UNIVERSITY OF SOUTHAMPTON

Shared Learning in Health Care Professional Education: An evaluation of third year medical, nursing, occupational therapy, physiotherapy and podiatry students' shared learning experiences.

Christine Leigh Gallagher

Thesis submitted for Doctor of Education

Faculty of Law, Arts and Social Sciences.

September 2003

UNIVERSITY OF SOUTHAMPTON

ABSTRACT

Doctor of Education

**Shared Learning in Health Care Professional Education:
An evaluation of third year medical, nursing, occupational therapy, physiotherapy and podiatry students' shared learning experiences.**

By Christine Leigh Gallagher

This qualitative, interpretative study investigates shared learning from the perspective of third year health care professional students. A combination of semi-structured interviews and group discussions were carried out during 2000-2001, over a period of 10 months. 60 students were directly involved, which ensured that the study reflected the views and experiences of a representative group. An interview checklist was used, full transcripts were produced and then analysed using the Nudist software package. As a single-handed researcher, my contribution and capacity to reflect on this is central to this study.

Participants shared memorable learning experiences gained in both academic and clinical areas. The cumulative effects of shared learning over three years were explored and based on this experience, a framework for shared learning that could be implemented in the future was recommended. Early inclusion of shared learning into the programme was endorsed, with the main body of work being carried out in year three when students appreciated the importance of inter-professional education to practice. Participants were in favour of shared learning that was relevant to clinical practice and locally based clinical workshops were highly valued. Case studies, discharge planning and collaborative work in small groups were the activities chosen to enhance learning. A suggested way of increasing the relevance of shared learning was to involve experienced students in developing and carrying out sessions with less experienced students.

A willingness to share responsibility with educators was expressed by participants, who indicated that collaboration was needed to plan and implement appropriate shared learning. Participants suggested realistic, manageable solutions to some of the inherent problems in shared learning. The localised results cannot be generalised, however, important lessons can be learnt about what it is like to be the recipients of inter-professional education at this time of change and development.

ACKNOWLEDGEMENTS

The completion of this thesis has touched many aspects of my life and the people within it. I questioned whether I 'should' do it, those who knew me well never questioned that I 'could' do it, we all questioned when it 'would' ever be finished.

Everyone has been supportive and encouraging in different ways, at different points along the way. Suffice to say I thank you all, you know who you are, and so do I.

Particular thanks are due to Kevin, who gave me space to do it as he believed that a positive outcome was a foregone conclusion and Professor Helen Simons who never gave up on me, I appreciated the support and guidance.

Finally, I dedicate this to my son, Francis, just as a reminder that he too can achieve anything he aspires to in his life.

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INTRODUCTION

1.1 Rationale and Context

'Multi-Professional Education: The Magical Mystery Tour' (Harden 1998).

Developments in health care professional education are placed into an interesting perspective by this title. 'Magical' implies that there are exciting possibilities on offer and 'mystery' suggests that the outcomes are uncertain and have yet to be discovered. Whilst this could be a positive area of development, the reality of change means living with constant uncertainty. Ten years prior to Harden's (1998) commentary, The World Health Organisation reviewed inter-professional education (IPE) world wide in their report: 'Learning together to work together for Health' (WHO 1988). The recommendations had international (EHC 1993) and national implications for all practitioners and educators and a lasting interest in the topic of shared learning was generated in the United Kingdom (UK).

The National Health Service (NHS) and Community Care Act (1990), was instrumental in setting the agenda for joint working across agency boundaries in the provision of care (Owens et al 1995). This was followed by an increasing number of government reports and white papers (DOH 1996, 1998). These encouraged professionals to work more closely together and demanded that there be collaboration through shared learning. Thus, shared learning became a focus for government and professional bodies. Because of this focus, organisations such as, The Centre for the Advancement of Inter-Professional Education (CAIPE), sprung up in the UK. These organisations maintain that undergraduate IPE promotes good teamwork practices when students take up post registration professional roles (SCOPME 1996, 1997).

The government, regional health executives and higher education institutions began to investigate the possibilities in earnest in the late 1990's (NHS 1995, 1996, DOH 1998, 1998a, 1998b). In response to these directives there was a powerful drive towards developing and integrating shared learning experiences into all professional education programmes: 'Education commissioners should actively explore

opportunities to commission, multi-disciplinary education and training programmes which provide opportunities for shared learning' (NHS 1995).

A consensus that shared learning promoted good teamwork and effective patient care developed (CAIPE 1996, Leathard 1997, Pirrie et al 1997, 1998, Baker et al 1998, Buchanan 1999, Hart and Fletcher 1999, Leinster 2002). Unfortunately, there was little evidence to support this, and despite the rhetoric, professionals continued to be educated separately in most undergraduate programmes. Accommodating the requirements of more than forty professional bodies in health and social care presented some difficulties when attempting to revise practice. Although when Miller et al (2001) sampled the views of the professional bodies, they all reported having highly positive attitudes towards shared learning.

A Department of Health Review (DOH 2000) indicated that partnerships between the NHS, Education Commissioners and professional bodies should be developing plans that were genuinely inter-professional in nature. However, the emphasis on IPE raised some concerns at ground level:

> 'Innovative educators complain that there is little point in developing new breeds of professionals if the NHS is not ready for them. Innovative NHS trusts complain that they have to retrain new staff to work in more flexible and integrated ways (DOH 2000, p23).

Despite this active promotion and research, guidance in developing integrated/joint curricula was difficult to find (Carpenter 1995, Vanclay and Hingston 1995, Barr 1996, Barr et al 1999). This is perhaps why Boelen (1996), a WHO representative, strongly supported the development of further research as he believed that this was urgently needed: 'innovative research and action will encourage the improvement of education for professionals, as well as the practice environment for improved health care delivery' (p 5). The potentially 'miraculous' outcomes of IPE occupied the thoughts of educators who began to devise research protocols to contribute to this fast growing area of development. Major changes in professional education have been limited, but evaluative studies of small initiatives were slowly beginning to surface (Leathard 1994, Hart and Fletcher 1999, Freeth et al 2002).

The Faculty of Medicine, Health and Biological Sciences at the University of Southampton was in an ideal position to implement major change. The Faculty consisted of the three schools: Medicine, Nursing and Midwifery, Health Professions and Rehabilitation Sciences (occupational therapy, physiotherapy and podiatry). In the late 1990's, this combination of five professions presented a unique opportunity for shared learning and assured that the Faculty was at the forefront of new developments and research. The annual student intake was approximately 450 in 1997, but with a larger intake of nurses and the inclusion of the Podiatry School, this grew to 925 in 1998.

An initiative called the New Generation Project was activated in 2001 to further integrate IPE across all the schools. Collaboration between the professional bodies, higher education and local employers was established and links with the Faculty of Social Sciences in Southampton (Social Work) and programmes in Radiotherapy, Pharmacy and Audiology, based at Portsmouth University began in 2002. This increased student numbers to 1,500 each intake, which presented an unprecedented opportunity for students to take part in the development of future professional curricula.

1.2 Aims of the Study

This study investigates shared learning from the perspective of third year health care professional students (1999/2000 and 2000/2001). Participants from five professional groups defined shared learning and shared, in either a group discussion or an individual interview situation, memorable inter-professional learning gained in both academic and clinical areas during their training. They considered what were the benefits and limitations of their experiences, and whether these were conducive to the development of what they perceived to be good team working skills. Participants were encouraged to explore the cumulative affects of shared learning over three years and identify what, if anything helped them to bridge the theory-practice gap. After highlighting appropriate and relevant shared learning activities, they recommend a framework for shared learning that could be implemented in the future.

The expectation was that, at a local level, the study would inform the new initiatives and at a national level, it was the intention to contribute the students' perspective to the growing body of evidence about IPE (Zwarestein et al 1999, Koppel et al 2001, Freeth et al 2002). The study introduces the concept that the student population has an active role to play in the collaborative process and as recipients of professional education, they have responsibility to participate in any future development (Walton 1995, Longworth 1996, Leathard 1997).

1.3 Why Inter-Professional Education?

1.3.1 Introduction

As a practitioner, I appreciate that teamwork is essential to personal and professional well being and productivity (Opie 2000, Miller et al 2001). As an educator, I have been involved in IPE on a regular basis since 1983. The cumulative effects of these experiences influence my current work with students and although such experiences are completely interwoven, it is possible to explore them separately. This reflection, prior to carrying out the study, helped me to recognise that I was 'a part of rather than apart from the world constructed through research' (Usher 1996 p35) and identify how my perceptions and opinions have been shaped.

1.3.2 Personal Work History

1.3.2.i Background

I qualified as an occupational therapist in 1979 and initially worked in a mental health setting with in-patients, out patients and day patients. My most creative contribution to patient care was as a member of a good clinical team, though not all the teams functioned effectively and my experiences varied over the years. Whatever the team I felt bound to develop good working relationships despite the perceived professional barriers and challenges presented by some members of the team (Opie 2000).

1.3.2.ii Negative Experience

Working with other professionals meant that I constantly justified my professional identity, team-working skills and developed strategies for dealing with challenging attitudes and situations. On one occasion I was informed that my profession had

simply taken up the recreational activities that nurses did not have time or energy to take on. One staff nurse repeatedly undermined my confidence by asking for an explanation of what I was going to do with all thirty patients the moment I stepped onto the ward. In an attempt to work with him as a colleague rather than as an adversary, my reply was always: 'What have you done with them so far that I can build upon?' Despite my attempts to value his contribution, this was unsuccessful and the failure increased my struggle to develop credible working relationships within the team.

1.3.2.iii Positive Experience

In contrast, I had the privilege to work in a supportive and dynamic rehabilitation team during 1980-1983, where professional roles were readily embraced. Team decisions about the most appropriate professional to work with the patients were dependent on the skills and personal attributes of the individuals concerned. In such an environment, where everyone's contribution was valued and respected, my confidence blossomed. It felt natural to become involved in inter-professional teaching at undergraduate and postgraduate levels.

1.3.2.iv Supervision Experience

In order to understand and respect each other's professional stance it was important to learn about each other at the earliest possible time. There were large areas of overlap in scientific knowledge and technical skills amongst professionals and it seemed sensible for students to learn together at undergraduate level. However, in higher education professionals learnt uni-professionally and usually the first time students became aware of the power of effective teamwork was during direct clinical experience.

I acted as a clinical supervisor to at least four undergraduate occupational therapy students each year. Clinical placements were approximately 12 weeks in length; therefore 48 weeks a year were spent working with these students, in addition to numerous students who were attached to colleagues from other disciplines. It was my duty to provide a good clinical role model for any student and enabling them to become an effective team member was a high priority.

1.3.2.v NHS Training and Development

I followed an interest in education to become a District Training Co-ordinator (1987-1993), with a remit to work with both undergraduate and postgraduate therapists. I invested time in developing a programme for newly qualified occupational therapists, speech and language therapists and physiotherapists during their first year of practice. I also facilitated workshops for undergraduates on a regular basis.

At this time inter-professional courses for newly qualified therapists were viewed with some degree of suspicion by NHS management and professional bodies, as such ventures were forward thinking and highly ambitious. Reflecting on this experience, I was drawn towards lecturing in a new pioneering School of Occupational Therapy and Physiotherapy that was opened in Southampton University in 1993, which was not surprising. This school was a radical experiment in professional education and gaining access to this experience sealed my initiation into the IPE network.

1.3.2.vi Current Experience

The belief that teamwork was crucial to practice first developed when I was a therapist and this was reinforced as an educator (Mathie 1997, Miller et al 2001). It was not acceptable to teach students in a single profession without any reference being made to the contribution of other professionals to patient care. I knew that in the right conditions students from different professional cultures could learn together. I pass on experiences of teamwork inadvertently, and intentionally, and it remains my responsibility as an educator to ensure that students have a good clinical role model to emulate (Fish and Coles 1998).

I first began facilitating mixed undergraduate groups in the clinical area (1989). As a member of the Faculty Inter-Professional Education Committee (1996), I have co-ordinated shared learning experiences for up to 925 undergraduate students at any one time. I work with practitioners who supervise students in the workplace and co-ordinate a postgraduate development programme for occupational therapy and physiotherapy (from 1993) and podiatry (2000) practitioners. Because participants appreciate working and learning together this is a highly positive experience.

These experiences have consolidated some of my original views. It would be acceptable to assume that inter-professional teaching would become increasingly easy to carry out. However, it continues to be my most demanding and challenging teaching responsibility and I learn from every new experience.

1.3.3. Reasons for Undertaking the Study

I have opted to focus on the students' point of view because, despite having strong opinions and being a forceful advocate for IPE, it is important to think about what evidence there is to support my judgements and beliefs. I have identified a number of reasons why this is significant to me.

1.3.3.i Personal

As a therapist in a mental health setting, I became very skilled at listening to people on a one-to-one basis, but recently have had less chance to use these skills. In the past listening was one way that I kept in touch with the needs of patients, therefore the decision to listen to students is underpinned by a belief that it would be a positive and revitalising experience to use these skills once more. In my opinion, keeping in touch with students' needs would increase both my personal confidence and professional credibility.

1.3.3.ii Professional

The Faculty produces a substantial number of newly qualified practitioners each year and is at the forefront of radical change in professional education. Involvement in the decision-making process across professional schools means that I understand the impact that professional expectations and territorial issues can have. I am aware that perceptions and attitudes towards IPE brought to the discussion by educators, whether positive or negative, often influence the collaborative process when planning curriculum change (Taylor 1997, Kennard 2002).

Despite our efforts to collaborate, I began to worry that educators might be biased and prejudiced simply because they were the products of their own experiences in the system. It was possible that professional issues or a focus on questionable topic areas might distract members of the New Generation Project development team.

They might mistakenly develop topics that they believed to be important when in reality students could not see the relevance of the activity to current practice.

Engel (1994) suggests that good collaboration usually occurs when there is empathy among team members, as this ensures a feeling of being valued and enables them to contribute personal expertise and experience to the task in hand. Whilst we need to work on this level as educators, it is important not to forget that students are part of this team and we must endeavour to include them in any collaborative, decision-making process. Success in doing this would ensure that new initiatives are realistic, have relevance and meet everyone's needs.

1.3.3.iii A Wider Perspective

A CAIPE conference in 1998 highlighted a national preoccupation with trying to find 'hard evidence' of the effectiveness of IPE. Finding such evidence was one way of gaining credibility for those people who espouse to the benefits of IPE. I attended a conference workshop organised by a researcher who presented the preliminary findings of a systematic review of shared learning studies. The findings of the review were published in the following year (Zwarestein et al 1999). An element of criticism crept into the presentation about two aspects: educators were accused of being slow to report their work in shared learning and that the existing studies were found lacking in 'hard' outcomes as they tended to describe the experience rather than investigate the effectiveness of the learning.

The audience accepted this critical view and were overly concerned with evaluating experiences immediately prior to, or just after, the shared learning event, in exactly the same way as the researcher outlined (Zwarestein et al 1999). This assumed that the choice of shared learning event was appropriate in the first place and that educators had a clear idea of what students needed. I did not feel that educators understood what was needed to ensure success, or what the focus of shared learning should be, therefore it would not be possible to evaluate the outcome effectively. For instance, if the initial choice of approach and content were weak, then it would elicit negative feedback about shared learning that might not represent the true views of recipients.

The assumption that 'educators know best' completely overlooked the collaborative role that students might play in the planning stage and the effect that this might have on the situation. Identifying student needs and priorities, and gaining an insight into their experiences seemed more likely to produce appropriate shared learning programmes. Once a relevant learning scheme had been implemented, the outcomes might then be tested and credible results would be available to help fine tune future curriculum developments. I left the CAIPE conference feeling convinced that focussing on students' experiences was a priority for me as it might help change the level of uncertainty that plagued IPE research.

1.4 Definitions

Health care managers, practitioners and educators use 'multi-professional, multi-disciplinary, inter-professional, inter-disciplinary' interchangeably to describe shared learning. This is a source of some confusion and protracted debate. The World Health Organisation (WHO 1988) promotes inter-disciplinary education and defines this as:

> 'The process by which a group of students from the health related occupations with different educational backgrounds learn together during certain periods of their education, with interaction as an important goal, to collaborate in providing promotive, preventative, curative, rehabilitative, and other health related services' (p6).

There have been a number of interpretations of this statement since 1988. For example, Rawson (1994) states that; 'The prefix 'inter' denotes relationships both between and among the elements and further implies some notion of reciprocal operations. 'Multi' implies many and some form of composition but again does not immediately suggest any give and take' (p39). More recently, in a review of current practice in the South West Health Regions Tope (1998) suggests that:

> 'The words inter-disciplinary and inter-professional should be adopted only when there is interaction between at least three of the professions in a learning situation, such as case studies, tutorials or seminars.

> Conversely the word multi-professional or multi-disciplinary should be used in a situation where a number of professions are present only to participate in an activity of shared interest, such as a conference or lecture. In such a situation, interaction between professions is not essential and frequently is non-existent' (p20).

Whilst this definition does not consider the benefits of interactive learning between two professional groups, it does clarify the spectrum of learning experiences that are available to health professionals. In common with other definitions it shares the notion that IPE is most productive when the context of the learning promotes the need for interaction between professionals, thereby providing opportunity for the type of experiential learning that can be achieved in small groups, tutorials and seminars.

When searching for a specific description of shared learning it is important to question what is being shared by students when they are learning together. It is possible for the professions to have common learning needs, such as biological sciences and pathologies. In isolation this type of knowledge-based experience does not assist students to learn about what other professionals do, nor will it necessarily result in improved teamwork and communication. If those who learn together are to work together more efficiently, and shared learning is seen as the way forward towards better patient care, then something more demanding is required.

Important outcomes of shared learning are to increase awareness of the limited value of professional stereotypes and an appreciation that team roles can depend on the nature of the problem, rather than professional status (Miller et al 2001). Also students need to be challenged to learn how to interact with others, to increase knowledge about roles and responsibilities, to gain a working knowledge of specific skills and most importantly to learn strategies for collaboration within a team (Shaw 1995). Hopefully experiential learning in small groups has the potential to develop positive attitudes and increase communication skills, though of course it cannot be assumed that the resultant improved teamwork will advance patient care.

Zwarestein et al (1999) identify how, having carried out a systematic review of a number of shared learning studies, they understand shared learning to be:

> 'an educational activity in which interaction takes place between learners from various professions, with the purpose of improving their working collaboration, and through this, their impact on the health and well being of their clients. Inter-professional education may be brief or extended, at any stage from pre-qualifying to advanced studies, either award bearing or not, formal or informal, in college or at work' (p424).

Although based on the Cochrane system, which does not take into account qualitative studies, this definition provides a useful baseline. It incorporates the understanding that the number of professions involved can be variable, the purpose is to increase the quality of patient care and the learning experience is a flexible, continuous process that occurs at both undergraduate and postgraduate levels.

In a further attempt to simplify terminology I refer to Wiles et al (1999) who state that, 'shared learning refers to any learning where more than one profession is being taught intentionally together' (p3). My experience of professional education is reflected in this interpretation. Therefore, for the purpose of this study, I use inter-professional education (IPE) as the preferred term to describe any joint learning venture between two or more health professions and shared learning applies to any interactive learning activity where they are taught together with the intention of learning about roles, skills and how to collaborate in teams.

1.5 Research Evidence

1.5.1 Background

The literature reviewed reflected the drive towards IPE in the UK. Many more postgraduate examples of IPE experiences were found than for undergraduates. However, a growing number of studies into undergraduate innovations have been published and are worth exploring. In many cases, the main limitations of the studies appear to be, difficulty in comparing IPE with traditional learning and the absence of control groups for comparison. It is very difficult to establish reliable

and valid measures by which to determine outcomes. Research to date suggests that IPE may have some positive effects in team functioning, but it seems to raise more questions than it answers.

A table (appendix 1) is a guide covering basic details about the most significant articles referred to in this study. Articles were placed in three loose categories; those which are opinion-based and described beliefs, concepts or models relating to IPE, those which described practical approaches used in IPE, and finally articles that described attempts to evaluate the effects of a shared learning approach. The first two predominated in the early stages of this study, however, more recently there has been an increase in studies looking into the effects of a shared learning approach. Producing hard evidence of the effectiveness of shared learning continues to present a challenge to educators and researchers in this field and reviews of the literature undertaken by Zwarestein et al (1999) and Freeth et al (2002) would support this view. There is a noticeable lack of innovative use of students in the research process, which is an area that requires more exploration.

1.5.2 Setting the Scene

Leather (1994) questioned whether providing IPE experiences would naturally produce competent inter-professional workers, and if this was the case, then why labour to find hard empirical evidence of the effectiveness of IPE? As people responded to the drive towards IPE, evidence was gradually produced and patient's views were becoming increasingly important as a measurable outcome. Tope (1998) highlights how a study in Massachusetts, USA, provided a persuasive argument about the need for shared learning at the beginning of undergraduate training, and then throughout the continuum of their careers. The study emphasised that if the professional groups had worked collaboratively from the beginning that there would be an early positive outcome in patient care.

Experience as a therapist leads me to believe that a healthy team promotes better practice and sharing of expertise. I am aware that: 'the need for sharing of expertise, the pooling of knowledge and the crossing of traditional boundaries has become, not a choice, but an essential ingredient of delivering high quality social and health care' (Owens et al 1995 p5). Because of this cultural set, the belief that

collaboration is a good thing has developed and inter-professional teams have increasingly gained favour in recent years (Leathard 1994, 1997, Beattie 1994, 1995, Leinster 2002).

The very nature of inter-professional work makes it hard to evaluate. There are so many variables about how effectiveness might be viewed that it is hardly surprising that research methods have yet to be devised that can cope with the complexity of the situation. To state categorically that shared learning is the only influence on the students' performance, without any element of chance is difficult. However, there is subjective evidence that IPE has a positive impact on students' attitudes and perceptions (Lorenz and Pichert 1986, Carpenter 1995a, 1995b, Hayward et al 1996, Locke 1999, Leinster 2002). All that is feasible is for students to reflect on their performance and to identify memorable learning that they believe influenced that performance positively or negatively. I think there is little evidence to substantiate the view that collaboration leads to an increase in the quality of care available to patients and service users (Leathard 1994, Hart and Fletcher 1999).

Zwarestein et al (1999) investigated whether there was evidence of the effectiveness of IPE in the literature. Using the Cochrane review system, the findings were that: 'no rigorous quantitative evidence exists on the effects of inter-professional education' (p 419). They argued the need for rigorous evaluation of the effectiveness of IPE before implementation became too widespread. While Zwarestein et al (1999) contribute useful information to the current debate; it is interesting that none of the studies reviewed provided evidence of whether or not IPE reaches its goals. However, the studies did manage to; 'reveal the experiences and the meanings attributed to an intervention and thus tell us why and how it works and give clues to improve its effects' (p 419). The researchers suggest that empirical positivist research worked in two ways: to provide increasingly valid estimates of the effectiveness of the intervention by using rigorous research designs, particularly the randomised trial, and to use statistical techniques to separate the effects of chance from the effects of the intervention.

Whilst outcomes are important, this argument is not the total picture as the scope of the investigation through the Cochrane Review was limited to a narrow range of

methodologies and outcomes. As Koppel et al (2001) claim: 'Such narrow definition of outcomes are inappropriate in this setting, as is a strict linearity between input and output that cannot reflect a complex reality' (p44). Just because evidence has not been produced does not mean that it does not exist. No evidence actually means that it has not been proven either way. Therefore, questions about whether IPE benefits patients should be adapted and widened to 'What kind of IPE, under what circumstances produces what kind of outcomes?' (Koppel et al 2001 p45).

Freeth et al (2002) reviewed studies that had an interactional element to the shared learning events. This was a fuller critique as the evaluative team not only looked at randomised controlled trials and controlled before and after studies, but also qualitative and experimental studies. They found that studies using quantitative data, with fairly limited interpretation, were the most common approach to evaluating shared learning and that most evaluation looked at postgraduate rather than undergraduate experiences. The findings looked at changes in attitudes, knowledge, skills, and behaviour changes related to patient care.

It was concluded by Freeth et al (2002) that greater investment was needed in order to evaluate IPE across a much wider spectrum. They recommended that a smaller number of comprehensive studies, of different kinds of IPE, be undertaken to avoid data saturation about similar things. Their proposal was that educators involved in innovative projects should be encouraged to evaluate the outcomes, but with much longer follow up periods. These findings in 2002 confirmed my feelings when I started this study in 1998, that further evaluation of a qualitative nature was needed to add to the research picture.

1.6 Research Questions

As a therapist, when dealing with a problematic patient I automatically listened to the needs identified by the patient. In a similar way, witnessing the struggle with research into IPE, my instinct was to listen closely to what the students had to say about their experiences and how they would advise educators to proceed in the future. In inter-professional research, it is unusual for students' views to be

considered when planning shared learning, in fact, there was little evidence of any review of student needs being carried out prior to implementation of any major shared learning developments (Koppel et al 2001, Freeth 2002). Reviewing the long-term experiences of students and asking for their advice would add an important alternative dimension to the debate and I decided to follow this up with a series of questions:

1. How do students define shared learning and what do they see is the purpose?

2. What has been students' experience of shared learning at university and/or in the clinical workplace? What shared learning experiences have they had and what were the most memorable experiences and why?

3. What pressures do shared learning experiences place students under in the context of the development of their professional identity? In what ways, if at all, did these memorable experiences influence their perception and attitudes towards other professionals?

4. How would students go about including shared learning in the curriculum if they had the choice? What advice would they have for educators who had responsibility for planning future curricula?

I have spent time putting this study into a local and personal context, it is now important to look at the wider issues that emerge in the wake of the drive towards IPE. The political climate and effects of IPE on professional development is explored in Chapter 2.

POLITICAL AND PROFESSIONAL ISSUES

2.1 Political Issues

2.1.1 Funding and Contracts

In the UK professional education is contracted through Workforce Development Confederations (previously regional health executives/consortium), whose role is to respond to the work force planning needs of the NHS trusts that provide direct services to the public. In the past health executives tended to advocate uni-professional audit in a way that thwarted any desire or attempts at genuine inter-professionalism (Tope 1998).

However, the NHS and Community Care Act (1990) set out a new agenda in that it required joint working across service and professional boundaries. The development of independent hospital trusts, GP fund holders and primary care groups produced many changes within and across organisations. Escalating costs, advances in treatment and the needs of an aging population placed demands on services and staff (Miller et al 2001). The rationalisation of services meant that professionals had to widen their concerns and become increasingly creative about budgets and the distribution of scarce resources. Emphasis was placed on good communication and an integrated approach, any lack of communication within teams was seen as interfering with this shared priority.

The emphasis on care in the community led to the development of smaller clinical teams with increasingly overlapping roles for professionals who had to create a common language of competencies and occupational standards. This enabled professionals to look beyond their own perspective, to reflect on practice and question approaches to care in a positive manner. However, there were also concerns about the apparent need for a multi-skilled professional which was seen as a threat to the professions (Onyett 1997). This anxiety was based partly on the fear that professional identity and skills would be diluted, but also that more patients with a greater range of conditions needed to be treated by fewer staff. This was perceived as being an additional burden at a time of chronic staff shortages and fragmented services.

This climate of change forced policy makers and service planners to collaborate actively with health executives to share ideas and plant the seeds of change. As training is an important vehicle for creating a workforce that is compatible with the goals of integrated services, this was used as a crucial negotiating tool. Enlightened managers slowly influenced training curricula by creating demand for a new type of trained individual with skills that were not taught, as well as supporting positive changes at the direct service level (Miller et al 2001).

The combination of evidence from ground level and government directives (DOH 1998, 1998a, 1998b) has resulted in a change of mindset. Shared learning is currently seen as a desirable feature of professional curricula because it appears to reflect service needs. Many newly formed Workforce Development Confederations now believe that, by instigating changes and promoting IPE, they are ensuring a better service to the patients, or purchasers, in the future. As a result, there is a high expectation placed on IPE and educators are being pressurised to construct effective shared learning experiences for undergraduates (GMC 1993, Davidson & Lucas 1995, DOH 2000).

Unfortunately, inter-professional concepts are difficult to understand and even more difficult to achieve in practice because, funding agencies run on short cycles whereas educating professionals is a lengthy business. The identification of long-term training needs has been patchy and programmes are not able to sustain their efforts in the absence of prolonged sponsorship and funding, a problem that also hampers efforts to measure the true potential of collaborative education. Horder (1996) reports how these factors militate against change and cites examples of how joint working is possible at a local level with appropriate funding. He describes how, when training jointly becomes the expected norm, this experience is enjoyed and highly rated by participants. In these instances, resistance to change is short lived and services and teams move forward proactively.

There is a recognisable period of delay while newly skilled practitioners are being trained. This is followed by a period of transition when those trained in new approaches can either influence the system in positive ways as they become employed in it, or become frustrated by systems unwilling or reluctant to change

(McGrab et al 1997, Kennard 2002). There is a joint responsibility for newly qualified and experienced professionals, 'to work together to learn together' to overcome these frustrations (WHO 1988). In order to achieve this there must be proper funding and commitment at all levels of management and professional hierarchies. Although the awareness of the inevitability of change is growing, financial support is not established enough to provide the security that is needed to underpin innovative practice.

De Witt (1996) highlights how the costs of IPE have never been accurately measured over a long enough period to assess the potential savings. There are real benefits to team delivery of health care, such as; new and expanded roles for practitioners, better continuity of care, as well as a system tuned to patient needs, rather than professional convenience. However, even with these aspects in place, ultimately, the survival of clinical teams in practice will depend on the cost benefits and cost effectiveness of such efforts.

2.1.1.i The Patient Factor

Historically, the health care providers hold the purse strings. Blane (1991) describes how, 'all available health care has been profoundly influenced by the struggles of its providers to increase their authority, status and income', (p234) and how education has attempted to equip professionals to cope effectively with this situation in a uni-professional way. In a system which educates uni-professionally, patients appear to benefit from this process in terms of the competence and ethical behaviour of those who care for them, but they may suffer because as a result of poor teamwork and communications between professionals and themselves (Ovretveit 1996). It has not been common practice to evaluate the impact of IPE from the patient perspective.

However, the NHS and Community Care Act (1990), and subsequent legislation, such as the Patients Charter, has increased patients expectations for quality services to the extent that in a review carried out for the South West Regional Health Executive, Tope (1998) states that the tide is turning and:

> 'Patients are now in the driving seat as far as the utilisation of health care services is concerned. They have been empowered and enabled through

legislation enacted within the last decade, to take control of their own health destinies' (p2).

NHS trusts are held accountable for their actions due to clinical governance and any lack of communication is seen as compromising good patient care. Increasingly priority is being given to patient opinion and conscientious professionals struggle to meet the needs of both patients and the clinical team within the financial constraints placed on the service by management. In all aspects, the professional is required to collaborate skilfully in order to meet the challenge that this presents (Owens et al 1995, Shaw 1995, Hart and Fletcher 1999, DOH 2000a).

2.1.2 Collaboration

In line with the WHO (1988) guidelines, CAIPE (1996a) promotes collaboration between higher education with specialist knowledge of facilitating learning, professional bodies with specialist knowledge of professional requirements and employers with specialist knowledge of service needs. Greater understanding of teamwork, professional relationships and the process of working across service boundaries was required and this necessitated the use of new models of shared learning. Patients, carers, managers, practitioners, educators and professional bodies were all stakeholders in a re-education process that encouraged shared goals, shared meanings about priorities, as well as good practice and quality assurance (Owen et al 1995). Communication between them is complex and it has been suggested by Eraut (1996) that:

> 'The work of professions can be viewed in terms of several inter-connected sets of power relationship, between service users, managers, government, special interest groups and other professions' (p5).

The joint School of Occupational Therapy and Physiotherapy was established because of this type of collaboration (Gallagher 1997). It was designed as a truly integrated professional education programme (SOTP 1993). However, this type of development is unusual rather than the norm, the up-take of such initiatives has been remarkably limited, and there appears to be a number of important issues that might account for this slow start in the development of IPE.

Firstly, where joint programmes and new initiatives are not planned or funded, the alternative is for existing uni-professional programmes to work towards joining their programmes. In such cases, implementation of new practice is hampered by having to match academic schedules and student skill levels (Wilson and Mires 2000). This type of directive often comes from the top downwards due to pressure from government and health executives/confederations, with little time for explanation or development of a shared vision. Developments usually have to be completed within very short time scales that do not allow space for adequate collaboration, although recent directives from the Department of Health (DOH 2000, 2000a, 2000b) do appear to be addressing this issue.

There is a common concern that, 'change for its own sake syndrome can cause educators to waste time on projects with little potential for bringing about worthwhile change' (Eraut 1996 p5). Without proper ownership of change, many established programmes report trying to incorporate change in the face of obstacles such as, lack of time to design and develop a curriculum, territorial power struggles and resistance to new approaches (De Witt 1996, Horder 1996, 1996a, Harden 1998a). Even with a willingness to change, the costs could potentially be very high and where this has not been confidently or adequately funded innovative ideas and projects have collapsed (De Witt 1996, Gordon et al 1996). Professionals have failed to find an effective method of dealing with the complex issues that arise.

Secondly, although new ventures may have been implemented, the adopted evaluative process has not yet produced hard research evidence to support the effectiveness of IPE (Leiper 1994, Boelan 1996, Reeves and Pryce 1998). Professions remain unconvinced as to the value of focusing energy on this challenging aspect of health care. They are particularly unclear about whether sustaining their commitment is a worthwhile activity in the long term (Parsell and Bligh 1998, Leaviss 2000). However, there are similarities in reported experiences and agreement about the need for IPE and also that such experience can be positive and energising (Carpenter 1995a, Tope 1996, Owens et al 1999, Ross and Southgate 2000). This is particularly important as:

> 'Now almost every contact a patient makes with a health professional depends on others, often unseen, to increase its chance of being useful, effective and helpful. We will frequently find that inter-professional learning is the most effective and fruitful way to design and implement changes that improve how closely the service provided matches the needs of the users of the service. We have also found that participants report their involvement in such learning work as reaffirming, energising and fun' (Campion-Smith et al 1999 p13).

Finally, IPE is hard work as it creates opportunity for discussion of professional roles in health care (Evetts 1999) and where these roles and boundaries overlap, the experience can become quite challenging for students and facilitators (Reeves et al 2002). 'For many years educationalists have been interested in the concept of IPE, it feels that is the right thing to do as far as teaching the health and social care professions are concerned' (Tope 1998 p16), and yet, it is probably the hardest teaching to organise and implement:

> 'The process has been exhilarating at times, stressful and disappointing at others. The search for effective collaboration is perhaps at the heart of a paradox. To recognise and come to terms with fundamental issues of dependence and interdependence is to recognise and manage one's humanity in the context of diversity in community care' (Gorman 1995).

As the nature of IPE incorporates such challenges on a regular basis, even the most dedicated can find it hard to sustain for any length of time and invariably this is not achieved (Leathard 1997, Leaviss 2000). This is also described by De Witt (1996), in a review of the systems in the USA:

> 'What has emerged from these experiences with inter-disciplinary education and practice is the awareness that the task of teaching co-operation and collaboration in health care is not easy. Attempts to promote such efforts seem to meet overwhelming barriers of disciplinary and territoriality and system inertia. Each forward push seems to end with a return to the point of origin, with little tangible evidence of impact

> or permanence. As a result each new generation seems to have to repeat the experiences and frustrations of the past' (p174).

In 1988, Areskog stated that, 'Despite the inherent difficulties there is no reason for further delay in planning and implementing multi-professional education or at least in establishing closer collaboration' (p252). While this viewpoint may be shared by others, the principle behind it appears to have had very little influence on the situation, as managers, practitioners and educators fail to deal comfortably with complex issues of finance, professional boundaries and management of change (Harden 1998).

2.1.3 Widening Participation of Students and Patients in Research

Gordon et al (1996) suggests that professionals in the UK appear to be following a similar pathway to colleagues in other countries and practitioners have begun to learn from the experiences of colleagues in Linkoping and Malmo, Sweden (Areskog 1995, Wahlstrom et al 1997, Wahlstorm and Sanden 1998). For example, Aspegren et al (1998) investigated the use of problem-based learning with medical students in general surgery. The focus on a single profession is an obvious limitation in the usefulness of the findings; however, it is of particular note because patients, students and tutors were involved in both the learning and evaluation process.

A series of tasks such as, initial interview and examination were undertaken by the students, with the patient's co-operation. Students, tutors and patients were subsequently all questioned (by questionnaire) about their experiences. It was not clear how influential patients' opinions were on the development of the seminars, though patients reported that they enjoyed the experience and were happy to contribute in this way as they felt it was a good way to teach students. As the feedback from everyone was positive, I assume that patients' views were taken into account when planning future teaching, and if the results had been negative, the involvement of patients could have been reviewed in order to make it more user-friendly.

Recently studies into the effectiveness of IPE have also begun to incorporate patient satisfaction into the equation. Reeves et al (2002), mirrored work carried out in Sweden as a 12-bedded training ward was set up in the musculoskeletal directorate of the Royal London Hospital. This allowed teams of students from a range of professions, under the supervision of qualified clinicians, to treat patients on the training ward. Whilst this demonstrates a move towards collaboration between education and health, and it is commendable to have used a range of research tools, they missed an opportunity to gain in depth information by omitting to formally interview patients. However, the researchers did discover that, when compared to a control group of similar patients with the identical medical conditions, patients on the training ward were more satisfied with their experiences. Patients reported having had more individual attention, which they valued. They also expressed interest in observing how the students' performance improved over time.

In contrast, Ker et al (2003) based their evaluation on teaching sessions in a Clinical Skills Centre where 2nd year medical and nursing students worked with simulated patients. The students, who were expected to develop working relationships while under pressure, were found to make mistakes, such as lack of respect for patient privacy and confidentiality. Although the experience was of short duration it was by students felt that it would be possible for similar experiences to become an integral part of the curriculum, as it could be adapted for all levels of students.

These examples confirm that multi-faceted evaluation needs to be developed as a way of evaluating the complexities and outcomes of shared learning. However, additional exploration of the long-term effects of such learning initiatives needs to be followed-up in order to complete the picture.

Professional Issues

2.2.1 Culture

Professional education usually relates to the history of a particular profession, which for some is very well established and respected. The language, ethos, customs, myths and rituals of professions are usually transmitted-implicitly, as the theories and skills are communicated explicitly. Each culture is distinguished by a

shared language and knowledge, which provides an important sense of belonging and uniqueness (Evetts 1999). Learning to work within specific competency boundaries, with the support and encouragement of colleagues increases the feeling of belonging and underpins most professional cultures. However, Meek (1995) believes that: 'a culture's claim to uniqueness is expressed through cultural manifestations that are not in fact unique. The uniqueness is a paradox' (p272). For example: the content of the programmes may be very different, however there are similar concerns about the students who were failing to achieve the required standards of professional judgement and practice (Fish and Coles 1998).

Relationships are complex, as each profession has its own knowledge base, responsibilities and territory (Ovretveit 1996, Atkins 1998). It is common for territorial issues to arise, particularly where there are overlaps in role and identity. Domeck (1997) describes how:

> 'The reason that blurring, converging, fusing or collapsing role boundaries are perceived as problematic is that they change and might threaten professional rights and responsibilities. When one's role is not clear, it is not possible to be sure that one is fulfilling one's obligations'. Inter-professional relationships run the risk either of remaining superficial or of becoming intractably conflicted', and it is, 'difficult to form collaborative ties when one is unsure of one's professional identity' (p15).

Professionals need time to cope with the process of cross-cultural communication in the same way as for any social grouping. Domeck (1997) outlines the issues as being: 'learning each other's language, being a guest in each other's territory, affirming one's own discipline, collaborating in inter-professional groups and rotating leadership roles' (p9). These are all aspects that have the potential to undermine important professional values and autonomy. A similar lack of security, and subsequent inflexibility, is reflected in practice in teams who frequently make mistakes and do not improve their performance, or who do not establish effective working relationships (Bubna-Kasteliz 1999).

Educators agree that allegiance within cultures, and across cultures, is crucial if professionals are to make explicit the boundaries and break down barriers as described by Engel (1994) and Horder (1996a). Engel (1996) best summarises the ideal situation when he states: 'Empathy among all members will ensure that they feel valued, encouraged and enabled to contribute their own special expertise and experience to the task in hand' (p3). SCOPME (1997) support this ideal, believing that effective inter-professional working and learning depends on there being mutual respect and understanding of each other's capabilities. Time is needed to appreciate each other's culture in order to support a new and innovative-shared curriculum. This is becoming increasingly urgent because, whilst uni-professional programmes assist students to become part of cultural groups, they do not provide a wide enough experience to equip them to function as expected in the workplace.

