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AMEE GUIDE

Learning in interprofessional teams: AMEE Guide no 38

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Abstract

This guide is for health and social care professionals who teach or guide others' learning before and after qualification, in formal courses or the workplace. It clarifies the understanding of interprofessional learning and explores the concept of teams and team working. Illustrated by examples from practice, the practicalities of effective interprofessional learning are described, and the underlying concepts of patient-centred care, excellent communication, development of capacity and clarity of roles that underpin this explored.

Introduction

Aims and objectives of this Guide

The aim of this Guide is to introduce and elaborate on the meaning and application of learning in interprofessional teams. More specifically, we have written with some objectives in mind for you, our reader.

We hope that this guide will improve your understanding of the:

- types of learning that are effective for interprofessional teams;
- characteristics and challenges of interprofessional team learning;
- practical ways to enhance interprofessional learning in teams;
- means by which interprofessional learning in teams can lead tomore effective practice.

Why this Guide was written

Learning in interprofessional teams is increasingly an important part of the learning experience for health and social care sciences students during their initial education and training and in their post-registration programmes and continuing professional development (CPD). For more than a decade now co-operation between professions has been advocated as a way of rationalizing educational resources, lessening duplication of training and ultimately and more importantly, providing a more effective, efficient and integrated service for both users and providers (Leathard 1994). As Barr et al. (2005) and Hammick et al. (2007) have shown, there is now evidence to indicate that this type of learning is an effective means of enabling practitioners to better understand each other, to work more collaboratively and thus to enhance patient and client care and service delivery. A recent study of graduates from one of the UK university found that

> *Participants who had experienced pre-qualifying IPE demonstrated a more sophisticated understanding of relevant issues and contributing factors, and appeared to be more aware of the impact of poor interprofessional working on care delivery, than participants without such experience. (Pollard et al. 2008)*

Evaluations and the systematic review evidence cited above have led to increasing opportunities for students and practitioners to be part of an interprofessional team and to learn from that experience. Despite these initiatives, the potential for this type of learning is not always fully realized and where it is part of the curriculum it does not always achieve its objectives

Practice points

- Interprofessional working and learning involves staff from different professional and working backgrounds learning and working together.
- Interprofessional working and learning should be service user/patient focused with service users/patients and their carers participating in the interprofessional team.
- Learning in interprofessional teams enables practitioners to work better together and improves services.
- The interprofessional team achieves its purpose through the collaborative learning and working and the collective knowledge and skills of all team members.
- Interprofessional teams need skilled leadership and members who respect and value each other.

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for the learners who participate. Hence, our interest in writing on a topic that we believe has growing significance in international health and social care sciences education. This Guide, with its focus on explaining key concepts and their practical application, is an important part of the burgeoning literature on the topic.

Who is our reader?

This guide is written for an international audience, primarily staff who work in any one of the numerous health and social care science professions, as practitioners, educators or both. We acknowledge, of course, that everyone is a learner. Our readers may include on-campus and clinical teachers, service managers and many who may not regard themselves as having a profession but who are as essential to the delivery of effective human and health services as those practitioners more normally regarded as professionals. In other words, the professional part of interprofessional relates to *conduct*, rather than to the traditional view of *who is and who is not a professional*. Students on formal courses that include the opportunity to learn in an interprofessional team will also find this Guide a useful addition to their reading list.

How to use this Guide

If you are unfamiliar with or want to check that you share our understanding of what learning in an interprofessional team is, then you will want to read Section 'Aims and objectives of this Guide' first. After that, and once familiar with the contents list, you may wish to dip in and out of the Guide as and when necessary in your current work and studies. Please remember that this is a Guide: each section only touches lightly on the aspects of the topic it addresses. We have drawn on the work of key authors in the field in several boxes within the text. There are also suggestions for other literature to draw on for a fuller discussion and other viewpoints. Other boxes list some key texts for this purpose. The references list also provides a rich resource for your own reading.

What you will find in this Guide

The Guide has three main sections. In the first section we explore the meaning of the three major concepts in the title: interprofessional, team and learning. All three are complex terms that exist alongside similar words with similar meanings. Experience has taught us the wisdom of establishing meaning of key words in a discourse before elaborating on its characteristics and the issues it raises. The middle section of the Guide looks at who is involved in interprofessional learning teams and the settings in which these teams operate. Finally, we discuss ways to ensure that interprofessional learning is effective as the means towards the delivery of care services that are perceived as effective by the service user and their carers.

