Introducing Interprofessional Education

CAIPE

CENTRE FOR THE ADVANCEMENT OF INTERPROFESSIONAL EDUCATION

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Preface

This guide is addressed to readers new to interprofessional education (IPE) who want to learn more as they prepare to become one of its tutors, practice teachers, facilitators, examiners, assessors, reviewers or researchers. It responds to questions that we are frequently asked by visitors to the UK embarking on their interprofessional journey, during the question time following our presentations in other countries and nearer home, by newcomers to CAIPE. It can be used by interested individuals working alone, but will have added value if used by a group working together to develop IPE. We offer examples from around the world to demonstrate the range of models and approaches used according to local need and resources. Questions are included to stimulate reflection, discussion and creative thinking within your local context.

What experience do you bring to IPE? Was interprofessional learning included in your pre-qualifying course? Did you participate later in post qualifying programmes, interprofessional workshops or conferences?

— **What springs to mind? How did this learning make a difference to your work with other professions?**

Some of your most valuable interprofessional learning may have occurred during your everyday practice, for example, during case conferences or team meetings. Make a note of significant memories.

— **Which other profession was helpful to your learning or practice and why?**

As a teacher, you may have taught professions other than your own. If so, which were they?

— **What did you learn about their attitudes, perceptions, perspectives, values, roles, responsibilities and relationships with others? What were their preferred ways of learning?**

Value what you bring to IPE from your prior experience, but be honest about what could be improved.

Glossary

These are some of the terms that you may encounter in your interprofessional reading.

Collaborative practice is working in partnership between professions and/or between organisations with individuals, families, groups and communities.

Competency-based education is defining outcomes from a course in terms of what the students are able to do by its completion.

Continuing Professional Development (CPD) is maintaining and developing competence for practice through on-going learning after qualification.

E-learning employs web based information, simulation and communication technologies.

Facilitation enables students to learn from their own experience and that of others.

Formative assessment contributes to students' learning as they appraise progress and plan for improvement.

Interdisciplinary care is sometimes used as an alternative to interprofessional care or to refer to care provided between branches of the same profession, typically medicine.

Interdisciplinary research typically refers to systematic investigation conducted in collaboration between members of different academic fields.

Interprofessional care is a collaborative response to the needs of individuals, families, groups and communities by members of two or more professions.

Interprofessional education occurs when students or members of two or more professions learn with, from and about each other to improve collaboration and the quality of care.

Interprofessional learning occurs between students or members of two or more professions to enhance knowledge and competence during interprofessional education, or, informally in educational or practice settings.

Interprofessional practice is collaboration in practice between members of two or more professions.

Interprofessional teamwork engages members of two or more professions with complementary competences in sustained collaborative practice towards common goals.

Interprofessional research refers either to systematic investigation into interprofessional education and practice and/or conducted between professions.

Multidisciplinary education is sometimes used interchangeably with multiprofessional education (see below) but may also refer to education between branches of the same profession or between academic disciplines.

Multiprofessional education is occasions when professions learn side by side for whatever reason.

Pre-qualifying courses are programmes leading on satisfactory completion to the award of professional qualifications.

Post-qualifying courses are programmes undertaken after qualification in order to advance knowledge and skills.

Shared learning is a generic term used loosely when professional groups learn together.

Summative assessment is an appraisal of the learning that has taken place which counts towards the award of the qualification.

Putting IPE in context

The case for closer collaboration between professions rests on the recognition in ever more countries of the need to deploy personnel more efficiently, more effectively and more economically in response to the increasingly complex problems presented by individuals, families and communities (Frenk et al., 2011). IPE promotes such collaboration as participants review relationships between their professions, enhance mutual understanding and explore ways to combine their expertise towards improving delivery of service, patient safety and quality of care (WHO, 2010).

IPE has been widely introduced into education for community-based care for growing numbers of vulnerable people, but it is as relevant in acute and chronic care, to sustain quality of life, ensure safety, prepare for rehabilitation and expedite discharge. We suggest ways in which you may be able to introduce it in pre- qualifying or post-qualifying education, or work-based settings between professions in health, social care and other fields. Each of the three settings is discussed below, followed by overlapping themes.

There is much to be learned from the approaches and models tried by others, but no two situations are the same. It is for each planning group to work out its own strategy, reconciling members' expectations and taking into account opportunities and constraints. That takes time and patience.

How familiar are you with education for the health and social care professions in your country?

Are there occasions when some of them already learn to together?

Are there opportunities for students of different professions to come together during their clinical or practice placements?

- **Make a note of the two or three such times known to you.**
- **Identify the aims, curriculum, learning methods and professions included.**
- **Make sure that you revisit those notes after reading more about ends and means in IPE in this guide.**

This guide may help you to find your bearings; it is based on the CAIPE principles of interprofessional education (CAIPE, 2011) enshrined in the UK in recommendations for pre-qualifying IPE (see appendix A taken from Barr & Low, 2012). You may find it helpful

to review application of these principles, not only to pre- but also post-qualifying IPE, in the context of professional education and practice in your country.

There are experienced interprofessional teachers ready and willing to guide you and national and international networks which you can join (see appendix B). There is a wealth of information in the interprofessional literature. Books and websites include introductory texts for students, guides for teachers, reusable learning materials, competency frameworks, systematic reviews of evidence and more. Sources are, however, uneven in quality and often culture-specific. We cite those which we have found to be accessible, compatible with the evidence and internationally applicable. Check first those sources that you can access for free on the internet before spending a lot of money. Some will almost certainly focus on your needs. Take a look at the list on the CAIPE website to get started – www.caipe/org/uk. We commend especially papers from the peer reviewed Journal of Interprofessional Care which is dedicated to collaboration in education, practice and research worldwide (www.informaworld.com/jic).

We have drawn on experience in many of the countries where IPE has been introduced, including those that we have visited. The outcome, if we have succeeded in our task, is a shared understanding of ways to develop IPE which transcends professional and national borders and cultures.

Introducing IPE in pre-qualifying courses

Drawing the boundaries

The occupational map changes as professions wax and wane, boundaries are redrawn and power and responsibility are reassigned. The outer boundary for IPE is correspondingly flexible, permeable and negotiable, but necessarily constrained in the university setting where entry requirements, educational levels and anticipated outcomes have to be taken into account.

Planning and preparation

IPE is introduced in and between two or more university-based pre-qualifying courses to obtain the best practicable mix of professional groups. It is preferably planned jointly between their faculties in collaboration with their professional associations, employing agencies, student bodies, patients (or clients) and their carers and other stakeholders, enlisting their support and tapping their resources. That ensures that the needs and interests of each group are taken into account.

It may not be feasible to engage all the groups in the learning from the outset. It may be more realistic to start modestly. Teachers may, for example, invite guest presenters from other professions, arrange observation visits, or revise case studies to include other professions in ways that exemplify collaborative practice, before sounding out colleagues

from other professions with a view to students sharing learning experiences. Students sometimes arrange extra-curricular activities such as community action and special interest groups before approaching their teachers to include IPE in their courses.

