



Evaluating student learning in an interprofessional curriculum: the relevance of pre-qualifying interprofessional education for future professional practice

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Executive summary

The focus of this study was qualified health and social care professionals' views about their experience of pre-qualifying interprofessional education (IPE). Adult nurses, midwives, physiotherapists, and social workers were interviewed. Our main findings were:

- Most (but not all) participants had found IPE in the academic environment useful. Many had only really started to appreciate its worth once they experienced its relevance to their own professional practice.
- Participants' experiences of interprofessional learning and working on placement had varied considerably.
- Mentors' support and encouragement for students' engagement in interprofessional working was considered invaluable.
- When compared with data from studies in which students were interviewed about the same pre-qualifying IPE initiative, professionals and students expressed very similar views.
- Participants who had experienced pre-qualifying IPE demonstrated a more sophisticated understanding of relevant issues and contributing factors, and appeared to be more aware of the impact of poor interprofessional working on care delivery, than participants without such experience.
- Suggestions for enhancing pre-qualifying IPE included broadening the
 professional mix of IPE groups and soliciting input from professionals, service
 users and carers in the academic environment; and learning with students
 from different professions, engaging in interprofessional activities, shadowing
 practitioners from other professions and including specific interprofessional
 competencies in learning outcomes while on placement.

All the participants were identified and recruited to this qualitative study through their participation in previous research concerning IPE in the School of Health and Social Care, University of the West of England, Bristol. Between July and December 2006, twenty-nine individuals took part in semi-structured in-depth interviews about their experiences of pre-qualifying IPE and of interprofessional working as a qualified health or social care professional. Resulting data were examined for emerging themes. The study was approved by a University Research Ethics Sub-committee, and by an NHS Research Ethics Committee. The project was funded by the Higher Education Academy Health Sciences and Practice Subject Centre.

1. Introduction

Over the last ten years, there has been an increasing emphasis on providing interprofessional learning opportunities for health and social care students in higher education (HE) institutions in the United Kingdom (UK), in response to a perceived need to improve interprofessional collaboration for the benefit of service users (DH 1994, DH 1999, Miller et al 1999, DH 2001, DH 2002a, Barr et al 2005). However, the effectiveness of pre-qualifying interprofessional education (IPE) in terms of its impact on the delivery of care still lacks a strong evidence base (Glen 2004, Zwarenstein et al 2005). A number of projects have reported on student experience of IPE at pre-qualifying level: however, very few have followed students through to practice to explore their perceptions of their professional education after they have qualified (Philippon et al 2005). This report describes a study undertaken to investigate professionals' opinions about their personal experience of pre-qualifying IPE. A particular focus of the study has been to discover professionals' views on how the incorporation of IPE into their pre-qualifying education impacted on their practice.

Background

The study was designed to build on an evaluation of a pre-qualifying interprofessional (IP) curriculum in the School of Health and Social Care¹ at the University of the West of England (UWE), Bristol. UWE, Bristol has one of the largest schools in the UK specialising in learning and research for health and social care practice, and educates many of the professions supported by the HE Academy Subject Centre for Health Sciences and Practice: adult nursing, children's nursing, diagnostic imaging, learning disabilities nursing, mental health nursing, midwifery, occupational therapy, physiotherapy, radiotherapy and social work. In 2000 a pre-qualifying interprofessional curriculum was introduced for all students enrolled on these ten professional programmes. A feature of the curriculum is a compulsory formally-assessed IP module in each year of study in which students from different professional disciplines work together in small groups using enquiry-based learning (EBL)² (Barrett et al 2003). Each group is assigned a facilitator from academic staff.

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¹ Formerly the Faculty of Health and Social Care.

² It should be noted that EBL is frequently used in IPE initiatives (Freeth et al 2005). Students in small groups are commonly presented with a practice-related scenario, and are then expected to identify, research and discuss relevant issues.

The level 3 module, while adhering to this format, is delivered on-line (Hughes et al 2004). In 2003, in response to student feedback and logistical demands, the level 2 module was changed to a two-day conference format, whose schedule included small group activity as outlined above. In September 2005, third year medical students from the University of Bristol were given the option of attending the level 2 module for the first time. From September 2006, attendance at the level 2 module became compulsory for these students. In September 2007, they were required to complete the same formal assessment for this module as the students from UWE, Bristol do.

In 2001 a multi-method research programme began at UWE, Bristol to evaluate the IP curriculum (Miers et al 2005a). The programme comprised five interlinked studies, three of which were funded by the Avon, Gloucestershire and Wiltshire Workforce Development Confederation. These included a longitudinal quantitative questionnaire-based study concerning individuals' attitudes to IP learning and working (Miers et al 2006, Pollard et al 2004, 2005a, 2006a), which included comparison with individuals who had not experienced IPE. Two qualitative studies explored the student experience in both academic and placement settings (Clarke et al 2007, Miers et al 2005b, 2007, Pollard, forthcoming, Pollard et al 2005b, 2007). This programme was one of the first major evaluations of IPE conducted in the UK, and included longitudinal studies with lengthy follow-up periods, as recommended by Freeth et al (2002) and Humphris & Hean (2004).

Key findings from the programme included the following:

- Results from the questionnaire study indicated that, both at qualification and
 after nine months in professional practice, the views of individuals on the IP
 curriculum were more positive than those of individuals on the previous
 uniprofessional (UP) curricula with regard to their own interprofessional
 relationships (Pollard et al 2006a, Miers et al 2006). These findings applied
 particularly to adult nurses, physiotherapists and midwives.
- Findings from the qualitative studies indicated that exposure to IPE at prequalifying level increased students' awareness of interprofessional issues, and that this had an influence on how they approached their learning and experience in practice settings (Clarke et al 2007, Miers et al 2005b, 2007).
- There appeared to be considerable variability in student experience of interprofessional learning and working in placement settings. Data

suggested that their experience depended both on their chosen profession and on the nature of the environment in which they were placed (Pollard, forthcoming, Pollard et al 2007).

All these findings raised questions about the influence of IPE on practice. Nationally, the widespread introduction of interprofessional opportunities for health and social care professionals has led to a deepening understanding of capabilities underpinning interprofessional practice. The Combined Universities Interprofessional Learning Unit (CUILU) developed the Interprofessional Capability Framework (Walsh et al 2005), although its authors acknowledged that 'the substance of what students require to learn in order to become interprofessional workers is yet to be fully articulated' (p.236).

Some of the capabilities identified relate to communication in interprofessional teams and others relate to collaborative activity such as sharing information. Reynolds and Crookenden (2003) found an association between high teamwork self-efficacy at the end of an IPE module and a belief among students that IPE made a strong contribution to their skills for working collaboratively with professionals from other disciplines. Analysis of practice data from the UWE, Bristol questionnaire study revealed significant positive correlations between professionals' self-assessment of their communication and teamworking skills, their views of interprofessional interaction, and their opinions of their own professional relationships (Miers et al 2006).

When discussing the CAIPE (2001) principles for effective IPE, Barr et al (2005, p.38) highlighted three which 'stress the need for interprofessional education to reinforce the professions separately as well as corporately, so that each contributes more effectively to the whole'. In particular, Barr et al (2005) recommend that IPE should:

- increase understanding of uniprofessional roles and interprofessional complementarity in order to enhance practice within professions;
- teach students to value every profession's distinctive role in order to engender respect for the integrity and contribution of each profession;
- foster mutual interprofessional support and the ability to recognise realistic and appropriate working patterns and obligations in order to increase professional satisfaction.

The authors of this report considered that more extensive exploration of qualified practitioners' perceptions was required to understand what effect IPE might have on their orientation to interprofessional working in terms of these principles and capabilities, and what effect this might have on practice. By summer 2005, most participants in the Faculty's research programme were practising as qualified health or social care professionals. In December 2005, the HE Academy Health Sciences and Practice Subject Centre agreed to fund a two-year in-depth investigation of qualified practitioners' views concerning their education, in order to illuminate pertinent issues relating to the relevance of IPE to practice.

Aims and objectives

The aim of the study was to evaluate student learning from a pre-qualifying IP curriculum for health and social care students in relation to preparation for interprofessional collaborative practice.

Objectives

- To explore how health and social care professionals evaluate their professional education in terms of being equipped to work effectively in multiand interprofessional environments, including reference to identified capabilities and principles (Barr et al 2005, Walsh et al 2005).
- To identify specific educational processes which health and social care professionals view as having been useful to them in their development as practitioners working in multi- and interprofessional teams and environments.
- To identify specific educational processes which health and social care
 professionals feel would have been beneficial to them in their development as
 practitioners working in multi- and interprofessional teams and environments.
- To discover what, if any, links health and social care professionals perceive between their pre-qualification opportunities for IP learning and working and the quality of the care that they deliver as qualified practitioners.
- To review the interprofessional capability framework (Walsh et al 2005) and recommendations for IPE (Barr et al 2005) in light of findings and, if necessary, suggest possible amendments.

2. Methods

In order to obtain in-depth information about professionals' views concerning IPE, a qualitative approach was chosen for the study (Bryman 2001). Data were collected through semi-structured interviews.

Ethical approval

Ethical approval was gained from an NHS Research Ethics Committee and from the Faculty Research Ethics Sub-Committee. The study was also approved by the Research and Governance Departments of seven acute and six primary care NHS Trusts.

Sample

Purposive quota sampling aimed to recruit forty professionals who were in practice at the time of data collection (Bryman 2001). Suitable candidates for recruitment were identified from a database of former UWE, Bristol students who had participated in the IP curriculum evaluation and who had indicated that they were willing to continue to participate in further research. Men and participants from minority ethnic groupings were particularly targeted for inclusion in the sample. Recruitment was focused within the South West of England, in order to maximise resources.

Adult nurses, physiotherapists and midwives were included in the study because of their significance in the findings of the quantitative study (Miers et al 2006, Pollard et al 2006a). In a service delivery climate where the integration between health and social care is of key importance (Miller 2004), it was felt that including social work professionals in the research would enhance the relevance of findings concerning interprofessional working between different agencies (the social work phase of the study was funded by UWE, Bristol). The sample was planned to comprise ten participants from each professional group, of whom five would have been on previous UP curricula at UWE, Bristol, and five on the current IP curriculum.

Targeted individuals were sent letters inviting them to take part in the study, along with information sheets and consent forms. It proved difficult to recruit professionals other than adult nurses from the cohort who had been on the UP curriculum. This was also the case with midwives and physiotherapists from the IP curriculum. Twenty-nine individuals actually participated in the study.

Instrument

Although the researchers' main aim was to explore the participants' perception of the preparation for interprofessional working that they had received during their prequalifying education, most participants were also keen to talk about collaborative working in their current practice settings. Interviews therefore also incorporated this focus, as it was felt that it added additional insights to the issues being explored. Topics for exploration during interview included:

- The usefulness of the curriculum the IP modules in the IP curriculum, the
 emphasis on interprofessional issues in UP modules or in the UP curricula,
 the emphasis on and experience of interprofessional issues on placement,
 role models for interprofessional working in academic and practice
 environments, the suitability of differing teaching modes.
- The effect of the participants' professional education on their ability to work in a multi- or interprofessional environment.
- Views on capabilities necessary for multi- and interprofessional collaborative working.
- The extent to which their ability to work in a multi- or interprofessional environment influenced their practice.
- The extent to which their ability to work in a multi- or interprofessional environment impacted on the care delivered to service users.
- Suggestions for learning opportunities at pre-qualifying level which would support collaborative practice.

Data collection and analysis

Individual interviews were conducted face to face in settings chosen by the participants. Chosen settings included participants' workplaces and homes, as well as the UWE, Bristol campus. Where participants were unable to meet with researchers face to face, either due to distance or time constraints, interviews were conducted by telephone. Interview transcripts were sent to participants for verification. Data were analysed thematically (Burnard 1991), using the qualitative analysis software package QSR Nvivo7. A particular focus of analysis was to examine findings alongside those from the qualitative UWE, Bristol student studies. Participants received a summary of the findings.

3. Findings

Twenty-three face to face and six telephone interviews were conducted with participants representing the four selected professions and the two educational cohorts (Table 1).

Table 1. Participants by profession and cohort.

Profession	Interprofessional curriculum	Uniprofessional curriculum
Adult nursing	6	7 (1 telephone)
Midwifery	3 (1 telephone)	1
Physiotherapy	4 (3 telephone)	1 (1 telephone)
Social work	6	1
<u>Total</u>	19	10

Despite efforts to recruit men and members of ethnic minorities, the sample mostly comprised white British females (Table 2). This reflected the wider demographic composition of both non-medical health and social care professions and the South West of England (Crown Copyright 2001, Equal Opportunities Commission 2006, Nursing and Midwifery Council 2007). Twenty-four participants had entered UWE, Bristol as mature students (> 21 years when they started their professional education).

Table 2. Participants by gender and ethnicity

Ethnicity	Female	Male
White British	26	2
Other	1	0
Total	27	2

Participants were working in a range of practice settings. These included both acute and community settings, and both traditional and new working structures (Table 3).

Table 3. Participants' professions and practice settings

Profession	Acute settings	Community settings
	10 nurses:	3 nurses:
	Stroke unit;	Community nursing;
	Wards - surgical, gastro-	Intermediate care team.
Adult nursing	intestinal, cardiology,	
	respiratory;	
	Accident and emergency;	
	Intensive care unit.	
	4 midwives:	
Midwifem	Maternity units – rotation	
Midwifery	between delivery suite and	
	wards (ante- and post-natal)	
	4 physiotherapists:	2 physiotherapists:
	Respiratory ward;	Industry - large
	Rehabilitation unit (joint	organisations;
Dhyaiatharany	Social Services and NHS);	Community and ward
Physiotherapy	Outpatients service in small	rotation.
	community hospital;	
	Community and ward	
	rotation.	
	2 social workers:	5 social workers:
Social work	Wards – rehabilitation, renal.	Child care team;
		Care management team;
		Integrated team for adults
		with disabilities;
		Service for dependent
		substance abusers;
		Residential children's
		home

Each participant was assigned a code which includes a unique number as well as reference to both their profession and their educational route:

- IP educated on the IP curriculum;
- UP educated on a UP curriculum;
- AN adult nurse
- MW midwife
- PH physiotherapist
- SW social worker.

For example, IP-PH-04 refers to the fourth physiotherapist interviewee from the interprofessional cohort.

In the next three chapters, we present our findings from the study.

3.1. Participants' pre-qualifying educational experiences

In this chapter, study findings are presented concerning participants' pre-qualifying educational experiences in the academic environment and in placement settings, as well as participants' preparation for interprofessional working. This section concludes with a comparison between key findings from this study and from earlier qualitative studies in UWE, Bristol's interprofessional curriculum evaluation (Clarke et al 2007, Miers et al 2005b, 2007, Pollard, forthcoming, Pollard et al 2007).

Experiences in the academic environment

Overall view of the IP modules

The experiences of the participants obviously differed depending on whether or not they had experience of the IP curriculum. Of the nineteen who had, nine held mixed views about the IP modules, in that there were elements that they enjoyed or found useful as well as elements that they disliked or found irrelevant:

... the best way of learning, I think, is observing it in practice and like watching what you learned out on placement I found was more relevant than what we were learning in the classroom... But it's good fun and it's nice to have lessons with other... professions...

IP-MW-01

I think Year 1 that was quite valuable because I hadn't really got a medical/health background so... just knowing the different roles of people in the team... just initially... and introducing our roles in the scenarios... That was quite useful...I wouldn't say [IP2] was as useful as the first year because a lot of us had been out on placement and already worked with members of the multi-disciplinary team and... at that stage the NHS was already geared towards multi-disciplinary working so that was already in our mindset... its just part of how it is... And inter-professional just from then on seemed like it was something we had to do really... I wouldn't really say I got a lot from it...

IP-PH-04 (male)

Five practitioners were negative about their educational experience overall. One reason given was that, as students, they had not known enough about their own roles to be of help to one another:

I have to be completely honest.... I think its lip-service, really. You know... if you've got trainee social workers, trainee nurses, midwives... whatever... they don't know what their role actually encompasses unless they've been doing

that job to start with... So they come into the inter-professional module... 'oh, yes, we're going to do this and yes, we'll do this'... but actually if you don't know what the job's going to be and you don't know what the boundaries within... and the remits within your own role... how can you possibly...? It's a bit like playing dressing up stuff. It isn't real. . . IP-SW-06

A physiotherapist thought that the module had actually created professional stereotypes and divides:

I think that for me doing those modules actually put stereotypes there that I might not necessarily have developed myself and certainly they made me a lot more cautious of certain professions when I went out on placement... because of my experiences learning alongside them.

IP-PH-01

However, five professionals were positive about their experience overall. They enjoyed engaging with people with a range of opinions, and learning about other professionals' roles and team working:

I enjoyed [the IP modules], I love discussion and I love debate, because you learn so much from that don't you? Other people's opinions. sometimes you don't appreciate them and then you have to question yourself and think why don't I appreciate that, that's a valid point that person has just made, who do you think you are? I always question myself and I was always a bit sort of the gobby one that used to speak up quite a lot [laughs]! IP-AN-06

I found that really useful, the inter-professional module, because it's about roles and the development of teams and things like that and what your part within that is ... that is the nub of it and certainly for somebody who has no experience in that area. It needs to be there... [I: So you felt that that actual module was a useful way to...?] Oh absolutely, definitely... Because you learn so much from each other as well.

IP-SW-04

Facilitation

Six participants recounted positive examples of facilitation, including when facilitators helped to initiate or manage discussions and when they used their skill to encourage fair and equal participation:

... I thought he was really good and sometimes he was quite directive because we did struggle with a couple of things ... he let us go on but he was there and he guided us and I thought that was good.

IP-SW-02

... some people are more outspoken than others and sometimes I think the facilitators worked quite well because they'd draw people in who were... sort of more quiet than others and stop people taking over completely because obviously different personalities come through as well, don't they? IP-MW-01

One professional recounted negative examples of facilitation whereby facilitators were vague or just referred students to the module handbook:

She didn't have a clue, really... it was all really, really, fluffy... whenever anyone put a question up it was always like... "Refer to your handbook"... well clearly I'd referred to the handbook and I didn't know the answer so... "Could you give me a hand?"

