In recent years, most professions have come under increasing pressure to work more collaboratively than before. In particular, they have been encouraged to participate in various kinds of interprofessional collaboration which entail relinquishing some of their professional autonomy. This paper discusses the collective competence that underpins interprofessionalism in these situations, and the kinds of professional education and training that help to develop it.
Interprofessionalism and the Collective Dimensions of Professional Practice

Keynote presentation at the Second Professional Lifelong Learning Conference

*Professional lifelong learning: critical debates about professionalism,*


Nick Boreham,
Professor of Education and Employment,
University of Stirling,
Scotland FK9 4LA

1. Interprofessionalism

In recent years, most professions have come under increasing pressure to work more collaboratively than before, or to put it more exactly, to work even more collaboratively than before. In particular, they have been encouraged to participate in various kinds of interprofessional collaboration which entail relinquishing some of their professional autonomy. In this presentation, I discuss what is required for professional competence in these situations, and the kinds of professional education and training that become necessary.

Right at the outset it must be acknowledged that interprofessional collaboration is not a single process but a whole family of processes, all related to each other but each with its own special characteristics. This is reflected in the plethora of terms used to describe the many kinds of collaboration that take place between professions. These include 'interprofessional', 'multiprofessional', 'cross-professional' and 'transprofessional', not to mention representations of collaborative activities as 'joint', 'integrated', 'unified', 'co-ordinated' and 'generic'.

1
These terms have slightly different meanings, reflecting the many different ways in which collaborations can take place. For example, ‘interprofessionalism’ implies a kind of joint action in which agency is exercised by the team as a whole, whereas ‘multiprofessionalism’ implies a looser level of collaboration where a concerted effort is made by members of different professions from their different perspectives without integrating their practices. Moreover, collaborators may drift from one level of collaboration to another in the course of their work, and may achieve full interprofessionalism in some aspects while remaining multiprofessional in others. Another consideration is that when professions collaborate, the top and bottom of their respective hierarchies may act differently. The top might be attempting a merger which is resisted at the bottom, or the latter might be developing collaborative practices while the tops remain disengaged for reasons that are entirely political.

The many varieties of interprofessional collaboration reflect the different purposes for which professions collaborate and the different organisational forms they adopt to do so.

**Different purposes**

There are many reasons why public and private sector organisations have encouraged professionally qualified employees to collaborate across professional boundaries. Among them we can cite:

- **Improving ‘customer care’**. Most of our social institutions, including the professions, are now being shaped by a kind of consumerism which expects a seamless ‘one-stop’ service. This entails closer collaboration between different professions than before.

- **More complex ways of working**. In both industry and the public services, recent years have seen growth in ways of working which require the
combined expertise of several professions. For example, complex multifunctional teams have replaced single-function departments in many fields.

- **Corporate performativity.** International competition due to the globalisation of world trade and pressure on public sector organisations to meet targets has placed an increased emphasis on corporate performativity. This is often pursued by encouraging all employees to commit themselves to corporate goals over and above their own professional goals requiring the alignment of different professions to a superordinate purpose.

- **Deregulation.** From the perspective of neo-liberal governments which regard professions as occupational interest groups, professional autonomy may be regarded as a restrictive practice. One of the purposes of promoting interprofessionalism may be to undermine these restrictive practices, not least in order to cut costs.

**Different organisational forms**

Interprofessional collaboration is achieved through many organisational forms. These include the dimensions of unit size, articulation, space and time.

- **Unit size.** The collaborating units may be individuals, departments, agencies or institutions.

- **Articulation.** The units may be joined in various ways: by creating a team, a partnership, a network, an alliance, a consortium, a forum or a merger.

- **Space:** some interprofessional collaborations occur on a face-to-face basis, while others are geographically distributed so that communication takes place at a distance.
• **Time:** Some interprofessional collaborations are temporary and disband when their task is completed, while others continue on a permanent basis.

It will be necessary to qualify the argument from time to time by referring to these differences. However, for simplicity, throughout this presentation I will stick to the term ‘interprofessional’ as a useful portmanteau expression.