Our first example is typical of many where IPE was introduced initially into a discrete area of teaching already covered in curricula for the requisite professional groups.

Making a start

The Faculty of Medicine at the University of Oulu and Faculty of Health and Social Care at the Oulu University of Applied Sciences in northern Finland established a joint steering group to identify and develop areas for IPE to be shared by their undergraduate students. Joint courses on 'first aid and emergency care' and 'public health and interprofessional health promotion' were developed by a design task force comprising teachers from both universities.

During the first course, first year medical and nursing students were divided into interprofessional groups with three to five members. Each group selected a first aid topic area, including resuscitation, intoxication and fracture and wound first aid, to study itself before presenting it to other students. The teacher assigned to each group acted as tutor and mentor helping the students to find information. Vignettes were planned and performed where 'victims' wore realistic make-up and clothing. Following positive evaluations by teachers and students, the first aid training has been developed and extended between the two universities.

During the second course, early year medical, dentistry, nursing and oral hygiene students were introduced to key challenges in public health in Finland, to the operation of the health and social care systems and strategies, and to the ideas informing interprofessional health promotion. Classroom teaching in the form of key lectures was followed by web-based education using a learning platform using family cases and interprofessional dialogue. Students were divided into eight interprofessional groups with two teachers (one from each university) for five weekly sessions discussing health challenges from childhood to old age. Students evaluated the lectures moderately well, but there were divided opinions about e-learning and requests for face-to-face learning, which teachers added when the course was repeated.

(Taanila & Tervaskanto-Mäentausta, 2011)

Aligning professional programmes for IPE can be problematic. Some universities have resolved this problem by setting aside a week each year where students from all the programmes come together for concentrated interactive interprofessional learning. This is reinforced throughout the rest of the year with additional interprofessional activities.

Integrating interprofessional learning across programmes

Building on existing interprofessional learning provision, the School of Health and Social Care at the University of Teesside in North East England integrated interprofessional learning across all its pre-registration programmes including adult, child, mental health and learning disability nursing, social work, physiotherapy, medical imaging, occupational therapy, clinical psychology, midwifery and operating department practitioners. The work was taken forward by an IPE implementation group with a dedicated project lead. An induction event was introduced at the start of year one focusing on multiprofessional team work and communication in service delivery and patient centred care. During year two the focus was on patient safety using tailor-made workshops, and during year three, on partnership with patients and their carers. The IPE week in each of the three years, was complemented by a range of additional IPE activities during the year, which took place between various combinations of student groups in the classroom and in practice settings.

(Sedgewick, 2010)

What are the opportunities and constraints which impact, or may impact on the form and content of IPE where you are based?

— How might the opportunities be exploited and the constraints eased?

Designing the curricula

Historically, planning the curricula for university-based pre-qualifying IPE began by 'trial and error'. Although this approach had its advantages, it also had the effect of fuelling doubts in universities about the meaning and purpose of IPE. In the next stage of development there were attempts to itemise curricular inputs under broad headings such as healthcare policy, communications and ethics (e.g. Ross & Southgate, 2000). Helpful though such headings were as a way of indicating meaning and purpose, this approach neglected the learning process and failed to distinguish profession by profession, between levels of learning and between applications to practice.

Itemising curricula has fallen from favour as competency-based outcomes have gained currency in professional and interprofessional education. Curricula have become outcome led, entrusting teachers with responsibility for introducing the content and the learning methods to match the competencies.

As the learning outcomes for pre-qualifying IPE have been clarified and agreed, commonalities in IPE curricula have also been identified and accepted. In some universities this has resulted in economies of scale, but common learning in large classes cannot replace interactive learning in small groups dealing in differences on which IPE relies.

Check that all professions involved are represented on the planning group.

- **How will differences in academic level, curricula structure and length be addressed?**
- **Will a framework for IPE competencies be used?**
- **What will the intended outcomes be for the students?**
- **Do the curricula 'deal in differences' as well as commonalities?**

Interprofessional learning in practice

Interprofessional practice learning complements interprofessional classroom learning. Teachers may encourage their students to find interprofessional learning opportunities for themselves during uniprofessional placements, but collaborating with practice teachers to plan opportunities in advance is likely to be more effective. Practice teachers may collaborate amongst themselves to find and develop interprofessional learning opportunities for co-located students from different professions. One of their number may be assigned the IPE lead role to instigate, develop and co-ordinate such opportunities and to work with the students as an interprofessional group, in consultation with their profession-specific practice teachers (Barr & Brewer, 2012). Arrangements may be made concurrently for the students to meet, for example, during working lunches or half day workshops, to compare their experiences, their perceptions of the community in which they have been placed and the coordination and delivery of local services in response to its needs (Jaques & Higgins, 1986).

Every student would benefit from at least one dedicated interprofessional placement with a group of students drawn from a number of professions in a community or hospital setting.

Combining professional and interprofessional learning on placement

Physiotherapy, nursing, occupational therapy and pharmacy students were placed by Curtin University, Western Australia, with the chronic disease management team (CDMT) of the North Metropolitan Health Service which worked with people at high risk of hospitalisation. Placements provided a mixture of profession-specific experiences and interprofessional assessment and intervention, care planning and preventive strategies. Students undertook inquiries, audits and presentations for the CDMT staff and prepared learning materials for future intakes of students. Professional and interprofessional assessment was competency based. Students' feedback emphasised the benefits of collaborative practice modelled on the work of the CDMT staff.

(Brewer & Franklin, 2009)

Learning to practice together on the ward

Holsterbro Regional Hospital in Denmark launched an interprofessional training unit (ITU) for students from occupational therapy, physiotherapy and nursing, joined later by others from medicine from Aarhus University and drawing on experience in Sweden. The ITU had eight beds on a 30 bed orthopaedic ward. Interprofessional groups, each comprising four students, and overseen and supported by regular staff, took responsibility for the ward during daytime shifts, concurrently developing their respective professional skills as they learned to work as a team.

(Jakobsen et al., 2009)

Learning to practice together in the community

IPE at Sapporo University in Japan is integral to its strategy to reinforce education for community health care in the sparsely populated northern island of Hokkaido where many communities with ageing populations are underserved by health professionals. The IPE programme integrates the community-residential internships and the team-based training to become the Team-based Residential Community Internship Program within a joint curriculum managed by the schools of medicine and health sciences. The students deepen their sense of mission towards community health care and their understanding of community as they nurture relationships with local people.

(Sohma et al., 2010)

Which organisations known to you would be well suited to provide IPE placements?

— **Make a note of some – statutory, voluntary and private – in institutional and community settings.**

Consider how you would approach these sites to persuade them to take your students.

— **What is the experience on which they would build?**
— **What preparation and support would their staff need?**
— **How might their contribution be rewarded or repaid?**

Selecting the students

There is a compelling case for providing IPE for all health and social care students during their pre-qualifying courses, but choices may be constrained by the range of professions following their pre-qualifying studies in the same location, eased sometimes by assembling the preferred mix across schools or across universities.