Reading about concepts and their meanings and application can lead to the assumption of an approach that is theoretical and lacks utility for the everyday practice of staff in contempory health and social care services. It is our contention that learning in interprofessional teams is one of the most practical and effective means to enhance service delivery. This Guide has a practice-based case study and uses examples from practice to illustrate what we say and to show how the models we write about work in practice.

Learning in interprofessional teams happens internationally. It takes place in colleges and universities as part of on-campus and in-practice learning, and now frequently happens in the simulation classroom. It occurs in many service delivery units, for pre-registration students and for staff as part of post-graduate studies and continuing professional development (CPD). To be comprehensive and democratic in selecting examples in this brief Guide was impossible. Some readers, we hope very few, may not recognize their particular practice setting in these pages. Our choices were dependant on our experiences and limited by the word count. Throughout the Guide we ask you to **'Stop & Think'** and to consider the application of what we discuss in relation to your practice. Each **'Stop & Think'** place allows some space for your own notes. Of course, as this Guide is about matters interprofessional, we recommend that whenever possible you do this with members of the interprofessional team you are learning and working with.

We were mindful as we wrote that this Guide was commissioned and is published by the Association of Medical Education in Europe (AMEE). Their constituency is mainly educators associated with the medical profession but clearly, the topic being interprofessional learning, this precluded a focus simply on this one profession. However, any publication must be in tune with its potential audience. We know that AMEE Guides are mostly read by on-campus and clinical teachers of medical students and doctors in training. This is in part an explanation for perhaps the slight emphasis in the illustrative material on these practitioners. That said, along with their nursing colleagues, medical doctors are the most frequent participants in interprofessional education (Hammick et al. 2007).

We hope you enjoy reading this Guide and that your interprofessional practice is enhanced by what we have written.

Learning in interprofessional teams

Whilst learning in interprofessional teams is increasingly a part of the normal experience for many health science and social care students and staff, a common understanding of what this really means is a goal yet to be achieved. To this end for the readers of this Guide, this section looks closely at its title. We discuss meanings and models for each key word, firstly, *interprofessional*, then *team* and finally *learning*. Our aim is to establish a shared understanding of these words to anchor our commentary on the characteristics and challenges of, and ways of enhancing, learning in interprofessional teams.

First, we look at some semantic issues to clarify two commonly used terms associated with learning in interprofessional teams: interprofessional education and interprofessional learning.

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Interprofessional education and interprofessional learning

The AMEE Medical Education Guide 12 (1999) was entitled 'Multiprofessional Education' and this begs the question of why this Guide refers to interprofessional education and learning. Is it a matter of semantics, or is there a difference? The answer is that it is both.

There is a great deal of confusion in the literature and within key organizations and a general but benign use and abuse of the terms interprofessional, multiprofessional, interdisciplinary and multidisciplinary, and all these sometimes with and sometimes without a hyphen! Harden (1998) described multiprofessional education along a continuum of eleven stages from isolation, where healthcare professionals are taught separately from one-another to transprofessional where learning is based in practice.

The World Health Organisation (WHO 1988) defined multiprofessional education as

> *The process by which a group of students (or workers) from the health-related occupations with different educational backgrounds learn together during certain periods of their education, with interaction as an important goal, to collaborate in providing promotive, preventive, curative, rehabilitative and other health-related services.*

It should be noted that the 2008 WHO Study Group on Interprofessional Education and Collaborative Practice has in its terms of reference to review the 1988 document and throughout its work refers to interprofessional education.

More recently, the UK Centre for the Advancement of Interprofessional Education re-issued its definition, which is:

> *Interprofessional education occurs when two or more professions learn with,from and about each other to improve collaboration and the quality of care. (CAIPE 1997 and 2006)*

This definition has been adopted by The International Association for Interprofessional Education and Collaborative Practice (InterED) and The Canadian Interprofessional Health Collaborative (CICH). It is the one we recommend to readers of this Guide.

It is clearly important for anyone discussing the topic to make plain their understanding of any terms they use; in this way, assumptions and misunderstandings can be avoided. Following our own advice we set out below our understanding of a number of the terms used in the interprofessional discourse and within this Guide. We start by defining in Box 1 what is meant by discipline and profession and continue with terms that add prefixes to these roots.

We now want to focus more sharply on the meaning of learning in interprofessional teams. The roots of the meaning of interprofessional lie in its two parts: inter and professional. Inter denotes a between-ness, as it does in the word international or internet. In this simplistic way interprofessional comes to mean *between the professionals*; a phrase that is rather meaningless! So we need to look elsewhere for its real meaning and where better than to what practice shows us (Stop & Think).