**Two examples of interprofessional teamwork**

**Healthcare: the Intensive Care Unit**

Historically, health care has been delivered by a variety of professions and agencies but for a long time now government has been encouraging providers to co-ordinate their services across professional and organisational boundaries and even to adopt new forms of collaborative practice in which professional boundaries all but disappear. From the many cases of interprofessional collaboration in the health care sector, I have selected Intensive Care Units (ICUs) as an example, partly because their work has been extensively researched and documented. In an ICU, members of the medical profession work alongside nurses in teams to provide a fully ‘joined up’ service to patients who are critically ill. Although the doctor-nurse-patient triad is the core of this interprofessionalism, there is also an extended team which (in the UK at least) includes the patients’ relatives and other professional groups such as ministers of religion and social workers. The division of labour in the ICU is derived from the traditional roles of the separate professions. Thus the medical staff are legally responsible for diagnosis, prognosis and decisions such as withdrawal of treatment, while the intensive care nurses are responsible for sustaining life and ameliorating distress by administering treatments and providing ongoing bedside care. The different roles and responsibilities of these groups sometimes lead to differences of professional opinion on issues such as the withdrawal of treatment.
However, the ICU team usually functions as an integrated team and this is revealed in the way that difficult decisions such as the withdrawal of treatment are often made by consensus rather than by the single profession with the legally entitlement. The rationale for consensus seeking is that intensive care depends on the ‘unfailing functioning of teamwork’. Making decisions by consensus ensures ‘the solidarity of the team and ... allow[s] it to move on, unscathed, from difficult clinical situations to face the next as a fully co-operative and collegial entity’ (Melia 2001, p. 718.) Here, then, is an example of interprofessionalism that has generated a new kind of collaborative practice.

Industry:

The example I want to cite from industry is the kind of interprofessional teamwork known as ‘organisational enquiry’. Organisational enquiries have developed from the drive to create learning organisations, where all levels of employee are involved in continuous improvement and commit themselves to adapting their processes and products to changing external demands. Organisational enquiries are temporary ad hoc task forces of employees which address problems in the production of goods and delivery of services and which are empowered to devise and implement new operating procedures to overcome those problems. They are interprofessional in the sense that they are drawn from different departments, trades and professions employed within the company. The following example of an organisational enquiry comes from a study of an oil refinery (Boreham & Morgan, 2004) where it was called ‘the Systematic Approach’. Whenever an employee encountered a problem in his or her day-to-day work, instead of referring it to management, the individual was empowered to convene a Systematic Approach team composed of the trades, professions and departments touched by the issue. Working as a self-directed team, they would explore the problem, collect evidence, work out a solution and implement it. These teams were not led by managers, but all managers were charged with the responsibility of supporting organisational enquiries when they were initiated by
members of the workforce. The managers were expected to use their authority to implement the new procedures devised by the organisational enquiry team without question, after checking them for safety and legality. As the employees involved described it, this way of working had become second nature:

We tend to use the Systematic Approach now every time we sort of want to look at something. I’d say it’s become part of the culture …

The following quote from an employee describes how a typical team would go about its work:

There’s a representative from each of the shifts that sit round that are going to look at this compressor that’s blown up, and they’re going to stop it happening, and what they do, they all sit round and say, ‘Well, how do you do it?’ The first person says, ‘Well, what I do, I go out and I check these 15 bells and I do this and I do the other’. Then the next person says to him ‘Well, I do that but I don’t necessarily do this’ and they start talking about that, and then the third person chips in and he says, ‘Well yes, I can see what you’re doing there, but I actually do this as well’. The idea is, you’re trying to get a consensus, and then you thrash out what the best practice is.

The outcomes of the organisational enquiries were agreed working practices that integrated the perspectives of different groups:

If you have got 5 shifts, you have got 5 different ways of doing things, if you have got 15, you have got 15 different ways of doing things. The most amount of time [in the team] is spent on getting the common ground out, and then once you have got the common ground, say ‘Well the consequences of this, that and the other are …’ and then develop the best
practice for it. And once you have done that you can then write the final operating procedure.

3. Interprofessional competence

In English, the word “competent” means “having the necessary ability, knowledge or skill to do something successfully” (Oxford English Dictionary.) Obviously, when professions collaborate so closely that they form themselves into new kinds of work unit, we want them to have the ability, knowledge and skill to do their work successfully. However, whilst all professions insist on professional competence as a requirement for membership, the qualifying bodies concerned usually focus on the *intraprofessional* competencies required for individual practice, not the *inter*professional competencies required for collective practice.