2.2.2 Dual Role of Educator

Until recently professional training took place in institutions that were controlled by the profession with a focus on self-identity, duty and loyalty. 'This gave considerable power to senior members of the profession to mould new members in their own image' (Blane 1991 p230), and change happened slowly, if at all. However, historical, political and sociological factors have resulted in initial training being increasingly based in higher education under the leadership of academics recruited from these professions.

As the norms of higher education take precedence over those in the professions, educators are experiencing considerable role conflict. In particular, when the knowledge base is segmented and framed in technical and scientific terms rather than practical terms. This renders the nature of the professional knowledge highly problematic for new and experienced educators alike. Eraut (1996) identifies the main issue as being one of fear of conflict between professional orientated perspectives and the academic university perspective. He maintains that part of this tension is the fact that a broader knowledge base could challenge cherished, long established practice.

Educators bring with them a wide spectrum of clinical, management, educational and research experience that can generate territorial disputes when there are

different vested interests. Taylor (1997) discusses how many academics develop allegiance to their disciplines rather than to the broader academic community and how this leads to dislocation and disputes. This territorial issue is extremely prevalent in the health care professions, where there is a strong power structure and well established historical hierarchies.

It is generally presumed that academic courses are shaped by those who teach on them, therefore the perceptions and attitudes of educators that formed whilst they were practising in the clinical field are important. Previous experiences of inter-professional work, whether positive, negative or ambivalent, could potentially influence communication. Leathard (1994) discusses how 'professional anxieties are likely to reflect professional insecurity' (p210) particularly when a profession seeks to uphold standards in an inflexible way. This insecurity and perceived threat manifests itself at best in the reluctance of students and educators to engage in shared learning at undergraduate level and at worst in their lack of co-operation and efforts to sabotage experiences that are presented to them.

On a more positive note, Eraut (1996) believes that educators take the responsibility of preparing the next generation very seriously and wish to socialise students safely into appropriate new roles. He feels that at a time of change there is a natural tendency for emphasis to be placed on new rather than building upon the old. Although this initially devalues the status and experience of senior professionals, it can be overcome in the long term. This complicated scenario places educators in a stressful situation, as they are required to uphold existing standards and embrace major change during a very unsettling time.

2.2.3 Academic and Clinical Interdependency

The issue of professional allegiance is compounded for educators in a university setting, because though professional values, culture and behaviour can be taught theoretically in school, there is a dependency upon practitioners in the workplace for a large proportion of the experiential learning. Programmes can take from two to five years to complete and in this time many professionals are involved in the learning process of each student. When working in a variety of clinical areas, with large numbers of practitioners, it can be difficult to predict what type of learning

opportunities students are likely to experience. A fine balance needs to be maintained between espoused theoretical ideals and the reality that students are exposed to in the workplace. If these two aspects are not complimentary, this is commonly referred to as the theory-practice gap (Rafferty et al 1996).

The opportunity of learning how to cope with disease, disability and a range of difficult emotional issues is a demanding experience. However, students are not only attempting to become members of a specific profession, they are developing this alongside learning how to work as part of a multi-disciplinary team (Wiles et al 1999). The positive and negative outcome of such specialisation is well documented. This appears to be highly relevant when addressing issues in the affective domain (Beattie 1994, Beattie 1995, Atkins 1998). Methods of coping with the affective domain are modelled to students by educators and practitioners and a strong allegiance is developed between everyone involved. This encourages students to develop appropriate survival skills. However, success is highly dependent on whether students are fortunate enough to work within an effective clinical team.

2.2.4 The Research Challenge

The two studies briefly discussed in this section attempt to evaluate the benefits of IPE. As the findings are inconclusive this is used to demonstrate that more sensitive research methods are needed to evaluate the effectiveness and outcome of IPE.

Wiles et al (1999) found that even though Regional Executives, NHS Trusts and practitioners supported the ideal of IPE: 'There was little overall evidence that newly qualified therapists educated on joint courses were of significantly better quality than those educated on other styles of professional course, although there was some indication that they had better teamwork skills' (p5). Employers and practitioners expressed concern that shared learning might be introduced at the expense of, or in a way that compromised professional identity, though this was not substantiated. The fact that this concern was voiced indicates that professionals need to be convinced that such collaboration is the most positive way forward. In a similar way to educators, their commitment to shared learning is influenced by personal experiences of team working which are often unpredictable.

IPE is influenced by this unpredictability, but cannot be held responsible for issues such as poor team working. Carpenter (1995b) describes how existing stereotypes between medical and nursing students were negative enough to jeopardise effective working relationships. While nurses respected the doctors' dedication, they found them to be arrogant, detached and poor communicators. Whereas medical students felt that although nurses were caring and good communicators, doctors were academically superior. There were significant inter group differences and positive and negative stereotypes were confirmed. In this case, medical students had opportunity to show that they were more concerned about patients, which had a positive effect on nurses' attitudes towards them.

In response to this, Carpenter (1995b) concluded that it was not possible to counteract every stereotype or misunderstanding, but that there had been a significant improvement in each professions attitude towards each other by the end. It was noted that discrepancies in power relationships held some significance to the potential change in attitudes, 'it is simply unrealistic to expect the weaker partner in a relationship to change the behaviour of the more powerful. Change must be two-sided - if the stereotyped relationships are to change in the interest of the patients, then doctors as well as nurses must change their attitudes and behaviour' (p152). Although the results were informative, the list of stereotypes identified may not provide wide enough coverage of the issues that arise, or be sensitive enough to detect subtle or lasting changes in attitudes between professionals as they occur. However, the study does identify that shared learning creates the opportunity for professionals to develop positive attitudes and appropriate team working skills.

These studies indicate the need to set aside professional differences that contribute to the stressful nature of collaboration. The content and implementation of shared learning presents additional problems, as identified in Chapter 3.

SHARED LEARNING

3.1 Developing a Shared Learning Curriculum

3.1.1 Educational Approach

The act of redesigning uni-professional programmes to meet the changing needs of health care draws attention to whether traditional approaches are best suited to shared learning. Sadlo et al (1994) suggest that traditional curricula, which are based on 'what is known', quickly become irrelevant due to the rapid accumulation of new information and increased specialisation. Traditional approaches do not serve the new purpose, which is to expose students to experiences that teach them 'how to learn' not 'what to learn'. Sometimes: 'theory as taught by academics is dry, esoteric and unrelated to practice, practitioners are encouraged to absorb it in a detached and uncritical manner and in some instances there is a need to unlearn much of their traditional approach towards health promotion' (Williams 1995 p37).

Support for this can be found in the report: Health Service for all Talents (DOH 2000). Here employers claim to have to retrain newly qualified workers to deal with the realities of the workplace and educators insist they cannot prepare professionals for a workplace that is not ready for radical change. Students report that they witness great variance in the quality of teamwork whilst on placement, which also verifies the need for change. However a lack of clarity about when and how to implement new developments inhibits the pace of change.

There is an urgent need to evaluate what to keep and what to eliminate from the curriculum; otherwise programmes become 'stuffed' with irrelevant information that precludes the experiential development of students. Such restrictions lead to student frustration because:

> 'Every student finds that large proportions of the curriculum are meaningless. Education becomes the futile attempt to learn material that has no personal meaning. Such learning involves the mind only. This learning takes place 'from the neck up'. It does not involve feelings or

> personal meanings. In contrast, there is such a thing as significant, meaningful, experiential learning' (Rogers and Freiberg 1994 p35).

The debate about traditional versus experimental approaches has a long history. A student-centred approach to learning was promoted by Rogers in the 1960's (Rogers and Freiberg 1994). Engel (1996) describes how the debate continued from 1960 through to the 1990's when a growing number of programmes adopted a problem-based learning approach. This provided opportunity for progressive development of competence; however, Engel (1996) suggests that:

> 'As the latter tend to be practised in uni-professional settings, additional opportunities for learning in a multi-professional context would need to be developed. Small groups of students from different professions should then be faced with the sorts of problems faced by multi-professional teams' (p3).

Whilst the suggestion of mixed groups of students working together is a potential goal, it is fraught with difficulties, mainly because programmes have developed in different ways that utilise a combination of teaching approaches (Walton 1997, Savin-Baden 2000, Kaufman 2003). This was the case in the evaluation carried out by Freeth and Nicol (1998) where final year medical students and newly qualified nurses worked on patient scenarios and teamwork. The evaluation found that although the experience had been informative and enjoyable, facilitators and participants had markedly different teaching/learning styles because of their traditional professional socialisation. This factor was believed to have significant impact on the learning experience.

A range of teaching approaches can be seen in Southampton where there were five professions in the initial collaboration process within the Faculty. The medical school is forward thinking in comparison with many of its peers, but still has a traditional, outcome-based edge to programme organisation (Harden et al 1997, 2002, 2002a). Nursing and midwifery adopts a more experiential approach and uses enquiry based learning groups (Glen and Wilkie 2000). Occupational therapy and physiotherapy have totally integrated components of their programmes (Gallagher 1997, Wiles et al 1999), and until 2001 the podiatry school was situated in a teacher

training college and were isolated from other university based health programmes. Such differences in historical background result in a variety of teaching approaches being employed.

A more recent development has been to include social sciences, pharmacy, audiology and radiotherapy in the collaboration, which potentially links eleven professions from health and social services, a number of faculties and two universities in the process. This is typical of the complicated scenarios encountered when dealing with existing curricula. However willing such diverse departments may be to collaborate, underpinning political and historical issues pose obstacles to the development of shared learning in such circumstances.

3.1.2 Learning in a Clinical Environment

Linking IPE with practice can be a key to motivating students, as meeting a patient face to face acts as a catalyst for the students to begin 'thinking' in action. It has been discovered that clinically based undergraduate inter-professional workshops are successful, particularly when real or hypothetical case studies are used (Pomeroy and Philp 1994, Studdy et al 1994, Mountford 1999, Donovan 1999, Ker et al 2003).

Pomeroy and Philp (1994) elicited the views of a mixed group of students who attended a one-day clinical workshop in elderly care. Students worked intensively with practitioners and educators from different professions, took part in small groups and observed a short 'real' patient-practitioner interview. Despite the experience being positive, there were incidents where some professional groups felt misunderstood, and students believed that a single day was nowhere near long enough to overcome these issues. A limitation of the study was that no follow up was planned, so researchers were not able to evaluate the lasting effects of the workshop on participants, or the outcome for patient care.

This type of study demonstrates how single events can be usefully evaluated at the end with a short questionnaire. Although the quality of such data is dependent on the merit of the questions being asked, it is possible for a range of opinions from different professional groups to be ascertained and compared. The study completed

by Pomeroy and Philp (1994) is an example of a localised survey that at the time acted as a guide to others, in similar circumstances, about how to evaluate shared learning events. The clinical workshops, which began in the late 1980's, were innovative for the time and may have pre-empted further studies, both locally and nationally, that adopted the same evaluation methods (MacKinnion and MacRae 1996, Lacey 1998, Stanley et al 1999). More recently, Freeth et al (2002) suggest that this type of evaluation has reached saturation point and what is needed now is a more sensitive, outcome lead approach to the evaluation process.

3.2 Organisation of Shared Learning

3.2.1 Making a Start

The timing of shared learning is important, although there does not appear to be any consensus in the literature about how early it should be introduced. Some educators believe it should start at the very beginning of professional courses (Harden 1998, 1998a, Mires et al 2001). For example, Petrioni (1994) suggests that students can obtain clear and distinct occupational identities at a relatively early stage in their training through practical experiences in mixed professional groups. Whereas other educators feel that students in the early stages of training often have difficulty in establishing themselves as part of the closely-knit professional group. It is hard for students to develop relationships with other professions before they have developed a professional identity of their own (Barr and Waterman 1996, Leaviss 2000). Barr (1994) states that:

> 'Shared learning is seen as being more effective and less dangerous where students are already secure in their identification with their chosen profession, before they're required to cross-fertilise ideas and methods with people form other professional groups' (p2).

Employers expect IPE to begin as early as possible, thereby adhering to the lifelong learning commitment they are establishing in the workplace (Longworth 1996, Buchanan 1999). This is positively supported by health confederations who need to plan for the workforce of the future (DOH 2000) and are expected to take into account the growing power of the users in service delivery nationally (Tope 1998).

There appears to have been little opportunity for students themselves to voice concerns, ideas and to be proactive in developing the content of their programmes.

However, a study of undergraduate student's readiness for IPE (Horsburg et al 2001) using a questionnaire developed by Parsell and Bligh (1999), indicated that students were positive about the benefits of early shared learning. While students expressed a positive attitude towards IPE, the evaluation was unable to determine the best time to begin the programme, unlike the findings of Parsell et al (1998), where shared learning was viewed as an excellent experience that should be incorporated as early as possible. The finalist students in Parsell's study had the benefit of clinical experience and hindsight to inform their decisions. Whereas Horsburg et al (2001) questioned first year students at the commencement of their courses when they had only a limited appreciation of the issues.

This difference verifies that insight into clinical practice influences students' attitudes towards shared learning, an issue that affirms my intention to explore shared learning with third year students. Many questions need to be addressed with students to ensure that decisions about the curriculum are sound. It is also important to avoid falling into the trap of re-inventing the wheel as described by De Witt (1996).

3.2.2 Content Credibility

Emphasis is placed on communication skills and teamwork in most reported undergraduate and postgraduate shared learning events. For example, Wiles et al (1999) recommend that programmes should encourage teamwork and communication skills as a way of promoting positive attitudes amongst professionals. Alongside this aspect, recognising the importance of psychosocial factors of disease, 'what a former Regional Postgraduate Dean called the *'soft centre'* of medical education,' (Bubna-Kasteliz 1999), naturally becomes a focus of IPE. This could be considered a little unfortunate, as it creates the misguided belief that shared learning is less important than hard science and the credibility of those who are associated with it is reduced. In reality this 'soft centre' can be as difficult to teach as hard facts as it challenges students to develop advanced communication

skills and to appreciate the wider concepts of health care (Walton 1995, Macleod 1996, Hart and Fletcher 1999, Leinster 2002).

This increases the pressure on educators, because if shared experiences are seen to be unsuccessful in any way; the credibility of the experience is further reduced. For this reason, there is a need to delegate responsibility to facilitators who understand group dynamics and have sound experience of shared learning. The need for strong facilitators presents a challenge to all educators who then struggle to attain high standards in facilitation, content and evaluation (Hart 1997, James 1997, Spencer and Jordan 1999, Dacre and Fox 2000). Often insufficient time is given to developing skills, planning content and checking whether it is relevant to students, which results in costly mistakes and worsens the reputation of shared learning.

3.3 Perceptions of Shared Learning

3.3.1 Educators

Most educators are products of uni-professional systems, they have not trained in an inter-professional approach nor have they practised in one, therefore it can be difficult to teach with this focus. However, they are familiar with current developments in educational practice, which affects their attitudes towards shared learning:

> 'For some it is a means of ensuring common language and shared concepts, thus helping to promote closer collaboration between professional groups; for others it is a means of up-dating knowledge and skill and of making good deficits in basic professional education. Yet other people see it as a means of redrawing the professional map when used to engineer changes in definitions of professions and of their boundaries and functions' (Barr 1994, p2)

Not everyone is convinced that development will be achieved by simply identifying a common core curriculum, or teaching large groups of students in similar ways (Barr and Waterman 1996). This scenario is unsettling for those educators who see themselves as empowering rather than controlling (Williams 1995, Hughes and

Lucas 1997), and have made definite moves towards participatory methods of teaching and student centred learning. These educators are familiar with allowing students to take responsibility for their own learning over time (Hollis 1991). Educators who promote student centred approaches have subsequently developed a range of facilitation and leadership skills that suit the approach adopted by their professional team. This experience results in differing levels of skills and confidence when using facilitation techniques (Ross and Southgate 2000, Gilkison 2003). It is difficult to establish parity across shared learning activities when an unpredictable range of skills is being offered, and in my experience, some educators find compromise a very unsatisfactory element of the collaboration process.

Despite programmes being uni-professional, it is normal for practitioners and experts in a clinical field to be called upon to teach on each other's programmes. Learning to trust and rely upon colleagues from different professions and accepting them as facilitators for your students is essential. Any perceived lack of commitment or understanding of the required standards appears to sabotage the learning experience before it starts. De Witt (1996) gives examples of how two professional groups can be successfully taught together by a single professional, and how students studying one profession can be taught by a completely different professional. He concludes that this is difficult to maintain without committed funding and resources which affirms the experience of the occupational therapy and physiotherapy teaching team who have worked jointly since 1993 (Gallagher 1997).

Evidence of the drain that shared learning can place on organisations is identified by Parsell et al (1998) who evaluated a pilot workshop for final year students from seven professions. There was substantial subjective evidence of a positive change in attitude and high satisfaction levels as they became more aware of the involvement of other professionals groups in patient care, but little evidence to suggest that these skills would be transferred into the workplace. The evaluation discovered that students viewed patient care in a linear way, 'as if patients were processed in a chain by each professional' (Parsell et al 1998 p309) which did not indicate an awareness of what seamless care involved. Nor were they aware that overlaps in roles might place patients in dangerous situations, especially if it was assumed, wrongly, that another professional had taken responsibility for an aspect of care

when this was not the case. It is concerning to find that students who were so close to qualification were unfamiliar with these issues.

This lack of knowledge and experience supports the argument that shared learning should begin early, as this would provide time to build on knowledge and consolidate learning. Parsell et al (1998) do not give details about whether the immediate positive responses had been maintained when reviewed six weeks later, though they imply that it was difficult to comment on this as students had previously completed many clinical placements which had influenced their knowledge and performance.

The study highlighted how the planning team purposefully involved senior practitioners at the 'sharp end of practice' to facilitate the workshop, which proved time consuming and expensive for the services involved. It was acknowledged that practitioners could not cope with the level of commitment and facilitation demands in the long term. Educators would be needed to facilitate the large numbers of students that would attend future workshops. This places the responsibility for financing, organising and sustaining shared learning firmly with the educators, who are likely to experience a similar drain on their innovative ideas and resources.

Planning for a mixed cohort, often results in limited opportunity for student centred approaches, which can be frustrating for everyone involved. The conflict of interest between teaching large numbers and the desire to promote student centred learning creates a difficult situation, which generates negative perceptions that shared learning is unusually demanding and difficult. Strong leadership is needed to counteract these circumstances, as, 'without powerful and co-ordinated leadership – shared learning in pre-qualifying education will remain the hobby-horse of some and an expendable luxury for others' (Ross and Southgate 2000 p743)

3.3.2 Students

Negative perceptions held by educators can be reinforced by examples of limited student compliance and inability to see the relevance of the material to patient care (Rafferty et al 1996). Even in well-established programmes attendance can be poor simply because students fail to see the relevance, or to prioritise the experience at

that point in time: 'Students often see modules as being irrelevant and onerous in the face of an already overloaded curriculum' (Davidson and Lucas 1995 p173). Only 21% of students reported that they would take up IPE workshops if they had been given the option (Australia) and were influenced negatively if they perceived IPE as being: 'low priority in eyes of school staff and the teachers did not practice what they preached. Students also stated that anything less than overt examining would be translated as a soft option and avoided' (p174). An attendance rate of 30% at shared learning sessions (Salford) had not improved significantly over a period of 4 years, which indicates that negative perceptions were hard to change. It requires highly motivated staff to carry a positive message into the student body once negative perceptions prevail.

Developing teamwork skills involves theory and practice and students express readiness to take part in this process once they had established a professional identity for themselves and had gained direct clinical experience (Nolan and Smith 1995, Horsburg et al 2001). However, it is not easy to find good clinical role models and if theory is not witnessed in the clinical workplace students quickly become dissatisfied and detached (De Witt 1996). This is viewed as a major problem as evidence shows that repeating theoretical and practical experience in the medical curriculum ensures positive perceptions and attitudinal changes are sustained in practice. The key to the success was for students to see professionals in practice, though the question: 'Does this early awareness of professional roles subsequently improve patient care?' (Mires et al 2001 p304) remains unanswered.

Whilst students are able to perceive the benefits of shared learning, they are not convinced that stand alone shared learning experiences are effective in changing perceptions and attitudes. Leaviss (2000) found that IPE needed to be prolonged and widespread to have real impact, an opinion based on the effects of a shared learning experience on a small group of final year students. A follow-up study, carried out after the first year of qualified practice, indicated that sustained positive contact in the working environment had helped to change ingrained perceptions about other professionals.

3.4 Future of Shared learning

In the event that financial support is secured, the future for IPE within pre-registration degrees depends on two other elements. Firstly, the skills of innovative, enthusiastic and motivated staff who support the philosophy, and secondly, that educators evaluate and publish their findings so that good practice can be learned quickly and effectively and support networks can flourish (Obholzer and Roberts 1994, Freeth et al 2002). Close collaboration across professions is needed in order to achieve both aspects and to negotiate a joint philosophy:

> 'committed staff, from each of the professional disciplines involved, create interesting and enjoyable learning experiences for students by encouraging inter-professional collaborative learning situations where students can reflect on health issues together' (Davidson and Lucas 1995 p175)

Bringing different professional schools together within one Faculty is seen as helpful to a certain extent, but while this might lead to the development of common concepts and language between professions, something more interactive is required to break down barriers and deepen understanding. Founder members of the teaching team at the School of Occupational Therapy and Physiotherapy identified a number of factors that were necessary to facilitate high standards in IPE. These focussed on aspects such as, regular team-teaching, widely negotiated educational goals and strong communication networks between students and staff (Gallagher 1997). The remaining ingredient for success is the teaching approach and content of the programme. Experiential learning, such as the use of learning contracts, facilitated groups and self-assessment is a versatile alternative to commonly used traditional methods (Rogers and Freiberg 1994).

3.5 Summary

By identifying the professional and educational issues encountered during the development of IPE it becomes apparent that this is a complex and constantly changing situation. It would be understandable if professionals were overwhelmed because the interaction between training and outcomes in service delivery is difficult to implement and evaluate. However, if: 'The future health of the people of

this planet depends on the expertise and dedication of those who teach in the basic, post-basic and continuing education of health professionals' (Engel 1996 p3), this is a great responsibility. However, Engel does not appear to doubt that professionals are able to accept the challenge and participate in the avalanche of changes that are anticipated in the future.

In comparison to other countries the development of shared learning in the UK is in its infancy (Davidson and Lucas 1995). There is great variability in the extent to which shared learning has been implemented and evaluated. Studies provide evidence about beliefs, concepts and practical examples of innovative approaches that are being developed. With many unanswered questions about the best way to develop programmes, research into the effectiveness of such innovation is growing (Freeth et al 2002). Having looked at the literature it becomes apparent that even though questions are being asked and IPE experience evaluated with increasing vigour, educators do not yet have any clear-cut answers to the questions posed by the introduction of IPE into the professional curriculum. An investigation of the experiences and opinions of those students who are the recipients or 'guinea pigs' during this challenging time is one more positive step towards understanding the complexity of the situation.

RESEARCH DESIGN AND METHODOLOGY

4.1 Design of the Study

4.1.1 Introduction

The study adopts an interpretive approach which is primarily qualitative (Powney and Watts 1987, Benner 1994, Miles and Huberman 1994, Mason 1996, Cohen et al 2000). Third year students from the Schools of Medicine, Nursing and Midwifery and Health Professions and Rehabilitation Sciences were the source of information and semi-structured interviews were used as the main method of exploring their experiences. A number of group discussions were also implemented in order to widen student participation. During 2000-2001 a combination of group discussions and interviews were carried out over a period of 10 months. 60 students, from 5 professions were involved, which ensured that the study reflected the experiences of a representative group of third year health care students.

4.1.2 Structure of Interviews

Interviews were semi-structured, using a pre-determined checklist to ensure coverage of issues (appendix 2). The interview questions were closely related to the research questions as can be seen below.

Table 1

Research Questions	Interview Checklist
How do students define shared learning and what do they see is the purpose?	• How would you define shared learning? • What is the purpose?
What has been students' experience of shared learning at university and/or in the clinical workplace?? What experiences have they had and what were the most memorable and why?	• What has been your experience of shared learning at university? • What has been your experience of shared learning in the workplace? • What made these experiences memorable? • In what way, if at all, did these experience influence your perception and attitudes towards other professionals? • In what way, if at all, does shared learning enhance professionals understanding of each other's roles?

How would students go about including shared learning into the curriculum if they had a choice? What advice would they have for educators who had responsibility for planning future curricula?	• At what point, or level of your programme, did you feel most receptive towards shared learning? • If you could re-design your programme, what changes could be made to encourage shared learning? • What aspects of the programme could be shared/learnt with other professionals? • Who would this involve and why? • Is there anything else you wish to comment on?

The checklist was developed and piloted informally with the first two group discussions and was used during all subsequent interviews and group discussions. The majority of interviews were 50 minutes long and focussed on shared learning and interprofessional practice. After initial warm up questions about definitions and purpose, the remaining questions were introduced into the conversation in an informal manner. Participants were encouraged to prioritise information, to share personal examples and to freely express their own views in relation to the topic.

4.1.3 Group Discussions

5 group discussions were carried out at intervals to verify interview questions and responses, and also as a source of new ideas to be followed up in interviews. The groups varied in size from 5 to15 participants and were on average 45 minutes in duration. Membership was uni-professional as this was believed to be an appropriate way of identifying general issues and also those that might be of specific interest to each profession.

4.1.4 Access to Participants and Recruitment to the Study

Due to the disparate nature of timetables across the programmes, differing methods were employed to contact students. Advice was sought from school tutors to elicit the most effective way of contacting each student body and students participated at times when their academic schedule permited. Access was gained through, direct requests placed on student notice boards, invitations were extended to existing student groups, direct requests were made in lectures and to students who were gaining practical experience in local health care departments.

- Occupational therapy and physiotherapy third year representatives were asked to bring volunteers to two lunch time group meetings in order to discuss learning experiences (10 students). A further request was made to students on clinical placement within Southampton in May 2000, 4 occupational therapy students and 4 physiotherapy students volunteered to be interviewed. A physiotherapy student came forward independently to be interviewed which increased the physiotherapy total to 5 students.

- Members of the third year evaluation committee in the School of Medicine (9 students) agreed to contribute to the study and also offered access to the minutes of previous meetings where shared learning had been discussed and documented, though this offer was not taken up. Students who attended a inter-professional workshop were asked to take part, 9 volunteers were contacted by email and 4 agreed to be interviewed.

- Podiatry students working in the Southampton Podiatry Clinic were invited to discuss shared learning. 15 students attended a lunchtime meeting and 3 volunteered to be interviewed.

- Students at the School of Nursing were contacted via the year three email network a number of times. No participants were gained through this method. Third year Enquiry Based Learning tutors were asked to contact students and one group (10) volunteered to be involved in a group discussion.

4.2 Justification of Methodology

4.2.1 Quantitative and Qualitative Approaches

Educational research involves the collection of facts and information about individuals and/or a group of people. It is primarily a problem-solving activity which addresses a problem, or tests a hypothesis (Hicks 1995, Anderson 1997). When attempting to investigate an educational problem it is important to consider a range of approaches and methods. Most educational research falls within four levels that can be loosely classified as; 1) descriptive, 2) explanatory, 3) generalisation and 4) theoretical (Anderson 1997). A wide range of methods, such as case study,

survey, time analysis and experimental designs, underpin these levels. Although there is a degree of overlap in how the methods are used across levels, the first two primarily use qualitative methods by exploring what has happened in the past and what is happening in the present. Whereas three and four adopt a more quantitative style, investigating what happens under different circumstances and any underlying theoretical principles.

Prior to the selecting the most appropriate method, it was important to identify the level best suited to the research question. In this study the research questions were concerned with students' experiences of shared learning at university and/or in the clinical workplace. The aim was to identify how their perceptions of, and attitudes towards, other professionals had developed as a result of shared learning. It was anticipated that multi-layered and complex information would be generated and that with an appreciation of student perspectives it would be possible to describe their experiences, interpret responses and draw conclusions (Cohen et al 1995).

With this in mind, levels 3) generalisable and 4) theoretical (quantiative) research were considered. These levels are best suited to experimental studies where hypothesis are tested under various conditions so that the results can be either accepted or rejected. In such instances, systematic classification, precision measurement and quantification would need to be carried out (Burgess 1993, Cohen et al 2000). Student numbers were large enough for a substantial quantitative survey or time analysis to be carried out, but in the early stage of exploring student views I wished to access a small number of students in depth rather than to involve them all (Benner 1994, Mason 1998, Dadds and Hart 2001). The idea of categorising responses as right or wrong was unacceptable; however, it was possible to foresee how the information gathered from a few might help develop tools to measure the opinions of the whole student cohort at a later stage.

Alternatively, levels 1) descriptive and 2) explanatory (qualitative) research presented a means of gaining insight into a person's opinions, feelings and beliefs. The underpinning methods include; observation, case study and interviews that use a range of description from brief narrative passages to in-depth interpretations (Burgess 1993, Cohen et al 2000). A factor in favour of qualitative methods is that

they are effective at exploring how the individual defines reality and the strategies s/he devises for coping with it. Gaining insight into how students developed inter-professional coping strategies and transferred theoretical skills into practice were the main concerns; so these methods presented an ideal means of gathering the information.

Whilst I was keen to examine situations through the eyes of students as opposed to my own perspective, the resulting interpretation of the findings by a single handed researcher was crucial. This level of interpretation is often associated with phenomenology (Mason 1998), where there is a concern with everyday life experiences and the consequences of such phenomena. In particular: 'the assumptions, the conventions they utilized and the practice they adopt' (Cohen et al 2000 p26). As the research questions focused on the consequences of past experience and relied heavily upon the skilful and unbiased interpretation of these events, this was a fitting philosophical baseline to adopt.

A phenomenological approach allows participants freedom to follow their own interests, concerns and perspectives rather than being dictated to by a preconcieved schedule (Benner 1994, Charmaz 1995). This approach was fine tuned to suit the study, the overall topic of IPE was chosen by the researcher and brief questions, developed through open, informal discussion with students, were introduced to prompt the discourse. Overall, the intention was to react to and communicate in a way that suited each unique individual during the data collection process. Any emerging themes would be analysed, using an interpretive approach that explored and explained social behaviours and attitudes.

Having determined that the interpretation of phenomena underpinned the study, an appropriate way of presenting this information would be to describe it. Description is not a method in itself, though it is fundamental to all research methods whether quantitative or qualitative (Anderson 1997). Data may range from brief narrative to detailed description of complicated phenomena. Skill is needed to know how to focus on and interpret the right issues and the main limitation is often the expertise of the researcher. Focussing on important issues presented a challenge as student reaction to questioning, and to what extent they would be willing to share

experiences, were both unknown outcomes. The intention was to listen to volunteered descriptions of everyday activities and, with consent, to follow up specific examples that were generated throughout the dialogue. The principles of a phenomenological approach were also adhered to during data analysis where direct quotes and practical examples were used extensively when describing the results. Maximum use was made of the data in that all known themes were incorporated into the results.

A common criticism of qualitative methods is that, as the researcher is actively involved in the production of the data itself, undue influence could be placed on participants to accept personal definitions and perceptions. A remedy is recommended by Mason (1995), who suggests that rigorous and ethical implementation, self scrutiny and active reflexivity can counteract potential influences. Ethical procedures were strictly adhered to and an active process of critical self-reflexivity was incorporated into the research design to neutralize any personal impact. Previous experience of qualitative research and reflective practice resulted in the application of a greater level of skill than if using an unfamiliar traditional experimental approach, a situation that further reduced the likelihood of personal bias.

Having carefully considered the alternatives, an interpretive approach that used qualitative methods, was chosen as this best matched the inherent nature of the study. To support this self scrutiny and reflection was implemented to counteract the limitations of being a single handed researcher.

4.2.2 Methods already used to Evaluate Learning

The aim was to gain insight into shared learning at a local level and not to generalise the findings to other universities or departments. With this in mind I took note of the type of evaluation that had already been undertaken within the Faculty. For example, at the end of a series of pilot shared learning events (1997-2000), questionnaires had been used extensively to evaluate student experiences. Choosing a questionnaire is 'generally motivated by a need to collect relatively routine data from a large number of respondents over several locations' (Anderson 1997 p207).

Therefore, it could be concluded that with large student numbers, over a number of dispersed schools, this was an appropriate method to use.

However, the value of questionnaires, which require students to evaluate learning and whether this results in any improvement in the content and quality of teaching, is currently under debate (Saroynan and Amundsen 2001, Kember et al 2002, Chen and Hoshower 2003). Although questionnaires are widely used in higher education there is little evidence to show that this is the most effective way of gathering student feedback.

Looking in detail at student experiences at the end of a three-year period, not just at the close of specific educational events, meant that a different way of eliciting information was required. The data needed to be dissimilar to that already evaluated if it was to add a more meaningful dimension to the information pool. This coupled with the fact that students were familiar and/or overburdened with questionnaires was precisely why I decided not to use questionnaires as a method.

4.2.3 Interviews

There is an abundance of literature about the use of interviews in qualitative research and a general consensus of opinion that interviewing is the most widely used technique for conducting social inquiry. For example, Wragg (1990), Benner (1994), Cohen et al (2000), Dadds and Hart (2001) all state that the interview process makes a major contribution to social sciences, educational and other research methodologies because the technique is particularly adaptable and widely used. Holstein and Gubrium (1997) identify that 90% of social science involves the use of interviews and the social interaction within interviews is the techniques most obvious strength.

The fact that all interviews are interactional, whether highly structured, semi-structured or free flowing and each encounter produces reportable knowledge is identified in a number of texts, such as Mason (1997)and Cohen et al (2000). However, whilst there is agreement on the flexibility of interviews there are differences in how the method is applied as each situation has unique factors that require careful thought and handling (Benner 1994, Bryant 1996). For instance, a

formal structured approach, that streamlines questions and pays little attention to real life experiences of interviewees could have been adopted (Holstein and Gubruin 1997). However, a semi-structured interview that encourages the generation of data from the interviewees' point of view would better suit the purpose and enhance the findings of the study.

An advantage of semi-structured interviews is that the role of interviewer is reduced to the minimum to allow the interviewee to discuss at length the pertinent issues surrounding a personal experience (Kvale 1983, Smith 1995, Cohen et al 2000). As described previously (page 44), this falls within the realms of a phenomenological approach, because the interview is guided by the interviewee who is free to follow their own interests, concerns and perspectives (Benner 1994, Charmaz 1995). Smith (1995) highlights the importance of minimal prompting and neutral questions because when the interviewer hands most of the control over to the interviewee, a deeper insight into values and beliefs is gained. Allowing the interviewee free time at the end of the interview to develop ideas, followed by a brief summary of the issues is also a useful technique to adopt.

Mason (1997) and Cohen et al (2000) point out that interviews are social, interpersonal encounters that 'generate' data and it is futile to strip interviews of this interaction, or to stop any collaboration that occurs. Under this rationale the dynamics of the interview contributes positively to the data and the idea that the interviewer can be a completely neutral collector of information is rejected. This level of involvement can be problematic, and Miller and Glassner (1997) acknowledge that gaining an authentic insight into people's experiences presents a dilemma, as the same information might have different meanings to different listeners. A key to handling this type of data is careful reflection on the results, which sheds light on the experience and places the results in a true context (Kvale 1996, Holstein and Gubrium 1997). The involvement of the interviewer and appropriate handling of data requires a high level of discipline and reflexivity, which is discussed further in Chapter 5.

4.2.4 Group Discussion

A method was needed to cross check whether the data gathered in interviews was representative of a larger student cohort and two group methods were explored to establish which was the most appropriate.

4.2.4.i Group Interview

Group interviewing is a useful way of conducting interviews as the process has potential to generate a wide range of responses from a larger number of participants (Cohen et al 2000). This method works well when the interviewer has a series of open ended questions and wishes participants to pursue priorities, generate questions and to explore issues of importance to them, in their own vocabulary (Kitzinger 1995). Overall, group interviews are a simple way of gaining information from a number of people simultaneously which saves time when collecting data.

This type of discussion is particularly effective where a group of people have worked together or have a common purpose, though the size of the group has to be carefully planned. Too few group members might increase the pressure on individuals to contribute, whereas, too many group members can result in the fragmentation of the group. Whatever the size of group there is little time to allow personal matters to emerge or to follow up on individual issues that might be raised. Although collecting data can be carried out quickly, analysing data can be challenging, as complex dialogue is difficult to transcribe, code and analyse in a reliable and unbiased way (Miles and Huberman 1994, Bottomley 1999). This can also be a time consuming process that requires considerable interpretive skill.

4.2.4.ii Focus Groups

Cohen et al (2000) introduced focus groups into the debate, pointing out the difference between these and group interviews:

> 'group interviews are often used simply as a quick and convenient way to collect data from several people simultaneously: focus groups explicitly use group interaction as part of the method, this means that instead of the researcher asking each person to respond to a question in turn, people are encouraged to talk to one another, asking questions, exchanging

anecdotes and commenting on each others' experiences and points of view' (p299).

Kitzinger (1995) adds to this by describing the process as 'structured eavesdropping' (p301) and suggests that data emerges from the interaction within the group and the identification of groups norms and values can then be drawn from this interaction. This discussion can be structured around open-ended questions though these should not be used as a rigid guide. The descriptions by Cohen et al (2000) and Kitzinger (1995) highlight the important additional interactive factors that fulfil the inherent needs of the study more fully then group interviews.

There is agreement about the nature and use of focus groups as an educational research method (Kitzinger 1995, McDaniel and Bach 1996, Millward 1998, Cohen et al 2001). Focus groups are a discussion-based interview that produces qualitative data that can be used as a self-contained means of data collection, or as a supplement to other methods depending on how it fits into the overall research plan. The group works best when participants have some characteristics in common and when a skilled facilitator empowers participants to express views without allowing too much time for discussion of personal matters. Focus groups are particularly useful for exploring people's knowledge and experiences and can be used to examine not only what people think, but also why they think that way. For this reason the use of focus groups is often advocated in relation to consumer satisfaction and quality assurance (McDaniel and Bach 1996).

4.2.4.iii Advantages and Disadvantages of Focus Groups

The number and size of groups, extremes of characters, and potential dominance of individuals within in the group are aspects that place demands on the facilitator. Achieving group co-operation without being too direct or non-directive is dependent on the facilitator's skills and the outcome could be disastrous as well as positive. The advantages are that reluctant participants are included and open discussion permits expression of criticism, ideas and experiences that might be developed further. Focus groups are also useful for developing theme topics and for evaluating and double checking data gained from other sources, such as interviews

(Kitzinger 1995, Sim and Snell 1996, Memon and Bull 1999).

It is not always possible to utilise all the data generated in focus groups, Kvale (1996) states that transcriptions inevitably lose data from the original encounter and that the process of selective transformation is unavoidable. Bottomley (1999) reviewed this process and found that analysis could not be accurate as independent evaluators assessing transcripts had difficulty in coming to any agreement on at least a third of the facts. The need for addressing issues of validity and reliability is raised and it is recommended that focus groups should never be a tool used by a single-handed researcher. Alternative views are presented by Millward (1998), and Cohen et al (2000), who believe that reliability and validity are inappropriate ways of determining the scientific rigor of this type of data. They suggest that criteria such as trustworthiness, credibility and transferability of information, e.g. similar factors identified across other groups, are more appropriate in this type of method.

The advantages and disadvantages of focus groups seem to be inter-changeable. Their contrived nature is unusual as they are unnatural get-togethers, but with a specific focus on key issues. Whilst the data might not otherwise be available in an interview situation, less data is produced and the difference between individual opinions and group consensus must first be distinguished and then sensitively interpreted before it can be deemed significant (Kitzinger 1995).

4.2.4.iv Summary

The factors that constitute the strengths of group interviews and focus groups may also be the main weaknesses of the method as much depends upon the identity of the group members, the skills of the facilitator and the nature of the topic (Sim and Snell 1996). However, I was aware that there might be a significant imbalance of power between participants and myself as interviewer if the evaluation was dependent on interview data alone. In a group interaction, where I was out-numbered by students, any imbalance could be addressed. The structure of a group interview, combined with the free interaction encouraged in focus groups offered a useful method of gathering additional data and group discussions were carried out to triangulate and double check information (Memon and Bull 1999).