The absence of one or more professions whose role is pivotal in collaborative practice, e.g. medicine, management or social work, can make the IPE seem less relevant to students – however carefully teachers may try to compensate. The participating professions may be drawn closer together at the expense of an absent profession, which is therefore unable to educate others on the valuable contribution of their profession. Students respond more positively and can more readily see the relevance when they are learning with professions with whom they anticipate working after they qualify. That can be difficult where they are taught in different universities or at different levels, i.e. pre-qualifying and post-qualifying.

There may be pressure to include a seemingly open-ended list of professions as IPE gains popularity. Realistically, consider where the limits lie for you. That will be depend not only on local needs, priorities and opportunities, but also on where the operational boundaries are drawn around occupations deemed to be professions. A narrowly elitist definition, restricted to the established professions, excludes many whose engagement in collaborative practice is essential, with much to give and gain during IPE. Conversely, an egalitarian definition which blurs the boundary between professions and other occupational groups may optimise student mix relevant to collaborative practice. Depending upon the field of collaborative practice, some universities extend IPE beyond health and social care to include, for example, sports and leisure staff, school teachers and police officers. Understanding and expertise can be transferred from one context to another.

Which clusters of student groups could benefit from opportunities for IPE in your situation? How feasible is it to bring them together?

— What are the challenges?

— How may they be overcome?

Involving the students

Teachers encourage students' active engagement in IPE as adult learners. For some students this may run counter to their prior experience at school or university. They may need help in letting go of deferential and hierarchical styles of learning where the teacher is the unchallenged authority, before being ready to enter into a more egalitarian and more democratic socially constructed engagement. Preparation is therefore essential so that students understand the interprofessional learning process and their teachers' expectations.

Confidence in self-directed learning builds up over time. Some students facilitate groups of their peers, prepared and supported by their teachers. Others take part in reciprocal peer assessment. Yet others contribute to IPE promotion, planning, development and evaluation.

Involving students as partners in planning

At Kobe University in Japan, IPE was taken forward through a series of annual seminars from 2003 onwards. The IPE leaders recognized students as partners in developing and promoting the IPE and organising the annual events to which presenters from the UK, Canada and Sweden were invited. In 2007, for example, an IPE workshop delivered by an external facilitator aimed to give students a greater awareness of both the challenges and possibilities of effective interprofessional learning and working together. The workshop was well evaluated and acted as a catalyst for the students of Kobe University and Kobe Pharmaceutical University to set up a student IPW club. In 2008 the students organized the workshop themselves with members of a Canadian student organisation as facilitators. Some students went on to participate as observers in the Health Care Team Challenge at University of British Columbia and to organize a workshop at the All Together Better Health VI conference in 2012.

(Tamura, 2012)

Responding to students as agents of change

Eight student organisations from seven professions established the Indonesian Health Professions Student Network during their first 'summit' in Jakarta in 2010 convened to create a forum for students to voice their aspirations for their education, including participation in its governance and the introduction of IPE. In the students own words, they were no longer the object of their education but agents for its change. "Like a seed struggling to bud, the students faced dry soil and hard rains". Two surveys – one on improving health professional education and the other on IPE – generated source material for their book entitled "What health professional students ought to know" followed by the drafting of guidelines on student advocacy, accessing Twitter and Facebook, presentations at national and international conferences and plans for an on-line journal.

(Health Professional Education Quality Project, 2011 & 2012)

How will you involve your students in planning, delivering and evaluating their IPE?
— Will their views be taken into account when introducing additional IPE?
— What part will students play in teaching each other?
— How will their feedback be canvassed?

Introducing IPE during post-qualifying courses

Experienced professionals in many countries return to university to attend multidisciplinary or multiprofessional courses which lead to post-graduate awards, preparing them for advanced specialist practice or additional roles in research, teaching, policy or management. Explicit designation of a post-qualifying course as interprofessional is the exception.

Engaging teams in post-qualifying studies

The Centre for Interprofessional Practice at the University of East Anglia has been delivering post-registration IPE to clinical teams since 2002. These teams have included a range of healthcare staff from a variety of specialties involved in delivering patient care in an acute trust hospital setting. The post-registration IPE programme was offered to professionals/agencies involved in delivering services to the public. Teams and individuals took part including staff from health, social services, education and the police.

The main aim of the programme was to enhance the knowledge, skills, attitudes and behaviour that facilitate effective interprofessional/inter-agency working by:

- *meeting in an informal and safe environment with the support of a trained facilitator;*
- *evaluating what works well, and what needs to change within their current practice;*
- *setting practical and deliverable learning goals which might be expected to lead to changes and improvements in current practice;*
- *carrying out exercises that would enhance team working skills;*
- *improving their understanding of different professionals with whom they will interact in delivering their service;*
- *expanding their knowledge of the different agencies involved in delivering their service;*
- *exploring ways to work together more effectively and more efficiently.*

Two participant-led courses were offered during the programme focusing on local need: a half-day workshop and a three-month course.

(Lindqvist, 2012)

The selection of participants for post-qualifying IPE tends to be determined by a shared focus on practice with a particular patient group or in a particular role.

Learning together between professional and lay workers

In 2010, a community-participatory postgraduate IPE program – 'The Health Class' – was developed to promote better interprofessional collaboration in health education and in caring for older people in one Japanese community. Participants in the programme were five health professionals – a doctor, nurse, physical therapist, pharmacist and dietitian – and five lay community members. All participants were involved in developing the content and decisions

about the interactive learning methods to be used during focus groups, one-to-one meetings and email discussions. Each session was followed by reflection prior to the next. Evaluation was carried out using additional focus groups and observation of activities in clinical settings by two external evaluators. The qualitative evaluation identified emerging themes as 'commitment to the community', 'building relationships' and 'understanding other healthcare professions'. The professional participants learned not only how to better deliver health education, but also about each other's roles and to respect the community participants as equals.

(Haruta, 2011)

IPE can also take place informally. Teachers introduce interprofessional perspectives of their own volition, or in response to the expressed needs of the students, to promote innovative, collaborative and progressive models of care. Verification regarding the inclusion of IPE can be checked against the application of its principles.

What opportunities are there where you are, for practitioners to return to university for post-qualifying studies?

Make a note of any which include more than one profession.
— Do they include IPE?
— If not, how, when and where might it be introduced?

Introducing work-based IPE

We have discussed university based post-qualifying IPE first, but most ongoing interprofessional learning is work-based. It can and does occur informally whenever members of two or more professions work together. Opportunities may be taken to compare perspectives, to share knowledge, to learn about each other's roles and responsibilities and to explore ways to collaborate more closely. They may arise during discussion with a supervisor or mentor from another profession or during consultations, case conferences, team meetings and away days. Interprofessional learning can be especially potent during systematic reviews of service provision.

Interprofessional work-based learning activities are often described as 'joint training' or 'shared learning'. Such terms may be more apt where the learning may include non-professional and/or paraprofessional as well as professional groups in the same workplace.

Work-based IPE is more sustained and more systematic when it is built into continuing interprofessional professional development, during which professionals apply, reinforce, update and augment their knowledge and skills in response to the changing demands of practice, organisation, delivery of services and career progression.