The dictionary definition of competence quoted above can be extended by examining the way the word is used in professional contexts. This suggests that in addition to “having the necessary ability, knowledge or skill to do something successfully”, being ‘competent’ also implies:

- Being recognized as a fit and proper party to be entrusted with a task or responsibility – that is, being competent implies being socially recognised as such, in the professions usually involving some kind of accreditation
- Having acquired this ability by recognised training and/or accredited experience – in the professions, this is usually subject to stringent formal regulation

While interprofessional teams may or may not “have[ ] the necessary ability, knowledge or skill to do [their joint task] successfully”, it seems rare for them to be accorded the level of social recognition and accreditation that is normal for *intraprofessional* practice by individuals. Nor is the professional regulation of the training and experience that leads to successful *inter*professional practice so
highly developed. If it occurs at all, it tends to be experimental, provisional or hedged round with limitations.

What is necessary to achieve professional competence in the interprofessional context? Interprofessional practice brings the collective dimensions of work strongly into focus, and it is on the collective dimension of professional competence that I will concentrate. Among other things, interprofessional practice involves communicating across entrenched professional boundaries, resolving the conflicting judgments that occur when different professions address the same issues and forging degrees of collegiality that stretch established patterns of intraprofessional cohesion. In this presentation I want to explore some of the implications of interprofessional collaboration for the way we think about professional competence, and from that position, discuss what forms of initial and continuing professional education are appropriate for this kind of activity.

Immediately we approach this question, however, we encounter a problem that is entirely conceptual in nature. It is that competence is highly problematic conception its own right. It is not a sharply defined scientific term but an everyday word that carries a lot of baggage with it. One problem is that when we talk about competence we seem to get tangled up in the distinction between individual performance and collective performance. The examples of interprofessionalism cited above illustrate a kind of work performance that is essentially collective. However, in the UK we have a powerful cultural bias towards individualism, especially in our discourses about vocational competence, and these are evident in the way professions deal with the competences of their members. In short, they are strong on individual competence but reticent about the forms of collective competence needed for interprofessional practice.

The implicit assumption that competence is an attribute of individuals is strongly entrenched in our system of professional qualifications, where the license to practice is usually awarded to individuals after they have demonstrated their
competence in a test of their individual performance. Teamwork is usually mentioned somewhere in lists of professional standards, but it is usually accorded a secondary place. Our iconic images of the professional at work remain those of the lone practitioner: the doctor examining a patient, the nurse giving an injection, the maintenance technician troubleshooting a faulty compressor, the process operator watching the instruments on a control panel. We are far less likely to define professional work in terms of collaborative practice, least of all with other professions. In general in the UK, individual performance tends to be viewed as fundamental and group performance as being derived from it. In other cultures, however, such as the Japanese, there is a tendency to view the group as fundamental and individual performance as derivative (Nonaka and Takeuchi, 1995).

Undoubtedly, many professional practices are individual. However, for those which are genuinely interprofessional, group activity should be regarded as the fundamental process and individual activity as derived from it. When an interprofessional team operates as a ‘fully co-operative and collegial entity’ (Melia 2001. p. 718) it becomes possible to talk about the agency and hence the competence of the interprofessional team as an actor in its own right. The need is to develop the collective competence of the team as an entity, not assume that if its members have individual competencies then team competence will occur naturally.

This is not really such a startling or radical proposal. Many social scientists have sought to explain individual behaviour as a construction out of group processes, and have rejected attempts to explain group processes in terms of aggregations of individual behaviour. A recent example of this approach in practice is Weick and Roberts’ (1993) study of crews working on the flight decks of aircraft carriers. These crews work as single units, guided by a collective mind which comes into existence when each individual gives conscious attention to the system-level consequences of his or her actions. That process is fundamental, and the
competence of the individual crew members to participate in it is derived from the collective mind. Each member is socialised into a collective way of thinking similar to what Gustavsson (2001) calls interactive consciousness: ‘The rules of the network of activities in the organisation connect people: each member knows what needs to be done in relation to what others in the organisation are doing and thus a group consciousness is created relying on the predetermined activities’ (p. 360).

4. Dissecting collective competence

If we acknowledge the importance of collective competence in interprofessional teamwork, and develop education and training specifically aimed at developing it, we need to understand the processes involved. I suggest that there are at least three normative principles to which an interprofessional team must conform if it is to act competently: making collective sense of events in the workplace, acquiring a collective knowledge base and developing a sense of interdependency.