4.3 Ethical Issues

4.3.1 Informed Consent

Mason (1996) identifies that informed consent, confidentiality and verification of data are crucial and poses the question 'Have I gained informed consent of my interviewees for their participation?' (p57). This aspect needed to be confronted from the outset, with an accompanying description of how information would be used and disseminated. Participants needed the opportunity to question me or to withdraw from the study without guilt.

Prior to the start of the interview participants were advised about the topic for discussion, issues of confidentiality and what was expected of them. This introduction ensured that participants made an informed judgment about the contribution they were willing to make. A consent form outlining the project and how the information would be used was designed and signed by each interviewee (appendix 3).

4.3.2 Control and Expectations in Interviews

Anderson (1997), Armstrong (1997) and Fox (1997) suggest that as most social science studies rely upon volunteers this raises a number of ethical issues:

1. The researcher has a position of authority over the volunteers who might be pressurised into taking part. As I am a member of staff this might have been problematic for some students; therefore any requests for help were accompanied by assurances that there would be no penalties for non-compliance with the request.

2. People often volunteer in the expectation that sharing information will be helpful to them in some way. Being clear about who would be the beneficiaries of such information was essential. Participants were quite clear that it was future students who were likely to benefit indirectly rather than themselves.

Fox (1997) believes that evaluating oneself through self-imposed morals is ineffective as a way of counteracting personal or professional dominance. The

assumption that power involves an increase in knowledge and every elaboration of knowledge involves an increase in power presents an interesting dimension to the interview situation. The seat of power in the interview may vary because, although I had insider knowledge about the shared learning events, participants could change the emphasis when they talked about their personal experiences. I did not control what they said, though of course I could change the focus with a question of my own.

The balance of interaction was slightly different in the group discussions as I was outnumbered by participants, and might not have been able to exert any significant control over the discussions, even if I had wanted to. Participants could decide whether to take notice of my questions or not, and were strictly in charge of their own responses. However, previous experience of group facilitating, prompting and focussing could assist me to address any issues when, and if necessary.

4.3.3 Precise Ethical Procedures

Efforts were made to complete the requirements recommended by Cohen et al (2000 p71) in their ethical code that establishes the importance of accurate information being given to volunteers. The following procedures were adopted and clearly outlined to participants prior to securing their co-operation:

- The interviews would be taped recorded and transcribed information used anonymously in the study. The only identification being to acknowledge the professional status of direct quotations used in the text.

- Tapes would be the property of, and kept safely by myself, for the duration of the study, after which they would be destroyed.

- Participants would have access to copies of the transcript prior to its use in the study, for the purposes of content verification and to comment on initial coding and interpretation of the transcript.

- Participants could withdraw from the study at any time.

- Data would be used by myself in achieving a doctorate, and the subsequent dispersal of information would be through national and international conferences and published journal articles.

- The knowledge and awareness gained from the study would underpin my contribution to the planning and development of the faculty shared learning programme.

4.4 Validity of the Study

4.4.1 Internal Validity

The validity of the research was carefully established (Cohen et al 2000). This involved ensuring that all expectations were clearly understood and that any misunderstandings about what was being asked were quickly overcome. As a single-handed researcher the effects of personal bias and preconceived ideas required monitoring. My contribution to the dialogue, interpretation of the issues and specific comments that influenced the discussion were identified and analysed separately. The interview checklist ensured coverage of the questions in the interviews and time was taken at the end of each interview for participants to offer independent comments on any aspects pertinent to them.

4.4.2 External Validity

The study was designed to relate only to students within the faculty and it was not the intention to generalise the results to the wider population. However, generalisations were made within specific professional groups when a significant number of participants within a profession, or across professions, responded in a similar way to learning experiences and methods of teaching. Incidents when participants responded in a noticeably different way from others were also noted.

4.4.3 Descriptive Validity

It was important to ensure that there was some notion of truth in what was being reported. Ensuring the factual accuracy of interview material, for instance, was the interviewee fabricating the answers or not, was manageable as participant numbers were small and it was possible to check out and confirm individual comments

within group discussions and vice versa. Following up ideas and experiences with other interviewees from other professional groups enabled different perceptions to be tested.

4.4.4 Interpretative Validity

It was not feasible to verify interpretation by the use of an external evaluator. This was deemed unnecessary because even if results of researcher and verifier tally: 'this is no guarantee that inferences are correct or invalid' (Hammersley and Atkinson 1997 p231). In addition, if there were differences, this would not mean that this person would be any more accurate than I would be (Barriball and While 1994, Anderson 1997, Mason 1998, Cohen et al 2000). The option of self-reflexivity was adopted throughout the research process as a way of systematically monitoring the accuracy of the results and the effects of my personal contribution and interpretation (Benner 1994, Bryant 1996, Usher 1996). This included the time spent at the beginning of the study identifying my stance on shared learning and reflection on the development of rapport with participants during the process (Chapter 5).

4.5 Reliability of the Study

An interview checklist was devised to increase the potential for replication. It was developed and piloted informally with groups of students prior to its use in the study to check that the proposed questions covered issues of relevance to students.

A positive advantage of being a single researcher was that there was reliability in transcribing, coding and analysis that simplified the process (Benner 1994, Bryant 1996). The authenticity and meaning of the dialogue was checked with participants who were encouraged to think of their own examples to support their expressed beliefs. This established an honest and in depth interaction at the time, which was useful when transcripts were later returned to participants for their reactions.

This study would only be replicable if third years students in the Faculty were asked similar questions about their shared learning experience (Cohen et al 2000). It was not possible to make 'comparisons to same data from different

phases of fieldwork' or other studies (Hammersley and Atkinson 1997 p230). It is unlikely that the experiences of the 2000/2001 cohort would be comparable now, as the curriculum has changed in subsequent years. The findings of this study are unique to the specific student group and cannot be generalised outside of the Faculty.

However, lessons can be learnt from my experience, by researchers who wish to evaluate their own student's responses to shared learning at a local level. The procedure of asking students for their views prior to developing the curricula could be replicated with the assistance of a similarly devised checklist. My approach towards self-regulation and reflexivity may throw some light on how this might be effectively staged and monitored on a regular basis during the research process. It would also be possible to replicate the process of data collection and analysis within a local context by recognising the unique qualities of the situation.

4.6 Data Collection

4.6.1 Professional Background of Participants

16 interviews were completed, which included 3 podiatry, 4 medical, 4 occupational therapy and 5 physiotherapy participants. 44 students were involved in 5 group discussions, which involved 15 podiatry, 9 medical, 10 nurses, 5 occupational therapy and 5 physiotherapy participants. 60 participants directly contributed to the study.

4.6.2 Stage of Training and Experience of Participants

Podiatry, occupational therapy and physiotherapy participants were in the final year of a 3-year programme. One physiotherapy participant was in year 3 of a 4-year part time programme. Nursing participants were in year 4 of a 4-year programme. Medical participants were in year 3 of a 5-year programme. With the exception of podiatrists, they all had experienced Faculty lead IPE events in their first and second year of training. Podiatry and medical students had all attended an IPE workshop in Elderly Care/Palliative Care, as this was a compulsory part of their programme, whereas for other students this was optional. Otherwise participants shared learning experiences depended on their pre-disposition to take up

opportunities arising during clinical placements.

4.6.3 Description of Data

All interviews were tape recorded and detailed transcipts made. Copies of transcripts were forwarded to selected participants to verify content and accuracy. The first 2 group discussions that were used to develop interview checklist were not tape recorded. The following 3 group discussions were tape recorded, transcribed and used to identify themes and to verify ongoing relevance. Hand written notes were taken of all interviews and all group discussions so that content accuracy could be checked with participants at the time (Hammersley and Atkinson 1997).

4.6.4 Data Recording

3 discussions were recorded and each transcript was coded. Initially 6 general themes were identified manually part way through data collection (appendix 4). The themes were verified in subsequent discussions and interviews. At a later stage the transcripts were entered onto the NUD*IST software package which was used to collate dialogue into the themes. Each theme report was analysed and divided into a number of sub-nodes on NUD*IST, which were later retrieved and analysed.

Transcripts of the interviews were returned to selected participants (depending on accessibility once participants had qualified and/or left the programme) allowing them opportunity to withdraw in light of confidentiality and personal issues and for verification of details and permission to be included (Cohen et al 2000). This process also afforded opportunity for additional explanation and information to be included should they wish (Miles and Huberman 1994). All agreed with the content, initial observations and gave permission for the inclusion of their transcripts in the study.

4.7 Data Analysis

4.7.1 Application of NUD*IST 5

The original intention was to complete the data analysis using manual techniques; however, access was gained to the NUD*IST software early in the process and the plan was adapted. NUD*IST is a data management tool that is designed specifically

to assist researchers to analyse qualitative data. As this was the first experience of using the package my knowledge was somewhat rudimentary and application was limited to the basic collation of information under themed nodes, sub-nodes and printing reports. NUD*IST was used to code and retrieve applications not to establish relationships between codes themselves, as I preferred to do this level of analysis manually (Benner 1994, McDaniel and Bach 1996, Hammersley and Atkinson 1997). Although this did not make maximum use of such a versatile resource, using NUD*IST in this limited way proved to be a beneficial time saving exercise. At a straightforward level it assisted in the confident handling of long transcripts and the quick transfer of information into nodes and sub-nodes. It contributed to the final analysis as it provided a useful systematic check of data and produced reliable printed reports that could be analysed further.

4.7.2 Interim Analysis

The collection of data was spread over a number of months and information was partially analysed along the way, the intention being to ensure that the questions remained pertinent to the changing arena of IPE and presenting participant needs. Content and thematic analysis involved reading and making judgements, followed by further reflection and interpretation (Benner 1994). Data analysis carried out along the way initially produced an incomplete picture, as it was not possible to interpret all aspects without further refinement and deliberation of the data (McDaniel and Bach 1996). This information subsequently acted as a baseline for the final analysis, which was undertaken once all the interviews and group discussions had been completed.

Tapes were listened to a number of times in order to gain a sense of the whole and to delineate general meanings (Benner 1994, Miles and Huberman 1994, Kvale 1996). In the initial stages of the analysis, tone, mood, and speed of talk, as well content were noted to clarify meanings and results further. Transcripts with full details of all interviews and discussion groups were produced (appendix 5). Additional personal notes of exchanges within the group discussion were put to good use in the transcribing process as the group tapes in particular were loud, lively and it was often difficult to differentiate who was saying what. Completed

transcripts were double-checked with the tapes to ensure that an accurate dialogue had been recorded.

A method of analysing such data is through content analysis and theme identification, which describes the frequency and importance of certain topics to the respondents (Benner 1994). Each transcript was read and 6 general themes were identified manually prior to the transcript being entered onto NUD*IST. Once transcripts had been entered they were reviewed line by line and coded through NUD*IST using the themes. Early in the data collection process it became clear when reviewing the transcripts that participants responded positively to the interview questions and that the information could be divided into themes closely related to these questions (see table 1, page 59). Theme reports were produced regularly and updated throughout the process in order to streamline and uncover information (appendix 6). Group discussions were used to cross check whether any themes were being over looked, but none were found. In this way I kept in touch with the issues that were of importance to participants and was able to follow these through in subsequent interviews.

4.7.3 Final Analysis

The original 6 themes were identified during and towards the end of the data collection process and were found to be closely linked to the research questions. These were placed into nodes on NUD*IST and in the final analysis they were divided further into sub-nodes (appendix 7). Links between all these aspects can be seen in table 1 (page 59).

Reports were produced for each themed node and the contents were re-valued manually as I was unsure of how to carry this out on NUD*IST (appendix 8). Similarities and differences across professional groups, out layers, significant individual comments were identified and colour coded. Clusters of meaning were also summarised to capture the essence of the participant's views that were then directly quoted in the results. Many examples and comments in the dialogue had been entered under more than one theme on NUD*IST, as the meanings were often multi-faceted and complex; therefore these were crosschecked to ensure that they represented the most important issue in the text.

Table 1. Links between Interview Questions, Themed Nodes and Sub-nodes.

Interview Questions	Themed Nodes	Sub-nodes
How would you define shared learning and what is the purpose?	1. Definition 2. Purpose	None identified
What has been your experience of shared learning at university? What made these experiences memorable? At what point, or level of your programme, did you feel most receptive towards shared learning? In what ways, if at all, were these experiences relevant to your learning and development?	3. Learning	perception, receptive, relevance, positive/negative examples, general/content, self-directed, mentors
What has been your experience of shared learning in the workplace? What made these experiences memorable? In what way, if at all did these experiences your perception and attitudes towards other professionals? In what way, if at all does shared learning enhance professionals understanding of each other's roles?	4. Working Practice	patient/client centred, practical examples, placement, teamwork, relationships, overlap/ boundaries, roles/stereotypes
If you could re-design your programme, what changes could be made to encourage shared learning? What aspects of the programme could be shared or learnt with other professionals?	5. Content	general, examples, communication, sciences, case studies, practical
	6. Method	clinical examples, timetable/staff, level/mentor, groups, case studies, compulsory, assessment

A list of interview questions, and how the responses were classified in the results, was devised to establish how the data/information would be presented. This overview of how the results were organised included; section headings and numbers, how the interview questions related to the sections, and subheadings within each section (appendix 9). Maximum use was made of the data, in that the subheadings were closely related to the sub-nodes recorded on NUD*IST. For example, a node linked to the question; *'In what way, if at all, did these experiences*

influence your perception and attitudes towards other professionals?' was entitled; *'Working Practice'*, with a sub-node called, *'Stereotypes'*. This pathway was presented in the results under a section heading; *'Perceptions and Attitudes Towards other Professionals'*, with the subheading; *'Preconceived Perceptions and Stereotypes'*. This type of pathway from research question to participant response was repeated throughout the results as it ensured that all the issues highlighted by participants were analysed and interpreted thoroughly. Specific reference was made in the results when the information represented a consensus view of many participants and/or when the information was judged significant in its own right (Benner 1994).

4.7.4 Personal Analysis and Reflexivity

All transcripts were screened to identify instances if, and when, I had significant impact on the data collected and every incident, however small, was highlighted. These were coded and collated on NUD*IST under a separate 'personal' node. The subsequent report was up-dated and critiqued at regular intervals throughout the data collection/analysis process and formed the basis of chapter 5.

4.8 Strengths of the Study

1. Health care students are comfortable with one to one discussion formats as they develop communication and listening skills throughout their training (Coyle and Wright, 1996, Payne, 1998, Seale and Barnard, 1998). This familiarity meant that it was unlikely that interview situations would provoke great levels of anxiety.

2. As a fellow professional, albeit with more experience than the participants, I shared a common language that hopefully increased understanding and appreciation of issues.

3. The length of the interviews ensured that time was available to clarify and discuss anything that I or the participants might not have understood (Miller and Glassner 1997). This encouraged participants to share and develop detailed experiential examples.

4. The combination of information gained in the group discussions and interviews facilitated the elaboration and verification of results (Anderson 1997). Themes identified in the discussion group were explored in more detail during interviews to gain additional knowledge and understanding of the answers and to check interpretation.

5. Evaluating third year students' experiences in such depth meant that the cumulative effects of shared learning could be explored and the final recommendations provided a significant insight into what future IPE priorities should be.

4.9 Limitations of the Study

1. The Faculty presents the shared learning programme as a high profile element of its short and long-term education policy, therefore its reputation is closely linked to the success of the IPE events. As a result the Faculty might have appeared to be too deeply committed to the interests of the study for participants to comment critically about their experiences.

2. Participants were a self-selecting group who were highly motivated to share personal experiences and might not be truly representative of the student group.

3. A serious limitation might be the imbalance of power between interviewer (educator) and interviewee (student) (Armstrong 1997, Fox 1997, Peterson & Bunton 1997). Participants may have felt obliged to help me, or pressurised to be successful so that I had positive things to report in the study (Barriball and While 1994). I attempted to counteract this by clarifying my neutrality and participants were encouraged to discuss negative responses towards shared learning without recrimination.

4. Barriball and While (1994) express interest in how therapist-interviewers deal with personal agendas and entrenched ideas when recording, analysing and interpreting the data. As a single-handed researcher there could be concern about my biasses, particularly as I am directly involved in running the IPE

programme and could be seen as having a vested interest in receiving positive results. It was not feasible to enlist the help of an external verifier, however, I adopted a process of intensive reflection to ensure that any potential for bias was acknowledged and reduced (Barriball and While, 1994, Mason 1995).

5. The group discussions were used to identify relevant themes to follow-up with individuals, which meant that data collected in individual interviews might be limited to the same questions (Powney and Watts 1987, Bell 1989, Miles and Huberman 1994). The hoped for opportunity to identify additional dimensions or to generate unexpected data might be missed if surfacing too late in the process. In an attempt to counteract this limitation, data from discussion groups and interviews were collected at different stages in the study, during 2000-2001, allowing time to analyse data at regular intervals.

6. The reliance on volunteers to have similar concerns about shared learning could be viewed either as a strength or a weakness of the study (Miller and Glassner 1997). Acquiring volunteers to participate in the study relied on my networking skills and depended on insider knowledge of the structure of the various programmes. In an ideal situation all students would be interviewed at the same point in their programmes and perhaps on a number of occasions (Cohen et al 2000). However, accessing students at similar times across five professions proved very difficult and it was not possible as they were often spread across local and regional health care services whilst on clinical placement. Emphasis had to be placed on engaging students from each school at times that suited their schedule, even when this did not match the timetable of others. This was another reason why group discussions, as well as interviews, were carried out over a long period of time.

4.10 Summary

The study uses qualitative methods to explore and interpret third year students' experiences of shared learning (Benner 1994, Cohen et al 2000). Data were collected from both interviews and group discussions as these methods were considered the most relevant to answer the research questions. An interview

checklist was devised to ensure that pertinent questions were covered and participants were encouraged to offer independent comments on any aspects significant to them (Anderson 1997). Transcripts with full details of all interviews and discussion groups were produced and analysed using both the NUD*IST software package and manual techniques (McDaniel and Bach 1996).

Due to the specific nature of the questions and the localised experiences of participants the results cannot be generalised (Cohen et al 2000), though lessons can be learnt by other researchers who are able to access innovative shared learning within their organisation. As a single-handed researcher it was essential to reflect on the impact that personal perceptions and opinions had on the study. Reflection on these aspects can be found in Chapter 5.

REFLEXIVITY

5.1 Issues related to being a Single Handed Researcher

5.1.1 Introduction

The strength of qualitative interviews is the capacity to access the self-reflexivity of the interviewee and interviewer (Bryant 1996, Usher 1996, Powell and Usher 1997). As a single-handed researcher, I am aware that my contribution to the data collection and analysis process is central to the study. Not only because my presence may have modifying how participants told their stories, but also the analysis depends on my ability to interpret the data in an open and honest manner.

I am not alone in these concerns, Holstein and Gubrium (1997) identify how the active approach of interviewing seems to invite unacceptable levels of contamination, and there needs to be consistent self-analysis in order not to loose sight of the meanings of the interaction. Although they believe that handling qualitative interview data is just as artful, and no less rigorous, than traditional data and this requires a high level of interviewer discipline. With this in mind, time was set aside to reflect on my contribution in a structured way.

Whilst it is important to acknowledge the potential for bias, Hammersley and Atkinson (1997) believe that it is misleading to regard insider knowledge as simply being a source of bias that must be, or could be, removed. 'Real' involvement in the setting could be a positive strength, as long as there was time to evaluate this in an appropriate and timely manner. They report that 'reflection on the data collection process and what is produced is essential if research is not to drift along the line of least resistance' (p206). To avoid falling into this trap I documented my reflections at regular intervals during data collection and analysis as a way of promoting openness and accuracy.

5.1.2 Personal Familiarity with the Process of Reflection

The 'social world' and level of interaction that developed within the interviews was familiar to myself, and the participants (Hammersley and Atkinson 1997, Coffey 1999). The familiarity with telling stories and reflecting on experiences helped me

to place the experience within a known parameter (Gallagher 1998). However, Barriball and While (1994), Coyle and Wright (1996), Payne (1998), Seale and Barnard (1998), all indicate that additional skills are needed to ensure effective use of interview skills in research. This refers to how practitioner-researchers deal with personal agendas and entrenched ideas when generating, recording, analysing and interpreting data, and the inevitable subjectively of being an insider-evaluator. Undoubtedly, the combination of being familiar with the educational events about which participants spoke and having to remain objectively distant was challenging for me.

5.1.3 Participants' Familiarity with the Process of Reflection

Fox (1997) places emphasis on self-examination, or 'self surveillance' in a similar way to Foucault. The belief that, evaluating one's own conduct is part of ethical reasoning and a way of improving oneself through self imposed morals and goals is emphasised. The process of self-evaluation and reflexivity has been investigated by a number of professionals. For example, Cross (1993), Mattingley and Flemming (1994), Higgs and Jones (1995) and Rubenfeld and Scheffer (1995) explore clinical/ethical reasoning and reflective practice in health care practice. It was highly likely that some, if not all of the participants, would be familiar with the principles of reflective practice related to their profession, which would enable them to easily tell their story and interpret their actions (Powell and Usher 1997).

5.1.4 My Approach

The nature of the data collected and subsequent analysis by a single-handed researcher increased the likelihood of a biased approach. Being aware of the potential effects of this, I monitored my involvement and subjectivity, for instance, participants were aware of my involvement in shared learning at the outset and most recognised me as a course tutor. Every professional group raised delicate issues about professional roles and stereotypes. This meant that I had to adopt a non-judgmental and encouraging manner, particularly when discussing negative aspects.

It was possible to identify areas where there was potential for 'going native' or becoming over concerned with stereotypes and professional issues prior to

starting the study (Hammersley and Atkinson 1997, Lupton 1997, Coffey 1999). In identifying the reasons for undertaking the study, I was aware that I had a strong personal agenda. It was important to reflect upon any situations where I either, colluded with a professional group, or found my response was dependent on personal perceptions and stereotypes. The identified themes were doubled checked (Benner 1994) and specific incidents in the transcripts were identified and analysed to ascertain how my response influenced the situation. Particular attention was given to how I was reading the situation, and whether there were alternative ways of interpreting it (Bryant 1996).

I attempted to minimise my influence on the discussion and to facilitate participants' open expression of their point of view. I was conscious of my position of authority and carefully thought about the impact of what I was saying, while I was saying it. However, participants seemed to be much less affected by this, a situation that Coffey (1999) suggests is reason why researchers should allow themselves freedom to become involved in the process.

There is a notion that the right time to counteract subjectivity is during the active research process not just in the final stages (Peshkin 1988, Fox 2997, Coffey 1999). With this in mind, the experience, transcripts and text were scrutinised in three ways: (a) informally through personal notes and observations made along the way, (b) a detailed written reflection part way through the data collection process, (c) and once again at the end during the final analysis. My questions, responses and interpretation were analysed (appendix 10) and the following questions posed: 'How, if at all, did I influence the interaction I had with each participant during interviews, and between members in the group discussions?', and, 'What did I learn about the impact my contribution had on the study?' (Bryant 1996).

5.1.5 Participants' Response to Questioning

Being aware that I might simply elicit information to support my own opinions, questions about definitions and purpose were included in every interview to ensure that an appreciation of the participants' point of view were gained. Part way through

each discussion they were asked the following question: *'If you were given a blank piece of paper what shared learning would you put into your programme?'* The response was variable, with some spontaneous examples, but most had to stop and think carefully about how to answer. Initially they said they did not really know, but eventually were able to share their experiences and ideas enthusiastically.

Groups and individuals were confident in discussing issues and expressing negative feelings, on occasions participants admitted to negative views in a way which suggested that they were aware of my position by adding the comment: *'If I am really honest ...'*. On one occasion during a discussion with nurses, they directly asked for information about another professional group, and I concluded that they were very aware of me having this knowledge.

The paradox was that participants enjoyed letting off steam with a staff member, particularly during group discussions (Coffey 1999). As might be expected, they were very confident in sharing their feelings when they had peer support and took the opportunity to express strong opinions quite freely. The fact that many had previous experience of staff valuing student opinions might have accounted for their willingness to discuss issues openly. For example, a number were nominated year representatives for their programme, or were part of an evaluation committee with regular and direct access to staff. It is important to acknowledge that participants were a self-selecting group who were likely to be highly motivated to share their experiences.

5.2. Initial Reflection

5.2.1 Profession Specific Issues

On many occasions the process of reflecting back on situations provoked emotive examples during interviews and groups discussions. As I became familiar with the participants' issues, my awareness of my own bias increased. To counteract this, a request for more detailed evidence from participants was made and I focussed on these during the analysis of the transcripts to check on my own reliability. Part way through the interview process I noted down a

number of key issues that in my opinion elicited strong responses from professional groups:

- Podiatry participants had had little opportunity to influence their programme: they were concerned with the compulsory nature of the schedule and their lack of shared learning experience when compared to other professional groups.

- Participants studying medicine felt misunderstood by nurses and unfairly labelled as being arrogant when this was not true. They had mixed feelings about when shared learning should be included in their programme.

- Nurse participants felt that doctors had little understanding or appreciation of the quality of a nurse's work, or of how important nurses were in the effective functioning of teams.

- Another professional group who felt generally misunderstood by the team were the occupational therapists, that is, until they had opportunity to explain or demonstrate their role to others.

- A common issue for physiotherapy participants was the confidence they gained in knowing what other members of the team did and sharing how they themselves worked. Opportunity for this was limited and they wished to work in this manner more often.

None of the issues raised were surprising to me, with the exception that physiotherapists expressed a need for more teamwork experience. I had not anticipated how important this would be as I thought they preferred to work independently.

These issues relate directly to comments made by participants and are not simply how I perceive them or how I would wish them to be. My familiarity with these issues may be because of my teaching experiences, but also because it was likely to be common knowledge amongst professionals. Hammersley and Atkinson (1997) report that it is wise not to reject such common-sense knowledge as there is no absolutely conclusive standard against which to judge

its validity and suggest that instead of rejecting such information we should simply acknowledge that it might be erroneous.

5.2.2 Dealing with Conflict in a Group *(first tape recorded group discussion)*

The following example concentrates on the podiatry group discussion at the beginning of the data collection process. This was the first tape-recorded evidence to be analysed. Participants held a diverse range of views and often confronted each other quite openly during the discussion. This resulted in lengthy debate about small issues and opposing views lead to a number of arguments.

Quite early in the discussion participants talked about the 'hardship' of finding the time to fit shared learning in amongst frequent visits to clinics. My initial response to this was quite forceful when I stated that I was 'fed-up' of hearing about timetables (appendix 11) and attempt to move the conversation onto other aspects. My frustration with the argumentative disposition of the group raised its head a little later when I expressed some impatience with them: *'You can go on like that for ever putting obstacles in the way. If you think it's relevant it would be worth it in the end wouldn't it?'*(GI:1P). Once more, the issue was about moving onto the more interesting aspects of designing the ideal situation. The 'you' was clearly not intended to directly link to an individual, and was simply a term meaning anyone. On this occasion, a participant in the group agreed with me and began to talk about the benefits, which quickly became the focus of attention.

The podiatry school had recently moved into the same building as occupational therapy and physiotherapy and participant's fears about coping with change surfaced in the discussion. I responded to this issue strongly as I shared their concerns about how to integrate the three professions (appendix 12).

a. Reflection

The attempt to break into the conversation was heartfelt as being 'fed-up' about timetabling obstacles was one of the reasons for carrying out the study. I was tired of negative, circular discussions during staff meetings and felt that the timetable was allowed to lead the decision making process. It was interesting that participants raised this issue, as I had not expected them to share this focus.

b. How might others see it?

An observer could perhaps detect a high degree of frustration in my responses, which, when seen in black and white appear to be impatient and directive. This might indicate that I was sanitising their negative feelings or implicitly inciting students to express positive feelings about their experiences rather than negative ones. By sharing this frustration with a degree of honesty, I might also have had a genuine interest in the highlighted issues, though this would depend on the way in which others perceived this.

c. What might be done differently?

These opinions were significant as podiatry participants had very little shared experience and they provided an alternative point of view to other professionals. I had limited insight into their needs and did not appreciate that they would have such strong opinions. Realistically very little could be changed that would counteract the tensions in the group.

However, participants had given me evidence to support my own frustrations about the lack of contact between the three professions. The discussion had a lasting impact on me as a short while after I altered the school's timetable so that the podiatry students were able to take part in the first year occupational therapy and physiotherapy module that I co-ordinated. The motivation behind this seemingly independent action had not been apparent to me until I analysed the transcripts and made the links between cause and action. This supports the notion that interviews have more impact on the interviewer than is often expected (Coffey 1999).

5.2.3 Intervention within a Group *(first tape recorded group discussion)*

After initially reacting spontaneously to the discussion I gradually adopted a more assertive style as the podiatry group progressed. On one occasion, I volunteered an interpretation as a way of calming down the group who were once more arguing amongst themselves (appendix 13):

a. Reflection

Establishing control over the group behaviour without inhibiting the conversation was important, but difficult. I intervened by supporting both sides of the argument

in an attempt to move the discussion forward as I was driven to get questions answered during the time available. Undoubtedly, if this had been a therapeutic group my reaction would have been to facilitate an exploration of the group dynamics rather than to opt for concentrating on the generation of data.

b. How might others might it?

To an observer, the intervention may not have appeared to satisfy the differences of opinion between members of the group, However, it did successfully change the immediate direction of the discussion for a short period of time and reinforced the value placed on their contribution.

c. What might be done differently?

Unfortunately, the relationship difficulty between participants arose frequently, as it was a well-established communication pattern for group members. It was not possible to eradicate this pattern completely, but with hindsight, I might have made more attempts to diminish the effects it had on the discussion.

Despite these difficulties, I gained insight into two important things that I was able to discuss with other participants. Firstly, professional groups felt that other professionals misunderstood the content of their training, and secondly, that gaining an understanding of each other's professional perspective was a highly relevant aspect of shared learning. The insight gained was significant and I saw no value in trying to change my reaction had it reoccurred in other group discussions.

5.3 Final Reflection

5.3.1 Relationships with Individuals

Participants had volunteered to take part in the belief they had something of value to offer the debate. From the outset, free speaking relationships with most participants were established. An example of how a relationship was gained with ease (example one), as compared with another that was tortuous and uncomfortable (example two), have been identified. The interviews demonstrate the flexibility needed when adapting to differing dynamics and individual needs.

5.3.1.i Example One

The interview with Interviewee 6 was balanced and calm, with no need for directive questions as the participant made interesting observations on her own volition (appendix 14). The dialogue was relaxed and progressed in an informal way. This was a familiar experience for me as in the past some therapeutic relationships develop with ease when compared to others.

During the dialogue the fact that nursing students appeared to feel better prepared for shared learning as a result of their early practical experience was highlighted. It was possible to make a comparison between this performance and the medical students who had a strong academic confidence rather than practical experience. I summarise the discussion in the following way: *'What you are saying is, don't let the medics escape, get them together really early with people to communicate and that somehow we have to assist students to deal with the threat of not knowing'* (I:6PT). The participant and I had both observed this in practice and shared a common language about the issue.

a. Reflection

I recognise in this comment a deep felt personal opinion that had originated through my own experience of working with medical students who had little or no teamwork experience. I related to the sense of threat they felt because I had faced the issue frequently over a ten-year period when facilitating an IPE workshop. My comment could only have been based on assumptions developed by this pervious experience, as at this point in the study I had not yet interviewed any medical participants individually. Had Interviewee 6 been an occupational therapist I might query whether this was evidence of uni-professional collusion, however as she was a physiotherapist, it is more likely that I merely responded to her mature responses.

Later in the reflective process, I became aware that this type of easy communication also occurred with a medical participant (appendix 15). She did not feel threatened by professional stereotypes and was able to reason at a skilful level. This interview was quite short as she was working on a ward and the relationship had less time to develop because time was limited. However, it acted as an important

counterbalance for me as it confirmed that I was not simply reacting in a stereotypical way against medical participants.

b. How might others see it?

An observer would be aware of the shared language and relaxed discussion process. They would recognise the superior reasoning skills of the participant and my response to this as an experienced practitioner, or expressed some concern about elements of professional collusion and preconceived ideas. They would query my spontaneous responses and advise that further explanation was required, or propose to use the interview checklist to take more control of the discussion.

c. What might have been done differently?

On reflection, the intensity of the discussion did not have a negative effect on the study. Equal use was made of information shared by all participants; I would react in a similar manner if the need arose. However, I might change the methodology to unstructured interviews in order to explore areas that the participants prioritised instead of using a semi-structured format.

5.3.1.ii Example Two

Many interesting ideas developed in Interview 15, which was the longest interview. This medical participant took a long time to answer questions and tended to ramble on which meant the interview was an affable, but tortuous experience. Introducing my next question before he had finished answering the previous one became a habit that was a negative trait to establish. The tape and transcript provided evidence of my effort to overcome this pattern as I gradually began to interrupt less, listen more fully and gained a more balanced approach.

This participant's apparent lack of awareness was evident during the interview (appendix 16). We had been discussing whether it was correct to assume that all medical students were arrogant and he seemed unaware that expressing a negative attitude towards shared learning might indicate an arrogant attitude. He managed to combine accurate observation of a situation, with small, seemingly insignificant comments that inferred that medical students knew most things anyway. It was other people's responsibility to ensure that the experience was relevant to them.

a. Reflection

I was uncomfortable during this interview and found that the word 'arrogant' kept coming to mind when I heard this participant's point of view. I appreciated that this was not his intention and that there was a genuine wish to share feelings. He was unaware that his seemingly 'dismissive or arrogant' responses, or that the contentious things he was saying might add to this impression. I was irritated with myself for interrupting him and was relieved to find that part way through the interview this stopped. I could not find any evidence that this caused him any distress in the tape or the transcript.

Interestingly I did not actually get any more 'usable' information from the interview even though it was much longer than the others were. During data analysis, I used quotations from all medical participants and not predominantly from this particular transcript. I did not wish to reinforce the arrogant theme unconsciously.

b. How might others see it?

This interview scene may have been amusing to another professional. Initially because of comments made on both our account, but mainly as a witness to my struggle to keep focussed on the topic without over reacting to the participant's stereotypical responses. However, an observer may have sensed the professional agenda and appreciated that the interruptions at the ends of answers were partly because of my impatience that the original question were interpreted inaccurately, thus resulting in a slightly irrelevant answer. Their advice might have been to adopt another, more neutral, approach to eliciting information, or to make the questions more direct and straightforward.

c. What might be done differently?

I would determine the time deadline at the beginning of the interview to help maintain the focus of the discussion. I would also consider giving the participant the question list prior to the interview to enable them to prioritise their answers in advance and then allowing them to answer freely in their own way. This would check any tendency to take control of the discussion on my part. As in example one all the questions on the checklist were covered and I adapted my style very quickly

to suit the participant. Their opinions were given equal weight in the analysis, despite the experience of interviewing being very different.

5.3.2 Intervention within a Group *(final group discussion)*

I perceive the following example, which arose during the group discussion with nurses, to be a powerful and pervasive issue between doctors and nurses. When other professional groups expressed an awareness of the ongoing nature of the stereotypes and rivalry between the two professions this further reinforced this perception. Participants believed this issue to have had a significant impact on the ability of all members to work as part of a clinical team.

Nurse participants commented strongly about how medical students perceive nurses (appendix 17). The predominant feeling was that medics did not recognise, and in fact belittled, the nurses' level of knowledge. Understandably, this resulted in the nurses expressing resentment and anger. I clarified whether it was fact or fantasy: *'Really, is that what the medical students were saying?'* (GI:3N). The topic kept re-appearing in a number of guises throughout the discussion. The issue was powerful enough to underpin much of their experiences with the other professions.

I was able to discuss this issue with medical participants whenever they wished to discuss their perceptions of roles (appendix 18). It was with the knowledge that nurses were angry with doctors that I queried: *'Knowing that might give you confidence when you go out on the wards, that if something happens to a patient, you know how to move them, you don't have to ask for a nurse. That would help?'* (I:13M). I checked the perception that practical experience might give medical students increased confidence when dealing with nurses, there was positive confirmation of this perception by all medical participants.

a. Reflection

By saying very little I was colluding with their perception that medical students were somehow inept in ward situations and depended on the good will of the nurses to survive. In situations where knowledge is powerful, it is the one time when medical students were vulnerable. The strength of the criticism by nurses and the power they exerted was obvious and I needed to protect the medical students

because I understood the issues. This protective role was one that I remember adopting in working practice on many occasions. I realised that this was the reaction of a vigilant occupational therapist, trying to keep the peace between the 'waring' nurses and doctors. It was a familiar feeling to be stuck-in-the middle of a well-established power struggle.

b. How might others see it?

It might not be clear what my role was other than to listen to what they said and to check the accuracy of my understanding of the details. An observer might conclude that I was very patient with participants in allowing them time to share these opinions. They might also appreciate some of the complex professional difficulties and be able to add an important alternative and/or wider interpretation about whether, and to what extent, I was colluding with either group.

c. What might be done differently?

The relationship between doctors and nurses held a fascination for me. It was familiar territory and I could separate myself from the issues, which were not professionally threatening. With hindsight, less time should have been devoted to discussing the issue, and more presence of mind on my part might have moved the discussion on more efficiently. This would have decreased the time spent on analysis and reduced the chance of becoming side tracked by the issue.

5.4 What I learnt about myself

As anticipated, I carried out research interviews with relative ease, relying upon my facilitating skills to contribute directly to the quality of the interviews carried out. The comfort factor of having previous experience was probably a deciding factor in why interviews were the preferred method in the first place and I might need to challenge myself by using a different approach in the future.

The strength of my opinion was evident when listening to tapes and scrutinising the transcripts closely, though it was satisfying to note that these did not come across as forcibly as anticipated. I handled the complexity of the interview

process quite naturally and encouraged participants to discuss and explore memorable examples. However, there was clear evidence of professional stereotypes underlying some of my responses, particularly within group discussions, as these tended to be more spontaneous, volatile and quicker paced. Group size varied and subtly different facilitation skills were needed in each situation; the larger the group the more my skills were tested and the more likely I was to respond in an unguarded manner.

There was a strong interpretative component to my interview technique. In the first recorded interview I actually say: *'I'm just trying to interpret what you are saying rather than just how I think'* (GI:1P), by way of convincing them of my genuine interest in what they had to say. I was aware of the need to reduce the impact of my personal agenda on the situation and on many occasions attempted to check my understanding of the dialogue by posing questions. For example, *'So you think that something happens in the third year which makes you more receptive towards working together?'* (GI.3N), *or; 'What you've said so far is that students should be able to take responsibility, do you mean student-centred?'* (I7.PT). Questioning in this manner became a regular pattern within all interviews and discussions.

I conclude that 'real' experience influences future behaviour, so it is important for me to see things from another person's perspective. Confirmation of personal opinions can be powerful if used carefully in a discriminating way, but conversely it is easy to collude with negative aspects, especially if this supports a personal opinion. These key issues have now become internalised and the insight gained will no doubt be an influencing factor on improving my research interview technique in the future.

5.5 Reflection on the Research Experience

5.5.1 Participants' Response

As third years, towards the end of their period of training, there were no direct individual benefits to discussing shared learning. For medical students, who were part way through training, there were no plans to incorporate new shared

learning events into their remaining academic programme. The main reason for taking part in the study was to share experiences and to offer advice that might be of benefit to other students in the future.

Initially participants found it easier to respond with negative incidents of shared learning rather than positive. During group discussions it appeared that members drew strength from the negativity of others, primarily because it would be difficult to go against this trend. However in individual interviews the discussions were more balanced, with a mixture of positive and negative attitudes being identified. There was evidence that a strong need to conform with peers might take precedence over any individual who wanted to present a more positive attitude.

Most participants referred to how inexperience had placed them in a vulnerable position during their IPE experiences and volunteered examples to illustrate this fact. This vulnerability offers some explanation as to why more negative attitudes towards shared learning were shared than positive ones. Conversely, it might be that they assumed that I would perceive shared learning more positively and would unconsciously influence the discussion towards the advantages instead of the reality. Therefore, negative aspects were put forward more forcefully in an attempt to counteract this possibility.

Professional and personal issues were discussed in an articulate way, with no obvious anxiety about conversations being recorded. Interviews were informal, with participants responding to general questions and specific probing in a relaxed manner. Their statements indicated that they were convinced that shared learning would become increasingly important in professional education and they were happy to be part of this process.

5.5.2 Personal Reflection

Bryant (1996) and Powell and Usher (1997) identify that the self-reflexivity of the interviewee and interviewer is a potential strength in the research process. In support of this, and with recent experience of advancing my reflective skills (Gallagher 1998), it seemed natural to enter into a reflective dialogue with myself.