Learning together in the primary care team

Weekly meetings of the Primary Care Team in Kinsale in the Republic of Ireland had been held since 2008 to discuss the multidisciplinary management of patients. In 2011 the team decided that although sharing their expertise enhanced their ability as team members to problem solve complex social and medical problems, learning informally with and from each other was opportunistic and haphazard, so they explored the possibility of formalizing their learning through dedicated IPE. Following a literature review and focus group meetings, the team decided to go ahead whilst being cognizant of potential difficulties. Planning the IPE involved all team members in each step of the design and implementation process, and calling on external advice.

The aim was to organize and facilitate successful ongoing IPE for the team and the objectives:

- *to design relevant and meaningful regular interprofessional meetings for the team;*
- *to enhance understanding of each others' roles;*
- *to improve team members' knowledge and skills of primary care topics;*
- *to collaborate with other healthcare providers in the community.*

The content was to be patient centred, appropriate for all and of immediate relevance. It included the primary care management of dementia, motor neurone disease and adolescent mental health and data protection.

Monthly educational meetings began during 2011 at the local community hospital. On average there were twenty attendees, eight general practitioners, four public health (community/district) nurses, two physiotherapists, one speech and language therapist, one psychologist, one dietician, one occupational therapist, and two practice nurses. Occasionally, staff from the community hospital also attended.

The Project was evaluated after three months, using a focus group and an anonymised questionnaire. Feedback was overwhelmingly positive. Key themes which emerged included the value of integrated teamwork, feelings of heightened self esteem and enhanced respect for fellow professionals and the resulting particular benefits for specific patients. In December 2011 the Kinsale PCT won an Irish Medical Times Irish Healthcare Award for its IPE project.

(Foley, 2012)

Work based IPE can facilitate changes in the way services are delivered, for example, by setting up specialist multi professional services for particular service user groups. These tend to be one-off initiatives, but may also be part of continuing professional development and involve service collaboration with the local education provider.

Combining work based learning across professions

Northampton General Hospital (NGH) is an acute NHS Trust in the English Midlands providing medical and surgical care to the population of the city and the surrounding areas. In 2004, staff training and continuous professional development in the Trust was delivered separately to medical staff, nurses and allied health professionals. Corporate training provided organisational, leadership and management learning, while specialised skills' training was available through each clinical directorate. The NGH action plan to review skills training and broaden the range of learning offered in the Trust led to the idea of bringing different professionals together to learn "with, from and about each other".

The NGH Synergy project started in 2004 to explore opportunities to deliver IPE to the medical and healthcare staff during the first two years post qualification. The project:

- *identified common learning needs of clinicians from all professions;*
- *identified existing interprofessional learning initiatives in the Trust;*
- *developed a route plan to deliver interprofessional learning;*
- *plugged gaps in communication and coordination in the learning process;*
- *opened existing learning initiatives for wider participation;*
- *trained interprofessional learning facilitators;*
- *developed and piloted an interprofessional learning module;*
- *looked for ways of introducing interprofessional learning as an integral part of the training and learning in NGH.*

The interprofessional module covered common learning needs of all medical and healthcare professions, including aspects of daily routine management, record keeping, medicine management and handling equipment. It was developed by a team of clinicians from different professions and was delivered by trained facilitators with different medical and healthcare backgrounds.

A reflective tool was piloted and used to assess the participants and the success of the module. The Project ran for two years and led to the same approaches being used in specialist clinical areas such as orthopaedics and respiratory care.

(Jeffrey, 2012)

Invoking action research

The Australian Capital Territory regional health service (ACT Health), in partnership with the Centre for Clinical Governance Research at the University of New South Wales and other Australian universities, conducted an action research project using interprofessional learning as the basis for improving interprofessional working. The aim was to create leaders and champions for interprofessional learning within the ACT Health workforce and to equip participants with knowledge, ideas and support for making changes within their working environment with increased interprofessional working.

Thirty six health professionals attended two workshops run by an external facilitator. There was high nursing and midwifery representation, many allied health professionals, some tertiary sector interest but only one doctor who stayed for part of one workshop. The workshops used interactive learning methods, including group problem solving, case study approaches, role play scenarios, joint planning and the development of projects. Content focused on the underpinning concepts of interprofessional learning and built on the experience and expertise of participants. It helped them to identify and begin to develop the skills needed to facilitate interprofessional learning in multi professional groups. Participants were also assisted to plan or take further forward an interprofessional learning project with colleagues. Over twenty initiatives were thought through and planned during these workshops. Of these, at least ten were implemented and led to significant change. Feedback suggested that the aims had been fulfilled. Participants thought that they could now role model some of the principles of interprofessional working.

(Stone, 2008)

Think of an example where professions learn together in the workplace in a planned and purposeful way.

— What prompted that learning?
— By whom was it instigated and facilitated?
— What factors in the working environment helped or hindered learning together?

Is there an opportunity for you to work with service providers to take forward interprofessional learning for collaborative practice in a local clinical area?

Progressing along the continuum of interprofessional learning

Well planned, pre-qualifying, work-based and post-qualifying IPE is complementary and mutually reinforcing. Students acquire a taste for interprofessional learning during their pre-qualifying courses which is carried forward into their continuing interprofessional learning and development. This may be planned and/or serendipitous learning opportunities during their subsequent employment, returning on one or more occasion to university for post-qualifying studies. The distinction between work-based and post-qualifying university-based IPE becomes blurred where, on the one hand, employing agencies exploit advances in open, distance and e-learning to extend and strengthen in-house provision, and on the other hand, universities enable post-qualifying students to access learning materials in their own time and to undertake assignments in the workplace.

Recurrent themes

Introducing theoretical perspectives

All IPE is more coherently planned, consistently delivered, rigorously evaluated and effectively reported when it is built on explicit and clear theoretical foundations. There is no single, generally accepted rationale; the onus rests on the proposers to select or construct their own, taking into account theoretical perspectives from their respective academic disciplines and fields of education and practice. A one-off theory, drawn from a single profession or discipline, would neglect the opportunity to compare and contrast perspectives in search of a coherent formulation.

You may find it helpful to begin with the interprofessional application of principles of adult learning (Wackerhausen, 2009) leading into the contact hypothesis and identity theories explained by Dickenson & Carpenter (2005) and situated learning and communities of practice by Lave & Wenger (1991). You may then be ready to introduce selected perspectives into teaching from group dynamics, organisational, activity, systems and complexity theory to illuminate aspects of collaborative practice (Barr, 2013). We suggest that you focus on those theories which resonate in your own experience and are compatible with the principles of IPE (CAIPE, 2011).

We have indicated that there is nothing as practical as a good theory.

— **Which of the theoretical perspectives on IPE that you have discovered so far measure up to that maxim? How?**

— **Which interprofessional theory or theories can best be modified and/or integrated with those you already use in uniprofessional education?**

Framing interprofessional outcomes

Where professional education is outcome-led and competency-based, it is easier to introduce interprofessional curricula framed in similar terms. Professional and interprofessional competencies can then be readily compared to coordinate the design and delivery of professional and interprofessional learning (Barr, 1998).