4.1 Making collective sense of events in the workplace

Part of the rationale for interprofessionalism is to bring together diverse professional resources to enable better sense to be made of complex, multidimensional problems. However, interprofessionalism is more than this. It has often been pointed out that groups are better suited for dealing with uncertainty – especially risk laden uncertainty – than individuals on their own. While interprofessionalism can bring a wider range of resources to bear, its real potential is its capacity to deal with the psychological challenge, the doubt and fear which complex and uncertain problems provoke.

Research into teamwork suggests that teams can address the challenges of risky and uncertain situations through languaging. In such situations, the initial experiences of group members are often bewildering, but language can help them
to make sense by attaching signs. The extent to which a group possesses the necessary linguistic resources is a precondition for its capacity to make sense collectively, because signs are public, enabling personal bewilderment to be dispelled by locating personal experience within the more ordered repertoire of collective experience. Czarniawska (1997) identifies the key activity by which work groups make sense of predicaments as narrating (p. 24). On her view, the uncertainty of a predicament poses the problem of how people ought to act, this creates negative emotions such as anxiety and these make people question their identity. Research by Eide (2000) suggests that a typical response to challenging situations is a spontaneous discussion between workers. This is not primarily a search for a technical solution to the problem, but an exchange of feelings about the situation, an attempt to define and where necessary transcend the boundaries of one’s occupational role, and ultimately an attempt to preserve the identities of the individuals and groups involved. The challenging situation provides material for narratives or stories which are exchanged within the group; according to Eide, the collective re-interpretation of these is how the group makes sense of what is happening. Building a competent interprofessional team, then, implies developing its capacity to make collective sense of complex and uncertain situations through open and constructive forms of dialogue.

4.2 A collective knowledge base

To engage in effective narration and dialogue, a group also needs adequate knowledge resources. In the context of interprofessional teamwork, these are likely to extend beyond the knowledge needed for individual performance in intraprofessional roles. Research on the use of language in the workplace indicates that many organisations develop specialist sub-languages tailored to the specific events in their domains, which then serve as a collective resource for everyone who works there (von Krogh and Roos, 1995). Concepts of the work process formed in this way are maintained as concepts over time which organisational members continue to bring up in their conversation and thinking. In interprofessional contexts,
a team can span the narrow perspectives of the individual professions involved by developing shared concepts and terminology. The term ‘collective knowledge’ refers to the epistemic precondition for this kind of language use (Boreham, 2000; Boreham et al., 2000). The idea that a social group can possess knowledge over and above the knowledge of its individual members is examined by Lyles and Schwenck (1992). They point out that collective knowledge is an important constituent of collective identity, suggesting that the uniqueness of a social group depends on its capacity to develop a ‘knowledge structure’ which can be maintained on a more enduring basis than the individual knowledge bases of its members. As von Krogh et al. (1996) put it, ‘Individuals may leave the group (for example, a physicist may retire from his department and field) but the knowledge of the group does not vanish’ (p. 178). Building a competent interprofessional team, then, implies developing a collective knowledge base within the team.

One way in which a collective knowledge base might come into existence is by reaching agreement on varying interpretations of common experiences (Daft and Weick, 1984). One kind of collective knowledge that may be required is illustrated in a study of fire fighters in the south of France by Rogalski et al. (2002). It was found that teams deployed to fight forest fires possessed a shared ‘model of tactical reasoning’ (i.e. game-plan) which enabled them to anticipate each other’s actions and interpret each other’s messages when fighting fires. The model developed naturally within each team as a result of experience. After it was identified by the researchers, it was codified and used explicitly by trainers to coach new teams.

4.3 A sense of interdependency

Collective competence depends on a sense of interdependency among team members. Schein (1992) provides an analysis of the cultural aspects of organisational behaviour which helps to understand this requirement. As Schein points out, groups invariably contain sub-systems (either groups or individuals),
each of which has a life of its own. The problem facing most groups is that what is rational within one sub-system might not be aligned with the goals of the group as a whole. Collective activity, based on co-operation and communication between sub-systems, demands that the group balance the fragmenting tendencies of the perceptions of its sub-systems by developing a sense of interdependency. Lacking such a sense, the members may act without regard for each other’s needs. Gozdz (1995) points out that the sense of interdependency in a work group generally grows from seeds that were sown in a crisis. He points out that this sense might disappear once the crisis is past, and on the present view undermine collective competence. Clearly, a feeling of interdependency cannot be produced by ordering people to feel that way. But Gozdz suggests that strategies do exist which work teams can adopt as a matter of deliberate policy in order to create and maintain this feeling. He cites two types of learning experience which can prove valuable in this connection. The first is encouraging everyone in the group to perceive and acknowledge the internal divisions that exist, especially those which could undermine its collective efforts. The second is planning and making attempts to transcend these differences by negotiation and joint activity.