As there needs to be consistent self-analysis in order not to loose sight of the meanings of the interaction, this involved acting as a critical friend by constantly reflecting on my contribution and the impact this had on the research process.

The relatively small numbers of participants in this study could mean that the expressed views do not represent a consensus the views held by the whole student cohort. Nevertheless the detail provided by this small group gives an insight into what it was like to be a recipient of new shared learning initiatives. My status as a facilitator of IPE may have influenced how the interviewees told their stories. However, they were articulate, enthusiastic and did not hesitate to respond to questions and probing. This indicated that they were not inhibited by my presence.

During each interview I double-checked my understanding of the issues that were raised. Each transcript was manually coded line by line to detect any influential comments that were made. These comments were recorded under a separate node on NUD*IST and were revisited again during the interim and final reflection. Unusual comments, direct, indirect and muddled questions were closely examined to ascertain how this effected the conversation. The node was constantly updated as interview numbers increased and it was possible to detect any personal issues that occurred on a regular basis. Differences in the nature of the conversations with individuals were compared to identify stereotypes and misperceptions. These steps helped me appreciate how I influenced the data collection and analysis.

5.6 Outcome of the Reflective Process

Previous experience of working with mixed student groups convinced me that third years would contribute a great deal to the development of curriculum if given the chance. I utilised my experience as a therapist to manage individual and group discussions in an informal way without restricting participants' freedom to respond genuinely and spontaneously. Semi-structured interviews kept the schedule similar, otherwise interest in participants experiences might distract from the main purpose. This was successful with a few exceptions where their responses required a slightly different approach. The interview style was adapted to best suit the person and the issues explored in each case.

Even though personal bias influenced my responses on a number of occasions, this did not occur as often, or come across as strongly, as originally anticipated. Although it was not possible to eliminate every instance of personal bias, the potential weaknesses have been considerable reduced through the reflective process. The contribution I have made to the data has had both a positive and negative influence as it had created its own identity in response to me as a person.

My opinions have added to the depth and nature of the data through an encouraging stance. I am convinced that it is futile to attempt to eliminate the effects of the researcher and investing time on trying to understand what is said is the best option. Having attempted to identify personal interests and concerns it is reasonable to assume that I am describing the facts as they are rather than as I would like them to be. Though of course this is carried out in the knowledge that, 'if I present things as facts, then I am trying to persuade you to accept them as the truth because of the association of facts with things that are true' (Bryant 1996 p118).

RESULTS OF ANALYSIS

6.1 KEY TO RESULTS SECTION

The interview questions are very closely linked to the research questions as shown in previous chapter (page 40). The table below provides an outline of how the results have been collated under headings that relate directly to the interview questions.

Table 2. Relationship between Research Questions and Results

SECTION HEADINGS *(Related to research questions)*	**Sub-Headings**
6.2 – 6.3 DEFINITION	
How would you define shared learning? What is the purpose of SL?	6.2 Definition 6.3 Purpose
6.4 Perception/Attitudes towards other Professionals	
In what way, if at all, did these experiences influence your first year perception and attitudes towards other professionals? In what way, if at all, does shared learning enhance professionals understanding of each other's roles?	6.4.1 Expectations 6.4.2 Preconceived Perceptions and Stereotypes 6.4.3 Perceptions of other Professionals
6.5 Shared Learning in an Academic Environment	
What has been your experience of shared learning at university? What made these experiences memorable? In what ways, if at all, were these experiences relevant to your learning and development?	6.5.1 Negative Learning Experiences 6.5.2 Positive Learning Experiences 6.5.3 Clinical workshops
6.6 Shared Learning in the Workplace	
What has been your experience of shared learning in the clinical workplace? What made these experiences memorable?	Analysis of this data can be found in appendix 21.
6.7 A New Shared Learning Curriculum	
At what point, or level of your programme, did you feel most receptive towards shared learning?	6.7.1 Learning Priorities 6.7.2 Receptiveness to Shared Learning 6.7.3 Familiar and Simple Ideas 6.7.4 Clinical Experience

6.8 Developing a Theory Practice Link	
If you could re-design your programme, what changes could be made to encourage shared learning? What aspects of the programme could be shared and/or learnt with other professionals?	6.8.1 Identifying Priorities 6.8.2 Developing Communication Skills 6.8.3 Science-Based Subjects 6.8.4 Case Studies
6.9 Organisation of the Programme	
If you could re-design your programme, what changes could be made to encourage shared learning? Who would this involve and why?	6.9.1 Timetable 6.9.2 Student Responsibility 6.9.3 Staff Responsibility
6.10 Method of Learning	
What aspects of the programme could be shared and/or learnt with other professionals? Who would this involve and why?	6.10.1 Learning in Groups

6.2 Definition of Shared Learning

From the analysis of the interviews it was clear that participants shared a common interest about *'Coming together and learning together about similar topics'* (I:3OT). They define shared learning as getting together, sharing knowledge and information. In their experience this had resulted in nurses, occupational therapists, physiotherapists, doctors and podiatrists learning together about similar topics.

In addition to learning basic factual knowledge together there was opportunity to discuss overlaps in practice and to view things from another perspective which is: *'Kind of working as a team, but sharing our own information and our own point of view'* (I:5OT). Learning about how other professions approach a problem was identified as being important.

Podiatry participants, with experience of a single shared learning workshop and limited teamwork, touched on the same elements, but produced more precise definitions: *'Shared learning is multi-factorial. It should be everyone together, learning about each other as well as studying together, it should be interactive not just learning facts'* (I:8P). Their lack of experience was perhaps significant in that

they were dealing with the 'ideal' scenario, whereas other participants needed to sift through numerous real life experiences in order to clarify their ideas. Definitions based on 'real' experience appeared less organised, as if an awareness of the complexity and messiness of shared learning further complicated the issue and made it less easy to visualise the ideal.

6.3 Purpose of Shared Learning

Shared learning was a familiar term to the participants and as the following quotes indicate they showed similar insight into a probable purpose of this experience:

- *'It's to show that in health there are many overlaps in the work and why we should be working together for the benefit of the patient. If we have shared learning then we appreciate that we all have a role to play'* (I:2OT).
- *'To understand each other's roles a bit better. How you can work together so you can make it better for that patient'* (GI:3N).

There was agreement that shared learning provided opportunity to gain understanding of each other's roles and perspectives. This was felt to break down barriers and promote the type of close teamwork where professional labels were not as important as was expertise.

In the less personally focused group discussion, participants tended to respond to the task of defining the purpose of shared learning in a challenging way, for example a participant commented that the main purpose was to have: *'big lectures with everyone in together'* (GI:2M), perhaps anticipating that this would gain a reaction from me as a lecturer and her peers, as we might have opinions about the contentious issue that shared learning was simply a cheap way of getting information over to large cohorts of students. Participants did respond to the comment which indicated that they were aware of and were dealing with some of the political pitfalls of shared learning reported in the literature.

The current local political climate was also mentioned as a contributing factor to the purpose of shared learning:

> *'From a faculty point of view it would unite us a lot more than we are at the moment. Whilst it's good PR within the university to have that, hopefully at the end of the day we're all going to qualify and work with each other anyway as professionals. The long term spin off will be better interaction when we qualify'* (I:11P).

Underpinning the discussion with all professional groups was an awareness of national trends and the political climate of support for inter-professional working in health care services:

> *'Everything that's coming on line from the government is to do with inter-professional working. Sharing of information, it is the way we must go if we want an effective health service. So linking it in with legislation and saying teamwork is essential is the way we have to go. We have no other choice, so we may as well get our skills sorted out and do it'* (I:2OT).

Undoubtedly participants were well informed about the current agenda, both nationally and locally and were forthcoming with opinions based on a mixture of personal beliefs and real life experiences. There was consensus that learning together was essential to health care and despite the pitfalls that they had experienced, there remained a strong commitment to the underlying purpose which was to improve patient care.

Further interpretation of these initial responses identified 'the ideal' nature of their definitions. They needed very little encouragement to share definitions about shared learning being the way to improve patient care, an idea that was easily accepted by professionals. One participant was acutely aware of perpetuating an ideal: *'I know that it sounds like a cliché, but it does help us to work in a team in a clinical environment'* (I:15M), but despite initial reservations about using clichés, went on to describe how he did believe that the purpose was a good one.

Physiotherapy participants had a sohisticated attitude about: *'Using other people's experience and knowledge to add to your knowledge base so that the next time you come across that situation you might be able to incorporate what they've learnt into*

your practice' (I:7PT), and appreciated the potential strengths of the situation more than any other professional group: '*it brings attention to different aspects, things perhaps you hadn't thought about'* (I:3PT). They were not threatened by: '*knowing what your own limitations are and knowing when its your place to stop and for someone else to intervene'* (I:6PT). Perhaps education in a joint school with occupational therapists, or active experiences of rehabilitation teams helped them to appreciate these issues in such a confident and insightful way. It could also be that their experience of working in clinical areas where time to discuss clincal cases was limited may have resulted in them being more comfortable with verbalising their opinions and needing less warm up time than their peers.

All participants appeared to be convinced that the purpose was significantly important to all professionals, both as students and as practitioners in the future as can be seen in the following example: *'To get a good idea of the mutlidisciplinary team, how things are going to be when you actually leave and get a job* (I:6PT). Having had some experience of working in teams they were aware that the concept behind shared learning represented the ideal vision of good team work, but that the pressures of complex case loads and financial contraints in the workplace made this ideal difficult to achieve.

6.4 Perceptions and Attitudes towards other Professionals

6.4.1 Expectations

There was awareness that employing successful professional relationships depended on whether professionals developed a respectful attitude and an appreciation of each other's skills. High expectations were placed on shared learning experience: *'It would be nice to have the grounding that we can work together competently'* (GI:1P), and concern about the absence of shared learning in the curriculum: '*If it's so important why is it only one session?'* (I:5OT). The stakes were perceived to be very high:

> *'I think everyone sits there and thinks it would be really nice to have good relationships because you know if you do not have a good relationship with the nurses on the wards it leads to a lot of animosity.*

> *I used to be on the other side of the fence and I can see it from both points of view and I think everyone would really benefit from it but it has got to be done so carefully'* (GI:2M).

This participant, who originally trained as a nurse, was acutely aware of the risks of remaining uni-professional. She understood that working in a good clinical team over a period of time was the best way of resolving the issues. This view was shared by others, though with some concerns that: *'It's about people not putting value on things I put value on'* (I:5OT), and the need for time to work through any perceived differences. First impressions were felt to have a strong and lasting effect, particularly if the challenge of values was too much and came too soon.

Participants claimed to have had insufficient time to establish themselves within their own professional cultures when they were first introduced to each other. They had expected to be orientated to their respective programmes prior to meeting other professionals. Exposing inexperienced students to each other placed great stress on their appreciation of personal roles and the roles of others: *'Maybe even going into what different people's roles are, but I think they would have to define it for themselves first'* (I:5OT). This lack of experience effectively left them feeling confused and insecure about what they expected would be achieved in shared learning. This negatively influenced how their initial perceptions about other professions developed.

6.4.2 Preconceived Perceptions and Stereotypes

During the interviews there was some evidence that shared learning experiences added to preconceived ideas about stereotypes: *'You have a bunch of people who come together and very quickly the stereotypes start getting thrown around. It's bizarre how it's adopted by a new generation'* (I:1OT). This applied to all professional groups, though, perhaps because medical participants had least opportunity to practice in clinical teams, they expressed the most concern. A strong feature was a perception of being persecuted by others: *'There's a feeling that they (healthcare students) don't like medics and that starts straightaway. You go into medicine, therefore you must be arrogant. So we can be kind and lovely, but they are horrible to you'* (I:13M).

Medical participants had most difficulty with the nurses who misinterpreted a theoretical approach and assertive manner as being arrogant. Medical and nursing participants both found it hard to deal with the knowledge that in the future it was likely that the doctor would lead the team. This issue became more acute in the third year when medical participants began to work on hospital wards. Even though occupational therapy and physiotherapy participants were aware of the tensions, they were not threatened by the conflict between nurses and doctors as can be seen in the insightful comment below:

> *'There were very stereotypical roles being played by everyone. We had a very unfortunate arrogant medic who said; "I don't see the point of this joint experience because we're going to be the bosses by the time we qualify and you're not". This was a first year medic who was speaking to us, so I think you've got to get them early!'* (I:2OT).

Nurses did admit to perpetuating negative perceptions: *'To be fair we were told straight away that medics are arrogant so we had a go at them'* (GI:3N), which meant making the life of medical participants as difficult as possible. They felt powerless to change some of these conflicting perceptions that were handed down to them, even in the realisation that on an individual basis it was possible to work effectively together.

There was disbelief about the difficulties that were experienced by some of their peers as a result of such preconceived ideas and they were perplexed by the influence that stereotypes can have:

> *'I have a lot of friends who are from other professions. I have met them through other clubs and doing other things. I have never had a problem with a barrier because you are a medic and they are a nurse. That was the one thing that I found quite strange that people came with preconcenived ideas. But when you meet them outside of the situation they don't seem to have it'* (I:14M).

A mature physiotherapy participant had imagined that: *'people coming straight from school or college wouldn't have that many pre-concenived ideas'* (I:9PT), therefore was highly surprised by the experience: *'On some placements the physiotherapist would not have anything to do with the occupational therapist. It's not like that now. I think it's the older generation, the same as any profession'* (I:9PT). Participants brought with them a public view of health care stereotypes mainly gained from media coverage and in some cases personal experiences, but were taken aback by the intensity of the experience when faced with this in practice.

6.4.3 Perceptions of other Professionals

6.4.3.i Roles and Responsibilities

Each profession believed that they were misunderstood by other professional groups as a result of negative stereotypes, a view which if not totally based on fact was widely held: *'In the first year we think that medics think nurses are crap, so we get right back at you now before you can get at us'* (GI:3N). Some stereotypes were very unpopular and difficult to shake off as can be seen in the following example: *'You are a nurse so just clean bed pans and that stuff. I think that doctors should be told that if a patient needs a toilet that they are allowed to take them. They don't have to come and get a nurse'* (GI:3N). The response to this comment was a mixture of anger and amusement amongst nurse participants, though such beliefs were not limited to doctors and nurses alone:

> *'They (professionals) have a stereotypical view of an occupational therapist as being someone who just plays. I think you have to chip away at that and say we're just as professional as everyone else is and have got a professional role to play. We have to recognise that these stereotypes about each other are not correct'* (I:2OT)

A deeper understanding of the issues of professional respect and perceived level of responsibility could be found underneath the more obvious stereotypes:

> *'I think the medics tend to own the patients, and they tell us what to do without really understanding what the other professionals are doing and perhaps undermining them slightly. The medical profession is seen as*

> *being responsible for them (patients) and you are responsible for professional methods. I do think it's seen by the general public and perhaps the doctors that ultimately they'll be the ones who have the blame at their door if anything goes wrong'* (I:2OT).

Whilst this occupational therapist appreciated the level of responsibility doctors had, she was frustrated that they were allowed to undermine the work of others. At the same time she expressed great discontent that her profession allowed this to happen on a regular basis and wished that professionals could be more self-confident in their contribution.

A podiatrist explained how this lack of confidence and respect affected both therapist and patient: *'We don't have much credit in the whole realm of medicine. I think that's awful because a lot of patients won't take our advice because of the whole stigma that's attached to our profession in particular'* (I:8P). Another podiatrist felt that negative stereotypes were often perpetuated by the profession itself: *'I think that it's down to a lack of confidence as to what our roles are within the professions. It's a great leveller, you get to see a person as opposed to a stereotypical view which often filters down'* (I:11P), that is until an individual with a strong personality came along to influence this more positively.

From the evidence in the interviews there was an element of realism in recognising the existence of stereotypes and acceptance that it is down to them, the participants to change this for the better. The podiatry participant (I:11P) felt that the main benefit of shared learning was that misperceptions of her profession could be altered at source instead of in practice when it was too late. This quest was echoed by other participants, who also wished to maximise shared learning to promote awareness of each other's role. However, they were aware that sometimes the practice of a team and the working environment had impact on the situation as well.

6.4.3.ii Circumstantial and Environmental Factors

An appreciation of how circumstances influenced the development of animosity between professions was apparent, as was insight into longer-term issues:

> *'I think they (medics) resented me because I did the electrocardiograms. However, because they were third years and they would just come they did not really know how to do it at all. I thought it was unfair that they could not stay as well, but they have to deal with that and there are likely to be things that they cannot do. They are going to catch up in a few years are not they and take it over'* (GI:3N).

No enjoyment was gained from the situation, even though it was an easy opportunity to undermine the medical students. A medical participant describes a similar feeling of unease and discomfort in a different situation:

> *'I didn't understand the uniform colour code and which nurses were senior and were going to help you. I found it really difficult to understand what the nurses actually did. Why were they asking a medical student to take bloods when I hadn't been assessed in it, no one could tell me whether I've done it right or not, but you know a qualified nurse actually isn't allowed to do it. You don't understand at the beginning of the third year and it's all quite confusing'* (I:12M).

In both the above cases practical tasks and responsibilities added to the complexity of the relationships between professionals and high stress levels were apparent. There was a shared dissatisfaction with the circumstances and concern that an opportunity for shared learning had been missed.

6.4.3.iii Myths and Misunderstandings

The views of professionals about each other were complex:

> *'Isn't it funny how nurses always have problems with medics and vice versa, but occupational therapists and physiotherapists have specific roles, they're not treading on each others toes. They train together and have a common foundation'* (GI:3N).

The nurse's perception was that because occupational therapists and physiotherapists trained in the same school, that their knowledge of each other

would significantly reduce any potential for conflict. As nurses did not share learning with other professionals in the same way they fantasised that the therapist's experience would be preferable to their own uni-professional learning.

This was a strongly held perception and one nurse was almost shocked to report that: *'Apparently physiotherapists and occupational therapists have rivalry, which I didn't realise'* (GI:3N). Other professional groups believed that the reason for the occupational therapy and physiotherapy cohesiveness was: *'Because they do loads of stuff together'* (I:8P), the implication being that doing things together also promotes understanding of each other's roles.

However, the reality for the occupational therapy and physiotherapy participants was very different: *'Throughout the course there's also been this bit of competition between occupational therapy and physiotherapy, though nothing nasty'* (I:9PT). Concern was expressed about a negative side effect of being perceived as a cohesive group was that they were 'clicky', which was not correct in their opinion: *'People say that physiotherapists and occupational therapists are so clicky that we don't tend to mix with others. I don't think we are ever given the opportunity to mix'* (I:7PT). They saw the pitfalls of being seen to work closely together, but had a wider perspective:

> *'It just seems that when you go out on placement there's a big divide between physiotherapy and medical students You look up to the doctors and you almost feel a bit intimidated by them and I don't think that's right. That needs to be got rid of'* (I:7PT).

The need to 'get rid' of stereotypes was highlighted as being a major reason for introducing shared learning across all professions. Based on a combination of observations of the occupational therapy and physiotherapy students in the faculty and clinical experience in general, shared learning was believed to be one of the best ways of dispersing the myths and misunderstandings that professionals held about each other.

6.5 Shared Learning in an Academic Environment

6.5.1 Negative Learning Experiences

6.5.1.i Negative Effects

Reflecting on their experience of shared learning in the first and second year assisted in the recall of examples: *'joint lectures and things like that perhaps and maybe workshops like some of the ones we had in the first year and clinical placement as well sometimes'* (I:4OT). Unfortunately the majority held negative experiences of this learning and the following quote typifies the comments that were made: *'To be honest I think IPE has fallen on stony ground and this gets worse as the programme progresses'* (I:2OT). Although some good examples were discussed, the negative experiences surfaced more readily:

> *'I haven't done any inter-professional thing that hasn't been terrible so far. Everyone says the same old things over and over every time we have anything inter-professional and we all slate each other and it doesn't get anyone anywhere'* (GI:2M)

They were adamant that: *'If shared learning is poor it's bad because it has a bad effect on you'* (GI:3N). Having a bad start was highly influential for some as they now felt that: *'anything inter-professional is negative, it's self-perpetuating if you have had a bad experience the first time'* (GI:2M). Routine things, such as time and venues, caused a level of resentment that under normal circumstances might have been unimportant. For example, occupational therapy and physiotherapy participants were frustrated with the venues: *'When we always have to go to the medical school, it felt like the medics were the important ones and we're just sharing their lecture'* (I:3OT). They were not convinced that holding groups in each other's departments was a good idea:

> *'The people I've spoken to haven't really found them of any benefit and everyone's really resented having to go up to Boldrewood (Medical School building) to do something that they know they're not going to gain much from anyway. I cant remember anything from any of the things*

that were talked about, apart from everyone complaining that they didn't want to be there' (I: 9PT).

Many participants resented having to travel to other departments to work with a group of strangers. They remembered that the whole experience, including the place, people and content, had been totally alien to them, which had been particularly overwhelming in the first year when they were not even familiar with their own programmes.

6.5.1.ii Relevance

Participants supported the concept of shared learning in an academic setting, but were frustrated that the content had not been highly relevant. Shared learning experiences were subsequently described as being 'terrible' or 'pointless'.

Medical participants had great difficulty in seeing the relevance in the early stages of their course as they were not able to link the content with their current course work: *'The questions were difficult to do, they weren't anything that we could have done from our lecture experience'* (GI:1M). A general information overload also appeared to be a large hurdle for them*: 'If you get given so much information sometimes that you can only store so much. If you know it is going to be relevant you are more likely to be willing to learn it or turn up'* (I:14M). However, the biggest problem for them was a lack of appreciation of the clinical relevance:

'Because we don't have the clinical experience we can't see the relevance properly so I'm not entirely sure that it does have a place in the first couple of years. A lot of it is repetition, which is good in some cases, but it can be 'we already know this why are we here'? Once you've got that in your mind it's seen as a chore' (I:15M).

This issue, which at first glance appears of particular relevance to medical participant, was discussed in detail by all participants. Sometimes the 'real' experiences of shared learning didn't reflect the theoretical definitions and expectations: *'I think sometimes it's quite disjointed and everyone goes off at a tangent whereas we could all be working together and it would be far better for the*

patient in the long run if you pull together' (I:2OT). The 'disjointed' nature of the discussion stemmed from lack of knowledge and experience and resulted in an uncomfortable shared ignorance amongst all the students.

It was not possible to suggest ways of increasing the relevance for anyone with a lack of clinical exposure: *'It's just always going to turn out that way I suppose, that some people won't see the relevance of it, wont feel they get much out of it'* (I:15M). However, it was felt crucial to find some way of convincing all students of the relevance rather than simply insisting that they attend.

6.5.1.iii Practical Aspects

Having practical activities incorporated into sessions at an early stage had proved to be traumatic: *'I was told to show how to hand wash for 15 minutes, it was so embarrassing, it was like a humiliation, because I'd been on the ward and none of the others had'* (GI:3N). Being singled out in this way had resulted in embarrassment for nurses, as they felt this negatively emphasised the divide between those who had had clinical experience and those who hadn't.

This aspect was also problematic for medical participants: *'The questions weren't aimed at us, they were aimed a people (nurses) with experience on the ward'* (GI:1M). It became clear that any student with limited clinical experience, but particularly medical students, felt overwhelmed by this lack of clinical experience when compared to other professionals. This simply exaggerated differences, did very little to dispel any professional myths and misunderstandings and resulted in them adopting a disinterested and passive role. It was assumed that had new practical skills been learnt together, students would have been on an equal footing and the experience might not have been so difficult.

6.5.1.iv Timing

Early on in the conversation in group discussion and individual interviews participants quickly keyed into the issue of shared learning being a potential waste of time:

> *'People turned up just because it's an obligation not because they want to. That's not just medical students because I've got contact with a few student nurses and the response is - shall I bother going to this? And it's like no, it's a waste of time'* (I:15M).

Nurse and medical participants felt coerced into first and second year shared learning events and they resented the poor timing of the events: *'I think in the first year it was a real forced thing, this is you're inter-professional thing and you will get along'* (GI:3N). With no prior clinical experience to rely upon medical participants felt inadequate and as the time tabled sessions actually interrupted the nurses first clinical placement this was viewed as being very disruptive.
The weight of factual learning faced by medical participants in the first and second year and a lack of working practice were key issues. They had had less opportunity than other participants to integrate the experience into 'real' working practice and had not developed or refined these elements further. Whilst other professionals empathised with the medical students about the lack of opportunity for contact with patients: *'They (medical students) don't do any and they need to. It's not fair on them and it's not fair on us really'* (GI:3N), most felt that this lack of clinical experience needed to be dealt with early in the learning process before it was too late to make a difference.

However, one participant expressed reservations about whether first or second years actually were able to take shared learning seriously:

> *'I don't think it has been successful in my experience. Many of the sessions, especially in the first and second year, have been discussion and a bit task orientated. Most students haven't followed those and it seems to have broken down into arguments'* (I:15M).

Such a response might be due to the nature of the medical programme and the timing of their contribution, but equally, medical participants were more prepared to be critical and discuss negative experiences of shared learning in both the university and the workplace. This could be viewed as stereotypical behaviour (critical and

arrogant) or, as a more open and honest interpretation of their experience along the way.

Early experience placed students together at a time when they felt most vulnerable and were experiencing the most diversity in their clinical experience. Immaturity and lack of experience widened the abyss, perpetuated misunderstandings and hardened attitudes at the time, however, this pessimistic attitude changed completely when the timing was right: *'By the time you're a third year, you realise that you can't know everything and you don't mind admitting that'* (I:10P). A suggestion that experienced students had a role to play in helping novice students was voiced: *'You have to explain to them and you have to rationalise and justify your own practice. You also feel really good inside, I have helped the first years and I know how it felt. I've made someone's practice a little bit easier'* (GI:3N). Participants felt most equipped to make best use of the time, to deal with problems and to assist other students in the third year (appendix 19).

6.5.1.v Compulsory Attendance

Whether shared learning should be made a compulsory part of the curriculum provoked an interesting debate as each school interpreted and implemented policies quite differently. Some had forced students to attend, whereas others had encouraged attendance but had not actively followed up students who didn't attend.

There did not appear to be any mid point as shared learning was either compulsory or it wasn't. On one hand the view was: *'If they're not compulsory attendance, they don't really carry importance'* (I:1OT). Whereas the opposite view was: *'If it was compulsory you'd get a lot of people going, well they'd have to, but the people that went wouldn't necessarily be motivated'* (I:4OT). Overall it was considered more productive to work with those who were motivated to be there:

> *'If the people didn't want to be there, there isn't that much work done. You don't have to get anything out of a session, you can sit there and block everything out even if you find it interesting, If you don't really want to be there you'll just block it out more'* (I:5OT).

This is an interesting insight into how those who are determined not to see the relevance or to participate manage to negate the experience despite the efforts of others.

Negative attitudes were very difficult to deal with in the first year, as were the incidences of individuals who sabotaged the experience for all group members: '*All it takes is one student to lower the mood of everybody else in the group and one cross word said*' (I:15M). This experience reflected badly on the profession the individual represented, as it reinforced preconceived ideas and labelled shared learning as an experience to be avoided in the future.

This extreme vulnerablility suggests that whilst non-compulsory attendance is the preferable long term ideal, in reality, inexperienced students need structure and direction in the early stages of the process. There was a hope that as they gained clinical experience, they would see the relevance of shared learning and become increasingly motivated about their involvement in the process:

> '*You might well get a better response if you make things compulsory. Those who saw no relevance in it avoided social sciences, but had they continued to come to the lectures they might eventually have clicked that there is relevance. It may be that we have to be treated like children until it gets through to everyone that it's important*' (I:2OT).

As course work became increasingly demanding participants described how they struggled with prioritising: '*It's putting that in balance with everything else that you've got to learn, so I'm not quite sure where the balance lies*' (I:4OT). This pressure resulted in strong opinions and different approaches: *'Most people did turn up for the first couple of years but this year I haven't been to any and that's a bit of a shame'* (I:15M). There needed to be dialogue between students and staff in order for them to make better-informed decisions about what to attend:

> '*The whole point of higher education is that you can't be forced to turn up. I think that the best thing to do is if you make it clear to people what*

they're going to get out of it, why it's relevant to them. People are more likely to turn up because they can see the benefit of it' (I:11P).

This was particularly pertinent for those on the podiatry programme whom, unlike most other health care students, were expected to attend all academic and practical sessions. This left them without choice or opportunity to prioritise their own work, a scenario that was highly resented by the predominantly mature students on the programme.

Participants who did not have strong opinions either way referred the responsibility back to the lecturers: *'I think the course really needs to decide what is important and what is 'unmissable' in terms of professional education'* (I:1OT). Different expectations about attendance could be extremely detrimental: *'IPE wasn't compulsory for any of the others and that just in itself makes a problem as it immediately makes you feel like, why have we bothered, they haven't'* (GI:2M). The one area of clear concensus was that whatever the decision, it should apply equally to all students across the faculty.

6.5.2 Positive Learning Experiences

6.5.2.i Talking and Listening

There was acknowledgement that when shared learning worked well it was of benefit to all members of the team: *'It stops the them and us thing, that segregation between professional groups.It should make us more of a team'* (GI:3N). Or as one participant concluded: *'This can be useful for you later on because you know which type of person to call upon for advice or for actual assistance when you're taking care of people.The sum total is greater than the individual parts'* (I:10P).

Positive memories about the potential benefits of shared learning emerged slowly and specific examples were used to illustrate their feelings: *'I enjoyed having a captive audience to tell them what we actually do. I found it really good talking to other people about what they do and to help me understand everyone else's role'* (I:OT). Occupational therapy and physiotherapy participants talked more about the positive and less about the negative aspects than any other professional group. They were clear about everyone's role and appreciated that professionals were all

dependent on each other. They gained strength from having professional identities challenged and valued having time to overcome some of the invasive stereotypes that were present from the onset.

The importance of having time in the academic programme to actively listen to others was emphasised by other professional groups: *'I always though it was good listening to the nurses who might have been on placement and had much more practical experience than we had at that stage and listen to what they had seen and what they learnt'* (I:13M). A seemingly simple act of listening helped to develop the necessary appreciation of complex professional roles and provide scope to: *'look at how your profession is positioned in perspective to the other healthcare professions* (I:11P), a valuable connection between theory and practice was established.

6.5.2.ii Linking Theory and Practice

Participants complained that they found academic learning hard as it often felt divorced from practice. Working in an effective clinical team was a very important positive part of the learning experience, particularly if the focus was helpful in linking theory with practice. For this reason, half-day clinical workshops carried out in Elderly Care, Palliative Care and Paediatrics were highly rated by participants as an excellent shared learning experience. Practitioners and educators worked together to facilitate students who attended when they were seconded on placement to either of the clinical areas identified above. However students who had been seconded to different clinical specialities or, who were carrying out an academic module, such as, paediatrics were also given opportunity to attend as an optional extra.

Medical participants gained this compulsory experience as third years during attachment to clinical firms. Podiatrists had access to the Elderly Care workshop, which was compulsory for the whole second year cohort. Whereas for occupational therapists and physiotherapists attendance was optional and first, second and third years students were able to take up the experience depending on their interests.

The workshops were deemed credible because the learning was focussed on real life case studies. Those who attended the clinical workshops expressed very positive

feelings about the experience, which was unanimously regarded as being highly relevant mainly due to the fact that: *'the workshop was brilliant because it was built around a case. You were finding out about roles and had a greater understanding'* (I:13M). Although there was a mixture of compulsory and optional attendance, all students found that besides being fun, the experience was a challenging, thought provoking learning experience.

> *'Before it actually happened we were sort of dragging our heels a bit, but once we'd gone and it was a very good experience, I think we are much more receptive to multidisciplinary stuff. If someone said 'oh you've got one next week', then I would go to it because I think you learn quite a lot'* (I:12M).

Motivation to take part and learn was generally high as they saw the relevance of the task, which was equally challenging for all participants whether novice or expert: *'It really is a situation where you have all professionals working together, each has an equal contribution to make. They didn't tell us who would do what, we discussed it as a group and presented what we thought'* (I:10P). Despite the clinical specialities being outside of participants direct clinical experience in some cases, at no time did they mention stereotypes, threats or boundaries when describing their experiences.

6.6 Shared Learning in the Workplace

As might be expected across a number of programmes the duration and nature of clinical experience was broad and participants shared many memorable examples. The most important information gleaned from the interviews was that a balance between university and workplace learning was preferable and that learning about professional roles and teamwork didn't become relevant until clinical experience began. A participant pointed out that: *'I know one medic I spoke to said that it is very academic in the first and second year and suddenly it's completely different in the third year'* (I:14M), and suggested that it was important to avoid this rapid change of focus.

The majority were convinced that they needed to work together early on in training in order to appreciate the interdependency that developed between professionals. Firstly, to realise that whilst each profession was important they could not function alone and secondly, to learn how to confidently handle this interdependency, without feeling undermined or loosing their professional identity. And finally, how to pull this knowledge together and to communication with each other so that the most appropriate professional input and the best package of care be given to patients.

Aspects such as: clinical experience, links between clinical and academic experience, client centred approaches, teamwork, overlaps in practice, working relationships and how to deal with resistance to change as being crucial elements of their learning in the workplace. A detailed account of these elements can be found in appendix 21.

6.7 A New Shared Learning Curriculum

6.7.1 Learning Priorities

Having been given a symbolic blank sheet of paper on which to develop a new-shared learning curriculum and, after an initial uncertainty about what to propose, participants explored how their needs might be fulfilled. Receptivity, familiarity and clinical experience evolved as priorities from a student point of view.

6.7.2 Receptiveness to Shared learning

Participants had difficulty, as do educators, in deciding on the most pertinent time to introduce shared learning. Responses to the question about receptivity and appropriate timing of shared learning fell into two concepts: the ideal time when shared learning should be available as opposed to when students were most receptive and felt able to make realistic use of the experience.

6.7.2.i Ideology

An awareness of the need for collaborative working appeared to influence initial responses, as the majority discussed the issues as if shared learning was inevitable. Initial responses promoted consideration of the ideal situation: '*You might as well*

do it from the beginning because that's how it's going to be when you leave and do things' (I:6PT) and also:

> *'In a way I think it would be better to start from the beginning of the course because if you're supposed to work as a team it's more natural if you start the approach from the beginning instead of maybe introducing the concept halfway through when it might seem a bit more alien'* (I:4OT).

There was a common understanding, particularly amongst occupational therapists and physiotherapists that this was real life and should be approached at the earliest possible opportunity. With hindsight, it was recognised that an early start might have increased their ability to make use of the experience: *'I think that if it had been something we'd done from the beginning we would have been more receptive to it now. As you go through, your professions divide and the divide gets wider and wider'* (I:7PT). The perceived 'divide' was the outcome of uni-professional training that might have been avoided had shared learning been incorporated into the programme.

There was a belief that despite the difficulties with shared learning, it was worth taking this risk in the hope that the experience itself would be useful: *'I think that if we're working together from day one, maybe you might be more receptive and more aware of the reasons for it when you're in the third year'* (I:8PT). All professional groups agreed that familiarity with the process of learning together would have enhanced working practice.

Whilst most participants felt that ideally an early start was preferable, some had reservations about the content of the shared learning, particularly if this took place prior to clinical experience (appendix 19). The ideal situation would be for shared learning to develop alongside clinical work, as this would enable them to see the relevance of the experience. It was important to have constant reminders about the relevance of the shared learning activities as this shaped motivation and attitudes towards collaborative care.

6.7.2.ii Reality

Feeling at ease with professional roles influenced attitudes towards shared learning:

> *'If we did inter-professional education now (3rd year) I think it would be a lot more beneficial. We don't have so much of the prejudice against medics as we had in the first year because now we have met a lot and worked with a lot of medics who are really good. So we are a lot more receptive'* (GI:3N).

This maturing attitude towards members of the team was discussed with all participants and appeared to underpin the claim that they were most receptive in the third year. This was primarily because they could more easily appreciate the relevance of the issues covered:

> *'I think that in the first year, you have less idea as to other people's roles, in the second year you start to get more of an understanding of it. By the third year, you have a nice view from all the experience that you've had of what other professionals do and I think you need that experience before you can accept joint learning'* (I:3PT).

This participant believed that her previous experience ensured shared learning would be more successful and leaving this experience until the third year would not be too late. This acts as a counter-balance to the fear expressed by participants, and educators alike, that it would be too late to introduce shared learning in the third year. Her words, 'to accept joint learning' may hold the key to an important part of the process that is missing in previous years. There was a firmly held belief amongst the participants that third years were more able to accept shared learning as being relevant to working practice as a result of their experience in clinical teams. A depth of experience and commitment to working together provided a diverse and safe backdrop against which shared learning would thrive.

Clinical experience assisted participants to appreciate the need for collaboration: '*Now we want to learn, we want to know about this, we want to learn about everyone's role. We now realise that we need the support as well*' (GI:3N). Nurses

indicated that their immature attitude towards other professions had gradually changed and mellowed as a result of clinical experience. The third year was viewed as being the best time for medical participants because this corresponded with the onset of intensive clinical work: *'I think the third year, because in the first and second year you're so strung up and worried about things. You haven't really met patients and you're still trying to get to grips with the pre-clinical stuff'* (I:12M). This comment reflects the dilemma faced by all participants that until they had direct responsibility for patients other course work took priority. This participant went on the say: *'It isn't that we shouldn't do it then (1^{st}-2^{nd} year), it's just that we would be much more receptive to it now'* (I:12M), which relates directly to the picture presented by all participants, the ideal versus the reality.

6.7.3 Professional Shadowing

As well as becoming familiar with other professionals in an academic environment an important step was gaining clinical experience together: *'I think there's a hunger for the shared clinical contact'* (I:1OT). All professional groups indicated that clinical experiences were the most important driving force behind their motivation to learn with each other and about each other. Part of the reason why clinical experience was considered essential was that it created the opportunity for shadowing other professionals as well as working with them. Medical participants identified that: *'We spend the day in the life of a nurse and occupational therapist, you tag a long with them whatever'* (GI:2M), and recognised the advantages of shadowing each other: *'I think that it is quite nice to see what they do rather than being told what they can do'* (I:14M). However this type of shadowing was not reciprocated: *'you never spend a day with a medic'* (GI:3N) and had professionals spent a day shadowing a doctor, they would understand the medical role better.

Each participant gave an account of what he or she had learnt from shadowing other professionals, and how it had been a meaningful experience. Although they appreciated some of the organisational issues about carrying out this type of activity from an academic or a clinical base, it was considered important enough to merit further development as the benefits were felt to out weigh any operational challenges.

6.8 Developing a Theory-Practice Link

6.8.1 Identifying Priorities

The first priority of shared learning was the creation of a link between theory and practice:

> *'It needs to start in university when we are learning about everything to make any positive influence on the workplace. If you come out cold, only knowing about what you do, it's very hard to bridge the gap between professions, theory and practice. If you have already got that linkage and that understanding with each other, then those bridges are much easier to build.* (I:2OT).

Having been encouraged to think independently of each other during separate interviews, the ideas generated were surprisingly similar in nature and focus. A range of suggestions for shared learning were proposed and followed up during discussion:

- *'Communication, teamwork and how multidisciplinary teams work together'* (I:7PT).
- *'Cell biology/micro-biology wasn't specific it was just very general genetics, methods of inquiry and statistics for research'* (GI:1P).
- *'Joint sessions on communication together or some factors like manual handling'* (GI:3N).
- *'Particularly stroke because that's such a multi-disciplinary area'* (I12M)
- *'The research conference day – those sorts of events are very good'* (I:4OT).
- *'Health policy is something we all need to know'* (I:8P).

The topics selected were believed to be either common to all programmes, (science subjects), or practical, generic skills (manual handling). The more taxing aspects related to developing an appreciation of each other's roles and professional relationships (teambuilding activities). Nevertheless, participants were most passionate about ideas that had been generated whilst they were on placement in the workplace (complex case studies and discharge planning).

6.8.2 Developing Communication Skills

6.8.2.i Communication Networks

There was a wish to: *'Learn about the interactive skills that we all need as health care professionals'* (I:11P). Communicating effectively within teams in order: *'to learn to liaise with people, when to refer patients to those people and discuss with those people to see if they can help with a different perspective that the one that you come in with'* (I:6PT). Being confident enough to question other members of the team was a recognised way of gaining information: *'There's no reason why medics can't jump in and ask us'* (GI:3N), but most importantly this was seen as a two-way exchange:

Although communication skills were highly valued, there were different views about what should be done with first year students. Despite the lack of experience and knowledge, the option of incorporating communication skills for first years was considered to be relevant by all participants. They were keen to take advantage of any opportunity to develop a wider range of skills in order to avoid poor team communication, though finding the right time to suit everyone was very difficult as each individual had thier own development needs. As all students were vulnerable and would find shared learning challenging it was envisaged that good group facilitation would be essential in the early stages.

