



United Kingdom Central Council
for Nursing, Midwifery and Health Visiting

INTERPROFESSIONAL EDUCATION: 1997-2000

A Review

for

**the United Kingdom Central Council for Nursing, Midwifery and Health
Visiting**

(UKCC)

prepared by

Hugh Barr

from

The UK Centre for the Advancement of Interprofessional Education

(CAIPE)

July 2000

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The Brief

To provide the UKCC with a position paper on the current state of interprofessional education in the United Kingdom, with particular reference to changes and developments since CAIPE last reported in 1997 including:

- a classification
- the evidence base
- a framework for future evaluation
- the perspectives of stakeholders
- current examples
- options for future action

Acknowledgements

I am indebted to Barbara Clague, Dr John Horder, Dr Ivan Koppel, Rosaline Steele and Dr Rosemary Tope for commenting so helpfully on successive drafts of this review.

Interprofessional education - a definition

Interprofessional education occurs when two or more professions learn with, from and about one another to facilitate collaboration in practice.

It is a subset of **multiprofessional education** during which professions learn side by side for whatever reason.

(CAIPE, 1997)

These definitions reflect common but by no means universal usage in the United Kingdom. They differ from those employed by the World Health Organization (WHO, 1988), which have become less clear with the passage of time.

This review respects the use of other terms intended to convey the same meaning.

Executive Summary

The raft of reforms in health care since CAIPE last reported in 1997 makes interprofessional education more important but potentially more fraught; more important to encourage closer collaboration, more fraught if invoked to engineer changes in the workforce without first obtaining the endorsement of professional institutions.

The aim of interprofessional education remains the same – to facilitate collaborative practice to improve the quality of patient care. But the context is changing. Professions are learning together more often for a host of different reasons. This is creating opportunities to introduce an interprofessional dimension. When, where and how to do so becomes critical. Objectives must be compatible. A balance needs to be struck between instilling common curricula and developing interactive learning, so that the professions not only secure a common foundation for practice, but also appreciate the distinctive contribution that each brings to collaborative practice.

Fieldwork for the most recent UK-wide survey of interprofessional education was conducted in 1993/94. It found 455 “initiatives”. Given a low response rate, this probably underestimates the true figure. Community nursing groups were the largest category of participants. The feasibility of conducting similar surveys in future is questionable. Intensive, small scale, qualitative research may be more effective to identify interprofessional dimensions in multiprofessional programmes.

Generalisations become more hazardous as interprofessional education becomes more diverse in form, content, methods and outcomes. A provisional classification takes these and other variables into account.

The 1997 review made the case for interprofessional education. This review tests the arguments against the evidence. Findings are reported from UK, English, Welsh and regional evaluations of interprofessional education, a UK-wide review of published and grey literature, and two worldwide reviews based upon systematic searches of Medline and other databases. From over 3,000 abstracts so far scanned during the second worldwide review, 128 have been analysed. Preliminary findings confirm that types of interprofessional education can be distinguished empirically and do lead to different outcomes. Work-based interprofessional education is much more likely than university-based to result directly in changes in practice or benefit to patients. A distinction is drawn between questions capable of being answered by reference to previous research and those calling for prospective investigation by means of longitudinal studies employing a combination of qualitative and quantitative methods.

CAIPE is responding to change. It is engaged less than before in promoting interprofessional education from scratch and more in developing it in multiprofessional education. Its priorities are: disseminating information, facilitating exchange, mounting workshops about interprofessional education methods, designing instruments to assure its quality, establishing the evidence base, preparing case studies and promoting prospective research.

Options for action

This report is presented to assist the UKCC and its successor body in developing strategies to support and sustain interprofessional education. The Council may wish to consider how either it or its successor might effect all or some of the following:

1. Use of this report to inform discussions with regulatory bodies for related health and social care professions, with a view to formulating an agreed statement and policies, and joint action to promote and develop interprofessional education
2. Preparation, in consultation with other regulatory bodies and CAIPE, of guidelines for the inclusion of an interprofessional learning dimension in pre-registration courses
3. Steps, in consultation with other regulatory bodies and CAIPE, to raise standards in interprofessional education by:
 - devising, testing and refining instruments for quality assurance
 - reviewing interprofessional requirements for the approval of courses
 - enabling teachers and clinical supervisors to acquire necessary competence
 - supporting publication of relevant materials
4. Action to ensure that interprofessional learning included in education approved for nurses, midwives and health visitors is systematically evaluated
5. Attraction of funds to expedite completion of retrospective analyses of evaluations of interprofessional education and to commission prospective evaluations
6. Authorisation and assistance for CAIPE to publish an edited version of this review with full acknowledgments to the UKCC

Section 1

Interprofessional education in context

This section reviews changes since 1997 in the organisation and delivery of services, education and training. It takes into account, workforce planning and the roles, responsibilities and policies of central education and training bodies which carry implications for interprofessional education.

From competition to collaboration

1.01 Presentation of the previous report from CAIPE (Vanclay, 1997) coincided with the election of a new government intent upon replacing competition by collaboration throughout the public sector, notably in health care. The new NHS, Government promised, would “work as one”, to break down organisational barriers and counter fragmentation of services. It would forge new working relationships locally with social care, housing, education and employment services whilst Government itself would work across Whitehall to bring about lasting improvements in the nation’s health (Secretary of State for Health, 1997; Department of Health, 1998a).

1.02 Health Improvement Programmes would bring together all those charged with the planning and provision of services. The ‘Berlin wall’ would come down as partnership was established between health and social services, putting an end to “sterile disputes about boundaries that leave users and their carers in no man’s land”. Primary Care Groups would promote the health of the local population by working across practices and providing fora for professional development and peer review. Health Action Zones would “release energy and innovation” as they brought together health organisations, local authorities, community groups, the voluntary sector and local business within “a whole systems approach” to develop and implement locally agreed strategies to improve the health of local people. Clinical governance would provide a framework within which to build a single, coherent, local programme for quality improvement. All this would contribute to a strategy for a healthier nation (Department of Health, 1998a-f; Secretary of State for Health, 1997; Barr, 1999).