IP-PH-01

Two professionals felt that their facilitators should have got more involved in group discussions and activities, whereas another felt that they were right to take more of a back seat role:

... it didn't feel like it was being facilitated quite as much because there were a few issues about clinical governance and people weren't quite understanding strictly what it was ... the facilitator could have stepped in and said 'Actually this is, you know, factually, this is what clinic governance is ...maybe you should have another look at it or whatever'. But that did go on for quite a while.

IP-AN-02

... they tended to sort of take a back seat role really, because I think the aim of it was to try and get us to work together more than stand at the front and teach you about something. But I think that's the best way to do it, really, for them to take more of a back seat role and let everybody...find out about things and teach themselves...

IP-MW-01

Generally professionals felt that is was necessary to have a facilitator in the groups. Only one professional, who had had a negative experience of facilitation, felt that they weren't really necessary:

... generally I felt the facilitators didn't do much... which I suppose is fair, because they're not really meant to... unless they need to... and were a bit pointless.

IP-PH-01

Mode of delivery

Three professionals said that they had preferred the level 3 online module to the earlier face to face modules:

... the third year I remember being quite good because a lot of that was done interactively on the web... and that was a lot better, I think, and there was actually more working together as teams... I thought the third year was more relevant, really, yes.

IP-MW-02

An adult nurse, however, found the online module isolating and also commented on the fact that it is not a method of communication she uses in practice:

I didn't like IP3... Only because it was very isolating and it's not the way that we would liaise... although we do liaise quite a lot now, we don't liaise via computer, it's all telephone and face-to-face.

IP-AN-04

Although they went on to successfully complete the module, and in some cases develop their IT skills, seven professionals remained unconvinced by the online approach. An adult nurse suggested the use of a combination of online and face-to-face contact during the module:

... I know its important that we do communicate across the computer, but I still think it doesn't beat face to face, I think it should have been half and not <u>all</u> computer... I think it should have been introduced but not like the whole module.

IP-AN-05

A couple of participants felt that the online module actually served to highlight differences between professions in terms of written communication and the standard of work produced:

... in terms of how I felt that developed inter-professional... it probably had in some ways more of a negative effect, which sounds awful, but in terms of the way that each different profession probably writes information down and their sort of professional written communication... I think that module really

demonstrated the sort of differences in the way that different professions actually write things. Which actually, I suppose, nowadays in notes and things you can see the difference when someone writes the case report... whether it be a nurse... whether it be a physio... or whether it would be the medical profession. You can see that difference. So in terms of inter-professional working I didn't feel it developed me in terms of... you know... my ability to work with the other professions. It just really showed the differences in written communication.

Three professionals appreciated the flexibility of the online approach:

That was good because you could kind of participate when you could... if you didn't have a lot of stuff going on you could join in when you felt... IP-AN-03

I found the online one easier as far as I could fit it more easily around placement.

IP-MW-03

However, one participant had found accessing the module difficult whilst on placement as she didn't have a home computer:

I particularly found that difficult, actually, because I didn't have a computer at home so it was very reliant on me... being out on placement, having to go into uni after work to use the computer... I found that quite stressful, actually.

IP-PH-01

There were differing views as to whether more discussion took place in the face-to-face or online groups. One adult nurse thought that more discussion had occurred in her online group, whereas two others felt that the face-to-face module discussions were of greater value:

It was... not so nice because you didn't have each other around you... you couldn't have the debates as such... I would rather have a group discussion, I would rather have a planned group, I think you get more from it, because you've got the eye contact, you've got the body language and it's so important.

IP-AN-06

Another adult nurse thought that the online discussion seemed more confrontational than the face-to-face discussions. She thought that this could be due to the fact that you couldn't hear people's tone of voice or see their facial expressions:

... there was still the discussion there... I don't know whether, because it wasn't face to face, people didn't hold back as much because it seemed a bit more confrontational on-line as well, but then you can't see facial expressions, you can't hear the change in the voice you just read the text that they've put and sometimes it can be misinterpreted, but it did seem a bit more confrontational.

IP-AN-02

Similarly a physiotherapist who had had a negative experience in the face to face groups, found the online level 3 module particularly difficult as she was worried about how her messages/ideas would be interpreted/received:

I'm very much a person that likes to be face to face anyway and I found it quite hard... I found myself getting into a bit of a flap, really thinking: "Oh gosh, they're going to think this and that, and actually all I want to say is this...".

IP-PH-01

Professional mix in the IP module groups

Although most participants were satisfied with the range of professions represented in their IP module groups, twelve went on to express a desire for a wider professional mix. The absence of the medical profession attracted the most comments, with nine practitioners expressing a desire for doctors to be included:

... it would have been nice to get the doctors involved... I think everybody else was there, it was just the doctors...

IP-AN-05

Student learning from the IP modules

Nine participants were positive about the EBL approach adopted during the IP modules:

... it was successful. It was a good way of learning. IP-AN-02

Yes, that was good, it was good because we got enough information to find out what we should be doing and then go off and do it . . .yes, I enjoyed that.

IP-MW-03

Several felt that this was good preparation both for the rest of their course and also once in qualified practice:

I think it was good because it all helps you... this job is... you've got to look for stuff and you've got to... I mean, you can't be lazy you've got to get people to do stuff. I thought it was alright, I like looking up on the computer; I enjoyed doing it actually...

IP-AN-05

I thought that was alright because you pretty much do that with everything in your degree, don't you? You have to read up about things... and even now it's an evidence-based job so you have to read up about stuff anyway.

IP-MW-01

... physiotherapy as a curriculum is very much self-directed study... and actually for your continuing professional development... we're very responsible for our own learning and development so I think it was great to start off in that way really, just to get us into the frame of mind.

IP-PH-01

However, two participants felt that they had never really understood the EBL approach:

I never got my head around enquiry-based learning really. IP-AN-04

I think I struggled with it... I think I got lost in understanding the difference between task and process at the time...we had to work on a particular topic and what I didn't identify beforehand was actually it was more about how we worked as professionals together to get the topic... maybe it could have been explained in a more... pro-active way, really... it felt like "You're there in this group, now sort it out"...

IP-SW-05

Four respondents felt that the module scenarios were not particularly relevant either to their own or other professions:

... even just slightly a bit more related to how I practice now... it might have been a bit more useful...it just seemed a bit strange to ... be doing a midwifery course and thinking about a homeless person's dog and where it was going to go when he went into hospital... It just seemed a bit bizarre...

IP-MW-01

I found that in the first year... I think that the scenario ... wasn't entirely relevant to many professions. I couldn't see the relevance of the physio or the occupational therapist or the radiographer... I couldn't really see it was a particularly relevant scenario to us, it wouldn't be something that we'd deal with particularly...

IP-PH-01

However, two participants felt that it was quite a good idea to look at a topic which would not normally be covered in their own professional curriculum:

... I remember one of them was spondulosis (I: Yeah, ankylosing spondylitis.) Yes that's it and I've never heard of it before I can't even say it now, but I've actually seen bits of it now with the arthritic lot, you know since and I thought 'oh we did that' but... having a subject like that, that you've never heard of is useful...

IP-AN-06

... it's quite good to put a different hat on so... it's quite good for midwives to look at a situation where actually there's not a pregnancy involved... to kind of open their focus a bit more.

IP-MW-02

Some participants felt that they had not realised the importance of the IP modules at the time:

I didn't realise the importance of it to be honest. And I know that a lot of the other girls and boys... we used to go along thinking 'Oh it's IP again, oh here we go', because we hadn't had the experience so you didn't really know what they were all waffling on about... a lot of the subjects we thought well where's this going to come in, but its not until you're doing it, and then you think crikey, that was important. The interprofessional modules were very important, but it's not until you're out there that you really realise the impact... IP-AN-06

A social worker thought that the interprofessional modules had raised her awareness of the importance of interprofessional working:

I think the Interprofessional made us think about the importance of working with other professionals, I think that was important, so it makes you stop and think... a good model is the two of you together, or whatever. You know, there's other disciplines...

IP-SW-03

A number of participants indicated that they had found the modules useful in terms of learning about group working (four) and professional roles and perspectives (eight):

I think it got me prepared for working in terms of group working and setting goals, setting things to do for next time and how to work in a group when people have got different ideas and come from different angles. IP-PH-02

... we all tended to keep to our own group/discipline, but when you have a task and you have to discuss things in a group, then you get used to each other's different views. And I think if there was more of that, you'd listen to what somebody else would say and think 'oh I never looked at it that way; I would have looked only - my way of looking at it'. And they would then say,' well I've never thought about that'. And I think by doing that together, you join in and respect each other's different ways of looking at it. Because at the end of the day, there's a service user in the middle there, that needs social care and national health...

IP-SW-03

I suppose they were quite good in the sense that it made you think a lot more about other disciplines before you even started work... it made me aware of other people... other professions... and that there are other people out there... it's not just me as a staff nurse... There are other professions who can help out.

IP-AN-03

The extent of interprofessional learning in the uniprofessional curricula

Eight of the ten participants who had been educated on uniprofessional curricula felt that there had been very little emphasis on interprofessional issues during their professional education:

... I don't think we <u>ever</u> went over it a great deal. No, I can't even comment on it, because it wasn't something that really came up with us. UP-AN-01

... not an awful lot, really... I mean we had people come in and talk to us about blood diseases, that worked in the community... sickle cell thalassaemia... blood types, blood groups and that... but there wasn't an awful lot. Most of the delivery was from the midwives on medical conditions in pregnancy and that sort of thing.

UP-MW-01

I don't remember there being very much... I think the nature of the physio course is such that you end up doing most of it just with your own cohort anyway.

UP-PH-01

An adult nurse thought that interprofessional issues had been mentioned "quite a bit" during her curriculum but felt that she had not been able to put this learning into context:

I think there was quite a bit but I don't think I really put it into context. I think it was one of those things where... oh, what are they blabbering on about now... because as a student you don't really fully understand it because... even in your management placement, you're never in that position where you're sorting out everything... your mentor might go "Oh, can you go and speak to... the tissue viability nurse... and get your patient referred." But you're not dealing with it every day and I don't think you really understand...

UP-AN-07

Three professionals thought that interprofessional working had been included in one or more of their assignments:

[I: And did any of your assessments have anything to do with IP working?] Yes there were probably boxes to tick, a couple of boxes.

UP-AN-05 (male)

And possibly we had to write an assignment, I think, on working together.

UP-PH-01

... there were definitely assignments on interprofessional working. In the second year there was a greater focus on that, about the law and the N[ational] S[ervice] F[ramework] that led to more focus on that. UP-SW-01

Eight participants representing all four professions had experienced some degree of shared learning with students from other professions during their UP curricula. This varied from a one day workshop to an eighteen month common learning programme. Interviewees expressed mixed views as to the success of these initiatives. Positive views included learning communication skills and hearing about different professional perspectives and experiences:

The interpersonal module was quite good. That was a good module to do because that kind of... it made you look at communication in a different way, really... you know... how people are sat and how they ask questions, etc, etc.

UP-AN-02

In the third year... we had Health Promotion... that was absolutely brilliant... there were community nurses who had come into the group... And there were quite contentious issues so we all discussed what we would do in that situation. I think it enabled a greater understanding of what we were all faced with and a better understanding of the different professions. I think people had a better understanding of social work from that module. I think they had quite a cloudy view of what we did... I don't know what it was about the module. I think it was the teaching method, the way we were encouraged to work together, and the subjects we discussed.

UP-SW-01

Negative views included students sticking to their own professional groups and joint learning seen as a distraction from what they had come to university to study:

... I think maybe once or twice we might have been in with some of the midwives or I think we used to have our biology with some of the physios but we never mixed together as a group, we never sort of all got together and we always tended to stick to our own little groups really.

UP-AN-01

I think we had one module where we were in with some of the other health professionals... I think it must have been the nurses because we were on site with the nurses... it was like something to do with social stuff. Obviously it wasn't totally course specific; it wasn't like a core medical module.

UP-PH-01

Experiences in placement settings

General environment

Participants reported that the quality of IP collaboration to which they had been exposed had varied across placement settings. Fifteen respondents (approximately 50% of each cohort) considered that placement staff worked well with each other. However, six professionals from the IP cohort also reported being on placement in settings where the IP collaboration was poor. No participants from the UP cohort mentioned experiences of poor IP working among placement staff:

I saw a lot of bad working... sort of... poor communication and... people saying: "I didn't know they were going to do that." Things like that....

I had my last placement on (the ward that I'm working on now) and it was so different. It was fantastic ... and that was one of the reasons I stayed... because it was so nice to work on. Everyone pulled together and worked as a team and it was great.

IP-AN-01

I was on a neuro-surgical ward ... everybody's aiming towards one sort of generalised goal of rehab. And I think they were particularly good, actually, at working together.

UP-PH-01

... the worst culprits are the doctors... especially the junior doctors... and I think that's historical, really. It's almost like they're trained not to work interprofessionally with people... you know... they put themselves on a bit of a pedestal and think they're untouchable and don't need anybody else's input...

IP-MW-02

Eleven participants from both cohorts said that there had been little or no interprofessional collaboration in some placement settings. However, in some cases, this assessment appeared to be based on an assumption that interaction between practitioners from only a small number of different professions does not really constitute interprofessional collaboration:

. . . in my second year I did a community placement which did seem to just be nursing, there wasn't that much inter-professional working in the community really, it was the district nurses and GP's and that was about it really.

IP-AN-02

...you are just the only physio... maybe telephone the odd GP but really you are just a physio... there's no other professions involved really.

IP-PH-02

A few interviewees commented on how they had been treated by qualified practitioners from other professionals while on placement. While two respondents from each of the cohorts felt that they had been well supported by a range of staff, one respondent from the IP cohort had had difficulties in one of her placement settings:

I always thought the GPs were very good in the inter-professional meetings ...

IP-AN-06

I did work with some probation officers and some youth workers and my experience was that when I did work with them I was met quite enthusiastically really, I was taken quite seriously.

-SW-01

... at the time I was an auxiliary nurse in the same Trust. I used to notice how... when I was wearing my grey auxiliary nurse uniform they would say: "Hello, hello..." you know. But when I had my student nurse uniform on... the same doctors wouldn't speak to me.

IP-AN-01

Factors affecting students' ability to engage in interprofessional collaboration Only eleven participants said that they had been encouraged by placement staff to work interprofessionally:

It was brilliant down here . . .but because it's private you know you've got to 'up the ante' and so of course we get to see the consultants down here...there's the list I gave you before... breast nurse, continence advisor and they encourage you down here to go out with whoever...the diabetes nurse, you know, everything.

IP-AN-05

... as students we did use to interact with the physios and OTs because they used to make sure that we did stuff with [them].

UP-AN-03

However, when talking about their activities on placement, nineteen participants (twelve from the IP cohort, seven from the UP cohort) reported that they had actively been involved in interaction with practitioners from other professions:

I can remember working with OTs and social workers on one placement.

Yes... especially when you're Inpatients, you did a lot more because you've got then like the cleaners, the caterers ... all that lot... pharmacists, S[peech]

A[nd] L[anguage] T[herapist]s...

IP-PH-03

That's the only way you can get your job done by discussing with... mostly doctors, but then, you know, we had obviously the sonographers ... and nurses, say on the baby units, so yeah, you have to do it, you can't get away from it.

IP-MW-03

I went to ***, the mental health team up in ***, I had no complaints at all, absolutely marvellous ... because they're a very small team that has all professionals working together and they very much work within a little team like, there was two social workers, a support worker, an OT, a nurse and a couple more that were workers within the mental health team.

IP-SW-03

My community placements were good... I guess because they had a bit more time... and you do... I remember when I was district nursing... you work quite closely with the GP surgery UP-AN-07

Ward [number]... a placement there... you have a lot of mums that have addictions and the babies go there because they're withdrawing... So then you have to have discharge planning meetings with lots of different professionals... GPs, paediatric consultants, social workers, the community midwife... people that are going to be involved in their care once they leave hospital.

UP-MW-01

Five participants spoke about both acute and community settings. They all had been provided with opportunities for IP working in the former. However, two reported a lack of such opportunities in community settings:

And certainly in community placements I don't remember any interprofessional overlap particularly. I never ran into somebody who was having community physio or... I mean occasionally you'd see domiciliary care... but other than that I don't remember there being much impact... UP-AN-06

By contrast, three professionals had found community placements to be very useful for interprofessional experience:

And case conferences and stuff... if you're working with the community midwives they'll just let you come along and see what happens...

IP-MW-01

In the IP cohort, six respondents intimated that their engagement in interprofessional opportunities had depended to some extent on their taking the initiative. This was also the case for two interviewees from the UP cohort:

... obviously not being in a hospital before I just wanted to find out what people do, just to find out how I could use them in the future, sort of thing. (I: So actually you sorted out those things... those learning opportunities out for yourself a bit as well?) Yes.

IP-PH-02

I took a lot of opportunity to do that ... particularly in places like rehabilitation hospitals. And I took that opportunity because I knew that we didn't

necessarily get it there, so I spent as much time as possible with each different person... speech and language, clinical psychology, that type of thing... so placement particularly was good for that.

UP-AN-06

Student learning about interprofessional issues

Six respondents, three from each cohort, stated that being on placement had enabled them to understand the importance of interprofessional collaboration:

... you suddenly find you're not just midwives... a lot more goes into the professional care of the women than just midwifery... It's talked about, you know that you have health visitors and you have doctors and things ... it's when you go out that you pick up that experience and have to communicate with them.

UP-MW-01

Only one of the IP participants and two respondents from the UP cohort stated that they had learned about other professionals' roles while on placement:

That's something I learnt when I was in A & E on my practice, is that physios do work quite independently, they can see people, they can discharge people...

IP-AN-02

I learned certainly about occupational therapists. I think nurses I probably learned just from interacting with them without actually spending any time talking to them. And the same with the doctors. But certainly with some of the other therapists, like speech and language and OTs, I got to learn a lot more about, which was really useful.

UP-PH-01

Preparation for interprofessional working

Nine participants from the IP cohort felt that the inclusion of the IP modules in the curriculum had helped to prepare them for interprofessional working in practice:

... I can't see how anything... any information like that doesn't help you, because it's obviously been researched from what you need ... but I didn't realise just how much until I got out there, how much impact it did have. And you often think... oh why didn't I take more notice?

IP-AN-06

IP-SW-01 thinks that her professional curriculum 'definitely' helped to prepare her for interprofessional working in practice. Multidisciplinary team working is such a huge part of her job, she feels that if she had done a uniprofessional course it would have been harder for her to start work there...

