Special Article

Interprofessional Education : From Rhetoric to Reality

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Introduction

Why interprofessional education? Explanations down the years have been many. Some point to predisposing factors - underlying and long-term trends either affecting the organisation and delivery of services or the needs of individuals, families and communities. Others point to precipitating factors - adverse events which expose poor communication and lack of trust between professions prompting recommendations for 'joint training' in the belief that this will improve collaboration.

The case for closer collaboration gathered momentum as the needs of patients seemingly became more complex and more challenging. It is now painfully apparent that no one profession can respond adequately to the multiplicity of problems that many patients present, be they children at risk, alienated young people, members of dysfunctional families, chronically sick and disabled people living longer, or amongst the growing number of old people surviving to an advanced age. The case has, however, been brought to a head in quite different terms in those countries where inquiries into medical errors, e.g. the United States (Institute of Medicine, 2001) and the United Kingdom (Kennedy, 2001), have attributed failure to problematic communications and relationships between professions (Meads & Ashcroft, 2005).

Beginnings

Early examples of interprofessional education (IPE) were invariably 'bottom up' in response to local needs and expectations in health and social care services. They were first reported in the late 1960s in Canada, the United States and the United Kingdom unbeknown to each other, followed by others during the 1970s and 1980s including some from Australia and the Nordic Countries. But they invariably remained small-scale, isolated, ephemeral and marginal to professional education. Many went unrecorded, reports being mostly anecdotal and inaccessible although some were captured later in historical commentaries (see, for example, Barr, 2005).

Many of these initiatives were preoccupied with problematic relationships, i.e. resolving tension and repairing relationships between professions. Most today are more positive and outward looking as they seek to unite professions in shared endeavour to effect change and improve services, taking aboard problems in interprofessional relationships if and when they break surface. This shift of emphasis reflects, first, moves in many countries away from a culture of blame towards systemic analyses of failure and, second, recognition by the professions that they have an inescapable responsibility to work together to enhance not only the quality of care but also the quality of life for individuals, families and communities.

Participants

IPE in developed countries mainly comprises health and social care professions who work with

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individuals and nuclear families with complex needs. For the care of adults and older people the mix may include branches of medicine and nursing with allied health professions and social work. For the care and protection of children it may include other branches of medicine and nursing with police officers, psychologists, school teachers, social workers and youth workers. Health education, learning disabilities, mental health, palliative care and numerous other fields of interprofessional working each include different configurations of professions. IPE in developing countries sometimes embraces a wider spectrum including, not only professional, but also paraprofessional and indigenous workers.

Undergraduate IPE programmes in the United Kingdom (UK) typically cater for more professions than postgraduate. They may include medical, health and social care professions, but choice is constrained where medicine is in one university with, say, dentistry and pharmacy, and nursing in another with, say, the allied health professions and social work. Remote locations can exacerbate such problems where a university has programmes for just one or two professions and time and cost to link up with students from other towns would be prohibitive. Mixing with other professional groups is especially problematic if and when colleges remain profession-specific.

Partnerships have nevertheless been established to optimise the mix of professional groups by mounting IPE programmes jointly between two or more universities in the same or neighbouring towns, or arranging for students from their respective professional programmes to learn together during concurrent practice placements in the same or adjoining locations. Pending such developments, incremental steps can be taken to introduce interprofessional perspectives into professional teaching (Harden, 1999). These may include invitations to practising professionals to talk to students about their roles and their relationships with each other, arranging visits or placements to observe other professions at work, tapping the pool of interprofessional e-learning material, or simply choosing case studies that present a range of professions positively and purposefully.

Postgraduate IPE typically includes practice professions who need to work closely together in a particular setting, e.g. a primary care team, with a particular group, e.g. people with HIV/AIDS, or applying a particular treatment model, e.g. in mental health. Arguably, it does not matter which professions come together in IPE provided that the learning is transferable from one field of practice to another, but evidence to that effect is so far lacking and appropriate learning methods have yet to be devised and tested.

Exchange

Opportunities to compare experience have increased over time, but were confined for many years to the same patient group, field of practice or work setting. IPE in child protection, community care, elder care, learning disabilities, mental health, palliative care and primary care in the UK developed largely in parallel. Opportunities were found to exchange experience within these fields at conferences and through specialist journals, but less often between them until CAIPE was launched in 1987 and began to play a critically important role in opening channels for exchange across fields.