Reforming education and training

1.03 Calls for reforms in service delivery have been reinforced by calls for reforms in education and training based upon “a common agenda” to be agreed with the “human resources community”, i.e. employers, unions and professions (Department of Health, 1998b).

1.04 Training and education should support and develop joint working between health and social care (Department of Health, 1998b, 1999a). “Integrated care for patients will rely on models of training and education that give staff a clear understanding of how their own roles fit with those of others within both the health and care professions” (Secretary of State for Health, 1997).

1.05 Priority has been given to reforms in continuing professional development (CPD), where the Department undertook to work with the professions to reach a shared understanding of underpinning principles (Secretary of State for Health, 1997; Department of Health, 1998b; NHS

Executive, 1999). Sir Kenneth Calman, then Chief Medical Officer, and his working party gave a clear lead for primary care. CPD would no longer pertain exclusively to the individual. "Practice Professional Development Plans" would develop the whole practice as a human resource for health care, encourage team working and facilitate appropriate adaptability of professional roles. Account would be taken of both professional and multiprofessional learning needs (Department of Health, 1998g).

1.06 The most recent report from the Department of Health (2000) reviews workforce planning for all professional groups within the NHS in England, taking into account roles and responsibilities at all levels. It emphasises the need for teamwork and flexible working to make the best use of skills. Barriers between occupational groups should be done away with and more flexible careers opened up to maximise the contribution of all to patient care. Education and training should be modernised to equip staff to work in a complex and changing NHS.

1.07 The report finds current arrangements for workforce planning wanting, failing amongst other things to be holistic in approach or supportive of "multidisciplinary training, education and working". Shortcomings highlighted include the lack of a national drive towards shared learning, a consistent focus on skill-mix and support for staff who wish to change roles in mid-career.

1.08 Relationships between the NHS and providers of education and training need, says the report, to be improved. It finds "a disjunction between the needs of the NHS and the desires of education providers", with "an over-academisation of training". Selection is liable to emphasise academic ability over caring skills. Higher education is said to value research more than teaching as an indicator of success. Some teachers, says the report, are out of touch with modern service needs, which, as a result, are not picked up in revising curricula.

1.09 Workforce planning should, the report argues, be aligned with service planning through the Health Improvement Programme. It should be multidisciplinary, include skill-mix and allow for the development of new types of healthcare worker. It should be steered by a National Workforce Development Board with Workforce Development Confederations (replacing Local Medical Workforce Advisory Groups) to bring together NHS and other employers of healthcare personnel. Implementation should be assisted by the appointment of a Director of Workforce Development in each NHS region and the merger of education and training levies to provide an integrated funding stream. Improving education and training calls for "genuinely multi-professional" partnership with providers and regulatory bodies.

1.10 Recommendations from the report may shortly be incorporated into those for root and branch reform of the NHS. Meanwhile, ministerial speeches as reported in the press refer to the creation of new occupations and grades and to joint foundation studies for doctors, nurses and "others". The NHS in Wales has announced plans to launch a human resources strategy including "common core training" for health professionals ahead of decisions in England (Shifrin, 2000).

1.11 These moves may reactivate debates about reforms envisaged by the Schofield Report (1996), although so far they stop short of its call for common core training for all health professionals to provide "generic carers", followed by continuing education on a multidisciplinary basis for those progressing to the professions.

Requirements, occupational standards and benchmarks

1.12 Reports from Government make no reference to steps taken by central education and training bodies to revise outcomes in interprofessional terms. Several regulatory bodies already require skills in collaborative working before qualifying for their respective professions, see, for example, nursing (UKCC, 1989), medicine (GMC, 1996) and social work (CCETSW, 1995).

1.13 Requirements from the regulatory bodies bear comparison with National Occupational Standards drawn up for health and care professions to provide a common language, assist dialogue, promote interprofessional working and inform interprofessional learning (Mitchell et al. 1998; Weinstein, 1998). These standards include the following competencies deemed to be necessary for effective collaborative working:

- Contribute to the development and knowledge of others
- Enable practitioners and agencies to work collaboratively
- Develop, sustain and evaluate collaborative approaches
- Contribute to joint planning, implementation, monitoring and review
- Coordinate an interdisciplinary team
- Provide assessment of needs so that others can take action
- Evaluate the outcome of another practitioner's assessment

(Summarised by Barr, 1998a)

1.14 Account needs also to be taken of the framework for higher education qualifications being developed by the Quality Assurance Agency (QAA, 2000). Subject benchmarks will provide the conceptual framework that gives each discipline coherence and identity. It remains to be seen how these will frame commonalities, not only between academic disciplines, but also practice professions. Implications for boundary definition, and for professional and interprofessional education and practice, could be far reaching. If so, working relations being forged between the QAA, professional and regulatory bodies and the NHS will become even more important.

Reviews of regulatory bodies

1.15 Reviews of the workings of the Council for Professions Supplementary to Medicine (CPSM), the UKCC and its associated national boards and CCETSW all raise interprofessional issues and point towards closer collaboration between programmes for the respective professions under the guidance of successor bodies.

1.16 Reviewing the Professions Supplementary to Medicine Act for the UK Departments of Health, JM Consulting (1997) found the structure of the CPSM insufficiently flexible to respond to an environment that had changed radically since 1960. Powerful, autonomous Boards dominated by the professions had led to unnecessary differences of approach in pursuit of sectional interests. The Council had, as a result, been unable to establish a strong-cross professional strategy. There would be benefits in interprofessional validation across Boards, but there had been few examples. More needed to be done to establish common ground between different professional bodies or to provide a forum where differences could be debated. The concept of an umbrella body for a group of professions nevertheless remained valuable, provided that the professions formed a coherent group and the body was able to influence and coordinate. Potential benefits included common values and approaches and the formulation of cross-

professional policies. The CPSM, the review recommended, should be replaced by a Health Professions Council which would effect closer links between the PAMs and more widely.