Box 1. Definitions of terms related to learning in interprofessional teams.

Discipline means an academic discipline, such as sociology or physics, *and* subspecialties or branches of knowledge within professions, for example, the disciplines of paediatrics and obstetrics within the health care sciences professions.

A **Profession** is a self-regulating group of people who have a common body of knowledge, entitled by law to call themselves a specific professional name, for example, Law, Dentistry, Nursing, and Occupational Therapy.

Multiprofessional education is when students from two or more professions learn alongside one another. It is parallel rather than interactive learning and often also referred to as shared or common learning.

Multidisciplinary education is those occasions when members (or students) of two or more disciplines learn together.

Uniprofessional education is members (or students) of a single profession learning together.

Box 2. Further reading about interprofessional education, learning and team working.

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

Hammick M (2005) Interprofessional learning: curriculum development, approval and delivery in higher education, In Carlisle C, Donovan T & Mercer D (Eds.) *Interprofessional Education: An agenda for health care professionals* Wiltshire: Quay Books.

Knowles M. S. (1970) *The Modern Practice of Adult Education*. New York: Association Press.

Katzenbach J.R. & Smith D. K. (1993) The Wisdom of Teams: Creating the High-performance Organisation. Boston: Harvard Business School.

Examples from practice of interprofessional working and interprofessional education clearly indicate that the interprofessional part of this is about how staff from different professional and working backgrounds behave with each other. This behaviour is one that means the service delivered or learning achieved is a shared enterprise between staff from two or more different professions or work settings and that everyone involved in this behaves in a way that we have come to know as professional. In other words, behaviour that is respectful of others regardless of their role and traditional place in the 'system'; recognizes individual scopes of practice and where there is overlap in these; and perhaps most importantly, maintains a focus on the needs of the recipient of the service that is to be delivered. This list is not exhaustive and you might like to **Stop & Think** here and add other indicators of this type of working from your experiences.

Stop & Think 1

Interprofessional means having:

- Respect for all others
- An awareness of shared and unique scopes of practice
- A patient, client, and/or carer focus to your work

Thus, interprofessional takes on the meaning of a way of learning and working with others that is respectful of them and, by implication, of what they know. This way of working then requires knowing about those others and about their contribution to the service recipient's needs. Because of its focus on the recipient of the care, it also demands that we

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select the most appropriate form of care from what is known by all involved. This may mean tailoring what one practitioner knows and would therefore do, according to what is known and done by others.

It can also identify what is not known and in this way with others', new knowledge and novel ways of delivering care and services may be found. All these propositions imply that students and staff working together interprofessionaly are almost certainly going to be learning about, from and with each other. This leads us neatly to our assertion that interprofessional learning is an integral part of interprofessional working.

In other words, interprofessional describes behaviour that involves being with colleagues from different professional and practice backgrounds to deliver care or services and taking the optimal way of doing this from the experience and expertize of all staff involved as the result of time spent learning about each other. It is an additional component of, and complimentary to, the characteristics that hallmark professional behaviour. We have listed some key texts on professional behaviour and the professions in Box 3.

Our discussion about the meaning of interprofessional clearly implies that this word can only be used to describe something done with others. In the next section we look at this type of activity – most usually called team working and at the characteristics of teams.

Teams and team working

Much is written on this subject and we do not plan to rehearse the work of many others here. For example, Miller (1999) described a variety of models of teamwork and pointed out that an effective team is more than just a group of people working alongside each other. Box 4 has a list of characteristics of a team that shows integrated working adapted from Miller (1999).

Box 3. Further reading about professional behaviour.

Fish D & Coles C. (1998) *Developing Professional Judgement in Health Care* Oxford: Butterworth-Heinemann.

Freidson, E (2001) *Professionalism – The Third Logic*. Cambridge: Polity Press.

Macdonald, K.M. (1995) *The Sociology of the Professions*. London: Sage.

Saks, M (1995) *Professions and the Public Interest – Medical Power, Altruism and Alternative Medicine*. London: Routledge.

Box 4. Characteristics of an integrated team.

- A highly developed shared vision of team-working and philosophy of patient care.
- Team members contribute to the decision making processes.
- Shared responsibility for team actions.
- Information *and* knowledge sharing are recognized as important.
- Team members know about their role and the roles of others.
- Role boundaries are flexible.
- A pool of team skills and knowledge is developed.