IP-SW-01, interview notes

I think it did make a contribution, yes. And I think it's important that it continues... to endorse it, really... so that everybody coming up through their student years realises the importance of it...

IP-MW-02

Four professionals from the UP cohort felt that their UP curricula had helped to prepare them for interprofessional working in practice. However, they indicated that their prior experience and/or personality may also have played a part:

(I: So overall would you say that your professional curriculum actually did help to prepare you for inter-professional working?) Yes, yes it did. I don't know whether some of that though is, like I say, because I am the sort of person who will seek out what I think I need to learn. I don't know if everybody would feel that way.

UP-AN-06

(I: So from the point of view of preparing for interprofessional working, how would you rate your professional education?) Quite well really. I felt quite well equipped and confident. But I was a health care assistant before I went into social work so I had that knowledge already. You sort of witness and view how other professions see social work and how they get on but I think my two placements as well as my education from UWE gave me a good basis about understanding issues in interprofessional working and in understanding the boundaries.

UP-SW-01

This opinion was also found among professionals educated on the IP curriculum:

I think if you've got quite a shy person who hasn't got the confidence when they start... and they don't necessarily know who people are and things, I think they are less likely, regardless of what training they've had, they're less likely to try and involve other professions, whereas if you've got a more confident person then they are more likely to sort of say 'oh, ask people and try and involve people'.

IP-AN-02

However, at least one participant with previous health care experience felt that, in spite of her prior knowledge, she had still learnt a lot from the IP modules:

... I was working inter-professionally before I started the course so I knew the way it worked. [However] I think it did. It made me see a lot of difference... If you come into a hospital environment you have to remember this is secondary care... there is primary care out there... and it makes you look beyond that and that there's other things we can actually do, we don't need to just liaise with people within the secondary... the hospital environment, we can liaise with people outside as well. Take a broader approach. And I think that... it did open that up to me.

IP-AN-04

Six participants from the UP cohort felt that their curricula had not really prepared them for interprofessional working in practice:

As a student I didn't feel it prepared me for what was to come when you're qualified. One week you're a student and one week you're qualified and you're out and I didn't feel that we ever got taught how to communicate with other people or, you know, just to liaise with people. I found it very difficult at the start and shied away from it, but I... think that's also to do with experience as well... the more you know the more you feel confident to be able to say things.

UP-AN-01

(I: So overall would you say that your professional curriculum helped to prepare you for inter-professional working in practice?) I don't know that I particularly would. It wasn't anything negative that came out of the curriculum, out of the degree process, but I don't think there was that much emphasis on it.

UP-PH-01

Three participants were of the opinion that good interprofessional working is not something that can be taught:

I don't think anything helps as much as actually doing it, you can talk until you're blue in the face, but actually, until you're in there, interacting with the others, I don't think you really... I think I can now see what the module was trying to tell me, but at the time I didn't see the relevance... IP-AN-05

At the time I thought it was a complete waste of space. I had no time for it at all. I felt it wasn't going to help me work. I still think that to some degree because although I don't work on other wards as such, I have been pulled off to work on other wards for shifts occasionally... and the interprofessional working on those is appalling. So I don't think the teaching of it actually

makes somebody do it. I think it's something that just happens if you've got a friendly bunch and you're in an area where a lot of inter-professional working is required...

IP-AN-01

I think it's one of those things where you just have to get out and experience it for yourself.

UP-AN-07

Five participants from the IP cohort felt that, although their classroom-based curriculum had gone some way towards preparing them for interprofessional working in practice, practical hands-on experience was essential for making sense of relevant issues:

... the best way of learning, I think, is observing it in practice and like watching what you learned out on placement I found was more relevant than what we were learning in the classroom...

IP-MW-01

... when you're studying, however much you prepare I don't know that it can prepare you for the workplace. I mean it's good and it makes you aware of things but the actual workings of it... sometimes I just feel as though you've got to be in the workplace to do it. I'm not saying it didn't help but... I think there's nothing like doing it.

IP-SW-02

The different roles... you don't understand them so much when you're actually learning it there, it's when you see it... well this is how I seem to learn... when I'm in action doing it, I think ah... you don't appreciate the importance of them when you're actually doing the module.

IP-AN-06

Two participants from the UP cohort also emphasised the importance of relevant placement experience:

I spent a day with the junior doctors, going round with them, and I was amazed at what their job actually entailed... because I mean you only see them for a short time on the ward and as a student you don't realise what they actually do on the rounds and... they look up all the blood results and... actually to have an insight into what they do and how their working day goes... I found that quite a useful experience, actually... UP-AN-03

I think perhaps I was lucky that I had a few positive placements that showed me about the benefits of interprofessional working. That was more influential to me than the course itself was.

UP-PH-01

Role modelling

The effect of role modelling by staff was mentioned by twenty-four interviewees. Most positive comments were associated with factors arising from the working environment:

There were a couple of senior nurses...I think it helped that they'd worked in the hospital for about 15 years and it's a small hospital and they knew everybody that came and went and they knew their job roles and things like that so they'd be able to say 'oh, so and so would be able to help with that' and it was all first name terms and it was almost like asking a friend to do a favour sometimes.

IP-AN-02

... in the accident unit there were some very good role models in nursing and GPs actually...doctors. The accident unit was probably one of the best placements I went on.

UP-AN-02

I was on a neuro surgical ward...and they had to work quite closely together by the nature of the sort of conditions they were dealing with.....you know everybody's aiming towards one sort of generalised goal of rehab. And I think they were particularly good, actually, at working together UP-PH-01

Good role models were praised for the quality of their interpersonal interaction, particularly in their response to and acceptance of students.

The doctors used to know my name. I had good experiences. You get patronised sometimes but it was generally the nurses to be honest. I don't remember being patronised by any of the doctors at all. In fact the opposite.

UP-AN-05 (male)

In my first placement I was in a voluntary group and the opportunity to work with other professionals was quite limited really but I did work with some probation officers and some youth workers and my experience was that when I did work with them I was met quite enthusiastically really, I was taken quite seriously so when I did have the opportunity it did work quite well.

UP-SW-01

Education staff in academic and practice settings were also identified as demonstrating skills in interprofessional working through their support for students. For example, a UWE, Bristol lecturer was praised for ensuring good liaison with practice based staff to support students and a social work practice teacher:

... spent the time.....to show me and to sort of talk through and prepare...making me aware of what they would be looking for as well....so making me aware of... in the different settings, what their emphasis would be on.

IP-SW-02

Observations concerning negative role modelling focused mainly on behaviour protective of professional role boundaries and professional hierarchy and poor interpersonal behaviour:

It's all a bit of ... 'this is our profession', I don't think you'll ever do anything about that, but I don't think it's as it used to be...but 'this is what I do, and you don't do that'...but I think it's part and parcel of the job, I don't think it's them doing it on purpose.

IP-AN-05

I did work on wards where it was like a case of 'us and them' with the nurses and the doctors and..they just used to wind each other up...I much prefer to work on a ward where everybody gets on and everybody interacts and...you're not kind of pushed to one side as if your opinion doesn't count, really.

UP-AN-03

The problem is that every group has its own students and when you start asking to go and spend time with anybody they invariably say "We're booked up with our own students". So it's quite difficult to cross the boundaries or spend time with any other discipline.

UP-AN-04

... it depends how much the physio service has been developed in that hospital...the physios can have quite a direct impact in some hospitals and can be quite at the forefront...discussing treatment with the medical staff...whereas another hospital...you get told what to do and you just do your normal treatment...but you don't sort of go out of the box and question things and add to it.

IP-PH-02

Medical staff received most criticism for poor interpersonal behaviour

... one of the GPs was really difficult to get on with in one of the surgeries and he would only let one midwife go out there...he was really in control of his practice ... so that's probably not a very good example of interprofessional working because you obviously don't get on with everybody but you need to be a bit more flexible than that.

IP-MW-01

... those that you speak to that are not being very open to it or not being very friendly towards you...makes you think "I really don't want to be like that"....the worst culprits are the doctors...especially the junior doctors.

IP-MW-02

... awful consultants who would not even...give you the time of day.

IP-SW-05

However, other staff were also criticised:

... there were some really bad...a particularly bad sister on one of the wards... she was a real bully.

UP-AN-02

Comparison between student and staff studies

Data from qualitative studies in the Faculty's IP curriculum evaluation³ (Clarke et al 2007, Miers et al 2005b, 2007, Pollard, forthcoming, Pollard et al 2007) were compared with those from the study reported here. Student participants in the curriculum evaluation were from the same educational cohorts from which the IP sample for the present study was drawn.

Experience and value of the IP modules

Individuals from both the student and the professional cohorts expressed similar opinions about their experience of IPE. A minority of participants held definite positive or negative views, while the majority had mixed opinions about the modules.

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³ See page 3.

Positive views

... but I do think it's quite good to get you all working together, 'cos I think there's quite a lot of rivalry when you go out . . .

Radiotherapy student (Yr 2)

... I think it has broken those sort of like barriers in my mind and ...
perceptions that I might have held ... it was just brilliant, it was just so great,
you know and yes, it got a bit heated now and again, but the facilitator drew us
back on what we were talking about and kept us on track and it felt purposeful.

Occupational therapy student (Yr 3)

I enjoyed them, I love discussion and I love debate, because you learn so much from that don't you? Other people's opinions.

IP-AN-06

... I just really enjoyed it and I suppose I go into things like that thinking: 'You get out what you put in' and so I was quite positive and... you know... and we had a good group that I was in... sort of... willing to take on board other professionals' opinions.

IP-SW-02

Negative views

She had started with quite an open/neutral view of social workers. Felt that the module had built barriers, that the social workers had quite a chip on their shoulders.

Adult nursing student (Yr 2), interview notes

I didn't feel that I brought anything to the group from what I was learning in physio, or knew about physio . Physiotherapy student (Yr 1)

... doing those modules actually put stereotypes there that I might not necessarily have developed myself and certainly they made me a lot more cautious of certain professions when I went out on placement... because of my experiences learning alongside them.

IP-PH-01

I think its lip-service, really. You know... if you've got trainee social workers, trainee nurses, midwives... whatever... they don't know what their role actually encompasses unless they've been doing that job to start with...

IP-SW-06

... it's got that yawn factor that everybody goes, 'Oh no, it's not IP again', but this one (IP3) I feel has taught me a lot...

Children's nursing student (Yr 3)

I can understand the importance that we need to learn about interprofessionalism but I couldn't see the relevance with the first year . . . I learnt more from those couple of weeks (in practice) than I did from the two IP modules . . . I think you can learn so much of that from the IP module but I think the majority of it, probably 90% of it, you learn on practice.

Mental health nursing student (Yr 3)

... it did make you think about other professions before you qualified... but it just needed to be tweaked a bit...

IP-AN-03

... what you learned out on placement I found was more relevant than what we were learning in the classroom maybe... But it's good fun and it's nice to have lessons with other... professions ... I think.

IP-MW-01

Experience of interprofessional learning and working in placement settings

Participants from both studies reported variable experiences concerning interprofessional learning and working as students in practice placement settings:

Poor collaboration would be in this placement, MDT meetings here are very medically orientated and the rest of the patient's problems are not appreciated nor the professionals with skills in those areas.

Physiotherapy student (Yr 3)

We have some professions that work really well, an integrated service, and there are others who don't exchange information as well. They're sort of protective of their area.

Social work student (Yr 2)

In this unit communication is very good, a lot of respect among professionals, probably because it is a good team, good working environment . . .

Midwifery student (Yr 3)

I saw a lot of bad working... sort of... poor communication and... you know... people saying: 'I didn't know they were going to do that'. IP-AN-01

I was in an out-patients department so it was just like... just very much physios everywhere... IP-PH-01

I went to ***, the mental health team up in ***, I had no complaints at all, absolutely marvellous ... because they're a very small team that has all professionals working together . . . IP-SW-03

I was in a voluntary group and the opportunity to work with other professionals was quite limited really . . . in the second placement I worked with an adult community care team in social services . . . I worked with GPs. . . there was a community care worker, myself and a social worker, an OT and an OT aide so it was quite a positive experience.

UP-SW-01

I was on a neuro-surgical ward ... everybody's aiming towards one sort of generalised goal of rehab. And I think they were particularly good, actually, at working together.

UP-PH-01

Individuals from both studies related how their placement mentors had been instrumental in getting them involved in interprofessional working:

My mentor, because it was the first time that I was really dealing with physiotherapists, she said had I seen what they do, so I said no I hadn't really been around with anybody, so she asked them if it was OK I could go round, and they were really good.

Midwifery student (Yr 2)

... when I was on a stroke unit I was encouraged to go and spend time with the speech therapist, for example, so that I could see their role with stroke clients. So it was definitely encouraged. IP-PH-02

Participants from both studies had also had similar experiences with regard to using their own initiative to ensure that they were able to engage in appropriate interprofessional events:

One of the SHOs and the social workers were talking about someone who had learning difficulties and 'cos I've got previous experience in that I felt comfortable to offer an opinion of what they were talking about.

Mental health nursing student (Yr 3)

I did, as a student, make sure that I spent time with those people. I went and spent a whole day in pharmacy which everybody said: 'Oh, that must be so boring'. But it wasn't... I did things like went and spent time with people that you wouldn't necessarily think of, like a clinical psychologist, and tried to spend time with the different people that... not just the physio... not just the OT. And it definitely makes a difference to how you work with them later on.

UP-AN-06

In both studies, there was evidence that male nursing students interacted with male doctors in a way not observed or reported among female nursing students:

Doctor in scrubs comes in. KP4 (male children's nursing student, year 3) has just come out of a side room. Doctor looks around, sees KP4 – smiles and says hi (he hasn't spoken to female nurses sitting at the desk), asks him for something. Male solidarity? Doctor goes back to notes trolley. KP4 goes up to him, they have a brief chat. At trolley for a bit, then walk a few steps together, KP4 takes chart and goes towards drugs trolley.

Researcher field notes, acute care paediatric unit

The doctors used to know my name... I don't remember being patronised by any of the doctors at all. In fact the opposite.

UP-AN-05 (male)

So it appears that gender may be a possible influence affecting students' experience in this context. An in-depth discussion of such influence is beyond the scope of this report, but it should be remembered that a wide range of social factors affect interaction between professionals.

3.2. Interprofessional working in practice.

In this chapter, findings are presented concerning participants' experiences of interprofessional working in practice as qualified professionals. Data concerning wider factors influencing interprofessional collaboration and its impact on care delivery are also reported.

Interprofessional working in qualified practice

The quality of interprofessional working

Nineteen respondents reported working in practice areas characterised by 'good' interprofessional working:

I think it's pretty good actually, yes, I don't think anybody is afraid of contacting another professional to say... you know... "We need your advice on this."

IP-MW-02

I think it's incredibly successful... very successful... and I don't think that I would want to go back to a different way of working now. ... because it feels like we actually do quite risky work sometimes and... you know... it's that safe thing about joint decision making . . . IP-SW-05

It's very good but I think that's possibly because it's industry... you know... it's different I think than being in a sort of... a pure health setting, you know these people have got an aim to get to and they may need specialist input to get there... and they're normally paying for it as well, which makes a difference! (Laughter here) But generally they're very open to working together.

UP-PH-01

... we seem to have a really good team on the ward, we always have done and we've always worked very hard to maintain it as well. I think that we all try and work very hard together to get the same result that we all want.

UP-AN-01

Two respondents (both social workers) stated explicitly that the interprofessional working in their practice areas was difficult:

When asked how she would rate interprofessional collaboration in her current workplace, IP-SW-01 said "not very well, there are big gaps". She thought that this might be due to the nature of the job, i.e. getting people out of hospital...

IP-SW-01 gave a general example of poor interprofessional collaboration: the discharge assessment team make all of the discharge plans (e.g. transport, equipment, medication) but the Discharge Sister role overlaps... "(s)he will steam ahead and not tell us social workers, for example, that the patient has been moved to another ward/hospital or even that the patient has died."

IP-SW-01, interview notes

...our young people come from up and down the country. So we get a young person placed from London or from Newcastle, or wherever. The local mental health teams don't have responsibility for them so we have to really fight hard to get them to be seen by somebody locally and it's very, very difficult...

IP-SW-06

Of those respondents who thought that interprofessional working was of variable quality in their practice areas, four reported that it depended on the occupational groups involved in the interaction:

I know the dietician, I know the speech and language therapist... because they're also on rotation and the chances are I've actually worked with them already now. I suppose it's moving from rotation to rotation... it's the doctors and the nurses that I don't know...

IP-PH-01

Within the surgery it's excellent. It's really good and we have a mutual respect... the GPs respect what we say and obviously we listen to what they say. And the same with social workers. The only trouble with social workers is quite often they don't have enough time... they're always really busy and there's always a waiting list for them to go out to see people. They've always got quite a lot of staff sickness... so quite often social workers and OTs, etc, aren't quite so easy to access and quite often there's a wait which... you know... when you're in the community it's an immediate problem and you want it sorted immediately otherwise quite often it means they've ended up having to go into hospital because the problem can't be sorted at home.

UP-AN-02

Factors depending on individuals

Eight respondents indicated that the amount and type of knowledge possessed by individuals about a situation was important. In some cases, this was associated directly with an individual's sphere of professional knowledge:

... we had the referral come through, it was asking for respite care... the consultant psychiatrist had the referral and then I was allocated as the second person to go out with him to facilitate the respite. ... we spoke to the carer and she was really, really stressed... you know... it was about the behavioural difficulties that her husband was exhibiting... Now if I had been a lone worker... as we are in the disabled adults team... I would go out and you would recognise the difficulties. But you wouldn't necessarily pick up on what the consultant psychiatrist picked up on which was his medication. He'd been prescribed medication that had interacted with other medications that he was prescribed and that was causing him to exhibit some of the behaviour that he was exhibiting.

The extent of shared understanding of a situation among individuals working together was seen to be a key factor influencing interprofessional working, and was mentioned by sixteen respondents:

I think you also have to have quite a lot of patience because I think until you realise what each profession does you realise that actually things that I thought would be a priority for different professions... to them that isn't much of a priority on their list. So you have to have a little patience and ... take their opinions on board and realise that maybe they'll do things in... two days time rather than at that minute because it's not a high priority.