1.17 No less than three reviews affecting nurse education have reported since 1997. All carry implications for relationships with other professions. *Making a Difference* (DoH, 1999b) looked to nursing to provide visionary leadership to help achieve the ambitions of the new NHS. It opened the door to partnership with GPs in primary care and paved the way for career progression through to appointment as consultant practitioners, while NHS Direct made nurses a first point of contact for patients.

1.18 The *Fitness for Practice* Report (UKCC, 1999) argued that education must prepare nurses and midwives for change throughout their careers in a dynamic working environment, with new roles and responsibilities across and within multiprofessional teams. Interprofessional learning at undergraduate level should promote interprofessional understanding, co-operation and communication. Health care professions should be actively encouraged to learn with and from each other, with the UKCC taking the lead to involve other regulatory bodies.

1.19 Reviewing the regulation under the 1997 Nurses, Midwives and Health Visitors Act, JM Consulting (1999) saw multiprofessional regulation as a means to assist the interchange of ideas and experience necessary for effective team working in practice. Joint regulation would then be seen as patient-driven rather than professions-focused and grounded in common values. A new Nursing and Midwifery Council should have a duty to collaborate with “other key stakeholders”.

1.20 The Department of Health conducted an internal review of social work education. This led to a decision to phase out CCETSW and to divide its responsibilities between a new General Social Care Council and TOPSS – the national training organisation for the personal social services. The Department subsequently commissioned JM Consulting to review requirements for the Diploma in Social Work. It is here that interprofessional implications may be picked up (if the other reports by JM Consulting offer clues), but the report was not yet in the public domain at the time of writing.

1.21 There has been no comparable review of medical education. Concern, however, about the regulation and accountability of doctors suggests that such a review could be imminent.

Implications for interprofessional education

1.22 Wishful thinkers may persuade themselves that learning together to improve working together is less necessary as the pendulum swings from competition to collaboration. Perhaps, but competition remains; competition that can be exacerbated as change generates new rivalries and tensions between the parties. Nor, of course, can the need for interprofessional education be equated simply with the need to resolve rivalry. It springs too from the need to enhance motivation to work with others, secure common knowledge bases, resolve misunderstandings, overcome prejudices and negative stereotyping, improve communication and acquire collaborative competencies.

1.23 Current education and training reforms contain seeds of tension. Developing flexible working and collaborative practice may seem to be one and the same, but pursuit of the former may be at the expense of the latter if the pace of change generates resistance and tension between

agencies and between professions. Interprofessional education can help to alleviate such tension, but only help. It can complement consultation between the parties, but is no substitute.

1.24 As conceived, interprofessional education encouraged collaboration between more or less stable occupational groups. It must do so now between groups whose roles and responsibilities are subject to review, as power shifts and boundaries are redrawn. It is called upon to reconcile objectives that may be in conflict – effecting change in service delivery, modifying the workforce and encouraging collaboration in the interests of service users. Its role becomes more complex and more difficult, but more important as an agent of change.

1.25 There is a tension too between the interactive learning methods which interprofessional education espouses and moves towards definition of common outcomes across professions. National Occupational Standards may well assist in determining common foundations for interprofessional education, but they may inadvertently detract from the need to engender respect and understanding between professions based upon mutual understanding of different roles and responsibilities. Evidence is needed of the benefits of interactive learning to withstand arguments from employers that common studies are sufficient to facilitate flexible deployment of the workforce and from educational institutions that they economise on scarce resources.

1.26 There is a more fundamental danger. Emphasis upon common learning needs can be at the expense of special learning needs, specialist learning made more necessary by the exponential growth in medical knowledge and technological advance leading to more specialties and sub-specialties in medicine and hence related professions. It is this that contributes so much to the need for interprofessional education to foster working relations between professions and even for intra-professional education within professions (Loxley, 1997). Viewed thus, there is a natural alliance between interprofessional education as it seeks to protect comparative studies and professional education as it seeks to protect specialist studies.

1.27 The Department of Health has given priority to shared learning during CPD, judging perhaps that it is here that reforms can be made with least resistance and impact on service delivery be achieved fastest. Meanwhile, integration of pre-registration studies has been driven by pressures within universities that have little to do with reforms in service delivery. Hopefully, this is about to change, as the NHS Executive engages in consultations with universities about its emerging workforce strategy. Tension in the short-term seems to be inescapable, but will, with flexibility by both parties, lead to better understanding in the long-term.

1.28 There is a clear expectation that the new generation of education and training bodies will work closely together to integrate provision across professions, leaving them to reconcile competing and potentially conflicting expectations in the current education, training and workforce reforms.

Section 2

Interprofessional education in essence

This section draws upon and augments the previous review prepared for the UKCC by Vanclay (1997) to provide essential understanding of interprofessional education, before this review delves more deeply into the issues.

Making the case

2.01 The pioneers of interprofessional education introduced it primarily as means to overcome ignorance and prejudice between health and social care professions. By learning together the professions would work more effectively together and thereby improve the quality of care for patients. They would understand each other better, valuing what each brought to collaborative practice whilst setting aside negative stereotypes (Carpenter, 1995; Carpenter and Hewstone, 1996; Jones, 1986; McMichael and Gilloran, 1984).

2.02 The timing of the early initiatives – the late 1960s and early 1970s – was significant. Community-based services were being developed. ‘Care in the community’ arrived as long-stay hospitals began to close. General practitioners recruited other professions to join them in primary care centres. Demarcations and hierarchical relations modeled on those in institutional settings were untenable in community settings. As relationships became more flexible and boundaries more permeable, risk of territorial disputes increased. Teamwork was introduced in mental health, learning disabilities, primary care and then other fields to help the professions to work more effectively together, teamwork that was liable to exacerbate tensions unless and until it became an interprofessional learning experience.

2.03 Interprofessional education was also invoked to help effect change, to implement new policies and legislation, for example, in child care and community care, and to remedy mistrust and miscommunication exposed by investigations, for example, into child abuse and mental health tragedies (Barr, 1994).