6.8.2.ii Complex Team Communication

There was a belief that: *'People get embarrassed, but once you've done a little bit of work in a clinical field you realise how difficult it is for people to communicate'* (I:10P), which means: *'We could all benefit from ongoing communications skills'* (I:2OT). The suggestion was to start at a basic skills level with a gradual move onto

higher order skills, for example, how to cope when communication goes wrong between professionals and/or between practitioner and patient.

Part of this challenge appeared to be linked to dealing with the 'grey' areas such as: *'Ethical issues, things that lend themselves quite well to clinical scenarios where it is easy to work out your roles and where the grey areas and overlaps are'* (I:5OT). These aspects were not necessarily discussed in the workplace because it was difficult to cope with professional issues when there were time constraints and everyone had a duty to patients.

> *'It is also important to talk about perhaps the grey areas that we don't talk about because you practice working in a team for the good of the patient on placement, but you don't necessarily talk about the stuff except within your school, and it's often useful to have ideas from other people who have been taught different things, or just other people'* (I:5OT).

When asked for an example this participant suggested that discussing complicated cases that didn't fit into the typical textbook plan would be relevant. Also, when to treat/when not to treat patients was an essential part of any professional repertoire, but it was difficult to explore ethical issues within busy clinical teams. Such dilemmas needed to be explored theoretically to broaden student's knowledge and developing coping strategies in an academic setting was preferred.

6.8.2.iii Mixed Communication Methods

Effective communication could be sub-divided depending on whether individuals or teams were involved. Having the ability to listen, explain complicated information and interact socially were the communication skills predominantly required in direct patient contact. When referring to team communications this encompassed all of the above-mentioned skills with the additional need for written communication skills.

Developing written skills was approached differently by each professional group, for example: podiatry participants, who worked independently within community clinics, with a lot of direct contact with patients, focussed on: *'It's all very well being able to verbalise yourself, but we all need to know how to write a reasonable*

letter as well' (I:11P). Whereas medical participants were concerned that: '*They (educators) are all very keen on emphasising that we have to spend as much time with patients as we can, taking histories, examining them and then going and reading about what they're in hospital for'* (I:13M), and felt that emphasis was placed on the reading and writing to the detriment of direct communication skills.

Although there were different perspectives on the skills that were required, the issues were raised repeatedly. Communication skills were high on everyone's agenda, indicating that there would have little difficulty in seeing the relevance of learning these skills together and a positive attitude would undoubtedly increase the likelihood of success.

6.8.3 Science-Based Subjects

6.8.3.i Biological Sciences

The concept of learning science-based subjects together was acknowledged, as it seemed the most sensible thing to do, primarily because: '*I would imagine that other professions need that underpinning knowledge'* (I:9PT) and, *'When we do cell biology/micro-biology that wasn't specific it was just very general genetics'* (GI:1P). The focus in this case was sharing a common need for facts and information to underpin an extensive knowledge base.

In particular, learning biological sciences together seemed to be a logical step and one participant explained the reality of learning the subject in shared living accommodation: *'Silly things like in the first year, two of my flat mates were a physiotherapist and a medic, so you used to quiz each other on anatomy when we were first trying to learn it and it really helped'* (I:13M). Thus, emphasising that students' carried out shared learning quite naturally, despite a lack of formal integration across professional curricula.

6.8.3 ii Psychosocial Sciences

Occupational therapy, physiotherapy and nurse participants discussed whether other subjects, such as behavioural and social sciences were significant:

- *'Basic communication or psychological effects of something that everybody would come across where you would all learn something'* (GI:3N).

- *'Behavioural sciences, because all the professions have to deal with behavioural aspects of patients and clients in the same way'* (I:3PT).

- *'They need to apply themselves to many social sciences because they are so entrenched in facts and figures that they can't see the wider picture'* (I:2OT).

The final comment referred to programmes that focused strongly on biological sciences to the apparent detriment of psychological aspects. A nurse shared her perception of the different emphasis that appeared to be placed on what was learnt: *'I know that we get less bio-health than the medics do and the allied health and the medics get less on communication and psychology. Some of those are really key areas and maybe it should be more intermingled that way'* (GI:3N). This touched on the contentious issue of 'how much and to what depth' subjects were explored and exposed differences of opinion about this. However, participants did not believe that having different opinions was good enough reason to outweigh the need for integration. There was agreement that a balance between 'hard' and 'soft' sciences would improve the content of every programme.

6.8.3.iii Clinical Sciences

Reasons why specific clinical subjects could be learnt together were identified, not simply as a way of learning the facts, but also as a way of learning about each other and the rehabilitation process: *'Neuroscience, that is something we're taught a lot about and that would be excellent chance to see how the occupational therapists and physiotherapists actually work with them'* (I:13M). The theme of learning together and learning about each other underpinned many observations:

> *'I think particularly stroke because that's such a multidisciplinary area really. Realising that huge input in stroke rehabilitation really helped me*

to understand the process of patient coming in to patient going home and on after as well' (I:12M).

Dealing with overlaps in practice and difficult clinical conditions at the earliest possible time was the preferred option: *'there is a fair degree of cross over in Diabetes, Parkinson's, Rheumatoid problems. You could look at systemic illness and possible complications those conditions present'* (I:11P). The understanding was that integrating some subjects wouldn't require much reorganisation: *'Muscular skeletal, neurological cases could be integrated without really changing modules very much. IPE could be part of the mark for most exams'* (I:1OT). Participants were convinced that learning clinical sciences together would be highly relevant and productive.

6.8.4 Case Studies

The importance of making learning patient-centred through the use of case studies was highlighted: *'Looking at case studies is one of the most important things'* (I:1OT) and, *'Give us a case scenario and findings on examination, then we can use that information'* (I:12M). Participants were very definite about the reasons why case studies should be used:

- *'As far as I can see almost every case clinically involves at least two members of the team, two different disciplines minimum. So obviously the more disciplines it does involve the better the picture we get of professional integration'* (I:15M).

- *'Students will have been in some sort of case conference somewhere'* (GI:3N).

- *'You could all have the same case scenario, so you write it from different perspectives, but you're also supposed to bring in the other professions, how you think they would deal with it and what their roles would be'* (I:7PT).

- *Looking at a case – you can start to look at the overlaps and see the person as a whole. Think about each other's professional point of view'* (I:10P).

- *'I'm a big fan of case studies though, so I might just be on my high horse'* (I:5OT).

Clearly they were in favour of using case studies, as this would broaden their knowledge base and assist them to respect and understand each other's point of view. Case scenarios were perceived as being important learning opportunities in their own right, with the added bonus that they were highly relevant to practice:

> *'As soon as they are given the independence to care for patients that is when they start to think about it.If people are given information that they're actually going to be able to use when they go on clinical placement, they sort of sit up and listen a bit more. If it could have impact on their practice I think this would be motivating as well'* (I:6PT).

And also:

> *'You realise what you were expecting of other people in the team and you'd realise what they were expecting of you. That was quite good because it made you think for once rather than seeing and accepting what they do. You actually think about what they think about what you are doing instead'* (I:14M).

Participants were convinced that, next to direct clinical experience, case studies were the single most important way of promoting good practice in the clinical team and for students to make appropriate links between theory and practice.

6.8.4.i Experiences of Case Study

Strong feelings were evident when participants reflected on experiences of using case studies. The majority remembered experiences gained in clinically based inter-professional workshops that had been held in Elderly Care, Palliative Care and Paediatrics. These workshops were memorable: *'Because we could see why we had to do certain things, why we had to call upon the help of others to do things, so it was a kind of clinical picture in a group workshop'* (I:15M). Besides this realisation,

the practical nature of the workshops focussed attention on the importance of teamwork: *'We felt more like a team working towards something because we watched a video and then gave feed back. It was like a healthcare team working together for the good of a patient'* (I:5OT). The use of case studies heightened awareness of patient needs and increased motivation to work as a team member to resolve situations.

6.8.4.ii Real versus Hypothetical Cases

Whether case studies should be 'real' or 'hypothetical' patients was uncertain, with many promoting the real thing:

> *'A case study where there was a real patient and you get to work with them. I do not think a paper exercise would be quite as exciting as where you meet and talk to the patient. I think it particularly sunk in when I was doing the Moorgreen workshop that the patient is the centre of everything'* (I:12M).

The complexity of the 'real' thing appeared to be preferred mainly because it provided the best preparation for coping with the realities in healthcare: *'Real situations I think are better because no patients' actually fit text books and you learn the set things that happen in the clinical situations. You go out on placement and it's not like that and you think hang on, what is going on?'* (I:9PT). This was a commonly shared view; however, the hypothetical scenario also held some attraction as it offered flexible learning without fear of injuring patients in any way:

> *'You can tailor hypothetical situations to meet everybody's needs in the group. You don't feel necessarily that your actions could jeopardise somebody. It's theoretical so you can come up with ideas and if they're perhaps not the accepted way it doesn't matter so much. We've got the perfect opportunity to put that into practice even if it's only theoretical practice'* (I:11P).

A compromise was offered in the form of either using paid actors, or students themselves, to take on patient roles. This was seen as opportunity to gain a

broader appreciation of issues from both a professional and a patient point of view:

> *'That's really real and valid, it's always better if you have got a person there, even if they're pretending to be a patient. People can personalise it and relate to that better. It was a real eye opener and for me it was quite important'* (I:6PT).

Also for:

> *'One person to pretend to be the patient and then everyone takes their roles, then seeing how they all deal with it. It gives them the different point of view and seeing how they would feel if they were the patient, so it puts it into the patients perspective'* (I:7PT).

Being faced with a living person, even if not a real patient, was considered to have sufficient impact on learning to be a worthwhile venture. A case study could be based on direct contact with a patient, a written case study based on a real or hypothetical case, whatever the situation case studies were unanimously supported. They also expressed the wish to be involved in compiling cases from their experience for use with first and second years.

6.8.4.iii Graded use of Case Studies

Case studies should be carefully graded according to the level of training reached which was primarily why participants believed that they could assist in developing appropriate teaching material. For instance the case would be introduced at a very basic level for first years because: *'I think in the first year you've got other things on your mind like learning the concepts of the human body'* (I:3PT). A lack of hands on experience in early stages also limits confidence in handling the material:

> *'At the very beginning, we're not going to know how to take a history or an examination, so it can't really revolve around that. You don't necessarily know how to take the information yourself, but if somebody gives us a case scenario and findings on examination, then we can use*

that information, so it would have to be a pre-assessment case' (I:12M).

This worked best when students had opportunity to apply knowledge in a clinical setting and by the time they reached the third year: *'Some nice meaty ethical issues would go down a treat'* (I:5OT), as they were searching for, and could handle, more of a challenge. One participant suggested: '*Get a group of third, second and first years together and present our case studies to the each other'* (I:1OT). As this idea was shared in the first interview it was possible to check its popularity during the remaining groups and interviewees. The idea of working across levels was discussed with other participants who accepted and developed the idea very positively without any doubt about its potential for success.

6.8.4.iv Practical uses of Case Studies

Many suggestions were shared about how to make use of case studies to explore professional roles and develop effective team working strategies:

> *'You could have a basic patient that everyone would enjoy because it was clinical and relevant to the course you are doing. None of us appreciates what the others are doing; we see what we want to see and nothing else. So if it was integrated into something clinical like a case history and how do courses get them trained, it would help a lot'* (GI:2M).

Participants referred to experiences they had had with complex cases: '*Cystic Fibrosis might be a good example of a case where all different areas have an input'* (I:13M), or practical ways of dealing with difficult situations and stereotypes:

> *'Put it into a scenario like if someone collapses on the floor, how are you going to get the patient up from the floor, who is going to help? So the medical students don't say you're the physiotherapist, you get them up off the floor, rather than sitting around talking about the ideal'* (I:7PT).

Exciting and provoking learning experiences were also suggested:

'You could split up a three-hour slot, and divide into small group for the first hour an hour for preparation. Then make up your two arguments and come back and battle it out. I know there are benefits to longer preparation, but we were working together and it was real teamwork, it just speeds it all up' (I:5OT).

In their experience positive and challenging use of case studies fired enthusiasm and increased learning as it was more memorable:

'I mean it's pretty amazing that I can remember anything from the last year. I looked at things from a nurse's point of view with a facilitator who asked – what do you think the nurse would do? She then said what she thought and everyone presented at the end. The only regret was that we couldn't have looked at all the professions. It worked because it wasn't just theoretical!' (I:8P).

The creative use of case studies was unanimously supported as was the suggestion that third year students should contribute to developing realistic examples based on their experiences.

6.8.4.v Discharge Planning

Having already suggested that case studies were relevant because: *'Most students would have been in some sort of a case conference somewhere'* (GI:3N), participants were struck by the idea of setting up learning experiences which offered the chance to practice the art of discharge planning: *'Maybe a case conference on your patient, because that's something we're going to come across later on'* (I:12M). Once more the relevance of the activity to 'real' clinical practice underpinned this reasoning:

'There's a huge emphasis on the role of discharge planning and its something that's quite hard to co-ordinator sometimes with all the other professional and for them to understand where you're coming from and you to understand where they're coming from. Something like that might be quite useful' (I:4OT).

The aim was to: '*Draw up a management plan because that gets people's brains thinking rather than just being talked to*' (I:3PT). Discharge planning generated a lot of enthusiasm, particularly as the professional and team working skills required were so exacting and relevant: '*I don't think you know the details of a good discharge plan until you've done it*' (G1:3N). The opportunity of practising discharge planning in this way was considered essential as:

> '*The aim of NHS is always to get patients back to independence as soon as possible and to do that you need to be able to use the right medication, you need to have OT referrals and such like. All of us need to have an appreciation of how to do that*' (I:13M).

It was an area that participants felt able to advise about as it clearly reflected their experiences of clinical work: '*If you had a group of third years doing the case conference and the first years watching them it would be quite good*' (GI:3N). They envisaged a role for themselves in facilitating others, particularly first years, though there were questions about what would work for second years: '*But if you had second years I'm not sure what they would see. They might sit there saying – oh I know all about this or, 'Oh I want to say they are doing that wrong*' (GI:3N). A comment that suggests that second year nurses would find this experience more difficult due to the stage of learning that had been reached.

This nursing perspective was not necessarily shared by other professions: '*I think if you learn together, so some of the dawning came in the second year and they realised that we were professional just the same as them*' (I:2OT). Therefore, despite the nursing reservation about the second year, discharge planning was proposed as a potentially rewarding activity as it involved all team members in a process of learning about each other's roles, and from each other's divergent approaches to patient care.

6.9 Organisation of the Programme

6.9.1 Timetable

After establishing the theory - practice links as the first priority, participants considered the second priority which was for shared learning to be integrated into the programme on a regular and meaningful basis: *'It would have to fit into the existing programme, I don't think you can give students anymore work to do'* (I:1OT). To accommodate this constraint other aspects of the programme would need to be reorganised and/or removed: *'because if people saw it as part of the core timetable they wouldn't have a problem with it. When shared learning is seen as an extra that they start to get a bit, I can't be bothered'* (I:7PT).

Simply adding shared learning events to the existing schedule was not acceptable as this would increase the already onerous burden on students: *'You can't over load people so unless it can be worked up that we don't have to do any more hours I don't think you can do it'* (I:10P). Although the idea of meeting a couple of times a term was proposed, the majority were in favour of meeting more often:

> *'Having them regularly and positive advice and feedback would make them feel more integrated. It's funny isn't it, a module starts and all of a sudden its just integrated in to your way of life, but one offs tend to be seen differently, whether they were put into a slot where a different module used to be or not'* (I:6PT).

Regular contact, over a period of time was preferred as it not only provided consistency in the academic setting but might also influence the development of relationships between professionals in the workplace. Meeting as often as every fortnight was proposed as a way of forging links between theory and practice: *'because it is very separate and it's not until you get out in clinical that you actually realise that these things go together'* (I:9PT). The assumption being that effective clinical work depended upon the individual's ability to integrate all aspects of the learning experience.

Starting shared learning at the beginning of programmes appeared to be acceptable:

'As we are supposed to have this emphasis on team working, it is probably valuable to start it from the beginning' (I:4OT), however there was very strong advise given about reducing the expectations of first year students:

> *'Don't put them into groups in the first year and expect them to get on with it on their own because they don't know how to, as they've not seen it. Give it to the third years, they are really interested and up for it. Introduce the first years slowly and maintain it. It will build up their confidence of speaking to people they don't know'* (GI:3N).

Being left to fend for themselves too much in the first year had not been a very positive experience. A side effect of such overburdening was that un-facilitated sessions became less of a priority: *'IPE groups started out reasonably well at the beginning, but then as people were busy with nursing shifts or had work that was due in it did dwindle somewhat'* (I:13M). This resulted in decreased motivation levels and poor experiences of shared learning that did more damage to relationships than good.

Fortunately, they felt better able to deal with the demands that shared learning placed on them in year three. Each professional group identified less pressurised times within their programmes when these additional demands would have been less onerous: *'The second year is comparatively light for exams, you still have to pass each system course, but you don't have the major horrible end of year exams like in the first and third year'* (I:13M). An appreciation of how shared learning events would impact on other learning experiences at the time appeared to be necessary. The 'real' experience of the pressures faced by students was another reason why they felt that third years should have a voice in the decision making process.

6.9.2 Student Responsibility

6.9.2.i Professional Responsibility

Shared learning was considered to be part of the future of professional education and participants had a positive attitude towards the role that they would have in any future development: *'You've got to start somewhere and if you don't try and change*

peoples attitudes then it'll never get any better' (I:16PT). A podiatrist approached the discussion about shared learning with an air of certainty: *'As time goes by, it will become more common. It will not be this new shared learning thing that's just started, it will be an integral part of the course'* (I:10P). This feeling of inevitability was shared, as was the belief that they had already played a significant role, though this was more evident in practice (collaborative teamwork) than in academic education (IPE events).

There was a genuine belief that giving students more responsibility would generate relevant activities that could be viewed in a positive way by other students. Drawing on personal experiences, either of real life patients, or composed hypothetical cases was identified a significant pathway for students to contribution to programmes. They recognised that the next challenge was to plan and implement timely, relevant and meaningful shared learning experiences for the current student population (Appendix 20).

6.9.2.ii Personal Learning

Being challenged to take responsibility for personal learning was deemed essential:

> *'We all have an area that we feel safe in and we don't want to step outside this. If I have to pretend to be someone else for five minutes I come out of my comfort zone and that's very challenging, but once you've done it your comfort zone has actually widened. We've all got them and we don't step out of them very often and I think we have to'* (I:2OT).

The majority felt that the confidence to do this developed towards the end of their undergraduate training, when they had personally experienced the benefits of collaborative teamwork and shared learning. For all professions, except medicine, the third year was when they were motivated enough to contribute to the experiences of others. Medical participants identified that it wasn't until the end of their third year, or even into the fourth year, that they felt this level of confidence.

Discussion about individual experiences of teamwork and how this had shaped their attitudes and developed their skills was intriguing: *'You have to be responsible for yourself, but you have also to learn to work in a team as well. You're still an individual and don't loose your identity because you are part of a team'* (I:2OT). This awareness appeared to stem from previous experiences in both academic and clinical areas.

6.9.2.iii Self Directed Learning

Shared learning experiences in the past were felt to have been directive and unsatisfying. Participants wished for shared learning to be more student led as they preferred to be proactive rather than passive recipients who were told what to do: *'Maybe for part of the sessions to be led by students, maybe for them to have a choice of things they can do. Then they could pick the one that's most relevant to them, so it's more student directed'* (I:1OT). The concept of: *'finding out what students want to get out of it, if they feel they are going to benefit from something then they'll do it'*, (GI:2M) was offered as a solution to the problems of disinterest and lack of motivation experienced by some medical participants.

Occupational Therapists and physiotherapists expressed an enthusiasm for increasing the element of self-directed learning*: 'I'm sure that students can take enormous responsibility if they have to'* (I:1OT). This could be for purely social reasons*: 'I mean its good on a social context because you can discuss it with your peers and not someone who is going to be teaching you'* (I:5OT), but more importantly because confidence gained from clinical experience had opened up the possibility that they could do this if given the chance: *'It's important to be challenged almost daily on whatever level and to have something that you need to think about and chew over. If everything is told to you, then you become very passive and there's no learning'* (I:5OT). They clearly did not enjoy being passive recipients.

Whether occupational therapy and physiotherapy participants were confident in expressing their views because they held additional frustration as a result of the joint nature of their programmes, or whether they were simply more familiar with

voicing their opinion could be debated. Any contrast between their experience of shared learning within the School of Health Professions and that which they experienced in faculty inter-professional events was not discussed in detail with them at the time. During interviews their positive interest in shared learning in comparison to other professional groups had been acknowledged, however, the extent of their keenness to contribute was not discovered until the analysis stage when their desire to influence the learning situation became evident:

- *'What they thought was good about it, what they didn't like about it, what they thought could be improved, that kind of reflection maybe'* (I:4OT).

- *'I think it would be really beneficial just because they know what they got from it last time and they're bound to have ideas about how that could be changed or made better'* (I:5OT).

- *'More responsibility for determining what they feel would be an appropriate learning situation for them* (I:7PT),

- *'They're gaining their own responsibility for what they've got to learn as well as how they are going to carry it on in the future'* (I:6PT).

Whether shared learning was as valuable as other aspects of the programme was questioned and there was recognition that sometimes when given responsibility students wouldn't necessarily prioritise in similar ways: *'It was sometimes disappointing that there weren't all the people there. Not everyone seemed to put such a kind of emphasis on it'* (I:5OT). If one professional group were seen as placing less emphasis on shared learning by not turning up for a timetabled session, this reinforced negative stereotypes and some participants felt very let down by their peers, which added to general feelings of frustration.

Despite the needs of some to have more control, there were a few reservations about the extent to which student independence could be taken. This was mainly due to a lack of confidence in personal awareness and ability to succeed: *'I think it's difficult*

in the first and second year because you don't recognise what your most effective style of learning is until you have experience of the whole spectrum. I mean it's with the benefit of hindsight that I'm saying this' (I:15M). However, the inclination to exert some informal level of control over personal learning and the learning of others was an asset that could be utilised more.

Participants were positive about the role that might be adopted in the decision making and planning situation, and believed that: *'Sometimes if you have staff telling students things, it doesn't necessarily sink home as much as if it's students that have just gone through it themselves'* (I:4OT).

6.9.2.iv Mentor Role

Overview

A preoccupation with the stage of training reached permeated through all areas of the discussion. Participants were happy to work across levels: *'because people do listen to the third years, I always listened to the third years'* (I:3OT), and were particularly keen for third year students to have some responsibility for assisting students in lower levels.

Practical experience gave third year student views a credibility with other students which was extremely important as: *'The students are the people that actually experience it, the staff know what is expected and the students know that the staff know what is expected, but it's the third year students that actually go through it and learn what they need to know'* (I:5OT). A certainty that third year students would have more chance of convincing less experienced students that seemingly irrelevant information would become more important in the long term was apparent: *'Because that's then coming from the student point of view'* (I:4OT). They could also help students to understand that although it takes a long time for some things to make sense and become part of the big picture, it did all fall into place eventually.

Informal Networks

There was a generosity about the support participants were willing to give other students, and a number of existing support networks were identified, including a 'buddy system' between first and second year occupational therapy and

physiotherapy students, and a 'super family system' within the school of nursing. Medical students also had a support network of their own: '*It's kind of variable what influences you get. You often know someone in another year and you kind of listen to what they have to say. So things go by word of mouth a bit*' (I:14M), which perhaps reflects the informality of the mechanisms used by all students.

Fortunately as: '*I only spoke to third years because I was too scared to ask a staff nurse. So I asked the older students and they were really nice I remember how grateful I was to third years who looked after me*' (GI:3N), these support networks were there on a needs led basis, whether or not this had been formally organised or not.

Reward

The wish to support and educate by example was partly seen as a duty, but also as the way of gaining the respect that their experience deserved:

> '*You could mix third years and first years up. It would be good for the first years to see because they would have no experience of it, then the first years might see how third years respond to the third year medics and vice versa. So that they could see that there is some mutual respect there*' (GI:3N).

This respect would be witnessed when those who were about to qualify were asked to identify and discuss the issues that they considered important.

It seemed that the camaraderie between students was beneficial to everyone: '*In the first year you just feel out of you're depth all of the time*' (GI:3N), therefore you were appreciative of any assistance offered. The feelings of inadequacy in the first year were memorable and as a result third years were highly sensitive to other students needs: '*You can just spot someone in the first couple of weeks because they just have that fear on their face. And you can really associate with that because you've been through it*' (GI:3N).

Another positive consequence of helping first and second years was that: *'In some ways you realise how much you have learnt'* (GI:3N), which acted as a confidence booster. However, they did not wish for this situation to become too organised: *'If it's formalised it can add pressure, but if they're just watching us and asking us, by the time we're third years, you're quite used to it'* (GI:3N), which might account for a reluctance to structure informal networks too much.

6.9.3 Staff Responsibility

6.9.3.i Professional Characteristics of an Effective Facilitator

As the work in shared learning was not seen as professional specific the facilitator's area of expertise was not an issue:

> *'If staff are all working to the same aims then it shouldn't matter whom the facilitator is. For the shared learning groups you're looking at the overlap skills so any professional should be able to do that'* (I:2OT).

It was agreed that if the facilitator was good professional background was of little consequence:

> *'At Moorgreen it didn't matter who your tutor was as they were all senior professionals which I think that was good. We got a lot more feedback on social work than we did on anything else, but she was very good and I just think it made the learning experience better'* (I:12M).

However, the facilitator's enthusiasm and skills were deemed more significant by one occupational therapist:

> *'I've always found that the inspiring ones to be the module co-ordinators who are quite dynamic in their approach. It's obvious that they have a knowledge and belief in their subject and their topic inspires them'* (I:5OT).

The benefits of having more than one professional facilitator were also highlighted: *'It would be good not to have the same profession each time. Because then you*

learn to work in different ways and different staff can put different emphasis on things' (I:5OT). Having a 'rotating facilitator' was seen as enhancing the inter-professional nature of the experience.

6.9.3.ii Reasons for having a Facilitator

Participants appreciated the need for effective interaction and indicated that this should be facilitated by someone with experience, particularly in the early stages: *'The actual group work or discussion/debating should primarily be the students, with maybe someone facilitating or giving information'* (I:7OT). They were clear about the role of the facilitator being to keep the group to the task and to assist with problem solving if the need arose: *'If they can see there's a problem within one of the group, then they can help work it out'* (I:7PT).

This included help to devise strategies for dealing with difficult patients, as can be seen in the following example, which supports the use of role-play: *'What to do with an arrogant patient. We could watch lecturers do it at the front of a lecture theatre and then we could do it'* (GI:3N). But also how to deal with peer pressure within the group:

> *'Early on you are quite easily influenced and if someone says something it's almost easier to agree with them that to disagree in some social contacts if they firmly believe something.Especially if they have got more experience than you have and in that way it can propargate their opinion in yourself'* (I:15M).

This comment provides some insight into how vulnerable students might be in group situations and a need to conform with professional peers might take precidence over any individual priorities. Anyone who had a different perception of other professions, or who wished to take a slightly more positive or negative attitude than their peers might choose not to voice this opinion. This would then result in an imbalance in the overall group conviction that may need to be counteracted by a good facilitator. Having a facilitator available as a trouble-shooter to deal with both clinical issues and group dynamics was a necessary safety net.

6.9.3.iii Changing Role of a Facilitator

Whilst it was clear that inexperienced students would need support from a facilitator, they also described how this role would change as this experience increased:

> *'I think it's good to have someone point you in the right direction, but in the third year, they'll have less of an active role. It's more of an observational role and just making sure that we are on line for what we're supposed to be doing. The role would probably change'* (I:15M).

The need for great flexibility in achieving a balance between direction, or allowing the group to take control of their learning was acknowledged:

> *'You could have someone to get the ball rolling and clarify anything, but not to be too involved once they've got the idea, because they're gaining their own responsibility for what they've got to learn as well as how they're going to carry it on in the future'* (I:6PT).

And;

> *'It's the problem of guidance, if you are all aware of what your role is in a situation, then there isn't much need for staff. If it's a case about which no one knew much, it could become quite hard if none of us were aware of the role in a situation. They were there just to advice and guide'* (I:14M).

A facilitator who was sensitive to learning needs and skilled in judging situations was needed. One participant suggested that the success of the shared learning events relied heavily upon the skills of the facilitator: *'I know it's hard if you are going to lecture us, but if you could concentrate on the things that we wouldn't know about. You wouldn't get anywhere otherwise, because in the first couple of years it's seen as a chore'* (I:15M). This perhaps reflects the key roles of a facilitator, which are primarily to encourage an appreciation of how shared learning is relevant to clinical practice, but also to maximise the involvement of participants by carefully judging their abilities and appreciating the context in which they are performing. To make

this judgement effectively facilitators would need in depth knowledge of each professional programme so that they were aware of what students were currently learning.

6.10 Method of Learning

6.10.1 Learning in Groups

6.10.1.i Purpose of Groups

Experiential learning in inter-professional groups was the preferred environment. This represented the reality of working with other professionals in work-based teams and provided opportunity to witness good teamwork, in both academic and clinical areas. Besides assuming that group learning was best suited to a shared learning scenario, participants keyed into how flexible group learning could be.

Also how working with others might increase personal confidence in dealing with untoward incidents and developing a wider scope of practice: *'It's easy for us just to form into our little clicks. We needed to be wrenched out of that every now and again. There was a couple from every profession as well so you didn't feel completely isolated'* (I:11P), and most importantly: *'When you go into the workplace you're working with different levels of experience, and if we start recognising that as a students that can only be of benefit to us. We've all got something to offer each other'* (I:2OT). Participants recognised the potential of group work as a method of promoting confidence and active involvement in team working

6.10.1.ii Size of Group

Nurses and occupational therapists had experience of group learning and voiced opinions about the size and constitution of groups confidently: *'You definitely need to be in an enquiry based learning group where you get to know people. About 10, it's quite a nice number, its spot on. You couldn't have it any bigger than that, that's for certain'* (GI:3N), and supported this with reasons why this size would be most successful:

> *'If you have larger groups lots of people will sit back and not necessarily be particularly interactive or proactive with their learning. If you get someone that's a bit quieter, they're quite happy to sit back and observe*

rather that take part in something that should be more of an active discussion. But if you've got a smaller group maybe one or two people from each professional group you'd have to take part and get on with it a bit more' (I:4OT).

As a result, the size of group was considered to contribute significantly to the success or failure of the learning.

6.10.1.iii Duration of Group

The question of whether group membership should be static or rotated provoked an interesting debate about the optimal length of time a group should work together. Preferences appeared to revolve around personal rather than professional issues as could be seen from the differences of opinions held by physiotherapy participants who clearly could not agree on the best way forward. They identified definite benefits from working in the same group: *'It would help to be brought together on a regular basis'* (I:9PT) and also because: *'it would be interesting to see how everyone changes their perspective as their course goes on'* (I:3PT).

However, this view was not shared wholeheartedly by all the physiotherapy participants: *'Different groups just because you get different perspectives. I'm not a prime example of a Physiotherapist so it's good just to see how other people work'* (I:6PT). Another physiotherapist was not able to make her mind up about the best way forward: *'I imagine it would be better to change because then you get other people's opinions but then saying that by changing members of the group you feel less comfortable each time you were changed'* (I:7PT). This perhaps reflects the dilemma of whether the purpose is to gain depth or breadth of knowledge and relationships.

Other professional groups had similar difficulties with this decision making process and the compromise of staying in the same group for one year was suggested:

'Maybe the same group over a period of time as each person goes through their training they're also going to develop their knowledge and

skills and it would be nice to see the progression as you go along. Maybe at the beginning people wouldn't understand each other's roles, but hopefully by the end you'd appreciate this a bit more' (I:4OT).

This was believed to be the best way as relationships and understanding of roles could be developed over time in the knowledge that this would eventually be tested in a different setting with different people in the future.

6.10.1.iv Group Dynamics

Membership of the same group was fine if the group worked well together, however, there was concern that being left in a poorly functioning group was not a good idea:

'There's danger if you put people from disciplines together and leave them in the same groups, it's just the same as if you left us in our large groups. We don't necessarily develop any better interaction and skills. So I think rotation has a positive outcome' (GI:2M).

Medical participants in particular felt that a lack of learning focus or difficult relationships in a group would be a waste of time, and were less keen to devote time in overcoming these problems. As the professional group with the least group experience they were concerned that members and medical students in particular, might be unfairly judged:

'It will come across in a group discussion as though some people aren't contributing and it will only be a small proportion of people who don't talk that are actually not saying anything because they can't be bothered. Most of the rest will just be quiet, shy people' (I:15M).

A lack of group experience lead to apprehension about group work and they were less confident about managing issues as they arose. They felt less able to contribute to the shared learning in these circumstances.

6.10.1.v Group Organisation

Those who had more experience of group work expressed similar concerns, but were slightly more resourceful in their ideas about how the groups should be organised to overcome the limitations. Occupational therapists were particularly forthcoming in sharing their ideas about how to overcome what they perceived to be too much talk and no action:

> *'If you're just going to sit and talk to people, there isn't any point in being in the same room. You might just as well be off in your different schools. If you put people into groups and get them interacting, drawing on their relevant experiences and talking about case studies. That makes it interactive and brings in personal experience'* (I:2OT).

Splitting into small sub-groups would ensure that everyone had opportunity to contribute to the discussion, however shy they might be in the larger group.

> *'You could work together and brainstorm things and then feed it all back to the group in general. I've always found those sessions quite useful because other people bring different things, we don't all know everything'* (I:2OT).

Simply being put into a group to talk was not useful without a challenging case study or a task to complete. In addition, allowing time for preparation prior to, or within a group session, was suggested as a confidence building activity:

> *'If you give them the case studies beforehand, it gives opportunity to have read up and others not too. If it's the very first group, you might not have realised that you should have read up and that can put up barriers and make you feel a bit silly. Whereas once you gain some kind of understanding of how the group works then you're all at the same point'* (I:5OT).

Structuring practical group work around lectures was suggested: '*Maybe have a lecture before on the topic and say we've told you all this, now, we want you to put*

it into practice' (I:7PT). Whatever the context, a mixture of information and practical tasks were promoted as being a significant way of allowing students to take control and link theory to practice effectively.

6.10.1.vi Assessment of Group Work

All participants considered whether shared learning should be assessed or not at some point in the interview and three aspects were identified that would need to be taken into account. Firstly that assessment was a focus point for students in that: *'assessment and course work come first and then everything else cascades down from there, especially if the pressure is on'* (GI:2M). The most commonly held view was that if students were required to pass something, they were much more likely to pay attention and try to learn it.

However, not everyone agreed wholeheartedly that students were only driven by assessments: *'I don't think it's always assessment, I think it's putting value on something. You don't necessarily go to the lecture or session when you are going to be assessed. You can cram at the end. You can get the notes from someone else'* (I:1OT). This observation throws an interesting light on the individuality of student response and reinforces the need for clearly defined learning outcomes when planning assessments. It also highlights the need for students to be actively involved in the decision making process as a way of increasing the likelihood of introducing a relevant assessment process.

Secondly, they did not wish to add to the overall assessment burden and expressed a preference for informal presentation rather than formal unseen written exams. The advise was to keep the assessment informal, such as a written evaluation to show knowledge, understanding or performance, or: *'just to present to their peers, it doesn't have to be deadly serious or anything. I think that if you put the fun element into it everyone remembers that'* (I:2OT). They felt that an assessment with an element of personal and group reflection suited a shared learning experience.

Finally, developing an assessment with the right combination of challenge, easy operation and credit rating would be a demanding and time consuming activity. While there was acknowledgement that assessment was essential, there were a

number of interpretations about what would best capture the inter-professional experience. Some participants were able to be creative in their ideas:

> *'If it's a kind of ethical issue, you might set up a debate for and against it. Or get people to do short snappy five minutes presentations. In a well-gelled group it could be really good. I mean you might scare some people witless, who really don't like doing that sort of stuff'* (I:5OT).

But it was not possible to gain consensus about the most effective form of assessment. The only strongly held view was that to be fair and equable the assessment should hold the same credit rating across all programmes.

6.11 Summary of Results

Participants believed that shared learning was inevitable as collaborative working depended on whether professionals developed a respectful attitude and an appreciation of each other's skills. High expectations were placed on shared learning experience and concern was expressed about the absence of shared learning in the curriculum. All participants identified how high the stakes were perceived to be and agreed that familiarity with the process of learning together would have enhanced their working practice.

There was some evidence that shared learning experiences added to preconceived ideas about stereotypes. Based on a combination of observations of other students in the faculty and clinical experience in general, shared learning was believed to be one of the best ways of dispersing the myths and misunderstandings that professionals held about each other. Although participants supported the concept of shared learning in an academic setting, they were frustrated that the content had not been highly relevant. They found academic learning hard as it often felt divorced from practice and suggested that the ideal situation would be for shared learning to develop alongside clinical work, as this would enable them to see the relevance of the experience. All professional groups indicated that clinical experiences were the most important driving force behind their motivation to learn with each other and about each other.

Next to direct clinical experience, case studies were the single most important way of promoting good practice in the clinical team and for students to make appropriate links between theory and practice. Many suggestions were shared about how to make use of case either with direct contact with a patient, a written case study based on a real or hypothetical case. The method of choice for shared learning was to work in inter-professional groups. Besides assuming that group learning was best suited to a shared learning scenario, participants keyed into how flexible group learning could be and recognised the potential of group work as a method of promoting confidence and active involvement in team working

Shared learning was seen as part of the future development of professional education and practice and participants held a positive attitude to the role that students would have in any ongoing development. They recognised that the next challenge was to plan and implement timely, relevant and meaningful shared learning experiences for the current student population and were keen to share this responsibility and contribute to a new curriculum.

DISCUSSION AND CONCLUSION

7.1 Introduction

This study has investigated how students developed complex professional skills at a time when new initiatives in IPE were being introduced into the curriculum. In many ways the findings correspond with those explored in the IPE literature, where students are asked to evaluate their shared learning experiences. However, instead of evaluating specific learning events, or one off experiences, as was the case in the following examples: Carpenter (1995a), Reeves et al (2002) and Ker et al (2003), in this study, participants' responses were drawn from a wider perspective. This perspective included experience that had been acquired by participants over a three-year period in both academic and clinical settings.

Having reached the third year in their professional education, participants had many memorable experiences to share. A sound appreciation of the nuances of shared learning was supported by descriptive examples from everyday practice. Participants identified when, and why, they had been most receptive to shared learning and what would have increased the relevance of this experience. Their suggestions about how to overcome the inherent problems of shared learning offered realistic, manageable solutions. From the evidence it is possible to gain insight into the participants' vision of shared learning in the future and the role that they wished to take in this developmental process.

7.2 Creating a New Shared Learning Curriculum

7.2.1 Receptivity towards Shared Learning

When Horsburg et al (2001) investigated the 'readiness' of first year students to participate in shared learning, they found the results to be inconclusive as student responses where not based on a full understanding of the issues. However, Parsell et al (1998) showed that finalist students had a fuller appreciation of the complexities of practice because they had clinical experience. In comparison the study reported here provides greater insight into student reasoning and practical evidence to support participants' opinions. Participants highlighted that the ideal time for shared learning to be introduced would be at the beginning of the programme. Even though

students were most receptive, and felt able to make realistic use of the experience, towards the end of their training.

When questioning participants about the best time to start shared learning they identified similar issues to those identified by authors such as Barr (1994), Dombeck (1997), Harden (1998, 1998a) and Mires et al (2001). For example the danger of undertaking shared learning before students had sufficient knowledge to fulfil their professional role was reason enough to be threatened. However, participants in my study considered it essential to start shared learning early in order to have time to develop the professional relationships that would prepare them for the realities of the workplace. An early start, followed by regular and sustained experiences of shared learning, was deemed far more important than single events.