IP-PH-02

I know the doctors are getting quite stressy at the moment... ... with the social workers because they're (the social workers) demanding capacity assessments on these people who have Alzheimer's disease... I think they need to be more involved in the team, really. I think they've got generally unrealistic ideas about... how hard the day is ... as a staff nurse on the ward I wash all my patients as well... so we're not just pushing pills and that... we're washing them... performing the mouth care and... you know... the continence problems. We're doing everything... and then they're asking us to fill in the fourth CM7.

Nine respondents thought that individual engagement with issues concerning interprofessional working had an influence on the quality of collaboration:

I've learned to involve as many people as early on as possible... IP-AN-03

I think being receptive to it, you've got to have the willingness to actually want to communicate with other professions....I think that has got to be there because then they find the time to speak to me. In the M[ulti] D[isciplinary] M[eeting], where you breeze over the patient on to the next one, If I sort of go "uh, uh XXX say" it's this sort of willingness to want to have a discussion and communicate . . . IP-PH-01

I can think of an instance with the way I work, a community specialist nurse...

I've invited her to a couple of reviews and she hasn't arrived and there's been no apology. I've linked in with her for a continence assessment and... you know... it hasn't happened.

IP-SW-04

It was four different professionals and everybody helped that home, because we went and saw the manager, both myself and the district nurse, spent time talking with her, spent time with staff and it was a lot more within our day than we planned, but we knew if we didn't this woman would be moved out because the care staff were completely saying 'I'm not doing it'. We had a risk of failing, but it was just... that was real Interprofessional working. Everyone trusted her enough that I phoned up our senior OT and he knew I very rarely asked for help quick, so he came out that afternoon, because he trusted me enough that I wouldn't be asking for nothing. They trusted the district nurse at the community hospital... she wouldn't go to a rehab and ask for something, so there was a lot of trust and relationship there. And, taking the time out to do that, each professional... not being precious about their role, not saying 'oh well I can't come back...', by saying 'well I'll do this bit and I'll do this bit, because I can fit it in'. We weren't all precious in our roles. And at the end of the day, the woman stayed where she wanted to and that was good.

IP-SW-03

Management and leadership styles were also mentioned by a few respondents as a factor influencing the quality of collaboration in an area:

It's a very old team here. It's got good management and I think that's a key thing: very good management.

IP-AN-04

I suppose the leadership side, really. I suppose in a group setting I'm someone who gets very frustrated if things get dragged on and clear plans aren't made. If clear goals aren't made in terms of... OK, so who's doing this, what is going to happen when... you know... what's the next stage? I'm probably someone who probably goes back to that, wants it clearly written

down... OK that's what we're going to do and we'll review it in a week's time at the next time we all meet.

IP-PH-02

Organisational factors

Three respondents mentioned the size of the organisation or team in which they worked. They all considered interprofessional collaboration to operate better within relatively small entities:

I think because it's a smaller hospital we tend to know pretty much everybody who passes through by name, we know them really well so we can quite easily ring up and say 'oh it's [name], I'm just ringing up to say blah blah blah', and they'll know who I am and so it does make it really easy. IP-AN-02

... the strengths... because we're so small everyone works together because we're all after the same thing... and communication's fine. IP-PH-03

The last time they did one (Multi Disciplinary Meeting) it was just chaos, you know, there were just so many. . . it was too big to make any sense, and everyone agreed that, and it was just a pointless exercise. Yes, we were all together, but it was so crammed in and no one could really hear what was going on, it was a disaster really and it was a shame because we do need to have meetings together . . .

IP-SW-03

Six respondents made specific mention of how problems with resources could hamper interprofessional collaboration:

I think one of the issues actually is also resources ... if you're so pressed for time then the luxuries of, say, liaising with your colleague in another department which might improve things might just go out the window because you just simply haven't got the time, you can't make the time to do that, you've got to prioritise your workload. So... I think at the moment I've generally got the luxury of that. I'm able to spend time listening to people about what they're doing or what their needs are and communicating how we can work together and making a bit of a plan.

UP-PH-01

Probably the social work team... a weakness... they're so stretched and there's such a limit in getting home care for people that sometimes we want to get people home quite quickly, they can't do it that quickly and sometimes

people end up going to a rehab... And also our OT only works part-time. So we really struggle . . . OT is a bit of a weak sort of point with us. . . As I said they do try and send other people up but it doesn't happen very often. Again, speech and language as well. They're people who... because the service is cut so much because of funding... they will only come to wards to assess patients on certain days.

UP-AN-06

Problems noted did not always hinge on lack of resources, but rather on how resources were organised and managed:

... if everybody worked inter-departmentally, you know, multi-professionally it would be so much better... but people are still very territorial... That's my money and my budgets... you know... It is getting better... we're looking at training... for example training needs within *** and... you know... there's loads of residential care homes. We've all got standards we have to meet for training staff. Wouldn't it be great just to have one training instead of...and then at least when they go from that house to that house... from that company to that company... you know exactly what quality of training they've received and... you know... It's not rocket science, really... pool your resources... do that properly...

Communication mechanisms

Eight respondents mentioned the importance of service users' notes and other paper-based media as vehicles for communicating information between different practitioners and professions. In two cases, notes had been streamlined so that all the professionals wrote in them:

There is a set of multi-disciplinary notes so everyone writes in there. . . . Everyone writes in the same set of notes so it's easy to pick up (provided it's not doctor's writing)...

IP-AN-01

The documentation is all... sort of... one folder ... or one folder within the patient's home whilst they're under our care and one folder in our offices . . . UP-AN-04

A physiotherapist noted that written communication was invaluable if she was unable to communicate face-to-face with other practitioners:

... we've got a notebook... if we don't see people we can write in there... So yes I think it really enhances the care people get.

IP-PH-02

Two respondents indicated that written communication was not always reliable, or might not necessarily be acted upon:

You can write in the nursing kardex for days about something before it actually happens and you will always hear other members of staff griping over that...

IP-PH-01

... reports that should have been in people's notes and aren't always there so we don't know about certain things until they've gone home when really probably they shouldn't have gone home that quickly because of a certain reason.

IP-MW-01

A lack of streamlined communication was highlighted by six respondents as a problem between health and social care services:

We go out and do an assessment and ... you've got this referral process to go through. Now if I go out and I identify that somebody needs some sort of OT assessment... some sort of equipment... I then have to come back and complete yet another form. That then goes to the team manager. She will screen it. She will allocate it. That person will go out. It will duplicate... this poor person will go through the whole lot of questions... the same sort of things... taking basic details...

IP-SW-04

They're (social workers) a bit more tricky to get hold of... particularly as the referral process is so difficult now... there's so much paperwork... I don't know whether it's the social workers... whether their hands are tied or whether it's just the sheer volume of paperwork that's required... but quite often we'll refer someone to them... possibly needing a nursing home placement... and it takes so long for all this to happen and for the social workers to assess... for the family to find somewhere they think suitable... and then this patient may, perhaps, fall and fracture a hip and they go upstairs and they have their hip mended, they come back down... and then you've got to start all over again.

IP-AN-01

Face-to-face communication, both formal and informal, was frequently mentioned as a means of gaining and imparting information across professions:

We have a regular Thursday morning team meeting where we discuss new referrals... we discuss ongoing cases... and further to that there's also the multi-disciplinary team meeting which is actually not very long but that's where... in theory... all the professionals are there including the consultant psychiatrist... so there's a space there where we all have an opportunity to discuss anyone with him...

IP-SW-05

... if, for example, something just doesn't seem quite right... I'm straight down to see the nurse... you know... "Can you take bloods... or... go and take their obs"... or something like that...

IP-PH-02

We work very closely with the doctors... we have to liaise really closely with them and they're really good... we give them our opinions and we go in with them, we help them with procedures and we do ward rounds with them ... The same with dieticians. We sit down with them, we go through with them, we talk about their diet... and then they obviously go off and do the assessment with the patient. We don't have the time to stay with them, unfortunately, but we are able to liaise really well with them. They are very good... they come up daily... so we've got the physios, we've got the dietician, the OTs come in in the morning. We don't see them very often because they go straight to the patient and obviously get on with the patient... so we don't really sort of liaise very much with them, but we do communicate with them ... they do come up and say: 'Is there anybody that I need to see?' So they always are approachable.

IP-AN-04

In some instances, communication between professionals appeared to be purely functional, rather than collaborative:

... we have three hand-overs a day to doctors... ward rounds... so you have to come out of the room and ... stand in front of them and... say: "This is Mrs So-and-So. She's term plus so-and-so. She's had so many babies. She came in at such-and- such time. Her waters had gone and we've got... blah, blah, blah."

UP-MW-01

Fourteen respondents from adult nursing, physiotherapy and social work indicated that there were regular multidisciplinary team (MDT) meetings in their areas:

Once a week they have a 1 ½ hr MDT meeting, which usually involves the ward sister, physiotherapist and occupational therapist. Sometimes other professionals are also involved in the MDT meetings, for example, speech therapists, psychologists, consultants, dialysis unit staff and members of the haematology team.

IP-SW-01, interview notes

And we have a meeting once a week, a multidisciplinary meeting, where we all get together, every Wednesday afternoon... we do it in the hospital and the ward sister comes along with all the paperwork from each patient, all their records, and we go through each patient one by one and it needs the district nurse to be there, because the OTs, the physios are there ... the social workers, and we all talk about the individual people, and I find that really invaluable, really important.

we have regular... well daily... ward hand overs with the nurse, OT and physio and then weekly... MDT meetings.

IP-PH-04 (male)

Midwife respondents reported attending meetings with other professionals as the need arose:

Social workers obviously we've got to have case conferences and all sorts with them there... it's quite in-depth involvement with them. Doctors are probably more on a short-term basis and people like social workers ... tend to be more long-term.

IP-MW-01

Six respondents mentioned either a lack of, or problems with, MDT meetings in their areas:

We have like our multidisciplinary meetings so we all know who's doing what. .

We do them once a week...well it's supposed to be once a week... there's always someone that can't make it and it ends up getting cancelled.

UP-AN-01

... we're supposed to have them every so many months, well multiprofessional ones with district nurses, but that was a good year ago and we haven't had one... I think the will is there, but it's just the time and the logistics to get such big rooms and people together... IP-SW-03 In many practice areas, staff relied on the telephone or e-mail to communicate with other practitioners, and to transmit information between services:

Social workers... we ring them up... if we've got a problem... if we want to get some extra care in. . . UP-AN-02

... there's e-mails for that or the telephone... you know... we're not in the highlands of Scotland...

IP-PH-03

Computer systems sometimes appeared to cause problems:

They've brought in a new system where you now have to go on to the intranet to access it... which takes forever because the machines are old and they are so slow... I was on the wards at the time when it came in and I said: "You know, I've got five women who need to go home but we can't dismiss them... discharge them... until we have their blood results." . . . And often blood results were taking a long time to come up on screen... or you were having to phone and phone and phone.

UP-MW-01

However, the lack of computer systems could also be problematic:

We've got a problem at the moment where they've taken the computer system away from us. We're doing everything manually and so, unfortunately, we've gone backwards ... it's made it a lot harder to communicate and to get the patients seen... it's an actual system. All you have to do is go in, go into the referral, say what's wrong with the patient, and then gone... and it's just so quick... and you knew it had been sent. And then you could pull it up and you could see exactly what the patient ... you know... what's been done for that patient. And we have nothing now.

IP-AN-04

Organisation of the environment

Physical location of staff was considered a significant factor affecting the ease with which individuals were able to engage in interprofessional working:

... you've got lots of work to do... you'd have to ring the GP... leave a message because you can't get through... and then they'll get back to you and you're out on the road and you're not there when they ring. Whereas in an

integrated team they are there, they're on site, you can go down and you can catch them.

IP-SW-01, interview notes

On the wards it's very difficult because obviously trying to get a doctor... you know... downstairs on delivery suite ... they're there ... physically there, most of the time. So that you can get them quite quickly. If you are on the wards sometimes and they're busy on delivery suite or in theatre doing emergency sections it's often very difficult to get them up to the ward and a lot of verbal instruction does go on.

UP-MW-01

Organisation of people

Differences in working patterns appeared to cause problems at times:

To elaborate on that, with the occupational therapists, one difficulty is that they only work 9-5 Monday to Friday so getting them to understand the need to come up quickly, and that for a patient, a referral on a Thursday and not being seen until a Wednesday, that is a lifetime for them. It is a huge amount of time to have to wait. It might just be three or four working days but it is a major issue. I've never had any problems with the OTs but I sense that they don't quite understand the 24 hour nature of hospitals and the fact that when they go away the patient is still there.

UP-AN-05 (male)

... you might get a CPN (community psychiatric nurse) who has been working with this file, too, and... you know... they work two days a week and then it's in a locked cabinet somewhere . . . IP-SW-04

These problems were linked to working patterns' impact on individuals' availability. Twenty respondents specifically mentioned how this affected interprofessional collaboration, either positively or negatively:

We can ring them up and they'll say 'yeah, we'll be there in half an hour', they'll come and assess the mobility and say 'yeah, they're perfectly fine with a frame, we're happy for them to go home' and the community liaison nurse will come in and say 'yes, that's fine, we need somebody to come in, we can arrange that, so that they come in and help you get up (or whatever it is)' and then they can go home that day. So it does work really well.

IP-AN-02

We never met to discuss what had gone wrong, although they did offer at the time. Time was... that we were going to... somebody was not there and available and it didn't happen again.

IP-SW-03

As well as availability, stability in terms both of management and low staff-turnover was thought to be helpful for interprofessional collaboration:

It's a very old team here. It's got good management and I think that's a key thing... And the respiratory physios have been here a long time. ... we all pull together and... there's a lot of staff that have been here a long time ...

IP-AN-04

The physiotherapists do change every so many months because they're on a rotation but you get to know them for the three months that they're there or however long it is. The occupational therapists... they do rotate but not so frequently so... we've had our OT for over a year so you get to know people. Generally the social work team, or the adult team as their new name is, they're generally familiar faces and the specialist nurses are familiar faces. There's not a massive turnover. The physiotherapy rotation is the main change, really ... It makes a difference to know what their strengths are... what their weaknesses are... how you can approach them... how you can ask them to do things... and it sounds manipulative but in a way... if you think about your relationship I suppose it is, in a way... you want them to help you...

UP-AN-06

IP-SW-01 also noted that because of the nature of the workforce on the ward (shift work, bank staff, and high turnover) even if you did educate them (about IP issues) it would be difficult to keep going as the workforce is not consistent.

IP-SW-01, interview notes

Where individuals were familiar with one another, it appeared that relationships could be cemented through engagement in social activities, although only two respondents mentioned this phenomenon:

I'm quite good at making the tea as well... which is really quite helpful (laughter)... you can't diminish it, it's an important thing ... maybe you might not get formal supervision quite as often as you could or should but we have a very good system of peer supervision which goes along with the making of tea and coffee...

IP-SW-05

After we have a ward round, with one of our consultants, we'll all go for coffee then, and it will be sort of us, the doctors, our ward manager, whoever is doing the ward round at the time, whatever nurse, we'll all get together and chat about the round, and do like a paper round more or less then and then that will last for about five minutes and then we just end up chatting about other things [laughs]! Still, it is quite nice that we all get together, we do go out socially now and again if someone is leaving or that sort of thing and people make an effort to come along, people who aren't even on the ward, you know like the occupational therapist, and the palliative care team will come out and we'll have a night out or something. But we all make an effort, I think that's why we all get on so well.

Organisational hierarchies were also considered to have an impact on interprofessional collaboration. Where traditional medical hierarchies were in place, they were seen as hindering effective interprofessional working; conversely, their absence was noted as contributing to the success of interaction between different occupational groups:

The worst culprits are the doctors... especially the junior doctors... and I think that's historical, really. It's almost like they're trained not to work interprofessionally with people... you know... they put themselves on a bit of a pedestal and think they're untouchable and don't need anybody else's input...

IP-MW-02

I think because it's a smaller hospital we tend to know pretty much everybody who passes through by name ... I'd say it is very successful, there isn't much sort of hierarchical... there is a little bit sometimes, but that's more to do with people's personalities than, you know ... but it works quite well. IP-AN-02

Two respondents mentioned the role of support workers and other non-professional staff within collaborative processes, in particular new generic support roles:

I work with some people called ICSW -Intermediate Care Support Workers – which are basically Band 3 people who do a bit of physio, bit of OT, bit of nursing... and this generic sort of worker is like big-style what is happening.

And they want a lot of people who are generic and I think for that to happen needs more interprofessional working.

IP-PH-02

Skills required for interprofessional working

Communication skills

Communication skills were mentioned by twenty-five respondents. This included appropriate use of documentation (see above). Listening was perceived as of immense importance, supported by non verbal communication such as eye contact and body language:

....it's really important, listening skills, body language is important, you need eye contact...there's nothing worse than you're talking to somebody when they are sort of looking around at...what they're going to do next, you know they're not interested. And patients notice that, because we're often very busy, but I won't rush myself...

....Listening, listening to the patient, what they're saying, not what you think they're saying, what they're saying. And compassion and being able to show that in your face'

IP-AN-06

I think, as a profession, I think we are generally quite strong at communicating....when we have outpatients...or inpatients...we are listening to them and thinking about what they are meaning the whole time....
...and speaking to the patient and trying to glean why is it that the family don't want this patient home.

IP-PH-01

They need to be able to listen and youcan't just charge in and say what you feel is right... the key thing is just being able to listen and put your point across without being argumentative.

UP-AN-07

I read a lot of body language (because I'm actually dyslexic) so for me I'm a very visual person so ...I look beyond and I actually see a lot of body language...and communication for me is a <u>massive</u> thing.

IP-AN-04

Eleven IP and four UP respondents referred to interpersonal relationship skills as skills for IP working. Both groups of respondents referred to being approachable:

Well you've got to be sociable.....I think I'm approachable... I'm <u>real</u> with people and I'm not snappy, my personality is that people feel able to open and speak to me hopefully.

IP-AN-05

... being approachable...because...if you've got the choice of telling the senior nurse looking after a team or one of the junior nurses, if the junior nurse is more approachable I would tell the junior nurse rather than the other one.

IP-PH-01

To be approachable really....if you get someone who's more approachable than somebody else you're more likely to ask them, really, aren't you?

UP-AN-03

Adaptability in communication style was emphasised as a key skill in working with other health and social care workers, as well as with students and service users:

... you need to talk to people in different ways really and change it to what's appropriate to whoever you're talking to.

IP-MW-01

... you need to be receptive if another professional is trying to communicate...you wouldn't waffle about...you wouldn't waste time...we're all busy...so I think being receptive to it.