2.04 As pressures have increased, each profession acting alone seems even less able than before to cope with the combined impact of complex personal and social problems, even more interventions are possible as a result of technological advance, rising consumer expectations, but finite resources (Vanclay, 1997). Interprofessional education promises relief for hard-pressed practitioners insofar as it succeeds in helping them work more effectively together across professional boundaries. Barr et al (1998) spelt this out in an attempt to demonstrate the relevance of interprofessional education to the objectives of LIZEI in Inner London.

2.05 They argued that interprofessional learning:

facilitates positive interaction
which
engenders mutual understanding and support
which
encourages collaboration between professions
which
spreads the load
which
limits demands made on any one profession
which
reduces stress
which
enhances job satisfaction
which
improves staff recruitment and retention
which
benefits the professions themselves
which
improves patient care

2.06 Viewed thus, interprofessional education may be an antidote to the malaise besetting the health and social care professions, whilst remembering that the ultimate goal must be the wellbeing of patients. Whether a sufficiently robust education and development strategy can be devised to order and control the interactions between these variables has yet to be put to the test.

Matching the expectations

2.07 As expectations multiply, so do questions about the capacity of interprofessional education to match them. Experience teaches that the chances of improving collaborative practice depend upon interprofessional education being part of a coherent strategy, which includes agreements between the parties and practice guidelines accompanied by ongoing support. Interprofessional education can contribute to collaborative practice.

Introducing an interprofessional learning dimension

2.08 Interprofessional learning seems more likely, in the prevailing climate, to take root and flourish in the mainstream of multiprofessional education rather than in isolated and vulnerable initiatives. The case must, however, be made in the contemporary language of higher and vocational education - occupational standards, competency-based outcomes and benchmarking. Only then can exponents of interprofessional learning argue convincingly for some of the savings from the introduction of multiprofessional education to be ploughed back (Barr, 1998).

2.09 Ideally, all multiprofessional education should include an interprofessional learning dimension. Realistically, that is only possible where learning applies to practice, teachers are seized with its importance, funding bodies are willing to make additional investment and competing objectives can be reconciled.

INTERPLAN

The Interprofessional Education Postgraduate Learning Plan (Interplan) at the University of Westminster integrates multiprofessional programmes at masters level into a single system. It introduces an interprofessional learning dimension into two pre-existing programmes (the evaluation of clinical practice and community development), complemented by two new, specifically interprofessional programmes (interprofessional education and interprofessional practice). Advanced social work and the complementary therapies will shortly be included, again reinforcing interprofessional learning.

All modules are being remodeled to optimise opportunities for interprofessional learning and access extended paving the way for interactive learning across a wider range of professions. Four of these modules emphasise such learning: social policy angled towards collaborative working; collaborative practice; research methods; and "Pride & Prejudice", which offers a unique interpersonal and interprofessional learning experience.

Application of adult learning principles helps students to tailor their learning to particular needs. Tutorials and choice of assignments ensure that students relate interprofessional learning to their respective professions and fields of practice.

Choosing when, where and how

2.10 Conventional wisdom holds that interprofessional education is better left until after qualification, when practitioners have secured their respective identities and have experience under their belts to share. An alternative view holds that negative attitudes towards other professions are reinforced during pre-registration education making them more difficult to shift later (McMichael and Gilloran, 1984). This view is gaining ground, endorsed by students themselves (Tope, 1996).

Learning together between two London universities

St George's Hospital Medical School and Kingston University have established a joint Faculty of Healthcare Sciences to drive educational initiatives across professional boundaries. Interprofessional education has been introduced through the Faculty for third year medical students and adult branch nurses in their final semester to examine how people work together. This entails clarifying roles, responsibilities, potential overlaps and tensions and how to overcome these. Observation and problem based learning from case studies were the methods used. Initial feedback from participants was positive

(Spurway, 1997)

2.12 The relevance of undergraduate interprofessional education depends upon the quality of interprofessional practice learning. Determined efforts are therefore being made to develop such learning (Bartholomew et al. 1996). Projects funded by the NHS Executive in the south west of England are breaking new ground.

Interprofessional practice learning and continuous quality improvement

The NHS Executive funded "Local Improvement Teams" in Bournemouth, Plymouth, and Avon, Somerset and Wiltshire as a "Collaborative". Projects include improving care in the fields of ageing, cancer, learning disabilities, mental health, and children and families. The three teams in Bournemouth take undergraduate students from nine or more professions on placement where they participate in action learning and continuous quality improvement including systems thinking and a service user orientation.

(Annandale et al 2000)

2.13 Interprofessional education is, however, still predominantly postqualifying with a growing preference for work-based learning facilitated by a cadre of freelance trainers.

LOTUS

Learning Opportunities for Teams (LOTUS) delivers and evaluates CPD for primary care teams. Each team is offered up to six two-hour workshops with a pair of facilitators from different health professions. It selects its own learning topic and methods of study as part of a reflective learning plan. Topics chosen include communication skills, diagnosing and managing depression and diabetes, HRT and osteoporosis, resuscitation, dealing with violent patients, health promotion, staff mentoring, and change management.

(Pirie and Basford, 1998; Pirie, 1999)

2.14 So popular is work-based interprofessional learning becoming that some university-based postqualifying programmes are being threatened (Tope, 1999). One way to protect them is to integrate professional and interprofessional postqualifying studies systematically.

2.15 But little has been done so far to integrate university-based postqualifying interprofessional education and work-based CPD. This is more likely when university teachers have time and opportunity to help plan, provide and evaluate in-house interprofessional learning.

2.16 Only then can university staff hope to become credible partners in helping agencies to develop not only in-house interprofessional education programmes, but also to help them to recognise, understand and strengthen interprofessional learning implicit in everyday working.

Equipping teachers and trainers

2.17 Progress on all these fronts depends upon better preparation for teachers and trainers building upon experience already gained (Bartholomew et al. 1996). The essential task is to enable them to detect, devise, deliver, integrate and evaluate implicit and explicit opportunities for interprofessional learning in university and work settings.