International exchange dates from the late 1980s when the World Health Organization (WHO) published two seminal reports. Students, it said, should learn together during certain periods of their education to: modify attitudes; establish common values, knowledge and skills; build teams; solve problems; respond to

community needs; change practice; and change the professions

(D'Ivernois & Vodoratski, 1988; WHO, 1988). No one programme could meet all of these expectations. A variety of interprofessional learning opportunities was needed, in the university and the workplace, during and after pre-licensure courses, interwoven with professional education.

Definitions

The need for a succinct and consistent definition for IPE became pressing to reconcile different perceptions and terminology in different countries and different fields of practice. CAIPE defined IPE as:

> Occasions when two or more professions learn with from and about each other to improve collaboration and the quality of care.
>
> (CAIPE, 1997)

It saw a need to distinguish between IPE, so defined, and the many other occasions when health and social care professions learnt together for many different reasons. It therefore presented interprofessional education as a subset of multiprofessional education defined as:

> Occasions when professions learn side by side
>
> (CAIPE, 1997)

To have imagined that these terms would from then on be used universally and consistently would have been naive. The field remains bedeviled by "semantic promiscuity" where commentators and researchers seemingly delight in introducing new terms (Freeth et al., 2005, 45).

Principles

CAIPE was, however, sufficiently encouraged by the adoption of its definition to complement it with the following statement of principles.

Effective IPE, said CAIPE:

1. Works to improve the quality of care
2. Focuses on the needs of service users and carers
3. Involves service users and carers
4. Encourages professions to learn with from and about each other
5. Respects the integrity of each profession
6. Enhances practice within professions
7. Increases professional satisfaction

(CAIPE, 2001)

The first of these principles is a reminder that IPE is not only grounded in practice, but also works for its improvement. The second and especially the third come through strongly in many current IPE initiatives in the UK in response to the momentum behind user-led care in health and social policy. The fourth reiterates the definition. The fifth and sixth are timely reminders of the need for IPE to be planned and delivered in ways that preserve and protect each profession within the greater whole. The seventh responds to the need to cultivate mutual support to alleviate occupational stress and find fulfilment in co-working.

Context

Setting the agenda is relatively easy; implementing it is much harder. Stakeholders may be more or less supportive of interprofessional education and practice. Service agencies may or may not be organised to complement IPE with well-planned collaborative practice. Commissioners may or may not be willing to invest in IPE at the level necessary to support small group learning with generous staff/student ratios. Regulatory bodies and professional associations may or may not welcome the inclusion of IPE in submissions for professional

programmes. And patients' demands for better coordinated services may or may not be satisfied. Much depends upon involving all these stakeholders in the joint planning, management and evaluation of the IPE, with time and opportunity to reconcile differences and subscribe to realistic goals.

Universities may be more or less well disposed towards IPE, with policies, structures and systems that encourage or discourage its promotion and development. Demarcations between departments may be rigid and defensive or open and permeable. Budgets may be separate or pooled, and funds more or less sufficient to cover relatively high costs for interprofessional learning in small groups with generous staff/student ratios. Teachers may be free to opt in or out of IPE, rewarded or penalised for their participation. Academic disciplines, e.g. economics, law, psychology, sociology, may or may not be available and willing to contribute to interprofessional teaching. Relations with local communities and industry (including the health and social care 'industry') may or may not be well-established. There may be much to be done within the university to 'put its house in order' before it is ready to reach out to build partnerships with others.

Responsibility for delivering pre-licensure IPE in the UK typically rests with one or more university in partnership with a number of employing agencies (NHS Trusts, local authorities and from the independent sector) and the relevant Strategic Health Authority (SHA). Each partnership manages the tension between its members as together they design, develop, deliver and evaluate an IPE programme which they can all endorse, taking into account needs, circumstances and priorities locally, and changes in health and social care policy nationally.

Development on the ground has taken many forms, depending upon topography from sparsely populated rural regions, at one extreme, to metropolitan counties and segments of London, at the other. Sustainability remains problematic. Relatively high unit costs render IPE liable to be watered down or jettisoned, whilst over complex formulae for partnership fail when 'collaboration fatigue' takes hold.