IP-PH-01

I like talking to people and I quite enjoy the challenge of finding that level with them....and you do have that in midwifery...that's the beauty of it...you can be looking after a traveller one day and you could be looking after an airline pilot's wife the next...and then you need to be able to speak nicely to the cleaner and ask her if she wouldn't mind getting your room cleaned for your next patient... and you need to be able to speak to a senior consultant and..you know...adapt the way that you speak to get the best out of it, really.

IP-MW-02

Some of them are very...they just want the facts...but some of them are happy to have a little joke and a chat...when you've been doing it a while you become quite adept at getting the information over quite quickly.

UP-MW-01

A strong theme, particularly emphasised by social workers, was simply keeping in touch:

... for me...it's to get back to them even if you don't know the answer...to get backthat you keep in touch. To me that's very important...

....I've always been keen to keep in touch with people....and I've always felt a letter needs a response....And telephone...I used to dread sometimes making the telephone calls.... If you're not going to do something, then let the person who's referred to you, let them know for whatever reason that it's not gonna go ahead.

IP-SW-02

Personal qualities and attributes

A wide range of qualities and attributes were identified by both IP and UP respondents. Thirteen IP respondents and six UP respondents identified qualities such as confidence, patience, and respect.

... confidence comes with time, you need to believe in yourself and accept that you can't be expected to know everything.

IP-SW-01, interview notes

I think you need to have the confidence to approach people really, and know a little about what they do.

UP-AN-02

The confidence to phone up consultants and the confidence to stand up for yourself. That is something that develops over time.

UP-SW-01

Commonsense and patience I would say...and persistence as well, just to know when to keep quiet but to know when to keep pushing as well...

UP-AN-01

Well most of them aren't taught, it's just things like respect and to be able to be knowledgeable about different professionals and what their job involves but also to involve them and be prepared to sort of help them in return and just be respectful of those around you.

IP-AN-02

... just respecting each others' profession.

UP-AN-03

Being non-judgmental, tolerant, open minded, and demonstrating reflection and trust were qualities emphasised by those from IP cohort:

I'm not very judgmental. Although I think we have to judge to survive...I hate people that label people......I always give someone a chance, lots of chances. I don't like judging people. I don't like being judged, so I don't go in with any preconception, to an extent.....

...I think my main quality is that I care 100% and I can go into filthy houses ... because I've worked with people with drug problems......but I just feel that if you think about what they're going through...who are you to judge that person? You don't know what's happened to them.

IP-AN-06

I think trust. I have to be able to trust them, that they're going to do as they said, and equally they've got to trust me and if I find I'm not able to do something, then its for me to make sure that I spend the time to make sure they know....I say trust...that they will know, if I say I'll do something, then I will do it. And if I can't then I'll go back....I think we've got to be honest with one another....I definitely think not to hide something...definitely trust and honesty amongst us all.

IP-SW-01, interview notes

Maturity and experience were considered to enhance the ability to work effectively with other individuals and professions:

Prior experience...just time....from mistakes...you know...mistakes you've made in the past, that's one way you learn...

IP-PH-03

I've been qualified for three years but I've actually been in social care in a variety of different roles from a care assistant....to becoming an assistant officer in charge and assistant care co-ordinator...so quite a lot of experience, really, in different settings.

IP-SW-04

...the qualification, for me, was the piece of paper that enabled me to say: "Actually, this is what I do" having done the job previously for 11 years...and building on that subsequently with the kind of roles I've done, has given me the experience and confidence, I guess....that's just me as a person.

IP-SW-06

'I think...confidence and communication come from knowing the job and knowing where to go, what to do...perhaps because I'm a bit older...that helps as well...and, obviously I've had a few jobs...so that helps' UP-AN-02

... being an older student and older working personnel...I've never had a problem talking to doctors. I think that tends to be an age thing and I don't mind asking for something from a doctor whereas somebody else might stand back. If I saw something for a client that's needed I would actually ask.

UP-AN-04

Such experience was not always gained prior to obtaining the professional qualification. Some had gained additional experience through continuing professional development:

Since qualifying I've done child protection courses... and domestic violence as well so if people on the wards feel they have an issue...they can contact me and I can go and sort of see their patients and give them the appropriate advice and things like that, but that is all part of nursing, so it's kind of extended roles'

IP-AN-02

Respondents also identified more individual characteristics, such as personality or 'character', often describing a range of traits that they saw as crucial in interprofessional working.

....I think it's personality, because not everybody's so sociable, not everybody's outgoing and some people can be a little snooty and a little bit guarded and you know...it's a lot to do with personality and whether you are looking outside yourself really'

IP-AN-05

... we need to be able to communicate. We need to be open. We need the time...we need to tell the truth as well.

IP-PH-03

...I think a lot of it is personality. I can't get away from that...Just to understand other people's positions because you can feel you are being attacked all the time by the health professions

IP-SW-01, interview notes

When discussing team functioning, IP respondents tended to report on their own actions to support teamwork:

I think I have a good relationship with most of the staff I need to be involved with. I think it's easier if you know the person....I try to do some bank work out in the community as well so I can get to know some of the staff out there...which has worked out really well because I've ended up speaking to a lot of them over the phone recently.

IP-MW-01

Depending on the group you need to be able to speak out ...team working won't work if someone doesn't communicate their views and actually have got the... I suppose, inner strength, really to speak their opinion...because often you're in an interprofessional meeting or on a ward and you're the only

profession, or you're representing your profession...and if that person doesn't feel able to speak out because you're in a group setting it means you're losing a whole professional opinion and then you're only hearing probably a biased view from the other professions that are there. So you need to have the confidence to speak out....

.....I suppose in a group setting I'm someone who gets very frustrated if things get dragged on and clear plans aren't made. If clear plans aren't made in terms of ...OK who's doing this, what is going to happen when...you know...what's the next stage? I'm probably someone who goes back to that, wants it clearly written down...OK that's what we're going to do and we'll review it in a week's time....that's one of the main abilities I've got is to bring a conversation back to...what does it all mean?...

....I'm a decisive person...that's part of my profession is the fact that I've got to make the decision...are they safe or are they not safe...can they go home and when can it be.....rallying the troops to make sure that all the other professions are working with me to make sure the client can go home.

IP-PH-02

You have to be able to build relationships with your colleagues from whichever department in order to get the best out of them as they do with you, for the benefit of the young person. So it's about relationships.......

...if you've got that relationship where ...they've worked quite closely with social services and obviously with myself or whoever else...and they've got that ability to do the negotiating rather than jobsworth....you know...'Oh, let's have a look at this....there might be a bit of money here...or...how about we look at" Just being a bit more creative, really ...

....I'm very good at networking (gives examples of phoning up etc)

IP-SW-05

I try and keep in touch with schools and that so... before I go and visit the child....just to phone up the school beforehand and say "Hi, it's me...are there any problems I should know about?

IP-SW-02

IP respondents were also particularly reflective and aware of the importance of reflection

And everybody jumps in with two feet and wishes they hadn't said something...you've got to learn from that as well. And that's the good thing

about reflection, I think. That's the big thing I learned from my course...was about reflecting on experiences and then building on it and learning from it.

IP-MW-02

I'm very good at saying 'No, I can't do that'....I think I'm good at noticing if anybody's struggling and I'm a very good reflector too. I do think and ponder and try and work out what we have learned from this situation and what else might we do differently.

IP-SW-05

This explicit level of awareness concerning the potential effect of their own actions was not found in data from the UP respondents.

Knowledge of roles

Eighteen respondents referred to the importance of knowledge of professional roles:

I know what they can do and what they can't do.

IP-AN-01

... just knowledge really, of what they've got to offer because otherwise if you don't know what they can do for your patients then you're not quite sure which direction to go.

UP-AN-02

... a really thorough understanding of what each other does because from understanding comes respect.

UP-PH-01

One UP respondent acknowledged that sometimes she was not so good at this. An IP respondent noted that:

... doctors particularly do not seem too aware of our role 100%....if we have any joint training sessions and a doctor is invited, they never come. Whereas the district nurses are willing to work alongside us, we never seem to get over that gap with the doctors.

IP-SW-03

Acting on the knowledge of roles by involving colleagues, helping them and displaying reciprocity was illustrated by participants:

A gentleman asked me the other day....his walking sticks were too short...well I knew straight away that the physio would do that. I spoke to her straightaway...And they were sorted...he had a new pair straightaway.

IP-AN-01

... a midwife's role could also see people postnatally and a physio could discharge people home...whereas nurses obviously have to wait for doctors to make the formal discharge...obviously I could utilise that because I could get them to come and assess them rather than waiting for a doctor.

IP-AN-02

... knowledgeable about different professionals and what their job role involves but also to involve them but to be prepared to help them in return, and just be respectful of those around you.

IP-AN-02

Such action was thought to involve understanding other perspectives and priorities:

Until you realise what each profession does you realise that actually things that I thought would be a priority for different professions...to them that isn't much of a priority...so you have to have a little patience and...take their opinions on board and realise that they'll do things in a couple of...

IP-PH-02

... important to be friendly and see things from other professionals' point of view, recognising that everyone's stance is different.

IP-SW-01, interview notes

Other comments included the importance of being flexible and not defensive about overlapping roles, and the value of proximity:

Seeing that the overlapping of roles isn't a bad thing and it's a good thing for the service delivery in <u>allowing your role</u> to overlap

IP-PH-01

The impact of interprofessional working on care delivery Assisting staff to deliver care

Respondents from both cohorts appeared to have comparable opinions about the way that interprofessional collaboration enhanced the facilitation of the delivery of care and planning of discharges which involved service users with complex needs:

... we've got a gentleman at the moment who is quite a complex discharge and we all know that ultimately this guy wants to go home but he needs an awful lot of physio, he needs an awful lot of OT input, he's got expressive dysphasia so he's having communication from speech and language... and

we are all just working together because we know what he wants to do and so everyone is doing what they can in their own profession to... sort of... help him achieve that.

IP-AN-01

about being able to do the stairs and things. And just by working together with the lung cancer nurse specialist... and the respiratory care nurses, the physiotherapy and the OT just to get somebody to learn that they could do the stairs by stopping halfway up... they had deep-breathing techniques for anxiety... the lung cancer nurse specialist to say: "I will be in touch the day after you've got home, when you've settled in. I've ordered the oxygen and it will be in on Monday... by ringing the district nurse to say they're going to come out on Monday when the oxygen arrives..." Just to get that person home on a Friday rather than sit in hospital 'til the Monday that it happened involved a lot of people and experience in knowing who can help...

UP-AN-06

This was also the case with respect to enhanced information exchange between professionals, and service co-ordination:

... we had a daily handover with the nurses and with the OT on the wards so we knew exactly who had come in, at what stage they're at ... IP-PH-02

... that's really where documentation comes in as much as anything else because if you can't attend a meeting where you're hearing stuff verbally, whenever anybody has been with a client they then write down what they have done with that client . . . when the next person goes in to that client they can see in the file what has happened on previous occasions. UP-AN-04

Thirteen respondents mentioned the way that other colleagues' specific disciplinary input enhances care delivery:

... we can only go so far within our professional role and then we need to get other people in because we've got boundaries that we practice within, obviously, and certain things are outside our boundaries... so people can't go home or do what they want to do until we've got in the appropriate people . . .

IP-MW-01

... if they've got a mental health nurse there that can really kind of say 'look, this is my profession, this is what I do, I can help you with this' rather than, obviously I can help them as much as I can but a mental health nurse would have more ability to understand them because they've had the training' and likewise, if somebody came in pregnant with pregnancy problems it would be much easier for me to say 'I'll get you a midwife, they'll help you completely.'

IP-AN-02

Only one respondent from the IP cohort reported that interprofessional collaboration can involve direct help with individual practitioners' workloads, while three respondents from the UP cohort also did so:

That's the two main things on our ward is chest and mobility for physios. And then if they're a bit short and they want a hand I might give them a hand, getting them out of bed and stuff.

UP-AN-03

An adult nurse from the IP cohort felt that interprofessional events afford professionals an opportunity to debrief about practice issues without compromising service user confidentiality:

Another thing that comes up about those meetings, you can talk about that person together, you can't come home and talk about it with your partner because you're breaking the patient confidentiality, but you need to some times, so those meetings enable you to be able to do that, I think, in a professional manner.

IP-AN-06

Direct impact on service users

Positive

Twenty-four respondents stated that interprofessional collaboration has a positive impact on care delivery. Respondents from both cohorts thought that interprofessional collaboration also contributes to an increase in service users' feelings of confidence and control, to consistency of information and care, and to the speed of discharge from acute settings, as well as helping prevent admissions to them:

I've known families want assistance and the patient doesn't want that and doesn't need that and that can be where you need the services of the OT to come up quickly and say, look this patient is absolutely fine.

UP-AN-05 (male)

... how they were looking after her whilst she was being sectioned was actually really important because they needed to adhere to strategies and boundaries that we'd developed previously. So socially... the social skills that she needed to have and working in a sort of cognitive behavioural framework... which is what we predominantly work in... they needed to follow that in order to not reinforce the negative stuff that she was doing.

IP-SW-06

... we all tend to be able to identify those people who need a little bit more input and we communicate really well between all of us and we're the only ward in the hospital who's got the fastest turnover to be able to get people out and home without bouncing back in within a week or so . . . UP-AN-01

We go and assess it and then get in touch with the OTs, or if we feel that people aren't managing, then we get in touch with other agencies that can help put carers in place, once, twice or three or four times a day and... basically try and keep people out of hospital... IP-AN-06

Four respondents from the IP cohort stated that interprofessional collaboration helps ensure that service users are located appropriately for treatment/care in either acute or community settings:

... we spend a lot of time liaising with the occupational therapists if we think that previous home arrangements are no longer satisfactory and they need other arrangements to be made... whether that means that they're going to need some care at home or whether they're going to need to move to another location in the future . . . IP-PH-01

... the whole little group sorted that out, with the result that the woman didn't have to ... we all took turns to do our bit, so that she could have exercises . . . the daughter is pleased that her mother hasn't had the trauma of moving . . . IP-SW-03

No respondents from the UP cohort mentioned appropriate place of care as an aspect of service delivery. Conversely, no respondents from the IP cohort mentioned that interprofessional collaboration can enhance service users' understanding of relevant issues, while two respondents from the UP cohort did:

I think because I get on quite well with the team, that does help the patients to understand what's going on a bit more.

UP-AN-01

Five respondents (from both cohorts) felt that interprofessional collaboration enhances opportunities for service user advocacy, as well as increasing the speed of care delivery:

We attend a weekly... ward round and that is the time that we speak up for the patient in an advocate role.

UP-SW-01

Negative

A social worker from the UP cohort stated that interprofessional collaboration could have a negative impact on service users, in that it exposes them to excessive and possibly unnecessary surveillance from a range of health and social care professionals:

There are so many spotlights on the patient and sometimes you just think, how did they ever manage without all this? Something will happen that brings them into hospital and then everyone swoops on them.

UP-SW-01

Wider context

A physiotherapist from the IP cohort thought that interprofessional collaboration enhances the organisation's reputation in the eyes of service users:

I think it's definitely very good for the hospital, anyway, if they come out with this impression that the staff are working well amongst themselves as well. IP-PH-01

Two respondents felt that interprofessional collaboration can be supportive of staff, either through their involvement in it, or through being targeted by it:

... the home have now had advice on guidance on the correct hoisting system and the staff who were going to walk out have now calmed down, are doing manual handling. So bringing in four professionals, they didn't do at all what the home asked for originally, (which) was to move this person on. We worked together and I thought that was a good one... IP-SW-03

The support workers feel much more supported and that they are being listened to.

UP-AN-04

Lack of interprofessional collaboration

One respondent from the UP cohort, together with seven from the IP cohort, mentioned that the lack of interprofessional collaboration could have a negative impact on care:

It's so frustrating when things fall apart... and it really impacts the patient. You can write in the nursing Kardex for days about something before it actually happens and you will always hear other members of staff griping over that... that you know... they'll have arranged a discharge for a patient... and it will completely fall apart because somebody didn't make a phone call along the way... it's always a communication breakdown... someone else thinks someone else is doing it and yes it really impacts on service delivery.

IP-PH-01

we spoke to the carer and she was really, really stressed . . .it was about the behavioural difficulties that her husband was exhibiting. Now if I had been a lone worker... as we are in the disabled adults team... you wouldn't necessarily pick up on what the consultant psychiatrist picked up on ... he'd been prescribed medication that had interacted with other medications that he was prescribed and that was causing him to exhibit some of the behaviour that he was exhibiting. . . . Now if I'd gone out on my own I wouldn't necessarily have been aware of this problem with the medication and we could have masked the problem.

While no respondents from the UP cohort mentioned a lack of interprofessional collaboration in relation to service users' understanding, a social worker from the IP cohort stated that this could make it more difficult for service users to understand their situation:

The patient had MRSA and C-DIF (which are contagious) and therefore needed barrier nursing. IP-SW-01 did the specialist assessment and the discharge team arranged the transport. When the ambulance arrived it refused to take him because he had MRSA and C-DIF and they had another patient on board. The patient was elderly and was very confused by what was going on - he thought he was leaving that day.

IP-SW-01, interview notes

Only respondents from the IP cohort commented on how the lack of interprofessional collaboration could result in the delivery of inconsistent and/or inappropriate treatment/care:

. . . if you weren't able to work inter-professionally then you wouldn't liaise with the other parties and the patient wouldn't end up with the same quality of care. IP-MW-02

... I can think of an instance with the way I work, a community specialist nurse... you know. I've invited her to a couple of reviews and she hasn't arrived and there's been no apology. I've linked in with her for a continence assessment and... you know... it hasn't happened.

IP-SW-04

3.3. Enhancing pre-qualifying IPE

In this chapter, participants' suggestions for enhancing pre-qualifying IPE are presented. In the case of the IP respondents, their data were based on their personal experience of pre-qualifying IPE followed by a relatively brief time in practice as a qualified professional (no longer than one year). The UP respondents, on the other hand, had been practising professionally for approximately three years at the time of data collection, but of course had no firsthand experience of pre-qualifying IPE.

Suggestions for improving IPE from the UWE, Bristol curriculum evaluation were very similar to those offered by the professionals. Student participants had stated that the IP modules could have been improved by more emphasis on different professional roles, and a wider mix of professions, noticeably doctors, social workers and occupational therapists. They also felt that having been on placement at least once helped to put IPE into context (Miers et al 2005b).