Differences in the timing of clinical placement had a profound effect on how participants viewed shared learning, as many early negative stereotypes were replaced by more positive real life experience of working together in clinical teams. For example, nurse participants established a nursing role very quickly due to experience on the ward being carried out within days of starting the programme. Whereas medical participants' clinical experience started in the third year and they were more likely to evaluate experiences prior to this as a waste of time. This meant that some professions had opportunity to resolve negative perceptions far earlier than others and the longer they had to wait the harder it was to counteract poor experiences.

Evidence to support this is found in the transcripts of occupational therapy and physiotherapy participants. Their programmes were partially integrated, which might account for why they presented in a slightly more positive way than other professional groups. Learning together in a joint school had advantages, such as developing mutual respect about each other's skills and level of knowledge. This sustained experience increased insight and motivation towards participating in shared learning. This affirms the findings of Leaviss (2000), that prolonged and widespread opportunity for collaborative working was more effective than short-term experiences.

Clinical experience was highly influential for all professional groups in the study, but despite divergent experiences, they all felt most receptive to accept shared learning in the third year. Experiences gained prior to this, whether positive or negative were important influencing factors. However, there was a significant shift in their willingness to work and learn together in year three because they could deal with the demands in a mature way. Participants suggested that all shared learning activities prior to this should be specifically designed to support this final outcome.

7.2.2 Relevance

Communication and team building were common subjects across all programmes in the Faculty. However, participants reported how such aspects were meaningless when learnt in a traditional, uni-professional way. The statement by Rogers and Freiberg (1994) that: 'No one should ever be asked to learn something in which the person sees no relevance' (p171) was particularly pertinent to this study. Even though participants believed in the virtues of shared learning, it was apparent that they could not always see the point of the activities they had been asked to carry out. Shared learning had not been sufficiently well integrated into professional programmes and was often viewed negatively when compared to most learning opportunities.

In a review of other shared learning programmes Davidson and Lucas (1995) found that poor experiences of IPE resulted in non-compliance and little commttment to shared learning. These findings were confirmed in this study as participants indicated that if given the option they would not attend as they gave low priority to what they perceive to be a 'soft or irrelevant option'. The logical solution to overcome this problem was to make attendance compulsory at the beginning and to change this to optional attendance as students progressed through the development levels. However, it was also recognised that despite reinforcement of the positive virtues of shared learning, some students would remain detached by choice. An inability to appreciate the finer points of collaborative work was believed to hinder some student's involvement and nothing could be done, other than to hope for a change of attitude as they gained clinical experience.

Ovreteit (1996), Opie (2000) and Miller et al (2001) all point out that professionally relevant skills which are easily associated with teamwork and patient care, need to be incorporated into the programme in order for shared learning to be successful. These aspects were acknowledged by participants in this study, who indicated that interaction with other professionals assisted them to develop strategies for coping with complex clinical cases. In their opinion the most effective way of increasing the relevance of shared learning would be to involve third year students in developing and carrying out sessions with less experienced students. They believed that focusing on case studies; discharge planning and collaborative team working was an essential ingredient of the work. This is in contrast to the findings of Parsell et al (1998) where finalist students were unfamiliar with the implications of collaborative working, perhaps because shared learning experience had been too little and too late for them to consolodate knowledge and experience.

7.2.3 Student Centred Approach

It was possible to identify how participants viewed student centred approaches through the examples of learning that they shared. These positive experiences included aspects such as: identifying learning needs and finding ways to meet them, students carrying out tasks and leading group learning sets, experienced students developing learning materials and experiences for less experienced students, and finally, shadowing experienced practitioners and/or students during clinical experience. Their expectations and feelings about shared learning appeared to match the experiential approach that was advocated by Freiberg and Rogers (1994).

The reality of managing the first, second and third year schedule presented some difficulties, but participants remained idealistic about the involvement that they could have in shared learning across developmental levels. As third years, being challenged to draw on their personal and professional experiences to help others was highly adventurous. They were keen to take responsibility for their own learning and felt it was their duty to help and protect less experienced students through an informal support/mentor network. All professional groups had examples of how such networks developed naturally, as part of everyday practice.

That participants wished to be involved in planning IPE was apparent and this need

was driven by an appreciation of the climate of change within professional education. There is evidence in the transcripts that participants' had a sophisticated understanding of the fear held by some professionals that IPE might challenge cherished and longstanding practice. This could be witnessed in the examples of professional behaviour that were shared and by the coping strategies that were adopted in difficult situations. For example, participants described many instances where they had to deal with resistance to change and poor practice in the workplace. They also discussed situations when they by-passed difficult staff in order to get things done, stating that they preferred to work with the younger, more open minded practitioners.

Participants believed they had a role to play in overcoming this fear of change and joint responsibility with experienced professionals, 'to work together to learn together' (Who 1988). This seemed to be an inevitable part of their future. There was enthusiasm about the prospect of being involved in this process, though this was accompanied by realistic concerns about how they might survive within teams that were reluctant to change. A highly optimistic stance towards dealing with obstacles was presented as they were convinced that as third years they had much to offer. They were aware of the implicit power of knowledge and experience and they enjoyed having the freedom to express their views as this made the power more explicit. An emphasis on student-led, experiential learning can be found in other evaluative studies, such as, Reeves et al (2002) and Ker et al (2003), however respondent's views were not presented in as much detail as in this study.

7.2.4 Method of Learning

A preference for working in a group was apparent in the discussions. It was not surprising to find that working in small inter-professional groups represented the reality of working in clinical teams as this would have become a familiar situation whilst participants were on clinical placement. Awareness of group dynamics and working in a team has been widely reported in the literature by authors such as: Engel (1996), Walton (1997and Opie (2000). However, due to the diversity in programme arrangements, some professional groups in this study were likely to be better prepared to cope with group work than other's, which resulted in some participants being disadvantaged from the outset. Material developed for use in

groups needed to be very carefully introduced and adjusted to account for this, from basic at the outset and becoming increasingly difficult in the later stages of the programme, so that all participants would be able to make appropriate use of the opportunities.

Besides assuming that group work and shared learning were positively linked, participants keyed into the flexibility it offered. As might be anticipated those with group experience were vigorous in their support and felt that this was the way forward. However, those with less group experience had reservations about how to cope if the group dynamics were poor, or members uncooperative. Educators were expected to be highly skilled facilitators who could deal with such circumstances. It was anticipated that they would adapt to unpredictable learning needs in similar ways to those outlined by Hughes and Lucas (1997, Spencer and Jordan (1999, Dacre and Fox (2000), Ross and Southgate (2000). Participants in this study had a good enough appreciation of group dynamics to suggest that facilitators might rotate around the groups, as this would match the reality of working with different members of the clinical team.

7.2.5 The use of Case Studies in Clinical Workshops

Whilst Campion-Smith et al (1999) discuss how, 'participants report their involvement in such learning as reaffirming, energising and fun', in this study participants did not refer to the experience in this way, however memorable it was. They tended to use words such as, 'relevance, interactive, tasks, skills and abilities' to summarise shared learning and only when describing clinically-based workshops did they react enthusiastically, reporting that the experience had been 'excellent' or 'brilliant'. This evidence suggests that shared learning was most successful for participants when it related to patient contact and was initiated by clinical teams in close collaboration with educators.

Clinical workshops spanned both academic and clinical spheres, which enabled students to appreciate how theory underpins practice. A focus on hypothetical and/or real life case studies and team teaching promoted a positive air of clinical relevance, which in turn increased motivation to participate and learn. The workshop formulae was proffered as a solution to some of the inherent difficulties

of shared learning. Participants believed that if carefully introduced, at an early stage, this type of experience could provide a springboard for inexperienced students to engage in the process without feeling threatened.

Next to direct clinical experience, case studies were perceived to be the most important way of promoting good clinical practice and for students to make appropriate links between theory and practice. However, not only were participants supporting case studies, they went as far as to suggest that these might be developed by students themselves. An eagerness to construct case studies, based on real patients, and to take part in sessions with first and second year students was apparent.

Closely associated with case studies was the process of discharge planning, for which there was strong support. Discharge planning was perceived to be a major pre-occupation of clinical teams and participants wished to acquire these advanced skills as early as possible. Their reasoning was very similar to Engel (1996) who suggested that: 'small groups of students from different professions would then be faced with the sorts of problems faced by multi-professional teams' (p3). This process of experiential learning was considered the best way to gain confidence and insight into the realities of patient care, so, incorporating case studies would be a productive way forward. This was not unexpected as evidence in other studies such as: Areskog (1995), Aspegren et al (1998), Wahlstrom and Sanden (1998), Reeves et al (2002) and Ker et al (2003), indicate that using patients as case studies was pivotal in the learning process.

7.3 Recommendations

7.3.1. Summary of Participants' Recommendations

Participants were given free reign to offer ideas for the future development of teaching IPE. Several areas of consensus emerged. The participants recommended that:

1. Experienced students become involved in the planning, decision making at Faculty level. This would involve them in the implementation of IPE

programmes for both their peers and for students at different levels of development.

2. It was essential that there be equality of expectations and outcomes across all schools, in areas of schedule/timetable adaptations, compulsory/non-compulsory attendance, assessment and credit rating.

3. Shared learning should be carefully integrated into the existing uni-professional programmes wherever possible so as to avoid overloading students with seemingly irrelevant extra curricular activities.

4. A realistic number and range of professionals be made available to facilitate shared learning, such as: educators (rotating experts), students, practitioners and/or others with recognisable expertise in the speciality.

5. Small mixed groups of students should meet regularly over a period of one academic year and that the membership could change the following year to ensure that experience of professional groups was varied.

6. The main body of work, and most demanding activities, should be initiated in year three when students have had sufficient clinical experience to appreciate the importance of IPE to practice.

7. Case studies be devised and used extensively in shared learning for students at all levels of development. More experienced students needed to be involved in producing and using case scenarios (based on real and/or hypothetical cases) for, and with, less experienced students.

8. Great emphasis needed to be placed on learning how to carry out discharge planning at all levels of training; this could be through observation, supervised or independent work within teams, in both academic and clinical areas.

9. Clinical experience should be used to increase students' motivation to learn with each other and about each other. They claimed to see more relevance, and be more motivated, if they could link theory directly with practice As a result, increased effort would be needed to develop collaborative workshops within a wider range of specialities.

10. Students might be attached to clinical teams in pairs, or a type of professional shadowing could be introduced for all students whilst they were on placement. Shadowing involved students working with more experienced students, or qualified members of staff. This need not be professional specific as much would be learnt from shadowing other professionals.

11. The 'informal' support/mentoring system that exists between each student cohort, should be developed across professions within clinical teams. This need not be limited to professionals supporting members of their own profession, as cross professional activities should be encouraged and sufficient time be allowed for this to be sustained on a fairly informal level.

12. Innovative assessment rather than traditional written exams could be implemented, with a focus on developing team working skills and reflective practice. This might incorporate projects, presentations, discussion and reflective log/diaries and self-assessment.

7.3.2. Evaluation of Recommendations

These recommendations are based on participants' theoretical, clinical and social experience of IPE over a three year period. The shared personal experiences, in both academic and clinical situations, had clearly played a crucial role in the development of positive attitudes towards other professionals (Carpenter 1995a, 1995b, Hayward et al 1996, Locke 1999, Leinster 2002). Even though in many situations their experiences had been difficult, this had not deterred them from believing that IPE was the way forward. This judgement was based on an appreciation that comprehensive client-centred care would be enhanced by good inter-professional teamwork and opportunity to learn together and about each other

should underpin all professional programmes (WHO 1988, CAIPE 1996, Leathard 1997).

Participants presented a confident and precise vision of what was needed in shared learning events and for the future of IPE. Their recommendations reflect a strong conviction that the workplace is the best place to learn and implement IPE as apposed to academic settings (Nolan and Smith 1995, Horsburg et al 2001). They believed that IPE would be successful at every level of training if based in clinical settings because students would see the relevance of the learning activities. This was not surprising, nor was the preference for group work, case studies, or the demand for equality across all schools (Leaviss 2000). They were well aware of the how important these aspects were having been subjected to similar experiences with variable levels of success.

This well thought out and sensible approach also included a rational view of how best to assess mixed groups of students. Experience of complex clinical teamwork and multi-method assessment had persuaded them that flexible assessments were needed to measure outcomes in IPE. This knowledge, combined with an appreciation of current professional trends towards continuous professional development portfolios and reflective diaries, enabled them to visualise how such assessment methods might be used to monitor shared learning experiences (Rogers and Freiburg 1994, Eraut 1996).

There was some indecision about when to introduce IPE, but they came to similar conclusions as have many educators (Harden 1998, 1998a, Mires et al 2001), that the early introduction of shared learning was preferable as long as the expectations were realistic and accompanied with adequate support networks. Explanations about the damage that could be done if experiences of IPE were poorly implemented were interesting, as were descriptions of the support/buddy network between students. However, the fervour and manner in which this support network was discussed and promoted was striking. The driving force behind this was the belief that third year students would be willing and able to take a proactive role in the learning of other students in both academic and clinical settings.

The level of understanding and insight that participants demonstrate is a clear indicator that they have a valuable role to play in IPE developments (Rogers and Freiburg 1994, Engel 1996). These comprehensive recommendations show that students are capable of involvement in the whole process, from outset in curricula planning through to outcomes where they, as part of the clinical team, assist students to improve patient care.

7.4 Implications

7.4.1 Implications for Educators

There was agreement by all participants that facilitators who understand group dynamics and had experience of IPE were needed to construct and implement meaningful experiential learning. This presents a challenge to educators, who depend on their traditional background, to learn appropriate new skills and to keep abreast of student needs. Participants were unaware of these implications and simply wished to have a facilitator who manoeuvred them smoothly through the group process. They appreciated that facilitators needed to be skilful, but did not question how these skills would be acquired. The fact that this was likely to involve major changes in policy and procedure, with repercussions in areas of job responsibilities and staff development was not an area of concern for them.

In highlighting the features of IPE, De Witt (1994) and Eraut (1996) suggest that adopting common goals and new ways of practice would result in the development of alternative communication networks with students. Participants in this study preferred to work with facilitators who were knowledgeable and sensitive to group needs, but who didn't take themselves too seriously. Educators need to 'think' from a wider perspective, to explore alternative solutions and to critique their professional baseline so that they are confident about new developments and less likely to be threatened by close scrutiny.

Negotiating a joint philosophy and developing team teaching across professions might be a costly infrastructure to set up, but it would provide a setting for students to witness how practitioners and educators can develop working relationships despite professional differences. However, exerting control over the development

process is necessary, otherwise time might be wasted: 'on projects with little potential for bringing about worthwhile change' (Eraut 1996 p35) and educators need to take this responsibility very seriously.

7.4.2 Implications for Students

Participants in this study supported an experiential approach to learning that involved group work and problem solving in a similar way to the approach promoted by Rogers and Freiberg (1994). Successful involvement in experiential learning would be dependent on students developing confidence in a number of group related skills. If some programmes remained loyal to traditional approaches, students might experience difficulties in handling a combination of traditional and experiential learning simultaneously. They could find it hard to meet personal needs in this situation as is described in the study by Freeth and Nicol (1998), who outlined the disruptive impact of traditional learning styles on shared learning.

With the introduction of shared learning across professions there was potential for student involvement in developing the curriculum content. Participants in the study had opportunity to express their views freely and indicated willingness to take an active negotiating role about the content and assessment of shared learning. They expressed a wish to produce resource material and facilitate their peers in shared learning sessions. But as they have little previous experience of this, they may be unaware of the pressures this could place them under. They may find that their enthusiasm collapses under the strain in a similar way to other innovative ideas linked to IPE. This would mirror the experiences of the professionals who De Witt (1996) and Gordon et al (1996) identify as having failed to find a way of dealing with the complex issues that arise.

7.4.3 Implications for Clinical Teams

It became apparent in the analysis that clinical experience was rated very highly and participants expected practitioners to be experts. This added to the pressure placed on clinical teams from management and government directives such as, The NHS Plan (DOH 2000a), and educators who expected clinical teams to provide quality clinical experience. The examples shared by participants demonstrated that even though developments were in the early stages, changes in the curriculum had begun

to produce students with the confidence to question current practice. It could be assumed that as this confidence increased, practitioners would be expected to describe their clinical reasoning more explicitly.

Participants in this study were aware of the fear of change within the professions as they shared examples of poor practice and resistance to change. However, lack of experience might mean that participants do not appreciate the full extent of its influence on practice. It is practitioners who have responsility for minimising negative effects of professional stereotypes and for assisting students to learn coping strategies. A review of team practices, as described by Eraut (1996) needs to be undertaken to ensure that the environment is suitable for the newly trained student who expects collaborative practice to be the norm. Students who have learnt how to collaborate in mixed groups will want to see this in practice and if this is not evident, they are likely to be critical of those involved.

All participants in this study were questioned about the use of practitioners as facilitators in the classroom and only one felt that this might be beneficial. This is not surprising, as most participants had no memorable experience of practitioner's involvement in academic learning. The majority did not expect to be facilitated by practitioners in an academic setting, or by educators in a clinical setting, nor did they have any strong feelings for or against the usefulness of this.

However collaboration between educators and practitioners and developments in IPE are likely to alter this practice. Successful local examples of shared learning have been initiated by clinical teams in collaboration with educators, as can be seen in the evaluations completed by Pomeroy and Phip 1994, Mountford (1999) and Donovan (1999). Participants in these studies respected the collaborative teamwork that they witnessed in these clinical workshops. Clincial teams may need to adapt quickly to this type of learning collaboration as it has set a precedent against which the quality of future clinical workshops will be assessed.

7.5 Evaluation of Strengths and Limitations of the Study

7.5.1 Strengths

The research methods adopted in this study were carried out successfully. The combination of group discussions and interviews worked well as it provided opportunity for a greater number of students to be involved than if using interviews as the only method. Themes were explored in detail and it was possible to verify the results across both methods (Anderson 1997). As anticipated participants were comfortable when communicating in both interview and group situations. There was no evidence to indicate that either experience provoked any anxiety or concern in the participants (Coyle and Wright, 1996, Payne, 1998, Seale and Barnard, 1998). Having gained similar experience throughout their training, they were on familiar territory and appeared confident and relaxed.

Sharing a common language with participants increased my understanding of the professional issues that were discussed and assisted in focussing on pertinent issues. As might be expected, with occupational therapists and physiotherapists, the bond was more secure, a fact that can be observed in the discourse. As a fellow therapist it was possible for me to quickly enter into the interprofessional situations that were offered as evidence (Evetts 1999). With the remaining professional groups, the shared language was most apparent when discussing client-centred approaches and teamworking issues. Whenever profession specific examples of procedures and approaches were not understood, I simply requested additional explanation of the nuances and meaning behind their comments. Participants were happy to do this and once more I was able to appreciate the messages being shared (Domeck 1997). At no point did any participant indicate that they felt misunderstood, or that the conversation had been mismanaged in any way.

In most cases, the length of the interviews ensured that enough time was available to identify relevant clincial experiences and discuss the main issues thoroughly (Miller and Glassner 1997). It was evident that the detailed clinical examples were the most interesting and exciting aspect of the data collection process for me and the participants. Two interviews were slightly shorter than the majority due to prior commitments and time constraints. It was not possible to spend as much time

exploring scenarios from working practice with these participants. Discussing clinical examples provided evidence of the need for and outcomes of shared learning and when this was missing an opportunity to collect useful data was lost. During the longest interview I questioned my own management of the situation and this was subsequently evaluated in depth (chapter 5). It was found that the length of an interview did not necessarily indicate quality discourse as even though it was longer this interview covered familiar issues without adding to the debate.

As anticipated, evaluating third year students' experiences in such depth meant that the cumulative effects of shared learning could be explored and the resultant recommendations provided a significant insight into what future IPE priorities should be.

7.5.2 Limitations

As a self-selecting group, participants were clearly motivated to share personal experiences and this was identified as a potential limitation. The underlying reason why most participants volunteered to take part in the study was that they had a vision about how the implementation of IPE could be improved. They were full of positive ideas and their advice on curriculum planning was a key finding in the research. They were extremely vocal about their experiences and clear about what worked, what didn't and the reasons for this. This level of commitment, enthusiasm and intelligent advice outweighed the fact that they might not truly represent the whole cohort.

They were aware of the profile of IPE within the Faculty, however, this did not deter them from being highly critical of the outcomes. Had I been searching for a glowing report about the success of IPE events this response would have been dissapointing. Any perception that only positive feedback was acceptable was quickly dispelled in the light of my questions which focused on how things could be developed in the future rather than trying to gather praise for what had happened. This was fortunate as participants held the strong opinion that while the concept of IPE was worthwhile, the execution had been a waste of time as they hadn't learnt very much.

I identified early in the process that as a single-handed researcher there could be concern about how I dealt with personal agendas and preconcieved ideas, particularly as I was involved in the IPE programme. I considered using an external verifier as one way of reducing bias; however, I choose to scrutinize my own performance through a reflective process. This critical reflective approach ensured that I personally gained insight into my prejudices and the impact that this had on the study. Although I might have learnt things from involving another researcher, they would not have been as critical as I was about my own performance so this experience was equally as valuable in the long term (Barriball and While, 1994, Mason 1995).

A potentially serious limitation might be the imbalance of power between interviewer (educator) and interviewee (student). However, I did not detect any subservient behaviour amongst the participants, nor did it appear that any of them felt I had undue power or influence over them (Armstrong 1997, Fox 1997, Peterson & Bunton 1997). There was a single incidence when group members referred to me having insider information about another professional group, but this was not followed through in the group discussion. Some participants may have felt obliged to help me, even though I did not pressurise them to participate. Though, a number of students, who initially volunteered to be interviewed, clearly understood that there would be no recrimination as they chose not to take part in the study (Barriball and While 1994).

Although the majority of participants were aware that I was a member of staff, this was the extent of their knowledge about me. Occupational Therapy and Physiotherapy students knew me better which seemed to help rather than hinder the process. These participants were generally more positive about IPE, perhaps because they had more examples of joint training to draw upon. They seemed pleased to share this with me and it might be that they detected that I wished to hear this positive feedback. However, they were equally as critical of the Faculty IPE experiences as the other participants, and tended to only give examples of effective shared learning from their own programme as evidence of good practice.

Collecting and analysing data at regular intervals proved to be a good idea as it kept

the results fresh. However, it did become apparent that similar information was being generated in group discussions and interviews. Whilst this verified the themes, it could also be seen as limiting the depth of the information gained (Miles and Huberman 1994). Even though saturation point had been reached it was possible to add an additional dimension to the analysis through the exploration of participants' clinical experiences. This was an unexpected bonus that contributed to the reality and depth of the study.

The fact that emphasis had to be placed on engaging students from each school at times that suited their schedule, even when this did not match the timetable of others, did not detract from the study. Locating volunteers relied on my networking skills and depended on insider knowledge of the structure of the programmes (Miller and Glassner 1997, Cohen et al 2000). It was noticable that even with access to school schedules, I did not fully appreciate the pressures that students were experiencing. For instance, early in the data collection process I was too late to gain access to medical and nursing students prior to their final exams. With hindsight, trying to gain their cooperation when they were revising and feeling pressurised was not good timing. It was preferable for volunteers to be willing and able to contribute, rather than to resent having to make the commitment. This lesson was learnt and a quick change of plan had to be implemented to accommodate their needs.

In comparison, an unforeseen positive side effect of the timing was that those who were on clinical placement were in touch with interprofessional working and readily focused on specific clinical experiences. Overall the depth and extent of the scenarios that all participants shared were far more revealing than I had anticipated. During data collection this could be seen as a limitation as it was difficult not to get side tracted into this interesting subject, to the detiment of the main task. However, this changed to a strength during data analysis where the examples brought a fresh and exciting perspective to the debate.

The identification of the original limitations played a useful part of the research process as it enabled me to direct energy towards regulating and/or neutralising the negative effects. It becomes apparent that this scrutiny has had a positive outcome

as while some had a slightly negative effect, most of the limitations did not detract from the study.

7.6 Contribution of the Study to Shared Learning Evaluation

A review of the literature identified that many professionals were experiencing difficulty in making the changes in professional education that were needed. Although there were examples of innovative practice in some areas, a lack of guidance and proper funding to support and maintain initiatives was identified in the work of Barr (1994), De Witt (1994), Leathard (1994) and Barr (1996). In all of the above, the aim of IPE was clearly outlined, but there was no supporting evidence as to whether shared learning was an effective way of achieving the purpose. The circular nature of the written debate was reflected in the staff committee rooms and the conferences that I attended, where professionals were confused about the way forward and struggled to identify a vision for the future.

This study was conceived and completed prior to a recent critical review (Freeth et al 2002), which reported that many studies looked at the short term effect of shared learning and that such evidence gained from before and after studies had probably reached saturation point. A need for different research strategies and innovative ways of eliciting data in order to better understand the outcomes of IPE was identified. This affirmed the original intention of the study which was to contribute an alternative dimension to local and national research data.

Instead of looking at isolated experiences of shared learning this study explored student experience in a wide range of settings, across both academic and clinical areas. It provides baseline information on the effects of changes on the student population, and explores how these experiences influence professional development. Whether identifying unexpected ideas or confirming general opinions the study sheds light on an important element of IPE, the recipient's version of the experience. The main contribution of the study is the identification of the students' ideal curriculum content and the role that they wish to adopt in the development process.

7.7 Recommendations for Future Research

This study sets a precedent for asking students for their vision of IPE in the future, and their response provides a baseline from which further studies could be developed. Having asked the questions, the remaining challenge is to find innovative ways of 'surveying' and 'observing' the outcomes of their shared learning experiences.

7.7.1 Local Level

a. A small team of researchers could develop an innovative approach to 'surveying' larger numbers of students about their experiences, preferably without using before and after questionnaires, and definitely with the consent and involvement of patients.

b. A follow up study of 'observing students' over a period of time could explore what the outcomes of shared learning were. This could be undertaken in both the university and the workplace, either with a trained observer, or in more innovative ways such as using video to record interactions between students and patients. Students could even be involved in collecting the data from each other and in analysing the outcome for themselves. Patient involvement would be an integral part of this process.

c. The above mentioned (a – b) could either be separate or linked longitudinal studies, which progress somewhere nearer to answering the question: What type of shared learning results in what type of outcome?

7.7.2 Institutional Level

A larger research team, from a number of different sites, could be established to explore and compare the results of different approaches to shared learning. If students and patients were central to the study, this would put them in a strong position of influencing the national agenda. Establishing links with a number of specific clinical teams who work collaboratively would mean that clinical outcomes of shared learning could also be compared.

7.8 Conclusions

This study explored the complex social world of undergraduate professional education. By studying the professional issues encountered during the development of the IPE it became apparent that this was a constantly changing situation. From a student point of view the success of IPE depended on whether the experience was timely and could be easily linked to clinical experience. It was evident that participants believed that educators often implemented shared learning without a true appreciation of the students' reaction to these experiences.

Despite this lack of understanding educators were well meaning and aspired to assist students to learn to work together effectively (WHO 1988) and promoted student centred learning wherever possible. However, a lack of insight into the range of students' responses resulted in the use of inappropriate activities that generated negative feelings towards shared learning in the student population.

This can be seen in the results, which indicate that initially participants held a totally anti-shared learning outlook. It was evident that early experience of negative stereotypes, either at university and/or the workplace, had impact on their appreciation of everyone's role within a clinical team. However, good experience in the workplace had helped re-shape a more positive outlook despite poor initial expectations. Being part of a truly collaborative clinical team resulted in a more productive and comfortable learning experience.

This investigation endeavoured to explore student experiences as a way of determining the best way forward for IPE in the future. It is recognised that the results are only the tip of the iceberg in the overall development and integration of shared learning into the professional curriculum. However, the study showed that participants were able to evaluate the cumulative effects of shared learning experiences over a three-year time span. They responded positively to the challenge of creating a realistic framework for meaningful shared learning that could be used at all levels of student development.

If as Engel (1996) suggests: 'The future health of the people of this planet depends on the expertise and dedication of those who teach in the basic, post-basic and

continuing education of health professionals' (p3), then it is important that educators and students collaborate about this responsibility. There was a willingness to contribute to this process, to ensure that educators fulfilled the challenge of creating practitioners who could adapt to, and participate in, the anticipated avalanche of changes in the future.

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APPENDIX 1

Table - Summary of Significant Studies/Sources

Philosophy, Concepts and Models

Areskog N.H (1988) The need for mutliprofessional health education in undergraduate studies. (Editorial) *Medical Education* **22** 251-252.
Summary: Response to 'WHO target for Health for All by the year 2000'. Description of their work and vision for the future. Identifies need for collaboration and planning. Claims there is no reason for further delay in getting this underway.

Areskog N (1995) The Linkoping case: a transition from traditional to innovative medical school. *Medical Teacher* **17** 4 371-376.
Summary: Description of experiences at Linkoping Sweden. Concerned with organisational structures and features of medical education. Identifies negative and positive factors for successful implementation of innovations.

De Witt C.B (1996) Some historical notes on interdisciplinary and interprofessional education in health care in the USA. *Journal of Interprofessional Care* **10** 2 173-187
Summary: the origins and development of interdisciplinary care teams in the USA is traced and the successes explored. The concept of IPE is espoused as a means of providing comprehensive and continuous care. Significant implications and barriers to IPE are identified and discussed.

Engel C (1996) Editorial *Education for Health* **9** 1 3.
Summary: Puts what, why and how we need to do it in a nutshell.

Wahlstrom O, Sanden I, Hammar M (1997) Multiprofessional education in the medical curriculum. *Medical Education,* **31** 425-429.
Summary: Description of development of training ward in Dept of Orthopaedics, Linkoping Sweden. Report on first experiences. Experienced students at end of training, with additional opportunity to learn together during modules. Staff familiar with supervising students. Difficulties in organisation and finding resources.
Outcome: Very efficient way of improving teamwork.

Harden R.M (1998a) Multi-professional Education: the magical mystery tour. (Editorial) *Medical Teacher* **20** 5 3 97- 3 98.
Summary: Explores some of the mysteries of IPE implementation and the three-dimensional model.

Parsell G and Bligh J (1998) Interprofessional Learning *Postgraduate Medical Journal* **74** 89-95.
Summary: Paper describes some of the ways of providing IPE and how these are being created. Caution is apparent before adopting new learning methods, which place extra demands on decreasing resources.

Evetts J (1999) Professionalisation and professionalism: issues for inter-professional care. *Journal of Interprofessional Care* **13** 2 119-128.
Summary: Attempts to develop a general framework by exploring the concepts of profession, professionalisation and professionalism. The historical developments and debates about this are illustrated and discussed. Suggestions of how the concepts might be influence IPE are provided. It is argued that accountability and CPD are compatible with development of professionalism.

Dacre J.E and Fox R.A (2000) How should we be teaching our undergraduate? *Ann Rheum Diseases* **59** 662-667.
Summary: Explores principles of adult learning, how to encourage and assess deep learning.

Harden R.M (2002) Development in outcome-based education. *Medical teacher* **24** 2 177-120.
Summary: Editorial identifying important factors about outcome-based education – learning outcomes and current developments.

Leinster S (2002) Medical education and the changing face of healthcare delivery. *Medical Teacher* **24** 1 13-15.
Summary: With the ever-increasing breakdown of professional roles, performance cannot be predicted. There is a commonly held range of skills across all professionals and attitudes must adapt accordingly. A new approach to education is needed. It is important to put patients at the centre of new developments.

Evaluations of IPE Experiences and Innovative Methods

Pomeroy V and Philp I (1994) Healthcare Teams: an interdisciplinary workshop for undergraduates. *Medical Teacher* **16** 4 341-346.
Summary: Evaluation of IPE workshops in Elderly Care for undergraduates. Used live patient interviews and group work over period of one day. A series of 8 workshops, over period of 10 months and all 170 students who attended were questioned.
Method: Post evaluation questionnaire. Team evaluation – annual.
Outcomes: Students were positive about experience, wanted more joint learning on placement. Key themes: Involve patient in decisions, professional roles, and teamwork. Some negative aspects about different perceptions and not enough time to alleviate misunderstandings. Increased knowledge base, not known if skills are transferable.

Carpenter J (1995a) Interprofessional education for medical and nursing student: evaluation of a programme. *Medical Educator* **29** 265-272.
Summary: Evaluation of a one-day programme for final year medical and fourth year nursing students. 39 students involved in evaluation. One-week compulsory programme which was not assessed. A number of professions were involved. Looked at perceptions and attitudes towards each other.
Method: Before and after questionnaires.
Outcomes: Successful in meeting its objectives. Overall mixed evidence that attitudes had improved. It is inappropriate to claim that IPE can remove all barriers, but did demonstrate that attitudes can be changed and knowledge increased under the right conditions.

Carpenter J (1995b) Doctors and nurses: stereotypes and stereotype change in interprofessional education. *Journal of Interprofessional Care* 9 2 151-16 1.
Summary: Follow up article to Carpenter (1995)
Methods: Before and after questionnaires.
Outcomes: Data about stereotypes held by medical and nursing students was demonstrated – considerable differentiation between them, with nurses seen as caring, dedicated and good communicators, doctors were confident, dedicated but arrogant. Evidence that IPE diminishes negative stereotypes over course of programme

Gordon P.R, Carlson L, Chessman A, Kundrat M.L, Morahan P.S and Headrick L.A (1996) A Multisite Collaborative for the Development of Interdisciplinary Education in Continuous Improvement for Health Professions Students. *Academic Medicine* 71 9 973-978.
Summary: Mission was to create an interdisciplinary teaching and learning environment for healthcare professionals. The collaborative consists of 4 teams across universities in USA, each site serving as a case study for the implementation of IPE.
Method: Reports by each site after first two years of work. Qualitative and qualitative methods.
Outcomes: Starting small was important. All expanded IPE in programmes. Many obstacles needed to be overcome. Students found it highly IPE relevant and wanted more. In future intend to follow up students to find long term outcomes. To include Self study with reflections of participants and interviewers.

Hayward K, Terrell Powell L, McRoberts J (1996) Changes in students perceptions of interdisciplinary practice in the rural setting. *Journal of Allied Health* Fall 315-237.
Summary: Evaluated students perceptions of inter-professional practice following a planned experience across a number of sites (10 academic sites in 5 states)
Method: Before and After tests to determine their perceptions of IP practice. Completion of an identical test after learning was conduced to measure any changes to perceptions.
Outcomes: increased awareness of the roles of varied disciplines in patient care. Significant change in co-operation and resource sharing. Awareness will support team working and awareness of unique contribution of other individuals.

Aspegren K, Blomqvist P and Borgstrom A (1998) Live patients and problem-based learning. *Medical Teacher* **20** 5 417-420.
Summary: How problem based learning approach and the use of real patient is used in general surgery is described. The satisfaction level of patients, teachers and students is reported. Groups of 8 students worked with a tutor, they are given tasks to complete in a group. Groups 2 hours twice a week. Integrated into programme.
Method: Questionnaires to students, teachers and patients immediately after experience.
Outcome: All students said real patient worked best. Tutors said mixture of hypothetical and real worked well. Patients reported being happy to be involved as it was a good way to teach students.

Freeth D and Nicol M (1998) Learning clinical skills: an interprofessional approach. *Nurse Education Today* **18**, 6 p 455-461.
Summary: Evaluation of a pilot programme for final year medical and newly qualified nurses. Course comprised of 4 half days, delivered over 4 week, with team teaching. Worked on patient scenarios and problem solving.
Method: Questionnaire, interview and observation.
Outcome: It was found that participants enjoyed the experience and it increased knowledge and communication skills. Both facilitators & participants had markedly different teach/learning style that resulted from their traditional professional socialisation.

Parsell G, Spalding R and Bligh J (1998) Shared gaols, shared learning: evaluation of a multiprofessional course for undergraduate students. *Medical Education.* **32** 304-311.
Summary: 28 final year students from 7 professions attended a two-day pilot course. They explored professional roles, clinical problem solving using a theme-based approach. Both didactic and small group learning enabled them to identify teamwork and collaborative issues.
Methods: Before and after questionnaires and a post course follow up 6 weeks afterwards. Contained 10 knowledge and attitude statements
Outcome: The course increased knowledge and understanding of each other. Developed more positive attitudes towards each other. Early and regular opportunities would be beneficial on all programmes. Little evidence to show that changes will be carried over into working practice.

Pirrie A, Wilson V, Harden RM and Elsegood J (1998) AMEE Guide No 12: Multiprofessional education: Part 2 – promoting cohesive practice in health care.
Summary: 2 year qualitative study of perceptions of MPE funded by DOH
Method: Interviews – course organisers, students in two contrasting clinical settings (general medical practice and A&E)
Outcomes: MPE is not easy or cheap. Resources are important, needs explicit objectives and reflection on outcomes. Success ultimately depends on commitment of staff.

Wahlstrom O and Sanden I (1998) Multiprofessional Training Ward at Linkoping University: Early Experience. *Education for Health* **11** 2 225-231.
Summary: Examines practical and organisational difficulties experienced on 8 bedded training ward run by students.
Method: Evaluation form at end of 2 week placement. Tutor evaluation at end of each term.
Outcome: Valuable experience. Clarified professional roles and understanding about other professionals. Medical students expressed some frustration and this was influential on others. Tutors need support and training to undertake role effectively.

Donovan E (1999) Childhood Disability Module. *Evaluation of Pilot Project 1999. University of Southampton, Department of Child Health.*
Summary: An evaluation of an inter-professional community based module, involving practical experience, seminars and video for undergraduates.
Method: Validated attitude questionnaire all students, interviews (medical students and teachers) phone interviews (community tutors). Data analysis – SPSS.
Outcome: Visits and practical work highly valued by students. 60% attendance by students at tutorials. Tutorial tutors found it difficult. Students needed more structure in tutorials. Video highly rated in context of seminar. Particularly successful if had very little IPE experience prior to seminar. Problems with consistency i.e. compulsory nature. Needs Very clear outcomes/objectives. Students receptive, but planning needed.

Mountford B (1999) Undergraduate interprofessional education: the evaluation of a model. *College of Occupational Therapy report of a shared learning conference.*
Summary: Evaluation of IP workshops carried out in Palliative Care. Three workshops, with 44 students from medicine, nursing, OT, PT and Social Work were interviewed in professional groups, within 2 days of workshops. After interviews students were given a questionnaire to supplement in writing what they had said.
Method: Interviews and follow up questionnaires.
Outcomes: Experience was valued, increased knowledge and understanding. Stereotypes were also visible. Mixed experience of working in small groups. Strong support for this to be integrated into programme. Benefit from common teaching at the beginning of their courses.

Parsell G and Bligh J (1999) The development of a questionnaire to assess the readiness of health care students for interprofessional learning (RIPLS). *Medical Education* **33** 95-100.
Summary: It has not been possible to measure the effects of education on student's attitudes. Main aim was to develop a rating scale using desires outcomes of shared learning to assess readiness for such activities.
Method: A questionnaire study off 120 undergraduate students in 8 professions.
Outcome: Resulted in a 3 factor scale with 19 items with a 0.9 consistency factor. Team working, collaboration, professional identity and role were important factors. Scale may be used to explore differences in perceptions and attitudes towards IPE. Need to evaluate scale with larger population.

Wiles R, Payne S, Barnitt R, Wheeler A, and Swan R (1999) A comparision of different types of pre-registration education for occupational therapists and physiotherapist and its relevance for first post performance. *Final report to DOH. Health research Unit, School of Occupational Therapy and Physiotherapy, University of Southampton.*
Summary: Aimed to identify effects of joint pre-registration course on knowledge and skills and compare quality with those educated by other ways. 6 months post qualification.
Method: Questionnaires and interviews of four groups of students and newly qualified therapists educated on joint pre-registration courses, newly qualified educated on other styles of course, supervisors and employers of NQ therapists
Outcomes: Support for shared learning from all respondents. Joint course was felt to

enhance team-working skills. Employers and supervisors felt they new nothing or very little about joint courses and were concerned not to compromise professions. No evidence that this had happened. There was less hostility between OT/PT if trained on joint courses. Questioning attitude of NQ was not always seen as a good thing. Teamwork and liaison skills were considered vital, as were, time management skills, skills in evidence-based practice and reflective practice, an ability to work independently and knowledge about modern health care provision.

Leaviss J (2000) Exploring the perceived effect of an undergraduate educational intervention. *Medical Education* **34** 483-486.
Summary: Examined the effect of IPE course on work practice of NQ professionals.
Method: Views of former students who took part in a pilot course were collected using semi-structured interview schedule and analysed using Nudist.
Outcomes: Two main themes- role knowledge and attitudes – increased by pilot workshop, raised awareness and skills. This counteracted negative attitudes that had developed during their education. These were partly encouraged by tutors. Workshop had had little to affect these attitudes. However, changes occurred once NQ started to work. Specific learning goals needed, prolonged and widespread IPE needed to have real impact.