Teaching the Teachers

The University of East Anglia (UEA) runs a programme to help practice teachers, clinical supervisors, trainers and fieldwork educators to apply adult learning theories, explore individual and professional values, facilitate personal and professional development and understand the roles of different professional groups. Participants come from clinical psychology, medicine, nursing, midwifery, occupational therapy, physiotherapy, social work and probation. They take up to three units of study, each of 60 hours, over seven months. Flexibility is of the essence. An assessed portfolio gains academic and professional credits.

(Moseley, 1997)

Overcoming the obstacles

2.18 Obstacles to the promotion and development of interprofessional learning and practice are formidable - attitudinal, educational, financial and organisational (Williams and Willson, 1998). Negative stereotypes and prejudices divide teachers and trainers, as much as they do practitioners. Profession-specific requirements still inhibit interprofessional learning despite the coordinated efforts of regulatory bodies to overcome them. Multiple funding streams bedevil the planning of education across professions (although not for much longer). Multiprofessional education favours large classes and common curricula which inhibit interactive interprofessional learning that relies upon small groups, generous staff/student ratios and facilitators with special training and experience as leading exponents reported (Barr, 1994). Logistics, geography, demarcations and tensions between employers and universities create organisational barriers. Interprofessional education must resolve these problems for itself before it can help resolve much the same problems in practice.

Relating interprofessional, multiprofessional and professional education

2.19 Effort during the past three years has concentrated upon clarifying processes and outcomes in interprofessional education to help establish its place in multiprofessional education and its relationship to professional education. The first is becoming clearer; the second has further to go.

2.20 Any attempt to define a rationale for a lasting relationship between interprofessional and professional education would be premature. Multiple forces are at work which no one stakeholder can control. Regulatory bodies may be especially exercised by the need to monitor shifting functions and boundaries between interprofessional and professional education and to work with one another, however painstakingly, towards an overarching rationale. So too should exponents of interprofessional education, each of whom retains an obligation to his or her own profession.

Section 3

The incidence of interprofessional education

This section summarises findings from the most recent UK survey of interprofessional education and critically reviews the methodology employed.

A UK survey of interprofessional education

3.01 The 1993/94 CAIPE survey to which Vanclay referred remains the most recent attempt to measure the incidence of interprofessional education throughout the UK (Barr and Waterton, 1996). It found 455 interprofessional education "initiatives". The response rate was low. This suggests an underestimate of the actual incidence. Of the 455, 200 were longer than two days. Topics covered were life stages from maternity to palliative care, chronic illnesses, collaboration, community care, counselling, disabilities, education and training, ethics, management and mental health. Three quarters of the initiatives were at the postqualifying stage. Most were two to five days long, but a third lasted less than two days.

3.02 Most were instigated and run jointly by Health Authorities or Trusts in association with either colleges or universities or local authorities. Participants per initiative ranged from eight to fifty. Community nursing groups made up the largest category followed by medicine, professions allied to medicine and social work in that order.

3.03 Learning was assessed in over half of the 200 initiatives lasting more than two days, almost always individually. Satisfactory completion often carried credit towards certificates, diplomas and degrees. Nine tenths of respondents reported that their initiatives had been evaluated, nearly half involving an independent assessor, but only a quarter had been written up and even fewer published.

3.04 Barr and Waterton (1996), like Shakespeare et al. (1989), solicited information from respondents likely to know of interprofessional education initiatives. Neither survey canvassed all university departments and training agencies. Nor would this have been practicable within the constraint of the resources available. Both succeeded in painting an illuminating picture of interprofessional education brought to life by examples, but the methodological constraints (and on the second occasion the low response rate obtained) rendered it impossible to estimate the overall incidence of interprofessional education.

3.05 Given more resources, future surveys could employ more exhaustive methods and might provide a more complete picture, although data would still tend to be ephemeral. A more fundamental problem would, however, remain. Postal surveys can locate explicit examples of interprofessional education. They cannot locate implicit interprofessional learning woven into the fabric of joint education and training instigated for other reasons. Nor can they locate interprofessional learning that takes place during everyday work, for example, in team meetings. Both could only be done by means of intensive, small scale, qualitative research.

A local survey of shared continuing professional development

3.06 Alive to these methodological complexities, Owens et al (1999) set themselves a less problematic task. They administered a postal survey to over two thousand practitioners from 24 health professions in Devon regarding the number of occasions during 1995/96 when they had taken part in a continuing professional education or training events where two or more health professions were present together. Nearly three quarters (73%) reported that they had been involved in such education or training during the specified period, but the percentage from each profession varied widely. Health visitors most often reported participation in multiprofessional education (94%) with other nursing groups also ranking high – school nurses (86%), district nurses (86%), practice nurses (85%), community psychiatric nurses (81%), midwives (79%) and hospital nurses (74%). Least participation was reported for dentists (25%) and pharmacists (22%). Less than a quarter of all respondents thought that learning with members of their own profession alone was more worthwhile than learning with other professions, while three quarters thought that there should be more opportunities for such learning. No attempt was made to isolate occasions when learning together constituted interprofessional education as defined in this review.

Section 4

Towards a classification of interprofessional education

This section identifies variables that distinguish different interprofessional education programmes in relation to realistic expectations of outcomes.

4.01 By definition, interprofessional education aims to encourage collaborative practice, but the objectives vary: modifying attitudes and perceptions, enhancing motivation, securing common knowledge bases, reinforcing collaborative competencies, effecting change or improvement in practice and benefiting patients (Barr, 1998a).

4.02 So too does the content and the learning methods employed. Some programmes build a common curriculum based upon analyses - sometimes no more than assumptions - about common learning needs. Others strike a balance between common and comparative content, laying a common foundation whilst enabling participants to compare and contrast their respective roles and fields of practice. Yet others include specialist learning, helping participants to relate common and comparative learning to their particular roles and fields of practice.