Wider professional mix

Twelve participants from the IP cohort said that there should be a wider mix of professions in the IP module groups than they had experienced:

... it was nice meeting other students from different disciplines but it would have been nice if it had been more choice, if it had been children's, if it had been physios, (do they do radiographers?), OTs,... if it had been a bigger group.

IP-AN-04

... with vulnerable adults now and the Children's Act and things like that... you're working more with the police, with health visitors, with teachers and education, housing... you know... I think [IP] should be broadened, too.

IP-SW-04

A social worker thought that users and carers should also be invited to take part:

I know that I felt it was actually quite a missed opportunity for having a user there as well... because that would have been really helpful... But then you would also be wanting to have carer involvement as well and..., I think... people are only just beginning to take that on board, really... that would be a real benefit, I think.

IP-SW-05

The absence of the medical profession from the groups attracted the most comments. Nine participants stated that medical students should be included in IP groups:

It's just a shame that none of the... because the doctors don't train at UWE... so it would have been better... and better for them as well because I think they've got the worst reputation for it, haven't they... so it would have been better for them to have been involved as well, really.

IP-MW-01

I also found it strange that the professions that I've worked with... is the doctors and to have inter-professional lectures at university and seminars without doctors seems a bit strange, you know... but I know we don't do a medical degree at UWE so it's quite difficult to get them on board.

IP-PH-04 (male)

I know there was some talk about doctors. It would have been a good idea to have doctors...

IP-SW-05

A physiotherapist thought that the lack of inclusion of medical students had been a missed opportunity to attempt to break down existing hierarchies and/or stereotypes:

I think for me it was a personal shame that we didn't have the medical profession there because I think that... without that mix... at undergraduate level... you didn't have the ability to... learn more about their profession. Instead you have to do that when you're actually just in practice. And I think in some ways it takes quite a while to build up the confidence to work with the medical profession... probably just a traditional stereo-typical sort of hierarchical thing that you need to break down. And that's what the interprofessional module sort of did. It allowed you to realise that everyone was on a level... you know... and could work together. So it was a bit of a shame that there wasn't so much of a mix...

When told that medical students were now involved in the level 2 IP module at UWE, Bristol, participants reacted positively, often with a degree of surprise:

Oh, my gosh... that is really good... that was definitely something that was noted... that there were no medics... and I didn't ever think you'd be able to get them involved! Yes, that would be really good because obviously they are

a very important role aren't they? Yes. I didn't think (they) would let them...
mingle with the rest of us. (laughter)

IP-AN-03

Oh are they? Yes, right that would be good, yes. I think it's important for them to see everyone else's role as well as, you know ... because they are not very aware sometimes.

IP-MW-03

Oh, excellent. I think that's a really good thing... well, a really good profession to have in the actual IP modules, really.

IP-PH-02

A couple of students again commented on the need to break down existing stereotypes and hierarchies:

Oh, that's good. That would be the only thing I would say is to try and get some of the medical students involved, from an early stage really...I don't know whether they just feel they're better than everybody else because they are training for longer and they had to achieve higher A-level results to get where they were to start with... and they are better qualified, in their own profession and it's a shame they don't... I know it's a bit of a general statement to say that they're all the same but... and they're not all the same... you know... some are very open to working inter-professionally. So, hopefully, it's something which will just change... it is a cultural thing... and it will just change as time goes on. But I think that was the main barrier, really, is the junior doctors.

That is great that the medics are there. I think again that's a whole other kettle of fish about the hierarchy but that might break down some of it. IP-PH-01

Two professionals thought that it might have been a good idea for facilitators to have tried to encourage students from the different professions to mix more:

I think probably when you're having a session as well, probably get people to sort of like move around and get involved with each other and not like sit in groups.[I: Do you remember if your facilitator ever tried to encourage that... in your groups?] I don't think any of them did really; they just always sat in the same place.

IP-AN-05

... maybe the tutors didn't mix us up enough at the beginning, because we did one interprofessional [module] when we were one side of the room each. And again, that's our fault, as well as the nurses... you know... we didn't gel as much as what I would have liked.

IP-SW-03

IPE format

When told that the level 2 IP module had changed to a two-day conference format, two participants thought that this sounded like a good idea, as it would allow students to get to know each other better and also to accomplish more:

No that's probably a good thing... two day seminar where you have to be together for the whole two days... So rather than just meeting for an hour or two a week you meet for a whole day... you get to know people a lot better, don't you.

IP-AN-03

... it's probably better now than it was because if you're all together... And for like a more... because we just used to get half-an-hour slots whereas if they've got two full days they can probably accomplish a bit more as well.

IP-MW-01

An adult nurse wondered if the IP modules could be incorporated within their work based learning days:

I think we could have done the IP modules... it would have been nice... If we could have divided that... half work-based learning day for other things and IP... for the first half... Now that's what we should be doing. I know it's difficult to get everybody in placement at the same time but I think that would have been far better...

IP-AN-04

However, a social worker (who completed the 2 year diploma programme) thought that more time ought to be devoted to IPE:

... it needs to be developed more. I mean we didn't have a lot of interprofessional workshops I don't think, as such... Given the whole curriculum I
don't think... [I: Yes, you would have had two six-week sessions I think.] Well
it needs to be more than that, I think, because ... that's the way that it's all
going and that's the way legislation... wants it to go, too. And for that to work
and work effectively you need to be doing a lot more.

IP-SW-04

An adult nurse questioned whether an element of IPE could be incorporated into assignments for other modules:

Perhaps it could be linked to another module, closely linked. It's like... a lot of our assignments we have to do psychology, sociology, and you have the biology in there... perhaps you could have had a bit of IP in there... not every assignment but in some of them. You know, if you do a reflection you could put... you know... if there was any... if you liaised with anybody... it could be brought into it, definitely.

IP-AN-04

Changes to IP module scenarios

All three midwives from the IP cohort thought that an attempt should be made to make the EBL scenarios more relevant to each of the professions:

... I think... if they maybe... sort of... adapted the ... scenarios so that it felt more relevant to the different people, I think you'd probably get a better response as well.

IP-MW-01

However one went on to reflect on the tension between making sure that the scenarios were relevant to everyone, but still realistic enough to remain believable and/or useful:

I think the case studies could have been more appropriate... possibly... but then that's difficult because if you've got people from six or seven different cohorts then how do you get one scenario that's going to be appropriate to everybody... you know. If you've got a disabled woman with mental health issues that's also pregnant, it's not very realistic, is it?

IP-MW-02

A social worker also thought that there needed to be more psychosocial input into the IP module scenarios:

IP-SW-01 felt that psychological issues didn't come up much in the interprofessional modules and thought that it would be good to have some psychological/therapeutic input in the module scenarios.

IP-SW-01, interview notes

An adult nurse wondered whether people could be asked to take on a different professional role within the group:

I think we had a scenario about a homeless person... Which I thought was an absolute waste of time... But actually that could be adapted... thinking about it now... to actually... perhaps give people different roles; instead of being a student nurse say: "Right, for this whole term you are going to be a physio and you are going to learn what the physio's role is." And it might be actually...role reversal... Take people out of their roles that they are in at the moment... and actually giving them a different role... to understand what the other person has to do... to see what their perception is then... IP-AN-01

Another nurse thought that perhaps students could be asked to think about how to utilise each of the different professions in an individual patient's care:

... if you had a patient that you had to maybe give examples of how you would utilise each different profession in their care, that would be quite good because it would force you to think 'right I've got this profession, I've got this patient that's got this problem' and then you'd try to utilise each profession in your group... because we all know our own roles really but if we were forced to put other people in to using for that patient's care... it would force you to think 'right, how am I going to make this patient's care better by using all these people?' And then when you're in practice you think, 'right, well I'm in that same situation, I need to utilise these people around me to make this patient's care as good as it can be really'... rather than just kind of learning about people's self-perspectives of their roles. And also if you then sort of put that to the class the next week they could say "actually, no... I wouldn't do that".

IP-AN-02

A physiotherapist thought that the on-line 'virtual village' approach being used at another university could help to make the module scenarios much more realistic:

They've got like a virtual village ... basically once a week they'll pull a problem from this virtual village where it's virtual people... you know... real problems that you're going to encounter... They will then put this scenario... to the groups, and say: "Right ok, what would you do for this? What would you do as a social worker? What would you do as an OT?" That sort of thing. But because it's like... you can actually go into this village... you can go into their houses... you've got the history... it makes it more real... we've had a couple

of students from ***... and they say it's really good because ... they actually want to work more as a team because they can see what they're actually going for.

IP-PH-03

Changes to module content

Two participants suggested bringing in qualified professionals to explain the importance and relevance of the IP modules to students:

When you first go to your first interprofessional module, it would be really good if you had someone there that could put over how important this learning is going to be for you when you go out there, and a few examples, rather than you just go in and take on what they've already got ready for you to do... someone to say 'look you might not appreciate this now, and you might think 'oh you know'... but when you get out there, you will see what this is all about'...

... we'd only been in weeks when we started our first module... you haven't been out in practice and you don't really know what to expect, so I suppose if you got like a qualified member of staff in just to talk to people about the importance of it...

IP-MW-03

Two professionals felt that communication skills should definitely be included within the IP modules:

So we definitely did communication skills within the actual course itself but not necessarily in IP. We may have touched on it and I think we broached it, maybe... I've always said communication is the highest thing. You've got to be able to communicate. [I: So do you think that's something that should be included within the interprofessional modules?] Absolutely. It's got to be.

IP-AN-04

... what do they need to cover? Remits and boundaries and... ways of working, ways of communicating... because a lot of things... like reports, for example... I know UWE don't tell you how to write reports or show you how to write reports... like court reports... That's a really huge area. Or assessment... how do you actually do an assessment? Yeah OK, you've got the assessment triangle, or whatever, but how do you actually formulate that? How do you... you know... collating all that information is all great, but how do you actually put it so it makes sense to the reader and the readers are often

different so you'd have to structure your report very differently for different readers... So when I'm writing a ... like the report I'm doing at the moment... that's very, very specific to a specific reader. There's nowhere that kind of teaches that stuff, really. I think that would be helpful. IP-SW-06

Although four participants felt that they had learned about group working as a result of the modules (see above), a social worker felt that there had not been enough opportunities to practise group working during the modules:

What I thought was a real missed opportunity was actually to practise group work skills and actually to do that bit about task and process... to actually get some experience in negotiating in a group... [I: So that didn't happen?] It didn't, no. Now whether that was our particular group... I don't know... but in hindsight that has been such a useful thing to have some learning about... I know you learn things for yourself but... it seemed like a missed opportunity to me.

IP-SW-05

An adult nurse suggested the use of formally assessed presentations as a means to encourage participation during the modules:

I know when I did my degree we did an awful lot of presentations; we didn't do that on the [adult nursing] diploma. Now in those presentations although we hated them, because we had to go out the front and your mouth goes dry... I learnt so much from it... I had to research what I was going to talk about and I had to know about it, because you can't put it across otherwise can you? ... [I: So would you see that as something that should be part of the assessment of the modules or would you just see it as something...?] I hate to say this, but yes, because I think you really do go back and research it 100%... and... it helps these disciplinary meetings because, it helps you speak up; it stops you being so scared.... You take on a different persona don't you... and it does help... but it must be awful for some people, those shy ones that don't say anything. But then when you get in practice, you can't be shy and not say anything.

A physiotherapist thought that perhaps discussions in the level 1 module should have been more focussed on group work, rather than professional roles, as students did not yet have enough knowledge/experience to contribute: I think the content at the time... I think it just meant that sometimes it was just a bit inappropriate in terms of what you were sort of wanting. I think probably more a general type of thing, maybe... learning about your group working could have been more appropriate at that stage and then in terms of discussions when you want to give professional opinion and... really see the different sides of the professions, probably later on when you've had a chance to learn about your own profession a bit more.

IP-PH-02

Although twelve participants indicated that they had learnt about professional roles and/ or perspectives as a result of the IP modules (see above), six respondents said that they would have liked to have learnt more about these sorts of things, including suggestions as to what they could do to help one another with their roles. Provision of an information booklet, second- and third-year students speaking about their placement experiences, qualified professionals coming in to speak about their practice experience and swapping professional roles when discussing the module scenarios were all suggested as ways of attempting to address this:

... if we'd looked into their roles a bit more... I think that's what we wanted to do... I'd have liked a bit more of a... a definite... I don't know, like a little booklet or just something where we could say: "Right, OK, this is the role of the physio..." or, like I said, at Year 2, we would know our roles guite well... to be able to give that information. So... I think especially in Year 2... I think you really could get together and say "Right, well actually this is what we do and this is how we do it and you could help us by doing this..." and "this is what physios really hate; when nurses do X" ... you know... Its shared experiences and I think that's really important...not just "a pharmacist does this, and a physio does this..." Its how best to get on with everybody and how best we can benefit... for the patient... But we need to know what specific roles are in a bigger sense, not just "This is what they do"... They do it with trained nurses. They bring trained nurses in. They should bring in qualified physios, bring an OT in... And I know that's really difficult to do because... you've got the different groups... but if it was over a certain period of time it could perhaps... come in once a week for an hour or something and maybe just do a few groups and then come in the next week and do a few groups and then you could just rotate them... but I think that would be really, really good and that would just give people insight... we could bombard them with questions like: "How can we do this better? Why do you do it like that?" I think they would get a good insight as well. I think they would learn.

IP-AN-04

I don't think you can do anymore really, apart from splitting them up and doing some sort of game with them, where they sort of do somebody else's role, to see what it feels like, I don't know... do role play, you know, you're the nurse and see how it feels to be... perhaps that's an idea.

IP-AN -05

... what would be maybe nice in a final year... or even in the second year actually by the time we'd had time to go out on placement... would almost be getting into these similar sized groups but presenting to one another what our profession is and then talking about it that way, because that might encourage nurses to say: "Oh but physios always ... make a mess and then walk off and leave the patient..." ... and we'd be able to go: "... these are our stresses and these are our demands..." ... But that might encourage things to come out a little bit. People could say "What are your gripes?"

IP-PH-01

Another physiotherapist would also have liked a lot more detailed information on professional roles, including the different structures and levels operating within each profession. She gave lots of examples of the sorts of information that would have been useful to her in preparation for both placements and qualified practice:

I think the only thing it didn't prepare me for is a deep enough knowledge on... the defined roles for each profession so, for example, when I graduated... I lived with a nurse and I learned, I think, more about the actual nursing profession in the time that I lived with her in terms of the facts... say... as a new graduate she couldn't do...for example... IV...which... learning that I knew then that when I was asking nurses on the ward: "Can you take this drip down?"... and when nurses actually said: "I can't do it myself." I then realised why they couldn't... because they weren't supposed to know that as a new graduate...

... I suppose above anything... a summary of what people do learn, what sort of areas they work in and how their professions grow. So like for example... when I probably went on placement in an acute setting... because I'd never worked with any of the medical staff in terms of the doctors, I didn't at all know their structure, so for example, what used to be House Officer, Senior House Officer, the Registrar and Consultant... and at times... my mentor would be like: "Oh, bleep one of the doctors and get the answer." And it was... like... "Which one do I bleep?" I don't know. I don't know which level they're meant to be at and who is supposed to answer for what and what level is appropriate...

... I think a lot of people... in terms of physio... are quite surprised, for example, that I do rotations and what does that mean? What level am I at? Why am I doing rotations? Why do I leave every four months to another department? ... by other professions... hearing the benefits of why we do, it will help them a lot more... it's sort of just learning about... you know... the stages in each profession and... the sort of appropriate levels, really. I think it's just having that sort of understanding probably helps when you're actually on placement and when you actually graduate and work...
...initially speech and language [therapy] I didn't at all know that they did swallowing... and it's something you didn't know until you were on placement... actually that's a major part of theirs... it isn't just talking... it's a major part that they get involved with. And you only need to have a little summary about their profession at uni and then it would make more sense when you go out... otherwise you're sort of in the dark and trying to find out IP-PH-02

She also thought that this information could be provided by qualified professionals or final year students, who would, by that time, probably have quite a 'knowledge of the actual work that they do'.

More opportunities to learn with students from other professions

Two participants expressed a desire for more shared learning with students from other professions throughout the curriculum:

... it struck me... instead of these funny scenarios that we do on the IP module, how useful it would actually have been to learn something generic like respiratory anatomy or physiology... which the nursing staff need to know, and physios need to know a lot about... you could build it up during the three years... in the first two years you could do it with the nurses and the occupational therapists and the third year the physios could go on... because it is a specialism of ours we generally have a little bit more expertise there... but I thought that would be much more useful to learn alongside them and then have assignments set on that... where there's a focus... because we can see how relevant it is to our course rather than the IP... And, for me, that would be really useful... to know exactly what the nurses are learning because I'd know it as well because I'd learnt alongside them...

IP-PH-01

if you're going to do inter-professional working... training, then do it across the whole board. You know... do the broad module together... do the psychology, the sociology... you can do a lot more...

IP-SW-06

More opportunities for interprofessional learning and working on placements

Six participants thought that it would have been a good idea to have spent more time shadowing other professionals whilst on placement:

... I would have liked to have looked into the roles a bit more, gone off and maybe done a bit of placement with someone... even if it had just been an hour... "this is where we work, this is what we do... how can we make it easier, how can we communicate better, how do people communicate?" and observe people.

IP-AN-04

I can remember in the first year thinking how good it would be to have gone out with somebody from a different profession to have got a feeling for what their role was like rather than just trying to get a handle on it within the classroom environment...even if it was just a couple of placements that you did somewhere different to your own. I think that would kind of open doors a bit more, really.

IP-MW-02

I think somehow... sort of... getting everyone to spend time with various professions... at least in their first couple of placements... trying to get them to spend time with everybody in the multi-disciplinary team... it's not until you actually go with them or follow them and just shadow them just to see what their job entails, really.

IP-PH-04 (male)

Two adult nurses wondered whether it would have been possible to spend time with other students from the IP module groups whilst on placement:

... maybe have something when they are on placements where they could all get together somehow...

IP-AN-03

... when we were on the wards... I know it's pretty difficult to do... but it would have been nice if we could have said: "Right OK, well I'd like to come out with you for a day. Can we organise it so I can actually see what your role is doing?" And that would have been nice. If we could have organised that between ourselves and they would have allowed it...

