nursing Dec, 8:22 pp1507-13

Tingle J. 1997 The Expanded role of the nurse: Accountability confusion British Journal of Nursing, 25 September Vol 6, No 17, pp1011-1013

Tye C, Ross F 2,000 Blurring boundaries: professional perspectives of the emergency nurse practitioner role in a major accident and emergency department Journal of Advanced Nursing May, 31:5 pp1089-96

UKCC 1989 Exercising Accountability UKCC London

Questions you must ask of yourself, the literature, the expanded role nurses and the Sisters in charge of the area you visit:–

- What is an expanded role? How does it differ from the older concept of extended role? (See Hunt and Wainwright 1994 Expanding the Role of the Nurse Chapter 1)

- Has the quality of patient care been enhanced as a result of the expanded nursing role you observed? How?

- Was the change in the interests of Patients or Nursing and Medical Staffs or all three?

- What were the cost implications? (Expense or savings? If additional money was required where did it come from, and how?)

- How are nurses prepared for these expanded roles? How are they assessed for autonomous practice?

- How important is support for these nursing roles eg in terms of protocols, ongoing education, medical advice?

- How are the nurses coping with their roles and responsibilities? What peer support mechanisms exist?

- How is quality of nursing practice addressed as an ongoing issue?

Your academic question requires you to discuss the expanded role of the nurse within a specific area of practice. By the time you have discovered the answers
to the above questions, and related them to some of
the literature studied, you should have produced a good
discussion. Remember not to use quotes which are
overlong, and take up whole paragraphs. The quotations
you use should support what you are saying in each
paragraph.

Do write an introduction to your essay. You could tell
your reader for example, about the significance within
ophthalmic nursing of the subject you have chosen. Don't
forget to note where the marks are allocated, as this
will give you a clue as to how many words to devote to
each section. Remember to write a conclusion which sums
up the contents of your essay.

Remember, 'A wealth of untapped knowledge is embedded
in the practices and the know how of expert nurse
clinicians, but this knowledge will not expand or fully
develop unless nurses systematically record what they
have learned from their own experience.' Benner P. 1984

Having read through this package, you can now clearly
see that you will need to negotiate a FIFTH study day
to suit your ward or department to explore the contents
of this pack in theory and in practice. It should be
completed by 30 October, in order to provide
the basis of your academic assignment, which is due on
18th December.

P.S. Do remember that your academic
assignment and your Clinical practice Portfolio
are worth 50% each, so give equal
enthusiasm to each area. I am happy to
speak with you at any time if you are
worried about your coursework
Dorothy

Home tel no 01*** 7****1
Appendix Seven

Consultation with Colleagues

Field Visit / Student Managed Open Learning

The ‘old’ ‘Field Visit and the new Student Managed Learning documents were supplied for two colleagues to check through

1) The old documents on the field visit read very academically, especially in the introduction, with words like ‘indicative readings’ and might have put beginning students off. It is not very clear how this applies to the assignment, and read as a check list.

2) She liked the colours on the new SMOL. It shows clear expectations of the students. There is no further reference to part 1 of the question. ? add one.

My expectations are made clear.

It encouraged deep learning and structured critical analysis.

There was very strong process and product.

The language was clearer for students.

References in the middle ? why? (I wanted the students to read first, as part of their general preparation prior to visit.)

Questions - would they ask their own personal questions? Should I leave spaces for them with bullet points?

Why did I not ask about implications for accountability? Its implicit but not explicit, as its in the 3rd assignment.
M R

I like the Benner quote but I'm unsure what point you are making in relation to the students.

The questions you ask re expanded role I would change 'Was the change in the interests of the patient, nursing etc' to ask who instigated the change initially. Was it nursing, patients or medical staff and why was the change initiated – you could ask the student to reflect on the politics behind the decision and thus expand their political awareness.

I would also ask 'how do nurses in this area justify their competence?' and get them to explore this in relation to accountability.

I would also like to include in the reading the UKCC Higher level of Practice statements and Jones M. (1999) Nurse Prescribing)

The colours on the paper draw the eye and the important things stand out.
Appendix Eight

Practical Skills Study Day Evaluation October 2002

The Study Day was attended by ten nurses. Questionnaires were sent to all who attended. Nine replies were received. The correlated results are presented below, in the students’ words.

What were the strengths of the study day?

The opportunity to have a go at the skills.

Very much needed skills were taught.

We could all practice and accomplish some skills.

Skills taught were relevant and clearly explained at a level easily understood.