Numerous IPE competency-based statements have been generated, notably in Canada (Canadian Interprofessional Health Collaborative, 2010), the United Kingdom (Sheffield Hallam University, 2010) and the United States (Interprofessional Education Collaborative Panel, 2011) which we cite.

Framing competency-based outcomes

Representatives from six professions – dentistry, medicine, nursing, osteopathy, pharmacy and public health – drew on each of their expected disciplinary competencies in defining competencies for interprofessional collaborative practice. They agreed that the "competency domains" should remain general in nature and function as guidelines. Those domains covered: values and ethics for interprofessional practice; roles and responsibilities; interprofessional communication; teams and teamwork; learning objectives and learning activities. Competencies within each domain were: patient/family centered; community/population oriented; relationship focused; process oriented; learning related; integral to curricula; context sensitive; applicable across professions; readily understandable; and outcome driven.

(Interprofessional Education Collaborative Panel, 2011)

Statements such as these are the product of high level discussion, negotiation and accommodation between professional institutions, analogous to the interprofessional learning between their members at grassroots level.

Choosing the learning methods

A variety of learning methods have been adopted and adapted from professional education for interprofessional education. Whichever methods are selected they should be active, interactive, reflective and patient centred. Such methods can be used to create opportunities to compare and contrast roles and responsibilities, power and authority, ethics and codes of practice, knowledge and skills in order to build effective relationships and to develop and reinforce skills for collaborative practice.

- Problem based learning has, for example, been introduced from progressive models of medical education (WHO, 1988) and advocated by some as 'the preferred' interprofessional learning method (Dahlgren 2009).
- Appreciative inquiry (Cooperrider & Whitney, 2005) has gained ground where problem-based methods may have dwelled too much on the negatives in working relationships.
- Observation-based and experiential learning have been introduced from psychotherapy via social work (Likierman, 1997; Hinshelwood & Skogstad, 2000) and reflective learning from nursing and social work (Schön, 1983 & 1987; Wackerhausen, 2009).
- Laboratory-based simulated learning has been introduced more recently, primarily from medical education.
- Case-based learning (Higgs & Jones, 2000) remains the bedrock of interprofessional learning methods.
- Workshops have engaged practitioners interactively and intensively (Low & Stone, 2010).
- Collaborative enquiry (Heron & Reason, 2008) and continuous quality improvement (Wilcock et al., 2003) are cyclical methods which have been found to be especially well

suited in employment based IPE where the emphasis was on learning and working together to effect change. They have been used also in university-based IPE, especially at the post-qualifying stage where students engage in self and group-directed assignments.

E-learning may be treated as a method or as a medium for the delivery of others. It is seen as more effective when 'blended' with face-to-face learning. Some universities have developed reusable 'learning objects' which are often accessible on-line. Others have developed 'virtual communities' which support and strengthen a patient centred approach.

Practice learning may also be better treated as the medium through which to apply a range of learning methods in the classroom, on placement or wherever students individually or in groups choose to access materials designed for the purpose (Barr & Brewer, 2012; Bromage et al., 2010).

No one method is enough. Experienced interprofessional teachers ring the changes as students' needs evolve and to hold their interest.

Think of a learning method with which you are familiar as a teacher or a student in your own profession.

— **How interactive, reflective and patient centred is it?**
— **How might it be adapted for interprofessional learning?**

How can you ensure an interprofessional perspective without diminishing the expertise of individual professions?

Facilitating and teaching

All tutors, practice teachers and trainers engaged in IPE need preparation to understand its ethos, principles and methods and to be aware of its implications for their habitual styles of teaching. Those who are already well versed in the application of principles of adult learning in professional education may need less help than those accustomed to more didactic methods, but will nevertheless still have much to learn. They need to resolve differences of perception, purpose and process in IPE. Students quickly become aware of the relationships between teachers from different professions and will sense any lack of belief in, and commitment to, IPE.

Workshops can enable teachers to enter into an interprofessional experience as they learn not only about education and practice for other professions, but also from positive and negative interprofessional encounters in the group. Sometimes, team teaching, or working with a 'buddy' or a 'mentor' can help whilst confidence grows in facilitating outside their 'comfort zone'.

Facilitating interprofessional learning requires expertise which builds on, but extends beyond that required for uniprofessional learning. IPE facilitators need to be able to

discern and address with sensitivity, diversity and differences between the student groups in educational background, professional cultures, power, status and hierarchy, language and practice perspectives; and also across professional and organisational barriers to effect group development and change equitably and effectively (Howkins & Bray, 2008; Low, 1998). They must maintain their professional neutrality, listen actively, understand and respond to the dynamics of the group, diplomatically and flexibly as they motivate, encourage and support the process of interprofessional learning (Freeman et al., 2010).

Teachers selected to lead modules or to tutor IPE will need a different level of preparation from those with more limited assignments, for example, as sessional teachers from the contributory academic disciplines. Practice teachers should most certainly be included, taking into account implications for the care and safety of patients wherever students are brought in.

Think of the way in which you have facilitated students in your own profession, or been helped as a student or worker by such facilitation.

What are the interprofessional issues that might arise in a mixed professional group of students?

- **What skills have you developed already as a facilitator?**
- **What additional expertise do you think you need to become an effective facilitator of interprofessional learning?**
- **How can you best gain the additional knowledge and expertise?**

In taking forward your IPE initiative, how will you ensure that those teachers and practitioners taking on the facilitator role are prepared and supported?

Assessing interprofessional learning

Pre- and post-qualifying university-based IPE (but not work-based) is usually assessed. Formative assessment may be preferred in the early stages of introducing IPE and for group assignments where it may be difficult to weigh individual contributions to a collective task and where peer assessment may be involved. Students, however, value IPE more when its assessment is summative, counting towards their awards. They may be required to demonstrate interprofessional learning when completing professional or interprofessional assignments. Students from all the professional groups, insofar as it is practicable, are best assessed for the same purpose, in the same way to the same standard. Reflective diaries, learning logs, portfolios and objective structured clinical examinations (OSCEs) are some of the assessment methods used.

Opinions differ about the merits of formative or summative assessment of students' interprofessional learning.

- **On which side of the argument do you come down and why?**
- **How can interprofessional collaborative practice be assessed within your IPE initiative?**
- **What tools are available to use?**

Involving patients and their carers

Empowering patients as partners in their care is a central plank in healthcare policy in many countries. Involving them as partners in professional and interprofessional education enhances students' understanding of their experiences and encourages patient centred practice. Their roles are many and varied – assisting with student selection, teaching, mentoring and assessment, as well as programme planning and review. Some welcome students to their homes to learn about their experiences, life styles and circumstances.

Many considerations need to be born in mind when choosing the patients and carers to involve: the relevance of their experience to students' learning needs; their readiness to share sensitive personal matters; and their vulnerability. Patients and carers are more effective in their teaching roles, more confident and more at ease when they have preparation and ongoing support from the teachers. They may be paid for their contributions in the same way as other external lecturers. The university assumes, in effect, the responsibility of a good employer when it retains patients and carers in these ways.