4.03 Learning methods may be didactic, but they are more often interactive (Barr, 1994). The following attempt to classify interactive learning methods (Barr, 1996) must not be allowed to inhibit innovation and imagination:

- **exchange-based**, e.g. debates, games, role plays and case studies
- **observation-based**, e.g. joint home visits and shadowing
- **action-based**, e.g. collaborative enquiry, joint research and problem-based learning
- **simulation-based**, e.g. experiential groups
- **practice-based**, e.g. work related assignments and placements

4.04 The choice of objectives, content and learning methods must take into account the stage which participants have reached in their professional education, the length and location of the learning, the number of professions included and the field of practice.

4.05 The earlier the interprofessional learning in participants' experience, the less they will have to share and the more the teacher will need to provide. The later the learning, the more the participants should be able to set their own agenda and call upon their own resources. Objectives for interprofessional education before qualification may be preventive, mitigating the risk of developing prejudices and negative stereotypes, and preparatory, laying foundations for subsequent interprofessional learning and practice. Objectives for interprofessional education after qualification tend to be more ambitious. Interprofessional education during pre-qualifying studies is typically confined to a module, sequence or placement. Interprofessional education after qualification typically applies to the entire programme.

4.06 The shorter the initiatives the more selective the content and the more intensive the learning methods to achieve results. The longer the initiative, the more diverse may be the content and the less pressurised need be the interactive methods.

4.07 Interprofessional education may be work-based or university-based (or both). Work-based initiatives tend to be task-specific, with the prospect of immediate impact on practice and benefit to patients. University-based initiatives tend to be broader in scope and more reflective, and impact on practice longer-term.

4.08 By definition, interprofessional education must include at least two professions. The smaller the number, the greater may be the opportunity to focus upon relationships between the parties and their respective roles. The larger the number, the greater may be the opportunity to develop a rounded view of a field of practice from multiple perspectives.

4.09 Interprofessional education in different fields may include different professions. Child protection, for example, may include police officers and schoolteachers alongside doctors, health visitors and social workers. Mental health may include psychiatrists, learning disabilities psychologists and so on. Each profession brings not only a different practice perspective, but also a different approach to learning.

4.10 Interprofessional education comprises a series of more or less separate traditions – child protection, learning disabilities, mental health and primary care to name but a few – with little cross-fertilisation of experience.

4.11 Some of these variables have been taken into account in evaluations of interprofessional education as reported in the next section.

Section 5

The evidence base for interprofessional education

This section compares findings from three wide-ranging evaluations of interprofessional education, two commissioned by central government and one by the ENB. Barr et al (2000) report other UK evaluations during the past three years. Passing reference is made to evaluations of programmes in progress, commissioned by the NHS Executive, before reporting on systematic searches of data bases by the Interprofessional Education Joint Evaluation Team (JET). The section ends with an assessment of how far the evidence base for interprofessional education can be secured from work in hand, identifies questions calling for prospective investigation and suggests means by which they can be addressed.

Findings from four UK reviews

5.01 Evaluations of interprofessional education commissioned by the Department of Health, the Welsh Office, the ENB and the NHS Executive all reported during the three years under review. The briefs were remarkably similar. The Department of Health commissioned the Scottish Council for Research in Education with the universities of Dundee and East Anglia to ascertain the extent of “multidisciplinary education” throughout the UK, perceptions of it and factors that facilitated or inhibited its development. The Welsh Office commissioned CAIPE in association with City University to identify the way forward for interprofessional education in Wales based upon a review of current interprofessional education activity and an analysis of factors that promoted or impeded effectiveness. The ENB commissioned Brighton University to map the extent of “shared learning”, analyse factors influencing the roles of nurses, midwives and health visitors in teams, evaluate outcomes of learning in relation to effectiveness in teams and identify implications for pre- and post-registration education. The NHS Executive commissioned Rosemary Tope to review interprofessional education programmes in the South West of England.

5.02 Pirrie and her colleagues undertook the study for the Department of Health. They employed qualitative methods to explore perceptions of “multidisciplinary education” in health care. Interviews were conducted with organisers and students from ten interprofessional courses and practitioners in two contrasting settings. Both teachers and students reportedly found it difficult to hold the tension between retaining unique areas of skill and knowledge, on the one hand, and sharing overlapping areas of knowledge and skill, on the other. Moving nursing into higher education had encouraged professional aspirations thought to run counter to the integration of learning with other professions. The breaking down of barriers was not universally welcomed.

5.03 Nevertheless, many of the course organisers interviewed saw a direct correlation between a satisfactory experience of learning with other professions and working together effectively as a team. Evidence from the study suggested that “multidisciplinary education” enhanced personal and professional confidence, promoted mutual understanding between professions, facilitated intra- and inter-professional communication and encouraged reflective practice. Respondents

thought on balance that such education had more impact at the post than the pre-registration stage. Logistical factors inhibited multidisciplinary courses, especially at the pre-registration stage. Initiatives were often ad hoc. An “overarching strategic vision” was critical to sustain developments in the long-term (Pirrie et al. 1997, 1998a, 1998b).

5.04 CAIPE and City University undertook the study for the Welsh Office in four stages. These were: the identification of plans for interprofessional education, an analysis of the perceived effectiveness of interprofessional courses, issues affecting students and staff and testing options for future development. Methods included a questionnaire to NHS Trusts, social services departments and CAIPE members to identify interprofessional courses. Seven interprofessional programmes were selected as case studies. Data were obtained from records, interviews and focus groups. Courses included were anonymised by prior agreement. Findings focused upon ways to improve the delivery of interprofessional education with calls for longitudinal research to evaluate outcomes (Freeth et al, 1998; Tope, 1998).

5.05 Miller and her colleagues undertook the study for the ENB. Data were collected from case studies of clinical teams, surveys of higher education institutions with shared learning and interviews with Trust managers. Whereas the above studies focused upon interprofessional education, Miller et al. focused upon collaboration in practice and its implications for such education. They found that “very little multiprofessional education in universities addresses interprofessional issues”. Most was not designed for that purpose. Common curricula were established to reduce duplication as opposed to utilizing and valuing professional differences to inform collaborative working (Miller et al. 1999). Unlike Pirrie and her colleagues who had played down interprofessional education at the pre-registration stage, Miller and her colleagues stressed its importance to prepare students to work in teams.