Wilson T and Mires G.J (2000) A comparison of performance by medical and midwifery student in multiprofessional teaching. *Medical Education* **34** 744-746.
Summary: Aim to teach medical and midwifery students together in a 2 week intensive course. Set out to test whether staff time could be saved by using shared resources. Using computer-assisted learning session focussing on how to interpret a cardiotocograph. Half of each group were given an extra teaching session prior to the main session.
Method: Before and after tests.
Results: Shared resources could be used and time was wasted on unnecessary additional tuition.

Horsburg M, Lamdin R and Williamson E (2001) Multiprofessional learning: the attitudes of medical, nursing and pharmacy students to shared learning. *Medical Education* **35** 876-883.
Summary: Aim to explore the attitudes of first year, medics, nursing and pharmacy students towards IPE at course commencement.
Method: The questionnaire (Readiness for Interprofessional Learning Scale) developed at the University of Liverpool, was administered to 770 students.
Outcomes: Most students reported positive attitudes towards shard learning. Most students believed it was important to enhance communication and team working skills through shared learning, though medical students were more hesitant and felt they needed to acquire more knowledge and skills than other professional groups prior to the experience. Developing effective team working is an appropriate focus for first years though the timing of when to start is not resolved.

Mires G, Williams F, Harden R and Howie P (2001) The benefits of a multiprofessional education programme can be sustained. *Medical Teacher* **23** 3 300- 304.
Summary: Evaluation of whether increased awareness of professional roles could be sustained and whether attitudinal changes were appropriate. Involved medical

students. Phase one 2-week multi-professional programme on topic of labour. Phase 3 same group 4-week clinical attachments.
Method: Attitude questionnaire was completed before and after phase 2 and following phase 3. Looked at roles and responsibilities of two professions. 3 sections, 21 clinical tasks and 7 aspects of care.
Outcomes: Confirmed that the change in awareness in medical students was sustained. Confirms that more than one exposure to IPE is needed to enhance and refine awareness of professional responsibilities. Early benefits of IPE and repeated experiences supported.

Reeves S, Freeth D, McCorie P and Perry D (2002) 'It teaches you what to expect in future ...': interprofessional learning on a training ward for medical, nursing, occupational therapy and physiotherapy students. *Medical Education* **36** 337-344.
Summary: Evaluation of inter-professional training ward. Senior pre-qualifying students, under supervision, to plan and deliver inter-professional care to orthopaedic and Rheumatology patients. Student teams were supported by facilitators, who led reflective and problem solving sessions.
Methods: Multi-method – students, facilitators and patients. Methods included before and after questionnaires, interviews and observations. Data collected in 3 phases, before, during and after.
Outcomes: Highly valued the experiential learning. Difficulties adopting autonomous learning styles. Highly demanding on facilitators leading to burn out. Patient satisfaction collected but need to develop this further.

Ker J, Mole L and Bradley P (2003) Early introduction to interprofessional learning: a simulated ward environment. *Medical Education* **37** 248-255.
Summary: Aim to develop a simulated ward environment for medical (5^{th}) and nursing (3^{rd}) students, in a skills centre. Total of 59 students. 2 hour long teaching session. Repeated over a 2 week period. 12 simulated patient scripts were developed based on real cases. Actors were coached and trained prior to session.
Method: Observers charted progress. Evaluations were taken from participants.
Outcome: Gave them first experience of independent practice in a safe environment. It was a powerful learning experience for students. Medical students had high expectations of nursing students. Demonstrated enormous potential for clinical learning in a safe and realistic environment. Students at all levels could take part, thus they can repeat the exercise.

Reviews of Effectiveness of IPE Experiences and Innovative Methods

Hart E and Fletcher J (1999) Learning how to change: a selective analysis of literature and experience of how teams learn and organisation change. *Journal of Interprofessional Care* **13** 1 53-63.
Summary: Highlights the important of understanding how teams learn to change and what change means to professional effectiveness. Four key texts are analysed and common themes are elaborated. Examples drawn from student experience demonstrate how theory can be used to illuminate and enhance practice. It is better to use limited theory in a critical way rather that to use no theory at all.

Owens C, Goble R, and Gray D.P (1999) Involvement in multiprofessional continuing education: a local survey of 24 healthcare professions. *Journal of Interprofessional Care* **13** 1 277-288.
Summary: Survey in one health authority to determine how much going on at postgraduate level. Individuals surveyed and attitudes towards IPE measured.
Outcome: Considerable interest in MPE at all levels. ¾'s of respondents involved over 12/52 period. Some professions excluded from MPE. Demand for more particularly in counselling and communication skills

Zwarestein M, Atkins J, Barr H, Hammick M, Koppel I and Reeves S (1999) A systematic review of interprofessional education. *Journal of Interprofessional Care* **13** 4, 417-424.
Summary: Reports on process and outcomes of review of evidence base for effectiveness of IPE using Cochrane System. 39/44 articles reviewed
Outcome: no rigorous evidence exists. Contribution of different approaches is important in long term

Ross F and Southgate F (2000) Learning together in medical and nursing training: aspirations and activity. *Medical Education* **34** 739-743.
Summary: Reflection on trends and tension in key policy directions. Mapping of current initiatives in pre-qualifying education.
Method: National information gathering exercise. Direct contacting all medical schools (25) and department of nursing and midwifery (37) in geographical proximity. Sought to find out what current or planned, shared learning activities were being undertaken. 1996/1997 - seminars organised to discuss issues.
Outcomes: Some examples of shared learning were available – 3 examples of active programmes, 2 lapsed pilots, advanced plans (4) and planned initiatives (11). Powerful leadership and commitment in organisational change were needed. Mechanisms for credit rating and appropriate assessment were needed.

Freeth D. Hammick M, Koppel I, Reeves S and Barr H (2002) A critical review of evaluations of interprofessional education. *Occasional Paper No. 2, Learning and Teaching Support Network, Centre for Health Sciences and Practice.* London.
Summary: A systematic critical review of studies completed by a multidisciplinary team. Found that studies were predominately about postgraduate teaching. Only 30% were pre-registration. The quality of the studies was variable. Nursing and medicine were the most commonly represented professions. Higher quality studies were dominated by before and after studies, however demonstrating cause and effect remains a problem. Few studies addressed longevity of any changes detected and more prospective and longitudinal studies are required. Quantitative and limited interpretation dominated, more critical and multi-method studies are needed.

APPENDIX 2

INTERVIEW QUESTION CHECKLIST

Shared learning in Health Care Professional Education: An evaluation of Third year students' shared learning experiences.

1. How would you define shared learning?

2. What has been your experience of shared learning at university and/or in the clinical workplace?

3. What made these experiences memorable?

4. In what ways, if at all, were these experiences relevant to your learning and development?

5. In what way, if at all, did these experiences influence your perception and attitudes towards other professionals?

6. In what way, if at all, does shared learning enhance professionals understanding of each other's roles?

7. At what point, or level of your programme, did you feel most receptive towards shared learning?

8. If you could re-design your programme, what changes could be made to encourage shared learning?

9. What aspects of the programme could be shared/learnt with other professionals? Who would this involve and why?

10. Is there anything else you wish to comment on?

APPENDIX 3

CONSENT FORM

Title:
Shared Learning in Health Care Professional Education: An evaluation of third year medical, nursing, occupational therapy, physiotherapy and podiatry students' shared learning experiences.

There is a strong drive towards implementing shared learning in health care professional education. The faculty is committed to developing inter-professional education across the three schools. An evaluation of student experiences and opinions about shared learning forms an important baseline from which to develop the curriculum in the future.

Do you understand the purpose of the study? yes/no

Do you understand that the information is to be used within the university, the faculty and for personal research? yes/no

Do you understand that the information is to be disseminated in reports, journals and at national/international conferences? yes/no

Do you understand that you are free to withdraw from the study at any time and without giving reason? yes/no

Do you agree to take part in the study and for your interview to be audiotaped? yes/no

Signed: .....

Date: .....

Name in block letter .....

Signature (researcher): .....

Date: .....

APPENDIX 4

Example of Transcript – Manual Coding

I want to ask you a few questions on interprofessional shared learning, so if you could tell me want you think shared learning is, because there might be different versions of what people think it is, so in your experience what would shared learning be?

I think some of our courses are shared learning where we share common subjects between physiotherapists and occupational therapists, but we've also had the opportunity to talk with nurses and doctors on our course on special days where we can give each other information about our own professions and try and work together. That's been my experience of it. It's not a vast amount of experience. D

So what do you think the purpose of it is?

I think it's to show that in health in particular that there are many overlaps in the work that we do and we can understand why we should be working together for the benefit of the patient and if we have this shared learning then we can appreciate that we all have a role to play. I think that's the main benefit because at the moment I think sometimes it's quite disjointed and everybody goes off at a tangent where as we could all be working together and it would be far better for the patient in the long run if we pull together and shared learning, I would hope would bring that about. Pur CC. O. CC

So you think it's about being able to benefit patient centred, patient orientated?

Yes definitely. I think everything has to be patient centred. I don't think any one profession should feel they own the patient, I think we should all be working for the benefit of the patient. CC

Have you come across where people do think they own the patient or have got a dominant role?

I think the medics tend to own the patients and they kind of say to everyone, this is what you'll do without really understanding what the other professions are doing and perhaps undermining them slightly, believing that they know best and they probably do know best in one particular area, but other areas can work with them together, so they're not their patient. I think in some ways as well like in law, if the medic profession is seen to be responsible for them when you're responsible for personal methods, I do think it's seen by the general public and perhaps the doctors feel that ultimately they'll be the ones that have the blamed at their door if anything goes wrong. But maybe it's as a result of that that I feel medics believe they own patients. They feel the buck stops at them. WP S Res

Sometimes it does doesn't it?

Yes it does.

APPENDIX 5

Example of Transcript – Interview 11 Podiatrist

(participant dialogue in italics)

I would like to start by first asking you how you would define shared learning?

OK, from just sort of like my own perspective, it would be that the disciplines would come together to learn for key units or information, so it would be across the board, the disciplines learning at the same level, the same core elements. I think from that, then specialist studies can be taken off from that. I think there's possibly key units that we all need to have as healthcare professionals.

So what do you think the purpose of learning it altogether would be?

I think it would, from a Faculty point of view, it would unite us a lot more than we are at the moment and that would be, whilst it's good PR within the University to have that, hopefully at the end of the day we're all going to qualify and work with each other anyway as professions so, a long term sort of better interaction when we qualify ideally.

So you seem to have some really good ideas about what this core thing is, what do you think are the core subjects that you could learn together?

I think some of the physiology aspects we could and certainly on the microbiology aspects of things because we all come in at a baseline and that needs to be built up before perhaps we go on to diversifying to our specialist fields, but we all need that baseline there. Likewise again, we have a health professions module and that is something really, its very essence should be done across the board because within that module we look at not just podiatry, we look at how podiatry is positioned in perspective to the other healthcare professions. It's a very sort of blinkered viewpoint if we're not interacting with those groups that we've got around us all the time. I think that would be really good because in a way potentially, if we don't ask each other, we're taking our interpretation of what the other professions are each time so it's not progressing anywhere, it's just going round and round in circles.

Do you think it stops your own professional development if you can't get someone else's views?

Absolutely. We are all dependent upon each other and one profession is only going to grow if you get a greater rapport with the others and plus the fact that we're all meant to be working towards working for patients or people as opposed to just what we do and if we can work better together, then at the end of the day the patient has got to be the one that benefits, and that could be us.

So you're saying yourself you want a better service so that when you use it personally it's better?

Yes, a better integrated service for the users but also as a profession, we tend to have this reputation of seeing ourselves under the subdication of medics but I think if we can actually break out from that and build a better rapport with them anyway, then it will improve a hundred times for the profession, so hopefully both things should come together.

So are you saying that the profession will get confidence if they have to work out with other professionals what the boundaries are and what the overlaps are and what the strengths are?

Yes, I think a lot of the time historically in society, I don't mean the School, podiatry has viewed itself as the underdog, but I think that is down to a lack of confidence as to what our actual roles are within the professions, so I think if we can get confident with what we represent, then we'll have a better rapport anyway. So yes, confidence.

Have you done a lot of shared learning on your course?

No, minimal.

Was it memorable?

The one time when we went up to Moorgreen, that was good, I enjoyed that.

Why was it good?

It was nice to see some of the other professions, but also it was nice to just meet them as people, you know, because you have a bit of a laugh and it was done in an informal way, so it was good.

So you liked the informality?

Yes.

Do you think that the experiences should be informal?

I think it depends what you're covering really, it depends on the topic but sometimes, especially when you're all at the same level, like at Moorgreen, none of us had necessarily done that before or had been placed in that situation and that's a great leveller anyway, if you're all at that baseline anyway, people don't feel intimidated because one group might know a bit more or whatever.

Interestingly enough, they were first year occupational therapists, second year podiatrists, third year medics all in together and yet you felt it was a level playing field?

Yes in as much as we as groups, we'd never met up before and it was all about exploring what those groups did, so although they could be technically further on in their knowledge base, the medical/physiological aspect, when it came to knowing what each other did, we were kind of in the dark really.

So that was the key thing then, getting to know each other and what you did?

I think so because you tend to talk about we're the underdogs to the medics, you tend to see groups and not socialise so well with them, not just on a social basis, but on a professional basis, but if you meet the people, they're alright, they're the same as us, they don't know this, and we don't know that. It's a great leveller, you get to see a person as opposed to a stereotypical view which often filters down.

Do you think you were discussing stereotype views?

The whole nature of that course as well, when you're looking at case studies, you're aware of stereotyping, even a patient, so I think it brought it into focus perhaps in a nice way. It covered that issue but not in a "oh you're making stereotypes about people", it made us re-evaluate how we were looking at the professions and the patients.

So the case study thing was quite a useful thing to do wasn't it? Around a case study?

Yes.

Do you think that made it relevant?

Yes, because you can tailor a hypothetical situation to meet everybody's needs in the group, if it's not a real situation, then I think also if it's hypothetical people are more ready to bounce ideas around. You don't feel necessarily your actions could jeopardise somebody or whatever. It's theoretical so you can come up with ideas and if they're perhaps not the accepted way or whatever, it doesn't matter so much.

Do you think that that was important to you as a podiatrist because you do a lot of your learning with real people, where mistakes are not allowed?

Possibly yes. From a fairly early stage on, we're dealing with the public, so yes we are aware of every time you treat a patient and you're assessed and you have to do your presentation at the end, you are very aware that hopefully what you're saying is right and you're certainly not going to do the patient any harm.

Continues .....

APPENDIX 6

Example of Nudist Theme Report

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REPORT ON NODE (F 21) 'Stereotypes'
Restriction to document: NONE

*****************************************************************************************
(F 21)                    //Free Nodes/Stereotypes
*** No Description
++++++++++++++++++++++++++++++++++++++
+++ ON-LINE DOCUMENT: Group Interview 2
+++ Retrieval for this document: 10 units out of 231, = 4.3%
++ Text units 62-71:
There seems to be a feeling that they don't like medics and that starts      62
straight away.                                                               63
Now that we've mentioned that, it is stereotypes that we are talking about   64
Yes (Students +)                                                             65
We have the same problems in our first years with the sessions. We come      66
along - why                                                                  67
You go into medicine therefore you must be arrogant and stuck up etc. So     68
we can be kind and lovely but they are horrible to you.                      69
So what is the best way of getting over that do you think. To go to your     70
own camps or to work more together.                                          71
++++++++++++++++++++++++++++++++++++++
+++ ON-LINE DOCUMENT: Group interview 3
+++ Retrieval for this document: 43 units out of 871, = 4.9%
++ Text units 24-38:
I think our perception of what a nurse does is different maybe to a          24
doctor's perception of what a nurse does.                                    25
RThat's key isn't it? So it's perceptions, so it's being able to explain     26
what you're doing to somebody else, is that what you mean?                   27
Yes                                                                          28
RHave you had much chance to do that?                                        29
S'sNo (laughter).                                                            30
RSo that was unanimous.                                                      31
We noticed it more in the first year or two really.  You know we got         32
treated like dirt really by medics, Oh so you are a nurse are you so just    33
clean bed pans and that stuff.                                               34
Oh degree in Nursing - can you do one of those. What's a degree in           35
nursing?                                                                     36
So you can clean bedpans very well then. Well done.                          37
It's a Mickey Mouse Disney school of nursing that we are going to.           38
++ Text units 40-52:
Yes it is. We were talking about this earlier and we were actually saying    40
that what it is, is that as first years we don't really know are own         41
roles and each group doesn't know your own roles until you are in            42
practice.  Whereas now the medics are on the wards themselves and a lot      43
of the barriers are gone, because they see what we do and we see what        44
they do as well. We know much more about what the doctors role is and the    45
PT's role is.                                                                46
We're a lot less defensive as well.                                          47
Yes absolutely.                                                              48
But to be fair we're told straight away that medics are arrogant.            49
So we always go now  - we've more easily got our backs up.                   50
RSo it's assumptions and perceptions.                                        51
Yes Barriers.                                                                52
++ Text units 249-251:
Especially because you tend to look up to sisters as a student nurse and     249
you think that they must know so much and know what they are talking         250
about. So you believe them.                                                  251
++ Text units 267-273:
It would be quite nice for the medics and physio's to see how much nurses    267
do know,  if a sister was to give a teaching session to a group of           268
medics, cos a lot of medics now they are on the wards are actually coming    269
back and saying there's quite a few nurses that know a lot out there         270
aren't there.  If we go and ask a nurse they'll know things. They are        271
only just realising that whereas before they very much - oh nurses don't     272
know anything, so it might be quite nice for them to have a nurse teacher.   273
++ Text units 598-602:
But this is probably why co we don't understand what each other does         598
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really.                                                                  599
Even if they do train together, so what.                                 600
PT's still call OT's basket weavers, don't they?                         601
Who drinks the most coffee.                                              602
++++++++++++++++++++++++++++++++++++++++
+++ ON-LINE DOCUMENT: Interview 1
+++ Retrieval for this document: 38 units out of 771, = 4.9%
++ Text units 74-80:
Um my experiences are still that there's a lot in the workplace there's   74
still a lot of stereotypes that each profession has of each other and I   75
haven't seen a lot of interdisciplinary work going on seen                76
multidisciplinary work where each profession is doing their own thing um  77
but not much interdisciplinary work where say there's joint assessment or 78
joint treatment a little bit with physio when I was doing some neuro      79
stuff in hospital um (?)                                                  80
++ Text units 82-85:
Yeah I still find there's a lot of stereotyping of OT's for instance um   82
and ah well even on the placement I'm on now there's definitely quite a   83
separation between nurses on the ward and the kind of therapists upstairs 84
and you know sometimes its kind of awkwardness                            85
++ Text units 156-157:
Yeah I think it's um stereotypes come out of got an inward lookiness of   156
or professionals tend to be sometimes quite inward looking                157
++ Text units 162-166:
Yeah um to change the stereotypes to get everyone to hear an idea of what 162
each profession can contribute and where the overlap is as well and where 163
how they can work together in an overlap um and I think to get a really   164
positive a positive example of what each profession does so when you're   165
out there you kind of have an idea of what people do                      166
++ Text units 205-217:
Hmm well I think that's good you know its good I mean but it was          205
noticeable in the first year how you know its funny you have a bunch of   206
people who are not physiotherapists not occupational therapists who come  207
together and very quickly the stereotypes start getting bounded around    208
and thrown around you know and it is really bizarre how that's adopted by 209
a new generation who you know its funny (?) it sounds like this teenager  210
need to fasten down to create you know this kind of to say well this is   211
us and then to stereotype another group you know professionals who've     212
have just got this insecurity about boundaries perhaps and identity       213
definitely seeking professional identity I think its confidence when      214
you've got confidence for professional identity and this is again an      215
outcome of my own research I found that confidence in professional        216
identity enable this kind of interdisciplinary blurred roles (?)          217
++ Text units 220-226:
Um don't know about that I don't think so I think um I think there's a    220
playfulness with those stereotypes sometimes with lecturing staff that's  221
you know that's fun then that can be fun um and the students as well (?)  222
mature students                                                           223
So there definitely is a difference in mature students you think          224
Generally although I can think of some of the, you know the younger ones  225
who (?)                                                                   226
++++++++++++++++++++++++++++++++++++++++
+++ ON-LINE DOCUMENT: Interview 2
+++ Retrieval for this document: 53 units out of 694, = 7.6%
++ Text units 30-41:
I think the medics tend to own the patients and they kind of say to       30
everyone, this is what you'll do without really understanding what the    31
other professions are doing and perhaps undermining them slightly,        32
believing that they know best and they probably do know best in one       33
particular area, but other areas can work with them together, so they're  34
not their patient.  I think in some ways as well like in law, if the      35
medic profession is seen to be responsible for them when you're           36
responsible for personal methods, I do think it's seen by the general     37
public and perhaps the doctors feel that ultimately they'll be the ones   38
that have the blamed at their door if anything goes wrong.  But maybe     39
it's as a result of that that I feel medics believe they own patients.    40
They feel the buck stops at them.                                         41
++ Text units 60-76:
I don't know what the problem is.  I think they come in to this that      60
there maybe a certain type of people apply for a certain type of job      61
within health and we all must chose for some reason, pick a specific      62
profession and perhaps it's the nature of those people in the first place 63
who feel that their profession is superior to another and will not        64
```

APPENDIX 7

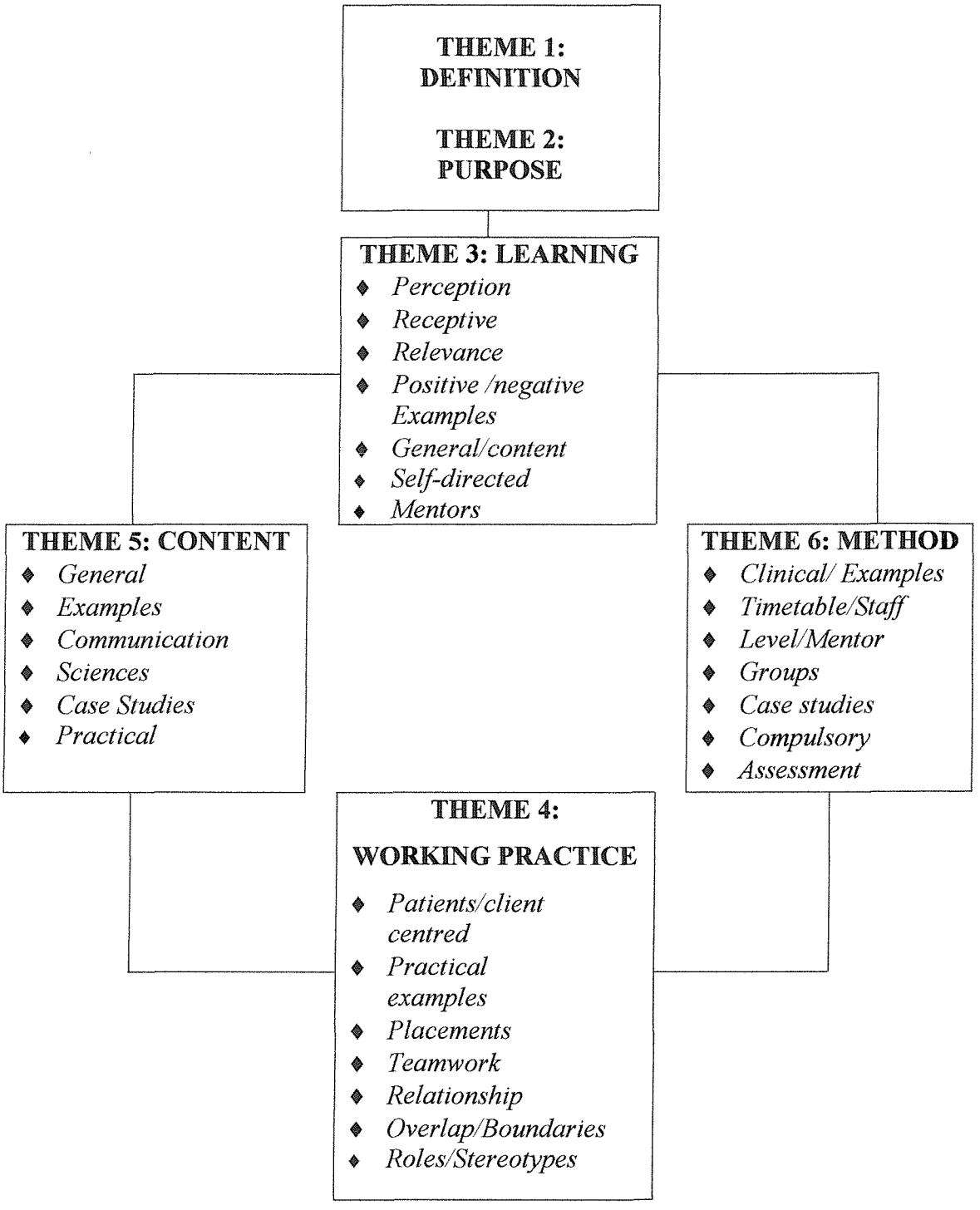

Figure 1: Diagram To Show Themes and Sub-Sections Identified From Transcripts.

APPENDIX 8

Example of Node Report with Manual Analysis and Coding

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(F5).txt              page: 2              5/16/19 09:38:26

doing, you're doing the overlap skills so any professional should be able    512
to do that.                                                                  513
What are the overlap skills?                                                 514
Communication, Biological Sciences probably in the first year that's the     515
main two.  I think communication should be in big capital letters because    516
communication skills are sometimes rubbish.                                  517
++++++++++++++++++++++++++++++++++++++++
+++ ON-LINE DOCUMENT: Interview 4
+++ Retrieval for this document: 19 units out of 507, = 3.7%
++ Text units 26-40:
For some of the groups it didn't seem like there was necessarily a            26
barrier between each professional though it wasn't like a distinct role,      27
each profession would bring maybe their own angle or their own small bit      28
of expertise but they'd work quite closely together and the sort of label     29
or the role wouldn't be as important.                                         30
So that's what you found in practice, an overlap?                             31
Yes there is quite a lot of overlap sometimes.                                32
So is it good when there's overlaps?  Is that what makes it good, when        33
there's no boundaries, no barriers?                                           34
I think it's good to have overlap but in a way some barriers and              35
boundaries otherwise if it merges too much you can't justify the separate     36
professions necessarily I don't think.  But I think overlap helps you to      37
work better together or some shared knowledge, but maybe some separate        38
skills to define yourself as a professional as opposed to another             39
profession.                                                                   40
++ Text units 63-66:
It's probably made me a bit more informed about their role and what they      63
do working together, and I suppose if you do things together you get to       64
know about what other things they do separate to you as well and just         65
sort of the overlaps and the links between that.                              66
++++++++++++++++++++++++++++++++++++++++
+++ ON-LINE DOCUMENT: Interview 6
+++ Retrieval for this document: 10 units out of 620, = 1.6%
++ Text units 94-103:
What was the most productive, memorable thing that you did together then,     94
that was really helpful for you?                                              95
The most recent thing that I remember the quickest is something I did         96
within one of the third year modules I was doing which was hand therapy       97
because it was particularly pertinent for me because there weren't any        98
other physios in there at all, so I was by myself.  I found that a little     99
bit daunting but I hopefully used it as a bit of a challenge and I think     100
I agree with that.  It was good from my point of view to see far more how    101
the occupational therapists work in comparison to the physios and how it     102
did overlap in a lot of respects.                                            103
++++++++++++++++++++++++++++++++++++++++
+++ ON-LINE DOCUMENT: Interview 7
+++ Retrieval for this document: 7 units out of 527, = 1.3%
++ Text units 23-29:
Is that what you've found in practice is that your understanding of other     23
professions has been tested, and have you learnt things while you've been     24
there as well?                                                               25
Yes, in practice there is a lot of overlap between what different            26
professions do and how they approach things.  Overlap between what          27
doctors and nurses do and how they approach different situations, but        28
there's quite a lot of contrast as well.                                     29
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
+++ Total number of text units retrieved = 92
+++ Retrievals in 5 out of 19 documents, = 26%.
+++ The documents with retrievals have a total of 2784 text units,
    so text units retrieved in these documents = 3.3%.
+++ All documents have a total of 10241 text units,
    so text units found in these documents = 0.90%.
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
```

Practice
Method
Content.

```
++ Text units 345-348:
R Sometimes to make time to do other things that you don't see as          345
priority can be difficult. They have to be committed to loosing something  346
as you are already up to here in work aren't you? So to squeeze in         347
anything else that means that something else has to go?                    348
++ Text units 368-369:
R I think medical students are more likely to be horrified that they       368
haven't had contact with patients and you have actually.                   369
++ Text units 374-375:
R I'm just trying the interpret what you are saying rather than just how   374
I think.                                                                   375
++++++++++++++++++++++++++++++++++++++++
+++ ON-LINE DOCUMENT: Group Interview 2
+++ Retrieval for this document: 18 units out of 231, = 7.8%
++ Text units 14-16:
develop some of the ideas. Some of the sorts of questions I am interested  14
in is what sort of shared experiences have you had and what's made them    15
memorable                                                                  16
++ Text units 18-19:
When are you most receptive to shared learning in your course?             18
What do you mean by shared learning.                                       19
++ Text units 40-41:
So how will we make the best decisions about what we will do together?     40
How might we go about that.                                                41
++ Text units 45-47:
You've had a bad experience Ok so its been a bit negative but since        45
you've had this experience what would you suggest that we did for the      46
years coming up that would be useful for them to do. You said roles        47
++ Text units 170-174:
I can't hear what you are saying. I need it in more depth so we can        170
follow ideas through and look at the realities of what we might do on      171
your courses. It's a bit like saying how do you redesign it if you could  172
its that sort of thing, how could you redesign it to put it in if was     173
valuable and to make it worth while.                                       174
++ Text units 181-182:
Do you think you have to do things together, to actually work on things    181
together and get to know each other.                                       182
++ Text units 191-191:
Do you think you get that by default by working together anyway?           191
++++++++++++++++++++++++++++++++++++++++
+++ ON-LINE DOCUMENT: Group interview 3
+++ Retrieval for this document: 51 units out of 871, = 5.9%
++ Text units 63-66:
RSo the timing of it? Can I discuss the timing of it, cos you mention      63
that at certain points you don't know your own role enough but later on    64
somehow you get experience, does that make a difference?                   65
Yes                                                                        66
++ Text units 97-99:
RSo .. do you think, you're saying that the first year is a real           97
struggle and that you have to know a bit more about what you are doing     98
and a perhaps a bit more structure in the first year.                      99
++ Text units 171-172:
RBut it's getting the others to appreciate that role isn't it and to       171
understand it and respect it.                                              172
++ Text units 201-202:
RSo you think that something happens in the third year which would makes   201
you more receptive towards working together.                               202
++ Text units 206-209:
RSo what have been your experiences in real life? You know on the wards    206
of IPE and learning about other professions there.                         207
It varies, sometimes it is brilliant, but some places are rubbish.         208
It definitely depends from ward to ward.                                   209
++ Text units 299-301:
RIf you could change what you have already done, if you had a blank piece  299
of paper what do you think you could include, what would you change to     300
make it more inter-professional.                                           301
++ Text units 305-305:
RSo if it's poor its bad because it has a bad effect on you.               305
++ Text units 341-342:
RSo you are saying that it would be learning together, not so much about   341
each other but together which is an easier step in you mean.               342
++ Text units 358-361:
RHow would you put it in then? First year, perhaps to start with learn     358
```

APPENDIX 9

REVIEW TO RESULTS SECTION

Relationship between Research Questions and Results

SECTION HEADINGS	Sub -Headings
6.2 – 6.3 DEFINITION	
How would you define shared learning? What is the purpose of SL?	6.2 Definition 6.3 Purpose
6.4 Perceptions/Attitudes towards other Professionals	
In what way, if at all, did these experiences influence your perception and attitudes towards other professionals? In what way, if at all, does shared learning enhance professionals understanding of each other's roles	6.4.1 Expectations 6.4.2 Preconceived Perceptions and Stereotypes 6.4.3 Perceptions of Each Other
6.5 Shared Learning in an Academic Environment	
What has been your experience of shared learning at university? What made these experiences memorable? In what ways, if at all, were these experiences relevant to your learning and development?	6.5.1 Negative Learning Experiences 6.5.2 Positive Learning Experiences 6.5.3 Clinical workshops
6.6 Shared Learning in the Workplace	
What has been your experience of shared learning in the clinical workplace? What made these experiences memorable?	Detailed analysis of this data can be found in appendix 21.
6.7 A New Shared Learning Curriculum	
At what point, or level of your programme, did you feel most receptive towards shared learning?	6.7.1 Learning Priorities 6.7.2 Receptiveness to Shared Learning 6.7.3 Familiar and Simple Ideas 6.7.4 Clinical Experience
6.8 Developing a Theory Practice Link	
If you could re-design your programme, what changes could be made to encourage shared learning? What aspects of the programme could be shared and/or learnt with other professionals?	6.8.1 Identifying Priorities 6.8.2 Developing Communication Skills 6.8.3 Science-Based Subjects 6.8.4 Case Studies
6.9 Organisation of the Programme	
If you could re-design your programme, what changes could be made to encourage shared learning? Who would this involve and why?	6.9.1 Timetable 6.9.2 Student Responsibility 6.9.3 Staff Responsibility

6.10 Method of Learning	
What aspects of the programme could be shared/learnt with other professionals? Who would this involve and why?	6.10.1 Learning in Groups

Appendix 21 - Additional analysis:

Shared Learning in the Workplace	
What has been your experience of shared learning in the clinical workplace? What made these experiences memorable? In what ways, if at all, were these experiences relevant to your learning and development?	1 Clinical Experience 2 Focussed Learning 3 Client-Centred Approach 4 Teamwork 5 Overlaps in Practice 6 Working Relationships 7 Resistance to change

APPENDIX 10

Self Reflection: Looking At My Dialogue/Questioning Technique

(interviewers – dialogue in italics)

Language
There was evidence of the participant's own words and phrases being used to emphasise a point:

> *'I'd be interested to hear how the medics feel about sharing lecturers with us because the views I've got is that they might be* ***horrified*** *that we have the same sort of learning ....'*
>
> *I think medical students are more likely to be* ***horrified*** *that they haven't had contact with patients and you have, actually.*
>
> *I got that at Moorgreen I suppose.*
>
> *That's what they are more likely to be* ***horrified*** *about. So what you are saying is about boundaries and territories, power ... (GI:1P)*

This happened spontaneously within the discussion and helped create a shared language. It promoted a sense of focussed listening as well as encouraging in depth exploration of issues raised. There were a number of similar, though more subtle, instances when language initiated by participants was used within the conversation.

Questioning
Most of the time discussions were directed with quick responses and direct open questions such as:

- *If you had a blank sheet of paper what do you think you would include?*
- *How might we go about that?*
- *What would you change to make it more inter-professional?*
- *In your experience has there been anything that has goes anywhere near to breaking down this stereotype?*

These types of questions were used in all interviews, though not always in the same order. Such questions were fitted into pauses in order to help the flow of the conversation. They were used successfully in order to help the participant explain their point of view and to draw out the meaning behind comments:

> *What do you think the purpose would be?*
>
> I think it highlights the importance of different areas relating to you, I, as a physio, perhaps understand how I think different things are important, like an OT may see different aspects of an area to what I do. Doing it together highlights those aspects
>
> *So you get someone else's perspective on it?*

Yes, and it brings attention to things you hadn't thought about, because Physio's can sometimes be based on one specific area of the body.

It widens your focus?

Yes

So with that baseline understanding what has been your experience of shared learning at the university?

Well the last thing I went on was a palliative care workshop and there were nurses, medics and OT's there and that was really interesting because we got to hear about they want to work on and what the different professions are working on and I really enjoyed that.

You enjoyed it because of the understanding that you got from it?

Yes

Was there anything else that was memorable? (I:6PT)

Sometimes closed questions that elicited straightforward yes or no answers were used to an area of discussion. This was quickly followed with another question that attempted to move onto a different aspect.

Muddled Questions

It was noticeable that I formed questions incompletely, this indicated a muddled response to complex situations, for example:

'What do you think that would do for professional development, you know your own identity, if you were actually able to communicate with the nurses or other professions? What do you think would happen to your own professional identity?' (I:12M)

'So if I can just summarise, what you're saying is that the activities that you do together should be very purposeful, practical. What might they consist of? How would you structure one? So if you had a scenario that you had a blank sheet of paper and you could organise the things that students do together, what do you think would be useful for them to do? (I:7PT).

In this example, having so many separate questions to answer was difficult, however, as the participant was involved in the conversation and familiar with the subject, they selected the aspect most relevant to themselves and the conversation moved on. Another example of how a common language was beneficial. This was transferable into most interviews, though on one occasion a participant did not understand a question and asked me to explain in more detail. Overall this participant appeared to be the least expressive and gave the most yes/no answers, even when questions were open and well constructed.

It is clear from the transcripts that in addition to the scheduled anticipated questions, there are numerous incidents when in the process of reacting to an unanticipated response after that I had little time to formulate the next question. Often I cover a number of issues raised by participants and think out loud:

> *Yes, so second and third years. So, the practicalities of that, let's think, you said small group working around a case scenario, perhaps working towards some sort of discharge plan or something. So you could have nurse, OT's, PT's, sort of representatives of a rehab team?* (I:4OT).

During this thinking process I assume, rightly, that the fellow occupational therapist will appreciate what I mean by rehab team. I depended on this common language to keep the smooth flow of the conversation. Particularly on the occasions when my thought process became slightly muddled as this gave me a breathing space. The participant was able to share responsibility for developing the conversation further.

On other occasions I review the conversation, think out loud and move the conversation on myself, though this appears on reflection to be convoluted and possibly difficult for student to understand:

> *I was thinking, if we were to try and think of topics and trying to pick up from what you said, topics that may be useful that all professionals need. So perhaps some community based information, communication you said. Do you think there's any other things or facets that we could look at learning together?* (I:10P).

To my surprise the participant appeared to understand what I was asking and followed through on as aspect that they felt pertinent to the discussion.

APPENDIX 11

Extract: Podiatry Group Discussion - Impatience

(interviewer – dialogue in italics)

I think that we have focus clinics where we get together as a group to treat a patient, I think that will be really helpful if we had a focus clinic with the OT and PT so that the patient is there in front of you. You can discuss all three disciplines together what would be your management of this patient.

That's only logical, but there's not enough time.

That's like for most of this.

That's why I'm getting your opinions because you probably feel quite strongly about it?

But I mean it wouldn't be that difficult for us and a couple of OT and PT students to come down here to one of our clinics would it?

It is when you are on placement for three months at a time. That's the hardship.

Time-tabling is always used as a means of not doing this, I'm fed up of hearing about it – not from what you are saying but if it's the right thing to do together then its worthwhile making sure you can do it.

I agree with what you are saying I think if you are going to do it you have to incorporate it early in the course because that's when the PTs and that don't go on block placements. Its when they get to the 2nd year, whereas we only do a 2 week block placement in the 2nd year.

APPENDIX 12

Extract: Podiatry Group Discussion - Shared Concerns

(interviewer – dialogue in italics)

Yes they benefit from when they are on these placements because they met all the other disciplines and we don't have that access. It's very fragmented.

But then they don't do the treatment that we do, they don't have clinics two days a week.

No you have a different sort of learning experience don't you. Do you think casework might be a good thing to do together.

It might be a good start yes.

Or possibly a student rotational thing where you could have 2 OT's come down for a day or half a day here, and we could spend half a day working with OT's or something. So that you actually going round that way. Like the placement system we have already but an internal one.

Ok I've got one here – we are happy to sort students out and try and sort of make that occur outside, but we are not utilising all the disciplines that we have got in the other schools.

But I think it was never going to be this year, that being put in the same building was traumatic enough, it was never going to be organised for this year.

It's a shame really because we don't have the benefit of being put in the traumatic efforts of being put in the building, if we did it we might be less traumatised.

But that's what I'm trying to ask you I'm not sure what the pay off would be. That's why I'm here trying to find out what it is it – what is it about teamwork that you need to know how to do it together?

I think there's a fine line because the flip side of it is that you might feel quite intimidated by speaking out in that sort of environment. But not in case studies, but especially in lecture type things.