IP-AN-04

Another adult nurse thought that it would be difficult to arrange more interprofessional shadowing opportunities on placements because everyone was already so busy:

I mean even with the nurses... quite often their mentors don't want to know them, they don't have the time for them, they get irritated by them, they say: "Oh, she asks too many questions." And that's just the nurses who are supposed to be looking after them! So these poor girls... to try and think that they could possibly get any better inter-professional learning... I mean the physios have their own students with them. Again, they're pretty good. They will take them out on home visits... they will take them to the gym... and stuff like that... but I think that's about as far as it goes... and I don't know whether they'd want to do any more with them because of the pressures from their own work and their own students.

Social workers were particularly concerned about issues of observing IP working in practice, as depending on their placement settings, social work students might not have had the opportunity to work with any other professionals during their training. It was thought that the new three year social work degree programme might allow further opportunities for students to observe IP working during placements:

... I think that placements could be more frequent because when I was on the... [social work] diploma... we just had the two placements... one in the first year and one in the second year... whether they could be more frequent... longer... less often... Because it's so vast... health and social care... and there are so many disciplines and you'd get to work with lots of different people.

IP-SW-04

I think a clear understanding of others' roles would be useful. So I think even if you're looking at placements then maybe instead of a social worker going to a social services department for all their placements maybe you could look at putting them in the NHS or with mental health... you know... something so that they could get a clearer understanding of others' roles, really. So... do a bit more kind of swapping... It could be done now the Social Work Degree has been extended... you've got longer placements... so that the first year... bits of that could be done in a different setting, maybe...

IP-SW-06

A midwife thought that it would also be a good idea for students to sit in on MDT meetings and to try to follow individual cases through:

I think it's probably good if they get the opportunity to sit in on meetings ... because we have like ward meetings where we all put across our views on things and stuff like that. So if they could sit in on things like that... and case conferences... and see how different professionals put their opinions in and the outcome at the end of it... And just to follow things through if they can, really. Because you sort of rotate around in your placement sometimes you don't always get to do that but I think that's the best experience is to follow things through.

Another midwife wondered whether interprofessional working could be included as a specific competency to be completed whilst on placement:

I don't know whether there's a specific competency that you have to get for interprofessional working, I don't think there is, so that could be something that could be introduced. Making sure that you have to ring the doctors and talk to them, because it is quite a daunting thing the first time you do it.

IP-MW-03

4. Discussion

The views and opinions of our IP participants in this study are particularly valuable: this is the first time that data have been reported from health and social care professionals whose pre-qualifying education included a substantial IPE initiative. Additionally, valuable insights have been gained from examining their views alongside those of students from whom data were collected when they were experiencing the same IPE initiative, and those of professionals without prequalifying IPE experience.

Views about the experience of pre-qualifying IPE

Experiences in the academic environment

The professionals' range of views about their IPE experience in the academic environment was similar to those expressed by students in studies conducted by both UWE, Bristol and other researchers (Ker et al 2003, Tunstall-Pedoe et al 2003, Miers et al 2005b). It appears then that many of these professionals' perceptions of their pre-qualifying IPE may not have changed dramatically since their student days. The view expressed by some participants that IPE had raised their awareness of relevant issues, and that they had only really started to appreciate the importance of IPE when exposed to practice settings, was again consistent with data from the UWE, Bristol and other student studies (Ker et al 2003, Miers et al 2005b). Overall, positive views of IPE expressed by the majority of the IP participants in this study reinforce the belief that IPE can impact positively on interprofessional working in practice, and on care delivery itself.

The opinions of the minority of participants who did not feel that the IP modules had been useful again agreed with those expressed by some students (Tunstall-Pedoe et al 2003, Miers et al 2005b). It seems likely, then, that there are a proportion of health and social care students who may hold similar negative views about IPE, particularly where initiatives are based on EBL and other small group learning activities. These individuals present an interesting challenge to educationalists, on a number of counts. Firstly, the idea that students cannot gain from IPE at an early stage of their careers because they have insufficient knowledge of their own roles reveals a simplistic expectation regarding the uses and value of IPE. Secondly, the fact that some participants could see no value in their IPE experience without an explicit link to their own practice may demonstrate, among other things, that these individuals required additional assistance to engage with and appreciate principles underlying

good interprofessional practice in general. Thirdly, the finding that IPE may not always prevent the formation of interprofessional stereotypes and divisions, but can actively promote them, is contrary to a major assumption concerning the benefits of IPE (Oandasan and Reeves 2005).

Our findings, together with those from the student studies mentioned above, indicate that educationalists need to consider these factors when planning IPE initiatives. In particular, an explicit focus on the importance of interpersonal and organisational issues in the wider context, as well as on the policy imperatives underpinning interprofessional initiatives in the workplace, may help students to appreciate the relevance of IPE to their own practice, even at an early stage of their careers, or in the absence of obvious links with their own profession. It was noticeable that participants from the UP curriculum valued pre-qualifying opportunities to improve their communication skills and gain more insight about other professions. Clearly these opportunities were thought to contribute to their ability to operate effectively in an interprofessional environment.

The issue of stereotype formation is more complex. It is thought that the process of professional socialisation is in part responsible for the development of stereotypes concerning other professions (Oandasan and Reeves 2005). Researchers investigating IPE with a particular interest in stereotypes (see, for example, Carpenter and Hewstone 1996, Hind et al 2003, Mandy et al 2004, Hean et al 2006) have drawn on Social Identity Theory in this context. Put simply, from this perspective, individuals derive their social identities in part from groups to which they belong, through a process of comparing the characteristics of group members with those of non-members (Tajfel et al 1971, Turner 1999). Following this logic, students' professional group constitutes an 'ingroup' from which they derive their social identity (Carpenter and Hewstone 1996).

Healthy stereotyping is held to occur when individuals both inside and outside the 'ingroup' share the same image of group members. Promotion of such healthy stereotyping is thought to be a beneficial outcome of IPE, where students from different professions can reinforce their own image of themselves in a way which accords with the view that students from other professions have of them (Hean et al 2006). Conversely, these authors also suggest that conflict can occur between those inside and outside of an 'ingroup' when interaction reveals that they hold dissonant views about that group's image. Our data reveal that there is also a possibility that

participation in IPE can itself result in negative stereotype *formation*. In this situation, negative identity appears to be assigned to members of another professional group on the basis of observed differences between them. This seems to be yet another finding that supports the argument that facilitation of IPE groups requires a comprehensive level of skill, and that academic staff should accordingly be well trained and supported if students are to enjoy a satisfactory IPE experience (Freeth et al 2005, Thomas et al 2007). It was clear from our data that participants had had very mixed experiences of facilitation in the IP modules.

Experiences in placement settings

Approximately half of the interviewees thought that they had observed good interprofessional working in practice placement settings, while more than a third reported little or no interprofessional working in some placement settings. The same proportion had been encouraged by placement staff to engage in interprofessional learning and working opportunities. However, as a much higher proportion of respondents reported having been involved in interprofessional interaction on placement, they were obviously able to do so even without overt encouragement from placement staff. A key finding was that a number of individuals stressed the need they had felt to take the initiative in ensuring that they gained appropriate interprofessional experience. There was no doubting, however, that positive encouragement and enabling from mentors made it easier for individuals to engage appropriately in interprofessional activities on placement. These findings raise questions about the quality of students' interprofessional experience in practice if they have not yet developed the personal confidence to take the initiative in the absence of explicit support from placement staff.

It is recommended that students should engage in practice-based IPE (DH 2001), which has been shown to be beneficial for both students and staff in placement settings (Miller et al 2006). However, practice-based IPE can also increase staff workloads, and pressure on placement settings from additional student numbers can be problematic (Miller et al 2006). In addition, despite its potential effectiveness, logistical and/or resource difficulties have restricted the implementation of IPE in practice settings (Glen & Reeves 2004); very few initiatives have been reported, either in the UK or elsewhere (Wahlström et al 1997, Reeves 2000, Reeves & Freeth 2002, McNair et al 2005, Miller et al 2006). It therefore seems likely that students' learning about interprofessional working in practice will continue to depend largely on the nature of the environments in which they find themselves, and on the behaviour

of staff, particularly individual mentors, in those environments. Unfortunately, it is also apparent that not all placement staff are able to support students appropriately. In addition to problems with resources and workload, they themselves may not have sufficiently developed the ability to interact effectively with colleagues from other disciplines (Pollard, forthcoming). In light of our findings, we would therefore argue that it is essential for mentors in placement to be adequately prepared and supported so that they are aware of the need to encourage and enable students to participate appropriately in interprofessional activities, and also have the capacity to do so.

Interprofessional working in qualified practice

As mentioned at the beginning of this report, the impact of IPE experience on care provision has not yet been established (Glen 2004, Zwarenstein et al 2005). In their report on evaluations of IPE, Freeth et al (2002) developed a model of outcomes of IPE, noting that most initiatives at that time produced outcomes only related to learners' reactions, attitudes, knowledge and/or skills (levels 1-2b, as detailed in Table 4).

Table 4. Model of outcomes of interprofessional education (Freeth et al 2002, p.14)

1	Reaction	Learners' views on the learning experience and
		its interprofessional nature
2a	Modification of attitudes/perceptions	Changes in reciprocal attitudes or perceptions
		between participant groups. Changes in
		perceptions or attitude toward the value and/or
		use of team approached to caring for a specific
		client group.
2b	Acquisition of knowledge/skills	Including knowledge and skills linked to
		interprofessional collaboration.
3	Behavioural Change	Identifies individuals' transfer of interprofessional
		learning to their practice setting and changed
		professional practice.
4a	Change in organisational practice	Wider changes in the organisation and delivery
		of care.
4b	Benefits to patients/clients	Improvements in health or well being of
		patients/clients.

Given the range and complexity of confounding factors, it would appear virtually impossible to establish definitively and directly the effects of IPE in terms of benefits to patients or clients (level 4b) through accepted research processes. In our attempt to identify outcomes of IPE beyond level 2b, we therefore adopted a 'chain' strategy:

we attempted to discover whether/how our participants' IPE experience influenced the way they practised; and whether/how the way they practised in an interprofessional context directly impacted on care delivery and service user experience. Caution is required when considering our findings, however: it must be remembered that our data rely on participants' self-report, rather than on direct observation of behaviour in practice.

When considering skills required for interprofessional working, participants identified, in particular, the development of appropriate and effective communication skills, and knowledge of the scope of other professionals' roles. Participants in other studies have also asserted the importance of these factors (Meerabeau et al 1999, Aston et al 2005, Parson et al 2007). Our data concerning students' learning in both the academic and placement settings therefore demonstrate that IPE can provide students with relevant skills. The fact that some of our IP respondents went on to reflect how they use their skills to contribute to interprofessional teamwork and interaction suggests that outcomes of their IPE experience are associated with behavioural change (level 3). In view of the fact that our IP respondents were all still in relatively junior positions, it would have been unrealistic to expect them yet to have implemented organisational change (level 4a) to any marked degree. However, there was some indication that participants' awareness of relevant issues, acquired during their IPE experience, did impact directly on the experience of service users with whose care they were involved. So we would argue that our data show that IPE can result in outcomes which impact directly on service users (level 4b). It therefore appears that outcomes of IPE associated with organisational change are not necessarily a pre-requisite for outcomes associated with an impact on service users (although such an impact will obviously be defined and possibly limited according to operating organisational constraints).

Comparison between the IP and UP cohorts

Overall, IP respondents showed a greater user focus and gave more complex responses, showing a greater awareness of relevant issues, specific skills and attributes required for effective interprofessional interaction and a more complex understanding of teamworking. Nevertheless one or two UP respondents drew on their greater experience of practice and demonstrated a depth of awareness about pertinent issues.

While their academic experiences had been different, respondents described similar experiences in placement across the two cohorts. The fact that only IP participants reported observing poor interprofessional working in placement settings may have been due to their drawing on relatively recent memories, as compared with those of the UP participants. However, it may also indicate that the former were more aware than the latter of the issues concerned. As a consequence of their IPE experience, they may also have expected interprofessional working to involve a relatively wide range of professions. This may account for the tendency of some IP respondents to downplay the importance of collaboration which involved representatives from only a few professions.

Respondents from both cohorts expressed similar views about how interprofessional collaboration assists staff to deliver care; and how it impacts directly on service users, especially with respect to enhancement of their feelings of confidence and/or control, the consistency of information and/or care they receive, the relative speed of discharge from acute settings, and the prevention of admission to these settings. There was, however, more awareness among respondents from the IP cohort about the value of professionals' specific disciplinary contribution to care delivery.

The most noticeable differences between the cohorts were that only the IP participants commented on how the lack of interprofessional collaboration contributes to the provision of inconsistent and/or inappropriate treatment or care; and only IP respondents showed awareness of issues concerning the impact of interprofessional collaboration on the appropriate location of care delivery, for example, acute or community settings. The latter perspective may also be attributable to the greater emphasis there has been within policy since 2000 on providing care in a variety of locales (see, for example, DH 2002b).

It is important to treat all these results with caution, however. While it appears that IPE can impact positively on user experience, there are also indications within our data that such an outcome is not guaranteed. It was noticeable that a number of respondents from both cohorts highlighted personal attributes as being integrally associated with the ability to engage effectively with other colleagues and service users. Again, this finding agrees with those from other research (Farrell et al 1999). Furthermore, many of our participants stressed how wider organisational factors impact, either positively or negatively, on interprofessional working, particularly in the case of multi-agency working. In order for individuals to effect organisational change

to enhance interprofessional working, awareness of relevant issues and possession of appropriate skills may require augmentation and actualisation through particular personal attributes and qualities that facilitate tackling, rather than accepting, pertinent organisational barriers.

Findings in relation to the Interprofessional Capability Framework

The findings from this study broadly support CUILU's Interprofessional Capability Framework (Table 5) (Walsh et al 2005). The skills and values which our participants identified as underpinning effective interprofessional working are reflected in the capabilities outlined within it. In particular, our data support specific capabilities which mainly involve interpersonal skills and the use of reflection (see Table 6).

Our respondents' capacity to reflect on their role within interprofessional structures is evidenced by the quality of the data that they provided for the study. It is noticeable, however, that they did not generally discuss interprofessional working in terms indicative of a perspective on service delivery wider than its effect on their own role and capacity to offer care: for example, support for 'anti-discriminatory practice' (Capability KP3) was not mentioned by any of our respondents. This may have been due to the relatively junior positions that most of our participants held in the services. The majority were not yet in a sufficiently senior position to be able to support some activities specified in the framework, for example, supporting 'the continual development of the interprofessional team' (Capability R2). It should be noted that support from senior staff is crucial for the successful implementation of interprofessional working (Pollard, forthcoming, Pollard et al 2006b).

As discussed above, our participants frequently mentioned organisational factors which either hindered or facilitated interprofessional working. There is no explicit mention in the CUILU framework of individuals' awareness or engagement with these factors. In light of our findings, we would argue an additional capability should be included in each of the 'Knowledge in practice', 'Interprofessional working' and 'Reflection' domains (Table 5) (Walsh et al 2005):

 Capability: KP.4 The interprofessional team member has an integrated understanding of organisational structures and processes that facilitate or constrain the activities of the interprofessional team.

Table 5. The Interprofessional Capability Framework (Walsh et al 2005, p.234). Reprinted with permission of Elsevier.

Domain	Capabilities
Ethical practice	Capability: EP.1 The interprofessional team member continually develops, promotes and practises understanding and respect for others' cultures, values and belief systems
	Capability: EP.2 The interprofessional team member interacts within the health and social care practice community to
	consistently promote and support patient/user participation and autonomy, on the basis of informed decision-making and exercise of choice
	Capability: EP.3 The interprofessional team member consistently ensures an interprofessional approach to the exercise of duty of care within a legal and ethical framework
	Capability: EP.4 The interprofessional team member critically evaluates policy and practice in the context of: _ Patient/client-focused care
	_ The changing role boundaries that inform the nature of the interprofessional team
	_ Making recommendations to influence developments to improve the quality of service/care for patients/clients of the service
Knowledge in practice	Capability: KP.1 The interprofessional team member has an integrated understanding of the legal frameworks and
-	statutory and regulatory requirements of the professions that make up the practice team
	Capability: KP.2 The interprofessional team member exercises a critical understanding of team structures and effective team functioning through knowledge of group dynamics and professional roles of all team members
	Capability: KP.3 The interprofessional team member maintains and develops a critical understanding of the
	requirements and non-judgemental and anti-discriminatory practice in order to effectively participate in care management decisions
Interprofessional working	Capability: IW.1 The interprofessional team member is able to lead or participate in interprofessional team and wider
	inter-agency work, to ensure a responsive and integrated approach to care/service management that is focused on the needs of the patient/client
	Capability: IW.2 The interprofessional team member implements an integrated assessment and plan of care/service in
	partnership with the patient/client, remaining responsive to the dynamic needs of care/service requirements
	Capability: IW.3 The interprofessional team member consistently communicates sensitively in a responsive and
	responsible manner, demonstrating effective interpersonal skills in the context of patient/client-focused care
	Capability: IW.4 The interprofessional team member shares uni-professional knowledge with the team in ways that contribute to and enhance service provision
	Capability: IW.5 The interprofessional team member provides a co-mentoring role to peers of own or other professions,
	in order to enhance service provision and personal and professional development
Reflection	Capability: R.1 The interprofessional team member utilises reflective processes in order to work in partnership with
Tronoction.	patients and colleagues ensuring a patient/client focused, and integrated care/service provision
	Capability: R.2 The interprofessional team member utilises a reciprocal process of reflection and supervision to support
	the continual development of the interprofessional team
	Capability: R.3 The interprofessional team member responds to the needs of the service by utilising problem-solving
	approaches and evidence-based practice to identify and anticipate future changes in interprofessional team role
	Capability: R.4 The interprofessional team member addresses professional development and lifelong learning needs in
	the interests of personal, professional and organisational/service development

Table 6. Capabilities from the Interprofessional Capability Framework (Walsh et al 2005) supported by data from this study

Domain	Capabilities	
Ethical practice	Capability: EP.1 The interprofessional team member continually develops, promotes and practises unders respect for others' cultures, values and belief systems	tanding and
	Other people's opinions. sometimes you don't appreciate them and then you have to question yourself and don't I appreciate that, that's a valid point that person has just made, who do you think you are?	d think why IP-AN-06
Knowledge in practice	Capability: KP.2 The interprofessional team member exercises a critical understanding of team structures team functioning through knowledge of group dynamics and professional roles of all team members	and effective
	if you don't know what they can do for your patients then you're not quite sure which direction to go.	UP-AN-02
Interprofessional working	Capability: IW.1 The interprofessional team member is able to lead or participate in interprofessional team inter-agency work, to ensure a responsive and integrated approach to care/service management that is fo needs of the patient/client	
	It was four different professionals and everybody helped that home that was real Interprofessional work end of the day, the woman stayed where she wanted to and that was good.	ing at the IP-SW-03
	Capability: IW.2 The interprofessional team member implements an integrated assessment and plan of capartnership with the patient/client, remaining responsive to the dynamic needs of care/service requirements	
	we had the referral come through, it was asking for respite care the consultant psychiatrist had the re I was allocated as the second person to go out with him now if I had been a lone workerI would go out would recognise the difficulties. But you wouldn't necessarily pick up on what the consultant psychiatrist p which was his medication	t and you
	Capability: IW.3 The interprofessional team member consistently communicates sensitively in a responsive responsible manner, demonstrating effective interpersonal skills in the context of patient/client-focused can	
	the key thing is just being able to listen and put your point across without being argumentative.	UP-AN-07
	Capability: IW.4 The interprofessional team member shares uni-professional knowledge with the team in ways that contribute to and enhance service provision	
	his walking sticks were too shortwell I knew straight away that the physio would do that.	IP-AN-01
Reflection	Capability: R.1 The interprofessional team member utilises reflective processes in order to work in partner patients and colleagues ensuring a patient/client focused, and integrated care/service provision	ship with
	And everybody jumps in with two feet and wishes they hadn't said somethingyou've got to learn from the that's the good thing about reflection, I think reflecting on experiences and then building on it and learn	
		IP-MW-02

- Capability: IW.6 The interprofessional team member identifies and implements changes within organisational structures and processes required to support integrated assessment and plan of care/service.
- Reflection. Capability: R.5 The interprofessional team member responds to the needs of the service by utilising problem-solving approaches and evidence-based practice to identify and anticipate changes required in organisational structures and processes in order to support the future interprofessional team role.