5.06 Tope (1999) evaluated nine higher education-based interprofessional education projects comprising 17 separate initiatives for the NHS Executive in the South West Region. Names of institutions and titles of programmes were withheld. Some had finished; others were in progress; a few had had yet to begin. Research methods included analyses of curricula, development of course profiles, interviews with project leaders, course directors and student groups, and questionnaires administered to practitioners and their patients. Evaluation has concentrated so far upon structure, content and recruitment rather than outcomes. Major difficulties were being experienced in recruiting sufficient students in all the institutions. Low numbers often limited scope for interprofessional learning. Particular problems were cited regarding the participation of the professions allied to medicine and social workers. Attendance was higher when courses were located in the workplace. Clinically oriented, shorter or modular courses were thought to have more interprofessional potential. A longitudinal study is underway during which students from longer postgraduate courses will complete questionnaires at regular intervals with a view to measuring changes in attitude towards collaborative practice. Each of the seventeen sites has been revisited to review progress a year later and a follow up report is due to be submitted to the NHS Executive by August 2000.

Work in hand

5.07 The NHS Executive has funded a further series of interprofessional education programmes, in the South West which are currently being evaluated. They fall into the following groupings:

- The University of Plymouth with education consortia in Devon and Somerset to achieve health improvement in severe mental health problems
- Eight NHS Trusts in Avon, Somerset and Wiltshire to improve cancer care through education
- Bournemouth University with NHS Trusts and Dorset Social Services to improve elderly care, mental health and child and family health through education.

(NHS South West, 1999)

5.08 The NHS Executive in the West Midlands Region has commissioned the University of Durham to evaluate the postgraduate programme in community mental health at the University of Birmingham. The evaluation is taking into account: the experience and views of trainers, interprofessional learning during the course, application to practice and outcomes for service users. Student cohorts are being followed through the course and for five years thereafter, recording changes in attitudes and practice, and with a control group (Carpenter, 2000).

5.09 Other UK evaluations of interprofessional education remain few and uneven in quality (Barr and Shaw, 1995; Barr et al, forthcoming). Whilst lessons can be learned from the more systematic of these, they reinforce the case for looking further afield.

Three systematic reviews

5.10 An Interprofessional Education Joint Evaluation Team (JET)¹ was convened to conduct systematic reviews of evaluations of interprofessional education. One worldwide review has been completed and a second is well advanced, complemented by a third focusing upon the UK.

5.11 The first was under the auspices of Cochrane Collaboration and subject to criteria agreed with it. These were evaluations that employed randomised controlled trials, controlled before and after studies or interrupted times series studies and demonstrated changes in the delivery of services or benefit to patients/clients (Barr, 1998b). Despite searching Medline, CINAHL and grey literature, no evaluations were found that met these criteria (Zwarenstein et al, 1999).

5.12 Evaluations did, however, come to JET's attention that, albeit falling short of the Cochrane criteria, shed light on the relationship between process and outcome in interprofessional education. JET decided therefore to conduct a second review taking into account a wider range of research methodologies – qualitative and quantitative – and a continuum of outcomes developed from work by Kirkpatrick (1967). These were participants' reactions to the learning; changes in their attitudes or perceptions; their acquisition of knowledge and/or skills; changes in their behaviour; changes in the organisation of practice; and effects on patient or clients. The revised criteria and methodology are reported more fully elsewhere (Barr et al. 1999).

¹ JET comprises Dr Della Freeth and Scott Reeves from City University, Dr Marilyn Hammick from Oxford Brookes University and Professor Hugh Barr and Dr Ivan Koppel from the University of Westminster, working in close association with CAIPE.

5.13 JET has scanned over 3,000 abstracts that met the revised search criteria, from an exhaustive search of Medline between 1968 and 1999. Of these, 224 papers had been evaluated at the time of writing and 128 selected for inclusion in the review. A further 60 papers awaited attention. CINAHL will be searched next and other databases sampled to ascertain whether they contain additional evaluations meeting required standards for inclusion.

5.14 Preliminary findings provide empirical confirmation of the typology suggested by Barr (1996) as discussed in Section 2. Of the findings to date, the most telling highlights differences in outcome in relation to location. Positive outcomes reported from evaluations of interprofessional education based in higher education were overwhelmingly in the form of reactions to the learning experience, changes in attitude or perception and the acquisition of knowledge and/or skills. Positive outcomes reported from work-based interprofessional education also included changes in the organisation of practice and effects on patients or clients. This difference may reinforce assertions that interprofessional education is only effective when it is work-based, but like is not being compared with like. University-based and work-based interprofessional education can be seen as different but complementary, each capable of reinforcing the other.

5.15 Nearly all of the evaluations included so far in JET's second review are from North America (95%). Application of findings from US studies to the UK calls for caution unless and until sufficient similarity can be demonstrated between the form of interprofessional education, the context in which it is applied and the means by which it has been evaluated. Earlier work by Barr and Shaw (1995) provides some reassurance on this point, corroborated by the third JET review. This was commissioned by the British Educational Research Association (BERA) and comprises 19 summaries of UK evaluations of interprofessional education with a critical analysis of the methodologies employed (Barr et al, forthcoming).

5.16 Secondary research of the kind that JET is doing serves four purposes. It establishes:

- what is known already
- the means by which it has become known
- questions remaining to be addressed in prospective research
- ways in which research methodology can be improved

5.17 No longer need interprofessional education be accepted 'on a wing and prayer'. The emerging evidence suggests that it can, in favourable circumstances and different ways, contribute to improving collaboration in practice. Examples reported set standards to which others may aspire. Any temptation to argue that they are representative of interprofessional education more generally must be resisted for three reasons. First, the number of evaluations satisfying standards set by JET for inclusion is small. Second, allowance must be made for bias at every stage from the original selection of a programme to be evaluated, the decision to submit the report for publication, its acceptance by refereed journals through to the decision whether to enter it on Medline or another database. 'Successes' are more likely to be recorded than 'failures'. Medline, upon which JET has relied in the first instance, also has a bias towards evaluations that included doctors and published in North America. Third, allowance must be made for the time lag between completion of an evaluation and entry upon one or more of the databases.