Yea.

Oh my god I can't speak out because maybe I'll get a different grade you know.

APPENDIX 13

Extract: Podiatry Group Discussion - Intervention To Reduce Conflict

(interviewer – dialogue in italics)

Its not only that its necessary, it's a legal thing that you should have something coming through saying this is what has been done and we're acting upon it.

Cost is the issue

No it isn't.

It is the issue because you've got to refer to the GP because they have got to find the money for you to send them to PT. The PT sends the letter to the GP that's why we don't get nothing back.

But you are going to get that as part of being a NHS community services in Southampton. It is an issue, we've worked in here for minimal.

It's not our domain to see where it's coming from, this lady is asking us students what do we want.

But you're gonna get that when you start work anyway

Sure but at this level its students.

Yes but it might be great to have the stuff when you are a student but then when you go out --ugh you don't get it now.

But we are talking about us students.

This is why no one wants to talk!

It's probably both – because you are investing as a student in your future and you want to do a good job. But you are also investing day by day into the relevance of what you are learning isn't it, so it is both. You are close to qualifying and being on your own so that is an issue. I know that its not going to change for you now but its important that your views and experiences as a student gained to influence the choice /course for others.

I mean, maybe now that we are all part of the same school for the years that are coming through I think that they should have far greater exposure to all the other disciplines. I mean what was it for, what was the point? It doesn't benefit us at all

It's also very good for the other disciplines to know exactly what we do as most of them haven't got a clue.

Its like that research thing – the conference day – its just so that you start to realise what they are looking for. Those sort of events are very good.

The first years as well are going to be in a totally different environment to us cos that's all they know.

They are going to feel a lot more comfortable with it.

It depends whether they are apart from physically having their lectures, how much are they interacting with the other disciplines.

Don't you walk by notice boards? Well I think it all helps.

It does help and they certainly have a lot better interaction than we've had. But I think that at the moment there's a lot more to do.

It starts at the top though doesn't it?

They could stay in their professional click if you like, if they don't want the boundaries to change.

APPENDIX 14

Extract: Interview 6 Physiotherapy

(interviewer – dialogue in italics)

I think it could do because of the fact that if you're doing it in the first year and then carrying it through to the second year. If the medics don't go out until later then they might not be able to visualise or get into that way, whereas the nurses should have had a lot of experiences because they start off quite early. But then that might give a bit more something for the nurses because they would be able to input far more and not feel quite so threatened by a doctor or a medic who tend to give that air of knowledge and everything.

But you see that's what we're dealing with, stereotypes aren't we?

Yes.

Do you think that stereotypes is a really big issue?

I think a little bit, yes I do. I know it more from a personal point of view rather than from what experience I've had from wards or school or anything, but nurses that other people know say: 'oh no physios, they're horrible'. Don't like them because they just swan in and off the wards and think they're this, that and the other, from that point of view, people think that of me and they don't even know me and I think that is a shame.

We've got to get over that haven't we? What do you think might help with that, because what you're describing is somebody taking on face value what they see somebody doing rather than knowing what they're doing and why?

Yes, and that's why I think something like this will help, if they were working in that group environment, and especially the younger you are doing that, the further that's going to carry through. I believe from a medics point of view, they decide in the first year or something, what they think of physios the first time they meet them, whether they like physios as a whole or not.

Yes, very big generalisations are made. So if there is this inequality with real experience with patients, do you think there would be any problems or would it be positive for third year medics to work with second years? Do you think it matters whether its years that are together or is it where they're at in their programme?

That's a difficult one because people might be further down the line clinically, but then they've had experience of other things.

What you're saying is, don't let the medics escape, get them together really early with people to communicate and that somehow we have to assist students to deal with the threat of not knowing, like nurses have probably got more experience, or the threat of academic knowledge compared to practical?

Yes
So we've got to deal with that haven't we, that's what you're saying?

Yes. Even if it's just explained to them that's how you perceive it and that's why you're integrating in that way. Sometimes if you just do explain it to people, then they understand and they're Ok with it.

But definitely I'm getting the impression from what you're saying is that working together will allow people to explain so we've to somehow ensure that groups of students get together, enough time to actually work through some of those stereotypes?

Yes, and really communicate because I think it just doesn't happen often. It's like when I come to read doctor's notes or something before I assess a patient, I think why can't they just write a bit easier. You waste loads of time, whereas if they understood that lots of other people are going to be reading them frequently, they might just think about it when they're doing it, I don't know.

It seems logical doesn't it? If they understood why a physio would be going there and what they'd be looking for. You said about working together for the patients benefit, but you've also talked about some of the processes of working together. The written notes explaining, justifying what you're doing, sharing that, making it efficient and saving time and making each others life easier, because you know what each other requires of you?

Yes, I think it could be done more efficiently.

APPENDIX 15

Extract: Interview 12 – Medicine

(participant dialogue in italics)

What they know and what they're likely to know you mean?

I can give a particular incident. A surgical patient just had an appendix taken out and she sat up and she was crying out for help and I was seeing another patient, but I stopped what I was doing and came over to see her, and she said I can't move, I can't move, I really need to get up and go to the toilet and I can't move. I said OK I'll just go and get a nurse, because I thought I don't know a thing about this patient and I'm sure a nurse will be able to help more than I can, and the nurses just looked at me, well you're the medical student, you do something. I thought well, I don't know anything about this patient and can't you just help me. They really weren't very helpful at all and a couple of instances I've found that maybe they're not being helpful or maybe they don't genuinely know what to do and that I'm expecting too much from them and I should have known that they wouldn't have been able to do anything, I don't know.

Yes, but somebody must have been able to help that person in that situation, shouldn't they?

Yes, but I thought it would be the nurse but it seemed to be, well she's not my patient. Oh OK, can you find the named nurse then, I don't know who Clara is, you know that kind of thing. I just expected because they're qualified, to know what to do when a patient's in pain.

Or even how to go about asking them. I supposed if you had other nurses and you were able to discuss it with them, other students, about the best process to go through to ask them about things like that?

Yes, and I think it's confusing because if you don't understand the different grades of the nurses and what uniform is what grade, and therefore what that nurse will or won't be able to do, you know, can they take bloods, can they not, why are they asking a medical student to take bloods when I haven't been assessed on it, no-one can tell me whether I've done it right or not, but you know a nurse that's qualified can't do it. You just don't understand at the beginning of the third year and it's all quite confusing.

So as a second year at the end of those last two weeks say, would you have known what questions like these to ask?

Probably not.
So how could we get over that? Because you know it now don't you?

Yes, I think maybe have briefings from third years.

You've got that insight now and you could enable the next years students to have the right questions very easily, couldn't you?

You couldn't really ask the third years to brief the second years at this period in time because we've got exams up to our ears and I can promise you, you wouldn't get any volunteers, but because it's a multidisciplinary thing, it might be a good idea to get the nurses who have been on the wards to give the third years orientation and then it's like, the nurses are then imparting some information to the medics and I don't know what the medics could do in return, but I'm sure there's something that we might know that the nurses might want to know. That's just a nurse/doctor thing.

But that's seems to be an issue doesn't it, about learning how to get on together?

Yes. I actually think that would help if the nurses were able to help us on the wards. Have second year nurses been on the wards by the time they get to the second year?

Yes, nurses actually go on the wards like within the first month of training, so that means that they would have experience.

Maybe they could take all the baby docs as well.

Baby docs? Is that how you see them or is that what everybody calls them?

Some people call them baby docs, because we're not real ones are we? They could take us round and that way they get to speak to us, know that we're completely ignorant when it comes to the wards.

Obviously patient care would be helped with that like you said, it's patient centred, what do you think that would do for professional development, you know your own identity, if you were actually able to communicate with the nurses or other professions? What do you think would happen to your own professional identity?

I don't think it would be lost. You'd still be doctors and they'd still be nurses, OTs whatever, but you've all got to work together when you're actually on the ward, and so working together as students is a good idea.

So you don't think you would lose it, because some people say you've got to learn your own professional identity and the more you realise there are overlaps, you will lose your own identity, and you don't think so?

But when you're a junior doctor and you don't know something and there isn't any other doctors around, you need to ask the nurse where something is or about a patient, because the nurses sit with the patient all day everyday, they're going to know more about the patient then you are. So you're going to have to talk to the nurses then, so why not ask the nurses as third years what it's all about.

So you don't think there's a threat of losing and there being too many overlaps?

No not at all. Because there's stuff you can learn very much together and you'll find in A & E, there's a very good example of where there is very little division and everybody pitches in and you'll get sometimes a nurse led team doing resus, sometimes it's doctor led, and it's just whoever's fit to do the job at the time, who is the most experienced and that isn't necessarily going to be a junior doctor. It's quite probably going to be a senior nurse and there doesn't seem to be any, when I've been down there on my module, it's been very working together, no divide lines.

Well it's like a stressful area isn't it, so crisis management, so you get the one whose got the experience to manage a situation at the time. Do you like working in that way?

I do, because I want to do A & E anyway.

APPENDIX 16

Extract: Interview 15 Medicine

(interviewer - dialogue is in italics)

Why is that?

Because early on you are quite easily influenced and I think if someone says something its almost easier to agree with them than to disagree in some social contacts if they firmly believe in something. I mean especially if they have got more experience than you have and in that way, it can propagate their opinion in yourself.

So you might be unfortunate to meet the one arrogant medical student on the course and that would sow seeds?

Because I mean it all stems back to these stereotypes but I mean I know people who aren't at all arrogant and in fact quite modest but my housemate Anna has been saying "Oh god that guy is so arrogant" and I know him not to be at all. It might just be that fact that she's gone in thinking 'right medical student" – and she'll remember the things that might be said jokily, there's a lot of joking that goes on in medical student conversations. And it might seem, in fact its does seem arrogant to people just watching, but with most of us are just joking.

Right, but you don't have enough contact with each other; you never find that out.

No

I mean one thing I used to notice when you worked with people on the ward is that your initial impressions can be very wrong. Sometimes it's a throw-away comment, sometimes it's a sense of humour and they are taking the micky out of a situation.

More often than not.

So first impressions can have a massive effect?

Yea they do. Especially if you have a pre – first impression. Yea

Did you ever ask Anna why she thought he was arrogant?

I have but she just came out with what he said and to me I can see how it would seem arrogant if he said that and nothing else. But I'm sure that they're the only things that she remembers because she went in with that impression in her head.

Did you tell her that?

I did yea.

Did she see it?

No.

Right, So it's something else, it needs more time to actually come to grips with it. That's what we might have to make time for.
I mean it's not only just within these disciplines, I know that these typical arrogant doctor stereotype is kind of fairly wide spread. Outside, a lot of people are aware of it.

But there's a lot of people going to be retiring and as they retire the new generation comes through don't they so it's a matter of..

All you need is one experience

I know

Yea

I'm sure you're saying you don't come across it but that's something to do with your attitude isn't it?

I'm sure it is.

So perhaps you're the new generation aren't and you'll change it in the future.

I'm not entirely sure.

So it's got to be something about patients. Not just about sitting and getting to know each other.

I don't see how you can take the patient out of it and still expected it to work.

No. What about doing lectures together and things like that, do you think that would have any influence?

Em I don't know I haven't really thought about that. I don't know how much of a core subject matter we share with everybody.

I don't know.

But that's another stereotype that doctors hold about nurses is that they are not as intelligent, unfortunately. Some of my colleagues felt they were being a bit patronised because the teaching wasn't being pitched at a high enough level. That kind of supports that stereotype.

Yea, what topic was that just out of interest?

I can't remember it was all relevant and I think it was something like em food care and a surgical attachment.

So it's actually lectures, so if we do lecturers say a therapist who was an expert in something came to talk.
Yea, probably more so.

so it depends on the style of learning that you've had, like your previous experience of lectures, whether they've told you things or whether you've had to find them out.

You pitch it right.

Yea, we know what people are familiar with, the style.

I mean a lot of it is repetition which is good in some cases but I mean it can be 'we already know this why are we here?' and once you've got that in your head
Why is it repetition because you've done it in a different way somewhere else?

Well just because, I think if when we do get lectured by people in different profession if they could just concentrate on the things, I know its hard for you if you are going to lecture us, but if you could concentrate on the things that we wouldn't know about.

OK. We'd have to find out what you did know though

Yea. But it's a fairly safe bet that we probably wouldn't know how to …, we could do it if it was a common sense thing, but even dressing a simple wound we wouldn't know where to go and what dressings were available. What the advantages and disadvantages were.

APPENDIX 17

Extract: Nurse Group Discussion – Perceptions/Stereotypes

(Interviewer – dialogue in italics)

We noticed it more in the first year or two really. You know we got treated like dirt really by medics, Oh so you are a nurse are you so just clean bed pans and that stuff.

Oh degree in Nursing – can you do one of those? What's a degree in nursing?

So you can clean bedpans very well then. Well done.

It's a Mickey Mouse Disney school of nursing that we are going to.

Really, is that what the medical students were saying?

Yes it is. We were talking about this earlier and we were actually saying that what it is that as first years we don't really know are own roles and each group doesn't know your own roles until you are in practice. Whereas now the medics are on the wards themselves and a lot of the barriers are gone, because they see what we do and we see what they do as well. We know much more about what the doctor's role is and the PT's role is.

We're a lot less defensive as well.

Yes absolutely.

But to be fair we're told straight away that medics are arrogant.

So we always go now - we've more easily got our backs up.

R So it's assumptions and perceptions.

Yes Barriers.

Barriers, you keep mentioning barriers. Seems like there's some sort of barriers to the ideal of communicating with patient?.

We did do inter-professional in the first year but

It was useless because we didn't have a clue, we didn't know what we were doing ourselves let alone...

We were very quiet.

The very first day was on the very first day of clinical practice and we had to miss half of it and it was so embarrassing. It was a big day for us anyway without having that to go to which is stupid.

APPENDIX 18

Extract: Interview 13 – Medicine Checking Out Practical Aspects

(interviewer dialogue in italics)

Yes, so there is a precedent there for saying, achievement of skills, practical skills?

Absolutely yes.

When do you do things like the practical things?

We get taught as a whole year group to take blood pressure in cardio-respiratory term, that's first year, and second year we were taught to take blood from each other, which was fun, for renal term, but the actual practice in building up experience of these things, it's very much left up to individual opportunities mainly in the third year.

When do you do things like handling? You mentioned handling earlier?

You're supposed to have teaching in handling in the elderly care attachments, but for some reason it fell through and I can't recall why.

So were you ever formally taught these things, how to move and handle people?

I think most of us had a vague idea, but there's not very much detailed or formal teaching that I can recall we've had.

Well I would think that knowing that might give you confidence when you go on the wards, that if something happens to a patient, you know how to move them, you don't have to ask for a nurse and stuff like that. That would help?

Sure, exactly that sort of thing. I would never actually dare move a patient myself. I would always go and ask the nurses at the station to.

So do you think that would be something that you could all learn together?

Absolutely.

It might make you feel a bit more confident then?

Yes.

What else do you think you might learn together? Because earlier on in the first year you said that the sciences, anatomy and stuff you might start that together, what else is there?

That's a good question. I guess just being able to appreciate how one particular aspect of treatment on it's own is not going to be as successful as it might be without the others in a lot of cases. For instance, the aim of the NHS is always to

get patients back to independence as soon as possible and to do that you need to be able to use the right medications, you need to have OT referrals and such like as appropriate and I think all of us need to have an appreciation of how to do that I suppose.

So it's appreciation of the pros and cons and timescales and different roles and just what it would take to get somebody discharged. Is that what you're meaning?

Yes. How you use all the resources best. Whatever type of resources.

Yes OK so using resources you could have sort of like shared lectures about using resources and then do something practical or do a case study or something about a patient and how you'd use the resources?

Yes.

Could it be something like that?

Yes.

I'm just trying to think how you make theory and practice links, because you've all got different experience.

Obviously we need to know different aspects of the theory to different levels, depending on what profession you're training in. So for instance, the physios might have an appreciation of the use of whichever given drug it might be given a group of patients, but their emphasis would mainly be on how their condition affects the patients' movement and how to treat that best. So for us it would be the other way round, I suppose, we would need an appreciation of how the physio can help the patient's movement in a given condition, but we would need to know more about the options for drug treatments and such like.

APPENDIX 19

Summary of Participants concerns and when they felt most receptive to shared learning.

1. Some anxiety was expressed about participating in shared learning events at the same time as trying to establish their own identify as a uni-professional: *'It was really good to start at the beginning, but that balances up with whether it's going to be talking about your profession. I think you need a while to find your feet and discover where you are as a professional* (I:5OT). All participants expressed similar reservations about this issue.

2. When this dimension was discussed further it became apparent that if shared experiences were good this contributed positively to the development of an individual's professional identify in both the short and long term. *'it helped me to learn the best way to present my skills and abilities, and learn about other people's roles and their skills and abilities'* (I:6PT). Shared ignorance was viewed as being an equalising element in some circumstances, e.g. they were all in the same situation and could build on this for the future.

3. However, lack of experience and confidence also significantly limited the perceived usefulness of the experience and led to negative feelings, '*We need a knowledge base. We were just waffling and being all defensive really, as were the others'* (GI:3N). This defensiveness appeared to be very hard to counterbalance in the time available to work together, and often strengthened negative stereotypes about other professionals.

4. These concerns were also tempered by the occasional individual learning preference rather than a simply a professional need: *'Some people don't mind coming and sharing ideas from an early stage, other people like to ease their way to it gently'* (I:11P). In all cases reference was made to personal confidence and openness to new experiences being important.

5. Another view reinforced the opinion that it was important to establish the links prior to participants coming under too much pressure from course requirements:

'It was definitely best at the outset I think. After a while people started to get busy with essays and decide they wouldn't bother going in the afternoon when it was scheduled' (I:13M). This individual's view was not supported by other medical students who predominantly voted for a later start, when the relevance appeared to be more pronounced. However, most participants did refer to pressure of work competing with shared learning activities.

APPENDIX 20

Participants Solutions to Difficulties in Shared Learning

(half way through data collection process)

Participants weren't necessarily asked directly for solutions to the inherant problems of shared learning. However, the examples of good experiences that had worked for them did clearly identify what the best solutions would be.

- Living and socialising had a part to play: *'Some of our friends are physios' and we lived with them'* (GI:3N). This was particularly important to medical participants in proving that they weren't arrogant: *'In the first year, two of my flat mates were PT's and one was a medic so you used to quiz each other on anatomy when we were first trying to learn it and I thought it really helped'* (I:13M). Other participants refered to this as being a great leveller in developing a good attituide towards working together.

- Working together and sustaining relationships was far more productive than short lived formal events when:

  'They are not people that you are ever going to see again, in an afternoon you can't change someone's perception of something that is that strong, however, you go about it. I think it was a case of getting on with it and hoping that they can change their image of what they think a medic is like' (I:14M).

- Learning together in a joint school had some advantages, such as developing mutual respect about each others' skills and level of knowledge:

  'From a personal experience with physiotherapy and occupational therapy, you get more of an understanding that occupational therapists do learn what you learn, you sort of get an idea that they are almost the

same, although they do different things. You're working towards the same goal, and you've got the same underpinning knowledge' (I:9PT).

- Knowing what other professions' knowledge base as this assisted them to appreciate where everyone fitted into the team and to identify were the expertise could be found.

- However, the best solution from all the participant's point of view was to get together once they all had had clinical experience:

Participants discussed how many of the initial negative experiences had been replaced by real experiences of working together and pooling their skills and knowledge. There was a significant shift in their willingness to work and learn together in the third year of their training.

APPENDIX 21

SHARED LEARNING IN THE WORKPLACE

Summary of Issues

1 Clinical Experience

As might be expected across a number of professional programmes the duration and nature of clinical experinece was broad. Participants indicated that these experiences had been either very good or very bad: *'It varies, sometimes it is brilliant, but some places are rubbish. It definitely veries from ward to ward'* (GI:3N). Responses to the question: 'What was memorable about shared learning in the workplace?, depended on each individual's perception of how the team worked: *'My experiences are still that there's a lot of stereotypes in the workplace,I haven't seen a lot of inter-professional work where there's joint assessment or treatment'* (I:1OT). This was stated mateer of factly, but with a tinge of regret.

One participant infered that: *'If you went from school into the work experience expecting you'd see all these amazing team working people – like in your dreams!'* (I:7PT). Such sarcasm might be a way of coping with this regretful, disappointing experience as well as making a point very strongly. A counterbalance was provided by those with positive experiences:

> *'I worked in a fantastic team.There are things that are specific to them and obviously the individual professions deal with that, but most of the time they're just working closely together.There's no jealously guarded roles or anything like that and the beneficiary is the patient because they had seamless care'* (I:2OT).

A number did appreciate that the type of clinical experience had a significant part to play, for instance, whether the experience was acute or rehabilitation influenced the type of teamwork that could be developed. In such settings participants experiences appeared to support their expectations, that in a community rehab setting or when working with the elderly, good teamwork was to be expected, whereas, in acute trauma, with limited time for rehabilitation, teamwork was not as relevant. Some also

appreciated the reasons for the difficulties experienced by clinical teams: *'I know professionals who've got this insecurity about boundaries. When you have confidence in your professional identity this enables this kind of inter-disciplinary blurred roles'* (I: 6PT), and were willing to accommodate this.

2. Links between Academic and Clinical Learning

Participants had a very clear idea about what they needed to learn in order to function well in the clinical setting. They relished the fact that; *'It's a different environment than sitting behind a desk'* (GI:1P) and agreed that their most productive learning occurred during this time when the focus was on teamwork and patients.

Discussion about clinical work elicited a very positive response from medical participants: *'I know one medic I spoke to said that it is very academic in the first and second year and suddenly it's completely different. The third year is when you start to face the challenge of really working in teams'* (I:12M), a view that was supported by other medical participants:

> *'The best place to learn so far on my degree has been in the hospital because this is where I have learnt a lot of what I know now. So I would suggest that shared learning would probably be best then when you are hands on in a clinical situation which is difficult to co-ordinate between schools or faculties'* (I:14M).

It was recognised that university and workplace needed to work together in order to best prepare them for the job ahead and participants spent time exploring how theory and practice had merged over time.

Participants felt that they needed to understand how they would be expected to function as part of a complex clinical team right from the beginning: *'More attention could be drawn to the fact that you do have to work with other people and you're not just a single person treating people, it's part of a whole magnum of people working together'* (I:6PT). As a result, each professional group had a fascination with what the other professional groups did and wanted to know why they did it. They recognised that the workplace was the best place to learn this and that many of the inequalities in

profile were due to discrepancies in clinical experience. For example, there was a belief that nurses learnt communications skills very quickly because they had early patient contact: *'If the medics don't go out until later then they might not be able to visualise or get into that way. Whereas the nurses should have had a lot of experiences because they start of quite early'* (I:1OT). Whilst agreeing that this gave them an advantage over other professionals, nurses admitted that early ward experience was a stressful time for them. This was mainly due to an acute lack of knowledge and practical skills that made nurses look (and feel) stupid in front of other members of the team. Early clinical experience in this case had been unhelpful, as they were not equipped to integrate theory with practice.

Although most participants felt that they learnt to work together only in the clinical situation, occupational therapy and physiotherapy participants felt that their university experience had added to this: *'As we learn together at university, it does become easier working together within health care'* (I:5OT). Perhaps therapists felt this because of being part of a joint school, where attempts were made to integrate professional groups, whereas other participants were generally less enthusiastic about some of the early university experiences.

Occupational therapy and physiotherapy participants commented on the variable levels of ability to carry out team work across the professions and suggested that increasing the profile in university would likely influence this: *'I think if the same weighting was put on it (team working and role definition) as other things, the importance of that would filter right the way through into the workplace'* (I:5OT). It was not clear whether this related solely to student performance, or whether the qualified work force would also be influenced by a better quality student performance.

3. Client Centred Approach

Participants had a clear concept of the purpose of the clinical team, which was *'to work out the goals for the patients, each member of the team sets up what they are trying to aim for the patients to do in say a week. So they meet again in a weeks time to go through and see how the patient is progressing'* (I:14M). As a patient/client centred approach was the focus of all professional groups it should be

included in shared learning: *'I think everything has to be patient centred. I do not think any one profession should feel they own the patient. I think we should all be working for the benefit of the patient'* (I:2OT).

Having insight into patient lives was considered an essential component of a successful team and a number of participants referred to the need to put themselves in the patient's position in order to: *'See how they would feel if they were the patient, so it puts it into the patient's perspective'* (I:7PT). A student role in supporting patients was another reason why they needed to understand each other's role and contribution: *'Patients can be very scared and we can say we'll ask the GP. The patient who says I have to do this but I do not understand why. You try to explain but can't offer any advice'* (GI:1P). Lack of contact with other professions was considered particularly limiting to their attempts at providing the best service.

Interestingly, there was a strong feeling that patients needed to be central in all shared learning: *'I don't see how you can take the patient out of it* (shared learning*) and still expect it to work'* (I:15M). Using hypothetical cases or giving students tasks that revolved around patients in university-based learning was felt to be essential as support to the work they did with real patients as part of a team. As third year students, they did not appear to be able to separate these two aspects from each other, though working with real patients in the workplace was considered more challenging.

4. Teamwork

As already highlighted, learning to work in a team was crucial if students were to gain access to each profession's contribution to the delivery of good care. Without this knowledge and experience, all healthcare professionals would be working in the dark: *'If somebody's going to see PT or anyone else for that matter and they come back to you. The only evidence we have is anecdotal and that is from the patient. So how can we get that uniform delivery of care?'* (GI:1P). Understandably, participants felt much undermined if this knowledge was lacking for whatever reason:

> *'Because when you go out to work, everyone's got to work together for that patient and if you have people (clinical staff) that haven't got a clue what anyone else is doing, don't know anything about each other, or each others*

jobs, don't work through problems for the patent together, it's just going to be a disaster' (I:7PT).

In addition to a general need for communication amongst professionals, some participants felt that knowledge about profession roles was an intricate element of their work and role:

'Some people say do we really need to have any inter-professional because you should all be able to work together anyway. But that does not really quite work because unless you know what other people are doing you cannot really actually carry out your role' (I:14M).

Another medical participant added to this explanation of interdependency:

'At the end of the day, I suppose the idea is that if you're a doctor to be able to make an appropriate referral and if you're a physiotherapist or an occupational therapist with a referral, to be able to understand what it actually means and what therefore you're going to be able to do for that patient' (I:13M).

All participants were convinced that students needed to work together early on in their training in order to work on this interdependency. Firstly, to realise that whilst each profession was important they could not function alone. Secondly, to learn how to handle this interdependency confidently, without feeling undermined or loosing their professional identity. Finally, how to pull this knowledge together and to communicate with each other so that the most appropriate professional input and the best package of care be given to patients.

4.1 Good Teamwork

Most participants had observed good teamwork during their clinical experience and discussed these enthusiastically. Good teamwork had two main ingredients. The first was good formal communication between members, which resulted in a quality experience for staff and patients:

> *'We had a case conference so that everyone gets a chance to air thier views. One of the doctors said you have to trust the people in the group and if you trust them and believe them then you can count on what they are saying. So the patients are getting quality care from every member of the team'* (I:14M).

Trust and respect, plus a network of formal communication networks appeared to be preferred by participants: *'We have weekly team meetings which are multi-disciplinary and then each patient also has a collaborative care meeting and all the team gets together, so continually there's input from everybody'* (I:7PT). This participant had worked in healthcare as an assistant physiotherapist prior to training and had a very clear vision of the team she most preferred to work in and why. Other participants were a little less confident, but just as clear about the advantages of good teamwork and described how this network of meetings meant that nothing was missed: *'If you miss something, then maybe somebody else would be able to come in and it's all better for the patient in the long run'* (I:11P).

The second ingredient of good teamwork was informal communication between team members:

> *'Once you actually speak to that other healthcare professionals you can explain so much more than you can if you write a letter because you have to be so careful when you write a letter. I'd really like to be able to ring someone up and say I want to refer this patient to you because I want an opinion from you'* (I:8P).

Communication between staff helped the smooth running of treatment: *'On the wards it's so easy to make life easier by co-ordinating treatment with the other professionals'* (I:4OT). Participants were concerned with providing a seamless service where one profession appreciated the need for continuity in treatment and could be trusted to reinforce and build on the work of another: *'It's not just the odd 20 minutes or however long you spend with the person that's important it's how they (the nurses) carry that over'* (I:6PT). This network of informal and formal communication was deemed essential, as many clinical situations were very complex.

4.2 Poor Teamwork

Lecturers in an academic setting are sometimes accused (by students) of theorising about the workplace in an unrealistic way. When looking at teamwork theoretically it is easy to paint a glowing picture that is very different from the rigours of everyday practice. Some participants referred to this in the discussion: *'It could be quite frustrating if you know what the ideal is and what it should be and then you go out in practice and it's not so good'* (I:4OT). The 'could' be frustrating was reiterated more concretely by others, who quite clearly felt that it was most definitely frustrating and uncomfortable: *'It's not a nice working atmosphere for a start and you don't' co-ordinate everything as well'* (I:4OT).

In any clinical area, the reality was, *'It's often that there just hasn't been enough staff to make it possible'* (I:14M). On the other hand, the pressure of work was just too great to devote sufficient time to developing and sustaining the necessary networks: *'We've got our clinic and we see an horrific number of patients in a day'* (I:8P). These aspects were not put forward as excuses, but simply as influential factors.

Clinical specialisation was mentioned as a factor that sometimes resulted in the patients needs being obscured, mainly because they were seen as a statistic rather than as a whole person:

> *'Because we all specialise in a part of patient care and it could be very easy to kind of just be blinkered in to our own speciality and not realise the patient is more that just our one bit. Some patients have very complicated histories and it is not only us, it's also people like the social workers'* (I:10P).

Occasionally reference was made to the fact that acute work promoted different working practices than longer-term rehabilitation settings. This was perceived by some professions, particularly those who predominantly specialised in community rehabilitation, as being part of the reason for limited teamwork:

'I think in a lot of professions you start off working in a hospital because that's where you do a fair bit of your training, not so much us, but a lot of them. I think you are more likely to realise what patient's lives are like and if you can help properly once they go into the community, because that's where they live' (I:10P).

Most participants were aware of these limitations and some had preferences for clinical specialities despite the limitations on teamwork. This was usually because they believed that the culture and environment best suited their skills; *'By the first day you have your own culture that you bring with you haven't you?'* (GI:2M), and they fully expected to take up a job in that area.

Working in any clinical team, whether effective or poor, was considered to be good experience by participants: *'That's what we're going to have to work with when we're no longer cushioned by being a student'* (GI:1P), They were optimistic that they could influence and improve a poor situation in small ways: *'We're all dependent on each other and a profession is only going to grow if they get a greater rapport with the others. Plus the fact that we are all meant to be working for patients'* (I:11Pod). There was a hope that the experience of inter-professional groups as a student would act as good preparation for when they managed a team role as a qualified practitioner in the future.

5. Overlaps in Practice

Having achieved many weeks of clinical work participants they had many thoughts about overlaps in practice that they had experienced along the way. Overlapping roles were seen as part of everyday working practice and participants believed that health care education would adapt to this eventuality:

'Each professional seems to claim nowadays that they have this holistic view of patients. We all know what the medical model is and most of us I think are now being trained to recognise that there is a social model as well and that the two should actually be blended together. So there's

overlap in the way we are trained to think, though some are entrenched in the medical model' (I:2OT).

This need had been precipitated by the increasing age of the population: *'Especially as some of our patients are on the older side and they need more things, if we know more of what are available then you can direct them. And then they would think you are taking care of the whole person and not just their feet or whatever'* (GI:1P). Some realistic doubts were expressed about this situation as shown by a participant who was clearly weighing up the pros and cons of shared versus specific expertise. She gradually came to terms with the fine balancing act that was required: *'I think it's good to have overlap..... but if it merges too much you cannot justify the separate professionals necessarily I do not think..... I think overlap helps you to work better together or some shared knowledge. But with some separate skills to define yourself as a professional'* (I:4OT).

Another participant had thought about this and was confident in the similarities and differences: *'There's overlap between what doctors and nurses do and how they approach different situations, but there's quite a contrast as well'* (I:7PT). Generally they were of the opinion that shared learning provided opportunity to gain information about each other's professional practice and: *'Show the degree of cross over that there is'* (I:11P) simply because: *'If we don't' know what they do and when their knowledge might be of help we can't really make use of those services can we?'* (I:15M). This participant believed that his future role and working practice depended on him gaining this information.

Many examples of overlaps in working practice were given, including and example related to accident and emergency. This example provided clear evidence of the necessity of overlap as a life saving practice as:

'There is very little division and everybody pitched in. You will sometimes have a nurse led team doing resuscitation, sometimes doctor led, and it is just whoever's fit to do the job at the time, who is the most experienced. It's been very much working together, no dividing lines' (I:12M).

The theme of *'working together rather than against each other became clear once you have a little bit of clinical experience. You realise that you can't do it alone and I think*

that's when you realise that there are others who are there to help you' (I:10P), emerged during all the interviews with participants. The fact that professions did help each other was both a revelation and a relief when they were describing early work. This had allowed them to relax and to integrate into a range of teams successfully. A key to this success was that: *'It's also knowing your own limitations and knowing when it's your place to stop and for someone else to intervene. The important thing is valuing what they do and that they're part of it as well'* (I:6PT). Participants felt able to do this in teams that functioned well and where they were respected, but were more guarded in less effective ones.

A spin off from this was that: *'I think what you might find is that sometimes if you've got to justify what you're doing, you actually get really clear about what your role is'* (I:6PT). Whilst this contains an element of truth, another participant put forward the other end of the continuum very articulately: *'that might be me wanting to justify to somebody why I do things and I guess if I'm happy with what I'm doing, they don't actually have to know the ins and outs of what I'm doing'* (I:5OT). She questioned whether it was good use of precious time and energy to be constantly justifying your own existence in busy teams with low staffing levels and limited time. After initially establishing her role within a team she felt there was no longer any need to keep on doing it.

There did seem to be great pressure to justify professional roles in the minds of other participants. Perhaps participants were more sensitive to the potential of overlapping roles and the needed to establish a role for themselves because as trainees they were regularly moving to new teams with different expectations and rules.

6. Working Relationships

The relationship between doctors and nurses demonstrates some of the complex myths and misunderstanding that can develop. Nurse participants were required to work closely with a number of highly experienced doctors: *'I can remember my first ward, nurses were a little bit scared of doctors. But my recent wards everyone gets on really well and they are happy to ask questions and doctors ask nurses for advice'* (GI:3N).

This feeling of interdependency is reciprocated by medical students who were aware that:

> *'When you're a junior doctor and you don't know something and there isn't any other doctors around, you need to ask the nurse because they're going to know more about the patient than you are, so why not ask the third years what it's all about'* (I:13M).

Nurse and medical participants thought that this was good preparation for future work. However, these relationships gradually became complex and rivalry entered the scenario as the following comment suggests: *'I did more for the patient than you did therefore I deserve better marks. It just gets silly'* (GI:3N). This is worsened by attitudes amongst some staff:

> *'Sometimes sisters say thing behind the doctor's back and it's unhelpful. You try to keep your own mind, but then everyone says its hard not to be influenced by things like that because you tend to look up to sisters as a student nurse and you think that they must know what they are talking about. So you believe them'* (GI:3N).

Some nurse found that being pressurised by experienced staff, such as the ward sister, to comply with stereotypes of doctors being arrogant and patronising, was problematic. At the same time medical participants perceived this as the nurses being unkind which knocked their confidence and resulted in defensiveness. Nurses then become impatient, as was the case with one nurse who questioned a medical student about why they didn't take a patient to the toilet:

> *'It's ridiculous, if you were walking down a corridor with a patient and they collapse on you what would you do? And she just turned around and said well, we never walk a patient, we always get a nurse'* (GI:3N).

The nursing group enjoyed this story and agreed that this was a regular occurrence. Viewed from a medical participant's point of view a similar story is just as convincing, as can be seen from another scenario below:

> *'A surgical patient just had an appendix taken out. She really needed to get up and go to the toilet. I said OK I'll just go and get a nurse, because I thought I don't know a thing about this patient and I'm sure a nurse will be able to help more that I can. The nurses just looked at me and said 'you're the medical student, you do something'. Maybe they were just not being helpful or maybe they don't genuinely know what to do. I just expected that because they are qualified that they would know what to do when a patient was in pain'* (I:12M).

This participant learnt the hard way that nurses might not be helpful, but also that they weren't as skilled as expected. Goodwill was extinguished and replaced by a determination not to fall into that trap again. Meanwhile the nurses complained about not being taken seriously, that their expertise was demeaned by doctors on a daily basis without realising the true motive behind a request for help. Both professions were aware that in the scenario above, the patient was the person who suffered the most as they are waiting for assistance. The misinterpretation of information is a good example of problems experienced by all members of the clinical team.

Participants were aware that the teams face difficult issues on a regular basis and were keen to find ways of managing situations in order to:

> *'Stop the 'them and us' thing, and that segregation between groups, that's a nursing perspective and that's obviously the best and the physiotherapist saying 'Ah yes', but that's a physiotherapy perspective and that's even better. It stops all that and it should make is more of a group, team effort'* (GI:3N).

Despite these negative experience, participants refused to be daunted by it: *'In my experience I cannot see the problem between doctors and nurses, everyone seems to get on fine'* (G:15M). This participant either, genuinely had not experienced any difficulties, or preferred to ignore them. She had spent her time observing and learning what good teams do and was keen to say:

'You would see patients who the occupational therapist had just taken off to do their activities of daily living and how the physiotherapists were waiting to come and see them. You'd see the consultants talking to the physiotherapist about how the patient was doing, that sort of thing' (I:13M).

In his opinion this is how ideally a team should work, a belief that was shared by the majority of participants.

7. Dealing with Resistance to Change

Participants believed in their own power to be self-directed and the need to support each other when faced with the reality of the work place:

'A lot of clinicians don't like to move and they can become quite stagnant possibly in what they are doing. I think they just feel safe with what they are doing and the issue of change might be difficult. I don't think we (the students) can change it out there, I think the clinicians have to work together' (I:6PT).

Participants simply choose to ignore the bad experience and found a way around any obstacles wherever this was possible. A significant number of participants gave examples of how they by-passed the resistant staff member, and opted to work with those with a more flexible nature and approach:

'I had no qualms about asking a student nurse to help me transfer someone because I know that they would be interested in learning and gaining the knowledge from it, whereas the staff nurses, I felt that they were just going to do what they did anyway. I think it's quite difficult because you're told at college that you have to communicate with all members of the team and with some you can tell them as much as you want, 'til you are blue in the face, and they still don't change their practice, or do what you ask, or communicate back' (I:7PT).

With these types of experiences it seems hardly surprising that participants promoted the involvement of students in determining what experience is relevant. The concept of how teams by-passed a weak or resistant member was described: *'The rest of the team pull together because say an occupational therapist or a nurse is not pulling their weight, then the rest of the team gel, sort of common enemy, but I think the stigma sticks'* (I:12M). This suggests that those people who did not work effectively as part of the team were clearly responsible for determining how their profession was viewed as a whole, unless of course another person from the same profession functioned well and changed the other team members mind.

Remarkably resilient in the face of great difficulties, participants shared how they managed to keep their own equilibrium despite obstacles placed in their way:

> *'I was in intensive care where the people all worked together because you were with the same patients and the same people. I really got on well with the nurses. But then the consultants were coming round and they were really negative and didn't want to listen to our views even though we'd been with somebody all day. They just came along for 10 minutes every day and as students you are nervous about saying anything, but they'd just knock it down. I think that's difficult ... I'd probably lost respect for them because they didn't take my opinion into consideration' (I:16PT).*

This participant was cross at this situation but not over awed by it. She appreciated that this did not reflect badly on her personally. She was not left questioning her own abilities or that her interpretation of good teamwork was suspect. She had a finer appreciation that respect for each other's professionalism had to be earned as well as given.

When asked how influential negative experiences of poor teamwork or resistance to change could be, the response was interesting. Reference was made to members of the professions who appeared to have gained a reputation with students for being poor communicators, such as consultants, orthopaedic surgeons or surgeons generally:

> *'I don't think anyone's influenced. I think people just laugh at them because they are alone because they only care about themselves. If you want an operation you'd probably go to them because you know they'd be very good, but you wouldn't go for quality of care as in the person'* (I:14M).

These two previous examples perhaps demonstrate that despite resistance from teams participants were able to hold positive opinions of their own.