Many universities involve volunteers either from local patient or carer associations or recommended by practitioners. Some, like the University of Central Lancashire, retain panels of patients and carers who contribute to teaching and learning across a range of professional and interprofessional programmes.

Including patients and carers in the teaching team

'Comensus' was a group comprising people with experience of using health and social care services and informal carers recruited and working with teachers in the Faculty of Health at the University of Central Lancashire. Internally, its members were engaged in teaching, developing learning materials including case scenarios to be used in professional and interprofessional learning. Externally, they helped to plan and to deliver a conference with likeminded universities and recorded their individual and collective experiences for publication. Mutual support, and from the teachers, was built in throughout.

(McKeown, Malihi-Shoja & Downe, 2010)

How might you set about involving patients and carers in IPE?
— **What would be your preferred way to consult them?**
— **What should be the guiding principles?**
— **What obligations would the university carry towards them?**

Evaluating IPE

Evaluation should be built into all IPE from outset. Internally by:

- the teachers, to review how their plans have worked out and the students have responded;
- the university, as part of validation or review for the constituent professional programmes;
- service providers involved in IPE planning and teaching regarding relevance;
- the students, to appraise their experience.

Externally by:

- commissioning, professional, regulatory and quality assurance organisations within those programmes; departmental or institutional reviews;
- independent researchers to contribute evidence regarding its efficacy.

The evaluation may take different forms for different reasons and for different purposes (Carpenter & Dickinson, 2008; Freeth et al., 2005a & b). It may focus on process, outcomes or both. Process may be evaluated qualitatively from documentary sources, observation and solicited feedback, e.g. questionnaires, interviews and focus groups. Outcomes may be quantified using validated instruments illuminated by qualitative findings. Despite their limitations, it is preferable to stick with validated instruments rather than to devise your own. Freeth et al. (2005b) and Carpenter & Dickinson (2008) describe and critique the instruments available.

Administering such instruments after IPE is of limited value without also doing so beforehand so that the impact of the learning can be measured over time. The same instrument may also be administered at intermediate stages, e.g. on completion of modules or placements and, ideally, some time following the completion of the programme. Evaluations which measure before and after change, but neglect observations regarding the intervening process, leave a black hole.

Many evaluations are conducted ‘in-house’, e.g. by the teachers, but benefit from external consultation, especially at the design and data interpretation stages, to guard against bias. Funds permitting, there is strong case for commissioning external evaluations by qualified researchers. Realistically, that option may only apply where an IPE programmes is breaking new ground.

Have you been involved in research, especially educational research?

If so, do you have expertise you can transfer into IPE as a member of an evaluation group?

- **Does the IPE planning group include the expertise necessary for evaluation?**
- **Does the budget for the IPE initiative include resources for evaluation?**
- **Will IPE evaluation be specifically included in the planning process?**

Establishing the evidence base

Experience corroborated by evidence confirms that well planned and well delivered IPE enhances mutual understanding between professions which, as part of organisational or inter-organisational strategies, improves collaborative practice, service delivery and patient outcomes. Pre-qualifying IPE can cultivate mutual understanding between professions and secure knowledge bases for collaborative practice (Barr et al., 2005; Hammick et al., 2007). Continuing interprofessional development (including post-qualifying university-based IPE) can impact directly to improve collaborative practice and its outcomes. The WHO task group (WHO, 2010) concluded that there was sufficient evidence to indicate that IPE enabled effective collaborative practice which in turn optimized health services, strengthened health systems and improved health outcomes. Patients reported higher levels of satisfaction, better acceptance of care and improved health outcomes following treatment by a collaborative team.

Beware the temptation to make unrealistic and unsubstantiated claims for pre-qualifying IPE, or conversely to underplay its potential. Progress is being made in meeting outcomes and in improving the range and effectiveness of learning methods, but do not expect the impossible. Students can only learn so far and so fast so early in their professional development and whilst under pressure to meet profession-specific requirements; and teachers can only incorporate IPE by stages and by common consent. Learning together during pre-qualifying programmes is the first stage on an interprofessional journey.

Be on the lookout for evidence to corroborate your assertions about IPE – evidence from experience and research.

- **Find a recent evaluation of an IPE programme.**
- **Summarise what its findings contribute to the IPE evidence base.**

Sustaining IPE

IPE is vulnerable. Changes in academic leadership all too easily result in support being withheld or withdrawn, while budgetary cuts may demand dilution. Equivocation and lack of explicit support or demonstration of some of the principles of IPE can lead to situations

in which those responsible for providing IPE are isolated or undermined. There are no foolproof safeguards, but involving all the relevant stakeholders equitably in planning, delivery and evaluation does sustain support, especially when they are represented at a sufficiently senior level to determine the means and protect resources. Endorsement from top management in universities and service partners is vital, underscored by inter-institutional agreements.

Be honest. Make sure that the true cost is transparent. Look for ways to off-set more expensive provision like small group teaching, with larger groups and e-learning. Avoid over-complex and over-costly organisational arrangements which can unravel. Seek out fellow enthusiasts, but avoid over-reliance on a charismatic leader who, sooner or later, moves on. Embed the IPE within your organisation systems and structures so that changes of staff cause minimal disruption. Do not try to do everything yourself. IPE is a collective endeavour.

Convening an interprofessional community of practice

The Australasian Community of Interprofessional Collaborative Practice (ACoIPCP) comprises like-minded individuals from both education and practice across Australia and New Zealand who keep abreast of current activities, share information and respond to change as a community of practice. Members support each other, share resources, seek feedback and learn with and from each other to foster interprofessional collaborative practice within educational, clinical and political settings.

Three key administrative steps enabled the learning. First, a 'participant summary' template was developed that included information about each member's current position, areas of practice and contact details. Second, a set of guidelines was developed governed by the key principles of collaborative practice: respect, teamwork and clear communication. Third, a communication strategy was developed to facilitate international communication and collaboration. This included monthly teleconferences, a website group within 'Education Network Australia' (EDNA) and group emails for ongoing communication, sharing of resources and other relevant information. Activities so far have included writing an article together, developing an IPE assessment tool and compiling and sharing literature reviews.

(Ritchie et al., 2012)

Whose support would you need to enlist for your IPE initiative?

How can your university maintain its interest and commitment?

How can you build sustainability into your programme?

Taking stock

Several sources provide lists against which you can check how your plans for IPE are shaping up (Barr, 2003; Carpenter & Dickinson 2008; Freeth et al., 2005; Vyt, 2009). We have taken them into account in suggesting the following:

- Have all the stakeholders been identified and involved from the outset?
- Are all the relevant professions engaged in the planning and the teaching?
- Are patients and carers actively involved in the planning and the teaching?
- Do they have equal status with the professionals?
- Have lead responsibilities been assigned?
- Have local and national expectations and plans been aligned?
- Has prior experience of IPE and collaborative practice been taken into account?
- Have aims and objectives been agreed by all involved and framed to promote collaborative practice and improve care?
- Is the planning
  - grounded in an agreed value base?
  - underpinned by evidence?
  - informed by a theoretical rationale?
  - applying principles of adult learning?
- Has a repertoire of interprofessional learning methods been chosen?
- Is small group learning accommodated?
- How is IPE being integrated into the professional programmes?
- What provision is being made to prepare the teachers and the trainers?
- How is the interprofessional learning to be assessed?
- Will the assessment count towards professional qualifications?
- Has evaluation been built in from the start?