5. Training for collective competence

Developing interprofessionalism through education and training is difficult, not least because it runs counter to many embedded cultural and political assumptions. These include the autonomy of individual professions, incompatible frameworks for understanding problems and the prevailing national culture of individualism. Moreover, as professions change, political cross-currents are encountered that disturb interprofessional arrangements. Nonetheless, the background of social change against which professionals practice, such as arrival of the information society, the growth of consumerism and the decline of trust in authority, make attention to the collective dimensions of professional practice during initial and continuing professional education more important than before.
Initial professional education

Typically, initial professional education is highly specialised and delivered in isolation from other professions. The result tends to be that during the course of this education, emerging professionals come to believe that the service they provide is not only the best solution to a client’s problem, but even the only solution (Casto, 1994). Client problems tend to be defined in the narrow terms of the profession’s own specialist solutions. However, it is not just a matter of curriculum content. Restrictive concentration on a limited range of problem definitions and solutions is a form of professional socialisation which results in the formation of a particular professional identity. And that identity is centred on the distinctive attitudes and culture of the profession concerned (i.e. those that differentiate them from other professions) and these might be maintained by undervaluing or ignoring the existence of other professions.

Preparing members of a profession to value interprofessionalism implies developing an appropriate sense of the professional self. This would be a relational self rather than an individually-contained one. Whilst the individually-contained self is a being with fixed qualities (professions often attempt to fix them by promulgating professional standards and codes of practice), the relational self exists in a process of dialogic self-construction through interaction with others. Such a self develops as individuals make sense of lived experience by engaging in dialogue, identifying with categories and discourses and using these to position and reconstruct themselves in successive situations. Whilst there have been important experiments in initial professional education that aim to develop more relational kinds of professional identity, this is not universal.

Work based learning

Developing effective interprofessional practice requires more than initial professional education. Sustaining a collectively competent interprofessional
team is a major accomplishment and the continuing influence of professional autonomy, alternative frameworks for understanding problems and the privileging of individual achievement will constantly unpick whatever level of collaboration the team manages to achieve. An interprofessional team is an organism that needs constant re-orientation and adjustment.

This is recognised in the aviation industry, where the work based training method known as crew resource management (CRM) was developed. CRM developed out of the post-accident analysis of flight recorders and cockpit voice recorders. These analyses showed that aviation incidents did not always result from individual lack of skill or malfunctioning equipment, but very often from the failure of the crew to respond to problem situations collectively, as a crew. In an attempt to address this problem, CRM emphasises developing collective rather than individual competence. Its two main aims are to develop the crew’s capacity to construct a shared mental model of problematic situations encountered during a flight, and a collective approach to deciding how to deal with these incidents. Importantly, it operates at the level of feelings and relationality as much as at the level of information and technical know-how.

CRM has been defined as ‘a process of interaction between crew members, whereby each individual is empowered and encouraged to contribute to the overall task of the team’ (Royal Aeronautical Society, 1999, para. 14.) It takes place during the period of pre-flight briefing conducted by the captain before the passengers and/or cargo are loaded and the aircraft takes off. It is thus part of the work process; there is no expectation that, having participated in one such briefing, the effects will carry over to future occasions. This is because CRM recognises that each crewmember’s feeling for the emotional states of the other members as they assemble for the flight is a transient condition. The process is designed to create for each crew member an awareness of being dependent on the others, and of the others’ dependence on them, as collectively they embark on the momentous activity of taking an aircraft off the ground.
Ginnett (1993) describes the feeling-state which CRM tries to achieve as one in which the crew are ready to enact any of these four exchanges: ‘(1) I need to talk to you; (2) I listen to you; (3) I need you to talk to me; or even (4) I expect you to talk to me’ (p. 88). Important in the development of CRM has been the recognition that this feeling-state must be shared across the barriers which separate the different categories of employee. Originally conceived as cockpit resource management, CRM was redefined as crew resource management to include the cabin crew, and then extended to include the gate staff - for in reality, the whole team must be competent collectively if the safety of the flight is to be assured.

6. References