Findings in relation to Barr et al (2005) recommendations

As outlined in the introduction to this report, Barr et al (2005) recommend that IPE should:

- increase understanding of uniprofessional roles and interprofessional complementarity in order to enhance practice within professions;
- teach students to value every profession's distinctive role in order to engender respect for the integrity and contribution of each profession;
- foster mutual interprofessional support and the ability to recognise realistic and appropriate working patterns and obligations in order to increase professional satisfaction.

Considering our findings in relation to these recommendations, we would argue that it is essential that IPE fulfil these functions. The other ideal principles of IPE, as advocated by CAIPE (2001), include:

- Works to improve the quality of care
- Focuses on the needs of service users and carers
- Involves service users and carers
- Promotes interprofessional collaboration
- Encourages professionals to learn from, with and about one another

(Barr et al, p.37)

However, we note that within these principles (as in the CUILU framework – see above), the stated focus is almost entirely on individual or collective processes, attitudes and activities. Our findings indicate that there is a need for IPE to go further, in that it should also make students explicitly aware of how organisational factors can affect interprofessional working. We would argue that it is necessary to get students to start thinking about how interprofessional working happens within

different organisational contexts; and, in particular, to encourage a habit of thinking creatively about strategies for change within all situations.

Enhancing pre-qualifying IPE

It was clear from the data that the professionals who had had experience of prequalifying IPE thought that it could be improved through a variety of strategies. These related to having opportunities to learn and interact with students from a wide range of professions (particularly medical students), ensuring the educational content's relevance for their own practice, and having specific input from practitioners, users and carers. Participants thought that placement experiences should include learning with students from different professions, engaging in interprofessional activities such as MDT meetings, and shadowing or spending time with practitioners from other professions. The view was also expressed that learning outcomes in placement should include specific interprofessional competencies. The chief barriers to achieving some of these objectives in both the academic and practice environments are likely to arise from logistical and resource problems (Glen and Reeves 2004, Barrett et al 2003). It seems that, unless senior staff in both environments fully support interprofessional initiatives, it is extremely difficult for teaching staff to ensure students have suitable opportunities to learn and work interprofessionally.

There were mixed views about the use of online mechanisms for the delivery of IPE. They certainly appear to be useful in allowing students to engage with each other in a virtual environment in a way that might be difficult to arrange practically in reality (Hughes et al 2004). However, the emphasis on interpersonal skills as a key feature of successful interprofessional working (Walsh et al 2005) must logically dictate that students also have opportunities to interact with other students and professionals face to face. It cannot be assumed that capacity developed in a virtual environment will translate to capacity in the real world. Our participants advocated a judicious use of online mechanisms in this regard.

A striking feature of our findings was their similarity with those from the UWE, Bristol curriculum evaluation (Miers et al 2005b, Pollard et al 2007). There was no indication that participants had substantially changed their views about their experience of IPE, or their opinions about its value, after having adapted to the role of qualified practitioner as opposed to that of student. We would therefore argue that, as educators, we need to consider carefully what students are saying about IPE

while they are still students. Their perceptions of what is, or is not, helpful to their learning about interprofessional issues, while possibly under-developed, can still be valuable in their potential to inform the development of IPE initiatives.

A major factor arising from our findings is the issue of support for teaching staff in both the academic and placement environments. It cannot be assumed that facilitating interprofessional learning and working in either environment is a trivial or unskilled task (Freeth et al 2005, Thomas et al 2007, Pollard, forthcoming). If we are to provide pre-qualifying students with satisfactory IPE initiatives, which equip them to interact effectively in an interprofessional context, it is imperative that teaching staff are themselves adequately trained and supported. We would argue that our findings reinforce the idea that support and commitment from senior staff in organisations is essential for the success of IPE initiatives.

5. Conclusion

In one of the first studies in the UK to explore qualified health and social care professionals' views about their pre-qualifying experience of IPE, findings reinforced the belief that IPE can impact positively on interprofessional working in practice, and on care delivery itself. Most participants had found IPE in the academic environment useful, although a minority had not. Where problems were identified, they included the delivery of IPE very early in the educational programme; perceived lack of relevance to professional role; and the formation of negative stereotypes. Our findings suggest that educators in the academic environment need to consider carefully how to address these issues. Appropriate training and support for academic facilitators appear to be essential for successful IPE.

Many participants reported that they had only really started to appreciate the value of IPE once they experienced its relevance to their own professional practice. Participants' experiences of interprofessional learning and working on placement had varied considerably. While mentors' encouragement for students' engagement in interprofessional working was considered invaluable, many participants stated that they had not received this support, and some recounted how they had used their own initiative to gain desired experience. It cannot be assumed that staff in placement settings have either the opportunity or ability to provide all students with the support they need to engage effectively in interprofessional learning and working. We would therefore argue that placement staff need to be well trained and supported themselves in order to provide students with appropriate experience.

Participants who had experienced pre-qualifying IPE demonstrated a more sophisticated understanding of relevant issues and contributing factors, and appeared to be more aware of the impact of poor interprofessional working on care delivery, than participants without such experience. Appropriate communication and interpersonal skills were highlighted as being crucial for effective interprofessional working by our participants. They also spoke frequently about the impact, both positive and negative, of organisational factors on the way that professionals are able to work together, particularly when multi-agency working is involved. In the light of these findings, we have suggested that both the CAIPE recommendations for IPE and the Interprofessional Capability Framework should incorporate additional items related to awareness of organisational issues.

When comparing data from this study with those from studies in which students were interviewed about the same pre-qualifying IPE initiative, it was found that professionals and students expressed very similar views. This suggests that our participants' opinions of their IPE experience had not changed substantially during their adaptation to the professional role. We would suggest that it would therefore be beneficial for educators and researchers to consider carefully the views expressed by students about their experience of IPE, particularly where they put forward ideas for improving it.

Suggestions for enhancing pre-qualifying IPE included broadening the professional mix of IPE student groups and soliciting input from professionals, service users and carers in the academic environment; and learning with students from different professions, engaging in interprofessional activities, shadowing practitioners from other professions and including specific interprofessional competencies in learning outcomes while on placement. Many of these suggestions have resource and logistical implications which may make them difficult to implement. However, it is clear that the provision of IPE is a complex process, which requires both adequate resources and good support for teaching staff in both the academic and practice environments. Without such resources and support, it appears to be highly unlikely that all students can be provided with suitable opportunities for interprofessional learning and working. Commitment to IPE from those in senior positions in educational and practice institutions is therefore essential.

References

Aston J, Shi E, Bullot H, Galway R, Crisp J (2005) Qualitative evaluation of regular morning meetings aimed at improving interdisciplinary communication and patient outcomes. *International Journal of Nursing Practice*. 11(5): 206-13.

Barr H, Koppel I, Reeves S, Hammick M, Freeth D (2005) *Effective Interprofessional Education: Argument, Assumption and Evidence.* Blackwell Publishing Ltd. with CAIPE, Oxford

Barrett G, Greenwood R, Ross K (2003) Integrating interprofessional education into 10 health and social care programmes. *Journal of Interprofessional Care* 17(3): 293-301.

Bryman A (2001) *Social Research Methods*. Oxford University Press, Oxford. Burnard P (1991) A method of analysing interview transcripts in qualitative

research. Nurse Education Today 11: 461-466.

CAIPE (2001) Principles of Interprofessional Education. CAIPE, London.

Carpenter J, Hewstone M (1996) Shared learning for doctors and social workers: evaluation of a programme. *British Journal of Social Work* 26: 239–257.

Clarke B, Miers ME, Pollard KC, Thomas J (2007) Complexities of learning together: students' experience of face-to-face interprofessional groups. *Learning in Health and Social Care* 6(4): 202-212

Crown Copyright (2001) Census 2001.

http://www.statistics.gov.uk/census2001/profiles/commentaries/ethnicity.asp Accessed 10/12/07.

DH (1994) Working in partnership: a collaborative approach to care. HMSO, London.

DH (1999) Making a difference: strengthening nursing, midwifery and health visitor education. HMSO, London.

DH (2001) Working Together, Learning Together. HMSO, London.

DH (2002a) Reform of Social Work Education and Training: Carer and Carer Trainers Focus Groups DH, http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4069343. Accessed 12/12/07.

DH (2002b) Liberating the Talents. Helping Primary Care Trusts and nurses to deliver The NHS Plan. DH, London.

Equal Opportunities Commission (2006) *Gender statistics: an evaluation. Working Paper Series No. 51.* EOC, Manchester.

Farrell GA (1999) Aggression in clinical settings: nurses' views -- a follow-up study. *Journal of Advanced Nursing* 29(3): 532-41. Freeth D, Hammick M, Koppel I, Reeves S, Barr H (2002) *A Critical Review of Evaluations of Interprofessional Education. Occasional Paper No 2.* LTSN-Centre for Health Sciences and Practice, London.

Freeth D, Hammick M, Reeves S, Koppel I, Barr H (2005) *Effective Interprofessional Education. Development, Delivery and Evaluation.* Blackwell Publishing Ltd. with CAIPE, Oxford.

Glen S (2004) Interprofessional education: the evidence base influencing policy and policy makers. *Nurse Education Today* 24(3): 157-159.

Glen S, Reeves S (2004) Developing interprofessional education in the preregistration curricula: mission impossible? *Nurse Education in Practice* 4(1): 45-52. Hean S, Macleod Clark J, Adams K, Humphris D, Lathlean K (2006) Being seen by others as we see ourselves: the congruence between the ingroup and outgroup perceptions of health and social care students. *Learning in Health and Social Care* 5(1):10-22.

Hind M, Norman I, Cooper S, Gill E, Hilton R, Judd P, Jones SC (2003) Interprofessional perceptions of health care students. *Journal of Interprofessional Care* 17(1): 21-34.

Hughes M, Ventura S, Dando M (2004) On-line Interprofessional learning: introducing constructivism through enquiry-based learning and peer review. *Journal of Interprofessional Care* 18(3): 263-268.

Humphris D, Hean S (2004) Educating the future workforce: building the evidence about interprofessional learning. *Journal of Health Services Research and Policy, 9, Supplement 1*, S1:24-S1:27.

Ker JS, Mole L, Bradley P (2003) Early introduction of interprofessional learning: a simulated ward environment. *Medical Teacher* 37: 248-255.

Mandy A, Milton C, Mandy P (2004) Professional stereotyping and interprofessional education. *Learning in Health and Social Care* 3(3): 154-170.

McNair R, Stone N, Sims J, Curtis C (2005) Australian evidence for interprofessional education contributing to effective teamwork preparation and interest in rural practice. *Journal of Interprofessional Care* 19(6): 579-594.

Meerabeau L, Pope R, Graham L (1999) Changing childbirth: who should be the lead professional? *Journal of Interprofessional Care* 13(4): 381-394.

Miers ME, Barrett G, Clarke BA, Hawes D, Means R, Pollard KC, Ross K, Snelson L (2005a) *Evaluating an interprofessional curriculum: meeting the research challenge.* UWE, Bristol. http://hsc.uwe.ac.uk/hsc/index.asp?pageid=653 Accessed 12/12/07.

Miers M, Clarke B, Pollard K, Thomas J (2005b) *Learning together: student and staff experience of interprofessional groups.* Research report. Faculty of Health and Social Care, UWE, Bristol.

Miers M, Clarke B, Pollard K, Rickaby C, Thomas J, Turtle A (2007) Online interprofessional learning: The student experience. *Journal of Interprofessional Care* 21(5) 529-542

Miers M, Pollard K. Gilchrist M (2006) *Inter-professional learning: does it make a difference?* NETNEP 1st Nurse Education International Conference. Developing collaborative practice in health and social care education. May 14-16th, Vancouver, Canada

Miller C (2004) *Producing Welfare: A Modern Agenda*. Palgrave, Basingstoke.

Miller C, Ross N, Freeman M (1999) *Shared Learning and Clinical Teamwork: new*

directions in education for multiprofessional practice. ENB, London.

Miller C, Woolf C, Mackintosh N (2006) Evaluation of Common Learning pilots and allied health professions first wave sites. Final report. Research commissioned by the Department of Health. Commission number: 160050. http://www.smd-edu.qmul.ac.uk/student_info/undergrad/ipe/docs/CLAM_Final_Report_Revised_Sept 06.pdf Accessed 25/06/07.

Nursing and Midwifery Council (2007) Statistical analysis of the Register. 1st April 2005 – 31st March 2006. London, Nursing and Midwifery Council Oandasan I, Reeves S (2005) Key elements of interprofessional education. Part 2: Factors, processes and outcomes. Journal of Interprofessional Care 19(Supplement 1) 39-48.

Parsons ML, Clark P, Marshall M, Cornett PA (2007) Team behavioral norms: a shared vision for a healthy patient care workplace. *Critical Care Nursing Quarterly* 30(3): 213-8.

Philippon DJ, Pimlott JFL, King S, Day RA, Cox C (2005) Preparing health science students to be effective health care team members: the InterProfessional Initiative at the University of Alberta. *Journal of Interprofessional Care* 19(3): 195-206.

Pollard KC (forthcoming) Non-formal learning and interprofessional collaboration in health and social care: the influence of the quality of staff interaction on student learning about collaborative behaviour in practice placements. *Learning in Health and Social Care*

Pollard KC, Miers ME, Gilchrist M (2004) Collaborative learning for collaborative working? Initial findings from a longitudinal study of health and social care students. *Health and Social Care in the Community* 12(4): 346-358.

Pollard KC, Miers ME, Gilchrist M (2005a) Second year scepticism: pre-qualifying health and social care students' midpoint self-assessment, attitudes and perceptions concerning interprofessional learning and working. *Journal of Interprofessional Care* 19(3): 251-268.

Pollard KC, Miers ME, Gilchrist M, Sayers A (2006a) A comparison of interprofessional perceptions and working relationships among health and social care students: the result of a 3 year intervention. *Health and Social Care in the Community* 14(6) 541-552

Pollard K, Rickaby C, Ventura S, Ross K, Taylor P, Evans D, Harrison J (2007) Transference to Practice (TOP): a study of collaborative learning and working in placement settings. The student voice. University of the West of England, Bristol. Pollard K, Ross K, Means R (2005b) Nursing Leadership, Interprofessionalism and the Modernization Agenda. British Journal of Nursing 14(6): 339-344.

Pollard K, Ross K, Means R (2006b) 'From a student's point of view it must be really confusing': student engagement in interprofessional working in practice placement settings. Annual International Nursing Research Conference, Royal College of Nursing, 21st - 24th March, York

Reeves S (2000) Community-based interprofessional education for medical, nursing and dental students. *Health and Social Care in the Community* 8(4): 269-276. Reeves S, Freeth D (2002) The London training ward: an innovative interprofessional learning initiative. *Journal of Interprofessional Care* 16(1): 41-52. Reynolds F, Crookenden R (2003) *Collaborative Teamwork Skills: How are they developed through interprofessional education and are they applicable in the practice setting?* http://www.health.heacademy.ac.uk/projects/miniprojects/reynoldsfr.pdf Accessed 10/11/2007.

Tajfel HI, Billig MG, Bundy (1971) Social categorization and intergroup behaviour. *European Journal of Social Psychology* 1: 149–178.

Thomas J, Clarke B, Pollard K, Miers M (2007) Facilitating interprofessional enquiry-based learning: Dilemmas and strategies. Short report. *Journal of Interprofessional Care* 21(4) 463-465

Tunstall-Pedoe S, Rink E, Hilton S. (2003) Student attitudes to undergraduate interprofessional education. *Journal of Interprofessional Care* 17(2): 161-172. Turner JC (1999) Some current issues in research on social identity and self categorization theories. In: N Ellemers, R Spears, B Doosje (eds) *Social Identity, Context, Commitment, Content.* Blackwell Publishers, Oxford, pp.6–34. Wahlström O, Sandén I, Hammar M (1997) Multiprofessional education in the medical curriculum. *Medical Education* 31: 425-429.

Walsh CL, Gordon MF, Marshall M, Wilson F, Hunt T (2005) Interprofessional capability: A developing framework for interprofessional education. *Nurse Education in Practice*. 5: 230-237.

Zwarenstein M, Reeves S, Barr H, Hammick M, Koppel I, Atkins J (2005) Interprofessional education: effects on professional practice and health care outcomes. Software. The Cochrane Library, Oxford.