Why not come back to this list from time to time to check how you are progressing?

And do let us know whether you have found this booklet accessible and helpful with suggestions to improve future editions (via admin@caipe.org.uk)

References

Anderson, E., Cox, D. & Thorpe, L. (2009) Preparation of educators involved in interprofessional education. *Journal of Interprofessional Care* 23 (1), 81-94

Barr, H. (1998) Competent to collaborate: Towards a competency-based model for interprofessional education. *Journal of Interprofessional Care* 12 (2), 181-188

Barr, H. (2003) Ensuring quality in interprofessional education. *CAIPE Bulletin* 22, 2-3. www.caipe.org.uk

Barr, H. (2013) Towards a Theoretical Framework for Interprofessional Education. *Journal of Interprofessional Care* 27 (2), 4-9

Barr, H., Helme, M. & D'Avray, L. (2011) *Developing interprofessional education in health and social care courses in the United Kingdom. Paper 12.* The Higher Education Academy: Health Sciences and Practice. www.health.heacademy.ac.uk

Barr, H., & Brewer, M. (2012) Interprofessional practice-based education. In J. Higgs, R. Barnett, S. Billett, M. Hutchings & F. Trede (Eds.), *Practice-based education: Perspectives and strategies,*199-212. Rotterdam, The Netherlands: Sense

Barr, H., Koppel, I., Reeves, S., Hammick, M. & Freeth, D. (2005) *Effective Interprofessional education: argument, assumption & evidence.* Oxford: Blackwell Publishing

Barr, H. & Low, H. (2012) Interprofessional learning in pre-registration education courses: A CAIPE guide for commissioners and regulators of education. London: CAIPE

Brewer, M. & Franklin, D. (2009) *Building interprofessional education and practice capacity between industry partners.* Collaboration across Borders, 19/21 November, Tucson, Arizona

Bromage, A., Clouder, L., Thistlethwaite, J. & Gordon, F. (2010) *Interprofessional e-learning and collaborative work: Practices and Technologies.* Hershey PA: Information Science Reference

CAIPE (2011) *Principles of Interprofessional Education.* www.caipe.org.uk

Carpenter, J. & Dickinson, H. (2008) *Interprofessional Education and Training,* Policy Press

Canadian Interprofessional Health Collaborative. (2010) *A national competency framework for interprofessional collaboration.* www.cihc.ca/files/CIHC_IPCompetencies_Feb2010.pdf

Colyer, H., Helme, M. & Jones, I. (2005) *The theory-practice relationship in interprofessional education.* London: The Higher Education Academy: Health Sciences and Practice. www.health.heacademy.ac.uk

Cooperrider, D.L. & Whitney, D. (2005) *Appreciate inquiry: A positive revolution in change.* San Fancisco: Berret-Koehler Publishers

Dahlgren, L. (2009) Interprofessional and problem-based learning: a marriage made in heaven? *Journal of Interprofessional Care* 23 (5), 448-54

Dickinson, C. and Carpenter, J. (2005) Contact is not enough: An inter group perspective on stereotypes and stereotype change in interprofessional education. In H. Colyer, M. Helme & I. Jones. Op.cit. chapter 2

Foley, T. (2012) Putting 'Sharing is Caring' into Practice. *Journal of the Irish College of General Practitioners,* May 2012

Freeman, S., Wright, A. & Lindqvist, S. (2010) Facilitator training for educators involved in interprofessional learning. *Journal of Interprofessional Care* 24 (4), 375-385

Freeth, D., Hammick, M., Reeves, S., Koppel, I. & Barr, H. (2005a) *Effective interprofessional education: development, delivery and evaluation.* Oxford: Blackwell with CAIPE

Freeth, D., Reeves, S., Koppel, I., Hammick, M. & Barr, H. (2005b) *Evaluating interprofessional education: A self-help guide.* Higher Education Academy: Health Sciences and Practice. www.health.heacademy.ac.uk

Frenk. J., Chen, L., Bhutta, Z., A., Cohen, J., Crisp, N., Evans, E., Fineberg, H., Garcia, P., Ke, Y., Kelley, P., Kistnasamy, B., Meleis, A., Naylor, D., Pablos-Medez, A., Reddy, S., Scrimshaw, S., Sepulveda, J., Serwadda, D. & Zurayk, H. (2010) Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. A Global Independent Commission. *The Lancet,* Vol. 376, (9756), 1923-1958

Hammick, M., Freeth, D., Koppel, I., Reeves, S. and Barr, H. (2007) A best evidence systematic review of interprofessional education. *Medical Teacher* 29, 735-751

Haruta, J. (2012) 'Community-participatory postgraduate IPE program' *Poster and Oral presentation* Asian Pacific Medical Education conference (APMEC). Singapore

Health Professional Education Quality Project (Indonesia) (2011) *Your guide to HPEQ.* Jakarta: Indonesian Health Professional Student Organizations Alliance for Education

Health Professional Education Quality Project (Indonesia) (2012) *Health professional students should Know!* Jakarta: Indonesian Health Professional Student Organizations Alliance for Education

Heron, J. & Reason, P. (2008) Extending epistemology in cooperative inquiry. In: P. Reason & H. Bradbury (eds) *Handbook of action research* (second edition). London: Sage

Higgs, J. & Jones, M.A. (2000) Clinical reasoning in health professions. In J. Higgs & M.A. Jones (eds) *Clinical reasoning in health professions.* London: Butterworth Heinemann Medical, 3-14

Hinshelwood, R.D. & Skogstad, W. (eds) (2000) *Observing organisations: anxiety, defence and culture in health care.* London: Routledge

Howkins, E. & Bray, J. (eds) (2008) *Preparing for interprofessional teaching: Theory and practice.* Oxford: Radcliffe

Interprofessional Education Collaborative Expert Panel (2011) *Core competencies for interprofessional collaborative practice: report of an expert panel.* Washington D.C.: Interprofessional Education Collaborative

Jakobsen, F., Fink, A., Marcussen, V., Larsen, K. & Hansen, T. (2009) Interprofessional undergraduate clinical learning: Results from a three year project in a Danish Interprofessional Training Unit. *Journal of Interprofessional Care* 23 (1), 30-40

Jaques, D. & Higgins, P. (1986) *Training for teamwork: The report of the Thamesmead Interdisciplinary Project.* Oxford: Oxford Polytechnic

Jeffrey, A. (2012) 'The Synergy project – Northampton General Hospital Inter-professional Learning Initiative' Report Update. Email contact: andrew.jeffrey@ngh.nhs.uk

Lave, J. & Wenger, E. (1991) Situated learning: Legitimate peripheral participation. Cambridge: University of Cambridge Press

Likierman, M. (1997) Psychoanalytic observation in community and primary health care. *Psychoanalytic Psychology* 11 (2), 147-157