5.18 The evidence is nevertheless illuminating. It confirms that examples of interprofessional education can be classified and that variables such as length and location correlate with outcomes. It confirms also that interprofessional education as reported almost invariably employs interactive

learning methods, although data about precise methods employed is too limited to compare their relative effects. In the absence of evaluations of programmes relying upon passive (or didactic) teaching methods, benefits resulting from the inclusion of interactive learning methods cannot be measured to test claims made by teachers that these add value (Barr, 1994).

5.19 The most frequently preferred methodologies were before and after studies or simple follow-up studies employing quantitative measures. Control groups were unusual and randomised controlled trials absent with one or two exceptions. Evaluations of the learning process employed qualitative methods, but they were relatively few and the methodology relatively underdeveloped. Presentation often left much to be desired making it hard to relate findings to learning experience. Too often JET had to reject evaluations for lack of adequate information, even though access to original data might have justified inclusion.

The need for prospective evaluations

5.20 The evidence reinforces the need for prospective UK-based evaluations of interprofessional education ranging from simple case studies through to systematic longitudinal comparisons of types of interprofessional education and their outcomes. Reference to the critique of methodology built into the JET analysis should ensure a significant advance in the range of methodologies and the rigour with which they are applied.

5.21 How far future evaluations should go for the “gold standard” prescribed by Cochrane Collaboration is debatable. Quasi-experimental models, such as controlled before and after studies and interrupted time series studies, may often be more realistic. The case for combining qualitative methods to evaluate outcome with quantitative methods to measure change resulting from the educational intervention is persuasive.

5.22 Blackwell Scientific has invited JET to write two books, one to present the evidence base for interprofessional education and the other to help future researchers to choose intelligently from a repertoire of research methods and to apply them effectively.

5.23 The JET team is conducting these reviews as volunteers on the margins of their everyday work. This prolongs the time needed to complete the current review, estimated at another two years, bringing the total to five since the first review started.

Section 6

CAIPE and its contribution

This section sets out the CAIPE's strategy in response to the renewed emphasis upon collaboration in education and practice. It lists CAIPE's priorities with brief notes on activities under each heading.

6.01 CAIPE is changing in step with the world in which it operates. Its task, as conceived, was to promote interprofessional education by which the founders understood discrete initiatives designed to cultivate collaboration in primary health and in community care. Important though that remains, CAIPE's task is now more often to develop an interprofessional dimension when health and social care professions learn together for whatever reason across a wider range of practice settings (SCOPME, 1997; Vanclay, 1996). The challenge lies in applying lessons learned from the first task in the more complex world of the second (Barr, 1994).

6.02 Success depends upon being clear about:

- the distinctive objectives of interprofessional education
- the means by which they can be accomplished
- the situations where collaboration needs to be improved
- the motivation of teachers and trainers to introduce interprofessional learning
- the readiness of management to back interprofessional education
- the compatibility of interprofessional and existing educational aims, structures, content and methods
- the resources necessary

6.02 CAIPE fosters collaboration, not only between professions, but also between organisations and with service users, carers and communities – collaboration that is multidimensional, even though the learning rotates around an interprofessional axis. It is engaged at any one time in discussions with policy makers, funding bodies, service providers, regulatory bodies, professional institutions and, not least, users and carers groups regarding wide-ranging developments in collaborative learning and practice.

6.03 This is the complex world that CAIPE members inhabit. It is they whom CAIPE is seeking, above all, to support in their efforts to recognise and capitalise upon opportunities to introduce interprofessional learning, when and where feasible and desirable. It is through them, and directly, that CAIPE is endeavouring to engage with wider developments resulting from current reforms in education and practice.

6.04 To that end, CAIPE's priorities are to:

- **facilitate mutual support and exchange between members**
Regular meetings are convened in London. For members by members, these are informal occasions with the accent on mutual support, stimulus and exchange. They complement major conferences nationally and, in association with other organisations regionally, open to a wider audience. These events facilitate exchange of experience between interprofessional education in different university and work settings, fields of practice and configurations of professions.
- **establish an accessible, up-to-date, interactive and user friendly database**
Computers are being upgraded to improve data storage and retrieval and the CAIPE website is about to go online.
- **disseminate information**
The CAIPE Bulletin continues to be published bi-annually to provide a channel for the exchange of news and views between members. The Journal of Interprofessional Care, with which CAIPE is now closely associated, is published quarterly and provides a channel for communication worldwide. An agreement is under discussion with Blackwell Scientific for a series of books.
- **mount workshops on facilitating interprofessional learning**
Workshops are being piloted to help teachers, trainers and practice supervisors to develop and facilitate interprofessional learning with a view to mounting a rolling programme. Resource materials complement the workshops.
- **design instruments to assure quality in interprofessional education**
Instruments for quality assurance are being designed to inform commissioning, internal validation and external accreditation of interprofessional learning.
- **help map and evaluate interprofessional education**
Methods to map the incidence of interprofessional education and to prepare case studies are being piloted in one area and, subject to demand, may be replicated in others.
- **secure the evidence base for effective interprofessional education**
A close working relationship has been forged with JET and outlets found to disseminate its findings through conferences and publications.
- **represent members nationally and internationally**
Responses are being made to national and international consultations and presentations made to conferences at home and abroad.

6.05 Diverse though these activities are, CAIPE retains its focuses upon interprofessional education. It avoids becoming embroiled in issues beyond its remit, such as current debates about workforce deployment, but takes into account implications for interprofessional education and practice.

6.06 CAIPE's workforce comprises a part-time Chief Executive, Barbara Clague, a part-time Administrator, Honorary Officers, Board members and other CAIPE members as volunteers. Expanding the work programme calls, in the short term, for the accreditation of trainers and, in the longer-term, sufficient income to employ a team of at least three full-time staff.

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