The radical solution remains to be confronted, namely relocation of professional educational programmes for health and social care between universities. The case for relocation becomes compelling in the UK to secure more economic, more efficient, more effective and better integrated provision as IPE become more lasting and more pervasive.

Models

Form, scale and content vary, especially for pre-licensure IPE, depending upon the consensus reached between the stakeholders. IPE may embrace two or many more professional programmes. It may last from hours to years, for a small proportion of an intake or the entire cohort running into many thousands of students. It may be kept on the margins of professional programmes, e.g. on placement or during students' free time; contained within discrete modules; or permeate professional studies throughout.

Methods

Interprofessional learning is collaborative, egalitarian, experiential, reflective and applied (Barr et al., 2005), building on principles of adult learning, but substituting collective for individual student responsibility.

Clarke (2006) commended interprofessional learning which was cooperative, collaborative and social generated during exchange between

the participants, associated with professional judgement and recognition of the social construction of knowledge within professions. Citing Kolb (1984), he saw experiential learning as a conflict-filled process out of which the development of insight, understanding and skills comes. Each profession, he said, had its cognitive or normative map derived from the process of professionalisation. IPE entailed the decentring of knowledge (Dahlgren, 2006) to become aware of points of view other than one's own.

Barr (2002) distinguished between the following learning methods in IPE:

- Exchange-based learning, *e.g. debates and case studies;*
- Action-based learning, *e.g. problem based learning, collaborative enquiry and continuous quality improvement (CQI);*
- Observation-based learning, *e.g. joint visits to a patient by students from different professions, shadowing another profession;*
- Simulation-based learning, *e.g. role-play, games, skills labs and experiential groups;*
- Practice-based, *e.g. co-location across professions for placements, out-posting to with another profession and interprofessional training wards;*
- E-learning, *e.g. reusable learning objects relating to the above;*
- Blended learning, *e.g. combining e-learning with face-to-face learning*
- Didactic learning, *e.g. lectures*

The list is not exhaustive. Nor are the categories mutually exclusive. Different methods may with advantage be used in combination. Didactic learning tends to be used sparingly, given the emphasis put on interaction and exchange.

Most of these methods have been adopted and adapted from one or more field of professional education. Problem based learning (PBL), for example, has been introduced into IPE from medical education where it is well established in many schools, prompting some medical educators to see it, if not as the only interprofessional learning method, at least as first choice. The potency of PBL in professional and interprofessional learning is well testified, but relying on any one method is needlessly restrictive and may inadvertently devalue those drawn from other fields of professional education. Depending on the topic, experienced teachers ring the changes in response to student's learning needs and to hold their interest. Imaginative teachers are constantly extending the range of approaches to interprofessional teaching and learning.

Curricula

Many writers have suggested topics for IPE. Ross and Southgate (2000), for example, recommended the following after consulting UK teachers: epidemiology; health promotion; ethics; critical appraisal skills; clinical skills; decision making; and care planning. Lists such as theirs concentrate the mind, but are prone to omit topics that focus directly on collaborative practice. 'Communications' is most often slipped in an attempt to remedy that omission, but open to interpretations that have little or nothing to do with collaborative practice.

Subject headings can be simplistic. They may jeopardise support from professional associations unless and until assurances are forthcoming that variations in the depth and breadth of coverage of the same subject will be taken into account in response to the particular needs of each profession and application to its practice. Outcome-led IPE avoids these pitfalls. Numerous formulations have itemised collaborative competences (Barr,

1998) and proved helpful in aligning professional and interprofessional objectives where the professional programmes are also competency-based. But IPE, like the professional education in which it is implanted, then sometimes falls prey to the same criticisms that competences are behaviourist and mechanistic addressing readiness for immediate practice at the expense of longer-term professional development.

Alive to those concerns, teachers in Sheffield developed a capability framework (CUILU, 2006, www.sheffield.ac.uk/cuilu) derived from benchmarking statements for undergraduate professional programmes medicine, nursing, allied health professions and social work (QAA, 2000, 2001, 2002a&b, 2006) covering: knowledge in practice; ethical practice, interprofessional working; and reflection. Whereas competences were task-specific, capabilities were about adaptation to change, developing new behaviours and improving performance.