Lindqvist, S. (2012) Personal communication, email contact: S.Lindqvist@uea.ac.uk

Low, H. (1998) Developing and Enhancing Skills to Facilitate Teaching in Interprofessional Education: Report of the joint national workshop. English National Board for Nursing, Central Council for Education and Training in Social Work and College of Occupational Therapy

Low, H. & Stone, J. (2009) Using Workshops as a tool to deliver interprofessional learning. *Journal of Practice Teaching and Learning* 9 (3), 26-46

McKeown, M., Malihi-Shoja, L. & Downe, S. (2010) *Service user and carer involvement in education for health and social care*. Oxford: Wiley-Blackwell with CAIPE

Ritchie, C., Sheehan, D., Gum, L., Brewer, M., Burley, M., Saunders-Battersby, S., Evans, S. & Tucker, L. (2013) Interprofessional Collaborative Practice. *Focus on Health Professional Education: A Multi-disciplinary Journal* 14 (2)

Ross, F. & Southgate, L. (2000) Shared learning in medical and nursing undergraduate education. *Medical Education* 34, 739-743

Schön, D. (1983) *The reflective practitione*r. New York: Basic Books

Schön, D. (1987) *Educating the reflective practitioner.* San Francisco: Jossey Bass

Sedgewick, J. (2010) A Personal Account of IPL at Teesside University, *CAIPE Bulletin* 36, 12. www.caipe.org.uk

Sheffield Hallam University (2010) *Interprofessional Capability Framework 2010 Mini-Guide.* London: Higher Education Academy Subject Centre for Health Sciences and Practice

Sohma, H., Sawda, I., Konno, M., Akashi, H., Sato, T.J., Maruyama, T., Tohse, N. & Imai. K. (2010) Encouraging appreciation of community health care by consistent medical undergraduate education. In: H. Watanabe & M. Koizumi (eds) *Advanced initiatives in interprofessional education in Japan.* Tokyo: Springer

Stanford, R. & Yelloly, M. (1994) *Shared learning in child protection.* London: the Central Council for Education & Training in Social Work and the English National Board for Nursing, Midwifery and Health Visiting

Stone, J. (2008) Interprofessional Working – Distance no Barrier *CAIPE Bulletin* 31, 15-16. www.caipe.org.uk

Taanila, A. & Tervaskanto-Mäentausta, T. (2011) *Interprofessional education in Oulu Finland – case study.* http://creativecommons.org/license/by/3.0/ (accessed October 2012)

Tamura, Y. (2012) Report of student led IPE at Kobe University, contact email: bontje@oregano.ocn.ne.jp

Vyt, A. (2009) Exploring quality assurance for interprofessional education in health and social care. Antwerp: Garant

Wackerhausen, S. (2009) Collaboration, professional identity and reflection across boundaries. *Journal of Interprofessional Care* 23 (5), 455-473

Wilcock, P., Campion-Smith, C. & Elston, S. (2003) *Practice development planning: A guide for primary care.* Abingdon: Radcliffe Medical

WHO (1988) *Learning together to work together for health.* Geneva: World Health Organization

WHO (2010) Framework for action on interprofessional education & collaborative practice. Geneva: World Health Organization. Available at: http://www.who.int/hrh/resources/framework_action/en/index.html. Accessed 30 April 2010

Appendices

Appendix A

Recommendations by CAIPE for IPE pre-registration courses in the UK (Barr & Low 2012)

CAIPE recommends that:

1. All pre-registration IPE proposals take collaborative practice as their starting point
2. Interprofessional teamwork is central in students' learning
3. All stakeholders are involved in the planning.
4. Time and opportunity is provided during the planning process to address and resolve differences between the professional courses and between the teachers
5. Each proposal is underpinned by a theoretical rationale
6. Each proposal harmonises requirements and benchmarking statements for the professional courses in which it is implanted
7. Outcomes from students' interprofessional learning are defined as competencies or capabilities and curricula planned accordingly
8. The interprofessional learning is designed to encourage flexible working across organisational and professional boundaries
9. The IPE is designed to generate commitment to work individually and collaboratively to improve care and services
10. All teachers and practitioners involved in facilitating IPE receive orientation, preparation and ongoing support
11. The inclusion of a repertoire of learning methods
12. Teachers and practice supervisors optimise interactive opportunities for students to learn with, from and about each other's professions
13. Every effort is made to include student groups for professions likely to work in the same settings in their subsequent careers
14. Students are actively involved individually and collaboratively in steering their interprofessional learning

15. Students' interprofessional learning includes a working knowledge of policies which may help or hinder teamwork and collaboration within and between health, social care and related organisations
16. Service users and carers are involved in teaching and mentoring IPE after preparation and followed by ongoing support
17. Students' achievement of outcomes from their interprofessional learning are subject to summative assessment
18. Objectives, content and learning methods during pre-registration IPE are designed to lay the foundations for continuing interprofessional development

Appendix B

National and international interprofessional networks

AIHC The American Interprofessional Health Collaborative – www.aihc-us.org/

AIPPEN The Australasian Interprofessional Education and Practice Network – www.aippen.net

CAIPE The (UK) Centre for the Advancement of Interprofessional Education – www.caipe.org.uk

CIHC The Canadian Interprofessional Health Collaborative – www.cihc.ca/

EIPEN The European Interprofessional Network – www.eipen.org

JAIPE The Japan Association for Interprofessional Education- www.jaipe.jp/

JIPWEN The Japan Interprofessional Working and Education Network – www.jipwen.dept.showa.gunma-u.ac.jp

NIPNET The Nordic Interprofessional Education Network – www.nipnet.org

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CAIPE

Founded in 1987, CAIPE is a charity and company limited by guarantee which promotes and develops interprofessional education with and through its members. It works with like minded organisations in the UK and overseas to improve collaborative practice, patient safety and quality of care by professions learning and working together. CAIPE's contributions to IPE include publications, development workshops, consultancy, commissioned studies and international partnerships, projects and networks.

CAIPE not only offers expertise and experience, but also provides an independent perspective which can facilitate collaboration across the boundaries between education and health, health and social care, and beyond.

Membership of CAIPE is open to individuals, students and organisations such as academic institutions, independent and public service providers in the UK and overseas.

CAIPE offers its members:

- a network to exchange ideas and experiences;
- special rates for conferences, workshops and consultancies;
- current information about interprofessional learning and working through its E-Bulletin and website;
- access to the Journal of Interprofessional Care at special rates.

The annual CAIPE Chair's Event is designed primarily for individual members, providing an opportunity for them to come together and share ideas, experiences and expertise.

The students' own lively network enables them to take part in CAIPE events, share experiences, link with students in other countries and apply for CAIPE scholarships.

Corporate membership confers access to the Forum through which members:

- work closely with CAIPE and each other;
- collaborate in research and development;
- relate to interprofessionally committed organisations in other countries including exchange visits and joint projects;
- raise the profile of their interprofessional activities nationally and internationally.

For further information about CAIPE and other benefits of membership go to **www.caipe.org.uk**

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