It covered practical skills such as placing and removing a contact lens which I had not performed previously. It re-enforced skills I already had, but in a more relaxed atmosphere.

Able to ask questions, see and do practical skills in a ‘safe’ environment.

The environment was well equipped and quiet.

Good setting, use of equipment, quiet.

- It was a small group, so we could have individual tuition. Practising on each other, I will now have more empathy with the patients having practical procedures on their eyes.

- I didn’t feel obligated to have procedures done on me if I didn’t want them.

- Well structured and interesting, very relevant to our working environment.

- The methods of teaching held our attention making learning easier.
• The provision of an environment to be introduced to and practice new skills in an unhurried way, without practice pressures.

What were the weaknesses of the study day?

None

• For some people it is a long way to travel, but that can’t be helped.

• Not enough time due to personal travelling times, and would like to have practised more.

• Some people might have felt pressured to take part.

• If the class had been smaller it would have been more useful.

• Lack of time to practice practical skills towards the end of the day. Not enough practice with the slit lamp due to these limitations.

• Too short!

Have you any suggestions for future improvements?

More days like this.

Would have liked to have more time learning more skills.

Wouldn’t have minded a longer day.

I wanted it to be longer.

Possibly two days of practice.

• Another tutor or nurse to teach so that more could be done in one day. You wouldn’t have to take so long waiting for everybody to have a go then.

• More time to be devoted to practice with the slit lamp.
• Find out students’ weak areas of practice. If a lot of variation, consider splitting group up to enable students to practice procedures most relevant to them as we all have different needs.

Were the Ophthalmic Nursing Procedures booklets helpful? If so, how?
• Yes, they explained things clearly and the language was easy to understand.
• I think it would be appropriate for each (eye) department to have a booklet like this.
• The explanations are clear and after the day it was nice to be able to refresh my memory on the procedures, and it clarified any confusion.
• Well presented with easy to follow instructions. Useful to refer back to.
Interesting to learn about the ones we’ll hardly see, but need to know.
• Very useful. Most of the procedures taught were new to me. I still go back to the booklet to remind me of the various steps to follow.
• I found the booklet helpful as it had instructions about the practice skills with easy to follow guidelines.
• As a means of reference for equipment and procedures not performed regularly.
• Good resource to refer to at work.

Did the day help you to connect/learn ophthalmic anatomy and physiology?
Yes, if helped to fill in the gaps, it re-enforced what I had read and learned in the classroom.
Yes, there’s nothing like doing it yourself on a real person for things to make sense!
Yes, very much so.
Yes, much of what I learned in the classroom I could relate to practice. It makes it clearer to understand.
To a certain extent yes.
Yes, they were a good concise guide to help learn basic ophthalmic anatomy and physiology.
Yes. Many practical skills are dependant on a knowledge of anatomy and physiology.
It was good to see how the theory related to the practice.
Yes, with sac washout.

**Personal Notes on Practical Skills Study Day**

**Disappointment**
10 out of a possible 14 attended
Reasons for this included illness, distance/weather, already rostered to work.

**Result** – 3 of the most experienced students nor present – therefore shared practical learning not possible.
Peer learning was therefore only possible for one demonstration, by briefly borrowing a Sandbourne student who was ‘on duty.’

**Excitement**
All participated well, and no-one suffered any misadventure from being practised on. This was a good confidence builder for all students.
They seemed motivated and enthusiastic throughout the session.

**The written feedback**
Generally very positive.
The written re-enforcement of all that had been learned practically was appreciated—and this looks a good route to follow in the future.

**Future Changes**
Perhaps distribute the Ophthalmic Nursing Procedures booklets the week before the session next time, to see if this improves student confidence.

More practical learning has been requested. It will be possible to adjust the timetable to accommodate this.

Need to look at how much I could do 1:1, to improve slit lamp skills.

**Note**
Interesting to observe that the pre-registration course is following a similar route.
Skills Lab. sessions at the university are now being followed within our hospital, by further practice sessions within the hospital at lunchtimes.

What is being discovered resonates with my comments in Chapter Two, p23 on Joyce and Showers' (1988) work and on page 19 which suggests that the balance of power is beginning to shift in terms of the value placed upon, and the means of assessing both practice and academic achievement within nursing courses.

In the past I, and probably my colleagues, shied away from teaching individual skills, as our mission was to teach holistic nursing care, at academic levels 2 and 3, but my research is pointing to the fact that without the individual building blocks which comprise that holistic knowledge, past students were having a hard time learning in practice.