The interprofessionally capable team member:
- Understands and respects others
- Promotes user participation
- Exercises the duty of care
- Critically evaluates policy and practice

Critically understands:
- Legal requirements for team members
- Team structure and function
- Non-judgemental and anti-discriminatory practice

Is able to:
- Participate in and lead an interprofessional team
- Implement integrated assessment
- Communicate sensitively
- Share uniprofessional knowledge
- Provide co-mentoring
- Work in partnership with patients

Utilises:
- Reflection in team development
- Problem-solving
- Evidence

Trends

The following are some of the trends in IPE during the past 40 years and especially the last ten:
- From short-lived to long-lasting programmes
- From post-licensure to pre-licensure programmes
- From shorter to longer programmes
- From the margins to the mainstream of professional education
- From discrete to integrated IPE within professional programmes
- From single to many purposes
- From a few to many professions
- From employment-led to education-led programmes
- From responses bottom up to local needs to responses top down to national policy
- From practice to policy driven, and input to outcome driven, curricula
- From common to comparative curricula
- From didactic to interactive teaching and learning methods
- From pragmatic to theoretical foundations
- From travelling hopefully to evidence-based IPE

Effectiveness

Generalisation about the effectiveness of IPE is hazardous. IPE, as you will have discovered by now, takes many forms capable of delivering different outcomes as findings from a systematic review confirm (Barr et al., 2005; Hammick et al., 2007), rendering redundant the naive question - Does IPE Work?

Instead, the review asked:

What types of IPE under what conditions result in what types of outcome?

Four data bases were searched: Medline (1966 - 2003); Cinahl (1982 - 2001); BEI[1] (1964 - 2001); and ASSIA (1990 - 2003), yielding 10,495 abstracts, from which 884 papers were selected for analysis. Of these, 353 met criteria for inclusion, of which 107 were deemed to be of high enough standard to include following a quality check for study design and information, each measured on a scale from 0 to 5.

Over half of the 107 were from the United States and a third from the United Kingdom. Fourth fifths were post-licensure. Duration ranged from less than a day to seven or more days (or their equivalent).

The following professions were included in the number of initiatives shown: nurses 95 (89%); doctors 88 (82%); social workers 39 (36%); occupational therapists 22 (21%); physiotherapists 18 (17%); other allied health professions 32 (30%); psychologists 16 (15%); dentists 5 (5%); midwives 6 (6%); and others 58 (54%).

Outcomes were classified using the following modified version of Kirkpatrick's typology:

- Learners' reactions
- Modification of attitudes
- Acquisition of knowledge/skills
- Change in individual behaviour
- Change in organisational behaviour
- Benefit to patients

Kirkpatrick 1967 (Modified)

The following outcomes were reported: learners' reactions 50, modification of attitudes 32; acquisition of knowledge/skills 40; changes in individual behaviour 26; changes in organisational behaviour 46; and (direct) benefit to patients 32 (with multiple coding).

Findings distinguished between three overlapping foci:

1. Individual learning for collaborative practice
2. Group or team-based learning for collaborative practice
3. Learning to effect change and service improvement

The first typified undergraduate IPE and the third postgraduate IPE between experienced practitioners, especially in the workplace. The second was reported less often at either stage than the interprofessional literature might lead you to expect, but a word of caution: rigorously evaluated examples qualifying for inclusion in a systematic review may not be typical of IPE in general. Team development may be more strongly represented in work-based IPE, but less often subjected to evaluation or lead to publication and hence consideration for inclusion in a systematic review.

Findings from the review establish baseline data both for IPE and its evaluation from which to do better, but also warn against overambitious expectations at variance with proven experience. Assertions that IPE should equip newly qualified workers as agents of change impose unrealistic expectations on students and teachers alike. Objectives must take into account the stage that students have reached in their professional maturation and, at the undergraduate stage, constraints on time and opportunity for interprofessional learning in crowded professional curricula.

[1] The British Educational Index

Conclusion

IPE has flourished in the UK against the odds, thanks to its inner dynamic to engage positively with each new challenge, and the remarkable readiness of its stakeholders to pull together in the confident expectation that agreed ways forward can and will be found, but underlying tensions remain.

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Some relevant websites

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