In Box 2, we included texts that discuss some of the key general theories about teams and team working. Our task now is to identify definitions and processes that have strong conceptual links with what we have already said about what it is to behave in an interprofessional way. Our aim is to build a picture of what defines an interprofessional team as the basis for what the processes of interprofessional team working and learning might look like.

The scene is set in Box 5, where we quote Mickan and Rodger (2000) on what a team is and what its important features are.

Behaviour by its members and team function are significant in ensuring that the team achieves its purpose. Box 6 set out some *good* team working skills and in Box 7 is a list of some of the things that teams need in order to work well and be effective.

Like everything involving relationships between people, building a team that works well takes time. Getting to the stage when the team is working well can be challenging and it is helpful to know the different steps in the development of a team. It is useful to draw on Tuckman's (1965) work, which divided the phases of group development into four stages. These are listed below with some

Box 5. Defining features of a team (Mickan & Rodger 2000).

There is broad consensus in the literature about the defining features of teams. Katzenbach and Smith (1993) stated that ''a team is a small number of people with complementary skills who are committed to a common purpose, performance goals, and approach for which they hold themselves mutually accountable'' (p 45). In addition, regular communication, coordination, distinctive roles, interdependent tasks and shared norms are important features (Ducanis & Golin 1979; Brannick & Prince 1997).

Box 6. Team working skills.

- Listening
- Encouraging
- Clarifying and summarising
- Organising
- Time management
- Constructive criticism
- Giving feedback
- Direct communication
- Valuing and appreciating
- Compromising
- Peacekeeping

Box 7. What an effective team needs.

- Clear objectives
- Clear structures, roles, responsibilities and leadership
- Agreed ground rules
- Preparation and training
- Trust, respect, cooperation and support
- Regular review of its processes
- Recognition of group achievements

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notes about how it might feel and what might happen during each stage.

- ***Forming*** – testing, guarded, impersonal, no conflicts, concern for structure, hidden agenda stay hidden, group identity is low.
- ***Storming*** – confusion, some conflicts and confrontation, hidden agenda may emerge, may be a leadership struggle, may feel stuck, some may opt out, lack of listening.
- ***Norming*** – getting organized, procedures developed, issues confronted, more open exchange of views and ideas, more listening, co-operation and feedback, leadership may be shared, preconceived ideas are let go, creativity is high.
- ***Performing*** – flexibility, creativity, open, effective, mature closeness, supportive, settled interdependence, high morale, empathy, high level of problem solving behaviour.
- In 1977, Tuckman added a fifth stage ***Adjourning***: the ending or termination phase of the group (Tuckman & Jensen 1977).

What is an interprofessional team?

There are clearly differences between an interprofessional team and the many other teams that exist in order to deliver health and social care and services to individuals and the public. Box 8 sets out the definition of an interprofessional team being used for the work in progress of The 2008 WHO Study Group on Interprofessional Education and Practice.

Applying this to practice, the examples of interprofessional teams that follow illustrate this. We have left space for you and your colleagues to **'Stop & Think 2'** about the teams you have worked in. Were they interprofessional teams? The key here is to check if the focus was on working and learning *with, about and from* each other. One way to do this is by Appreciative Inquiry (Cooperrider et al. 2003). Use the following questions in relation to times when you have been part of a highly successful and effective group or team.

- What values and behaviours did the team demonstrate?
- What was the role of the leader/facilitator and the members?
- How did it feel to be part of such a team?

It's even better if your reflections can be shared in a small interprofessional group. We recommend this as the basis for building team processes/agreements/ground rules. Appendix 1 (on Medical Teacher website www.medicalteacher.org) has more details on this process set out as a team exercise.

Box 8. The interprofessional team from: WHO study group (work in progress 2008).

An **Interprofessional team** is a group of people from different professional backgrounds who deliver services and coordinate care programmes in order to achieve different and often disparate service user needs. Goals are set collaboratively through consensual decision making and result in an individualized care plan which may be delivered by one or two team members. This level of collaborative practice maximizes the value of shared expertize and minimizes the barriers of professional autonomy. Often, one team member is appointed as a key worker or case manager for the service user; in this role they coordinate communication between practitioners and the patient or client and/or carer(s).

In the United Kingdom, general practitioners (GP) have been working with nursing and administrative colleagues for many years. Anderson (1969) and Burns (1969) advocated the extended team and five years later Marsh and McNay (1974) described the work of one of the first primary care teams that emerged after altered funding encouraged GPs to employ ancillary staff.

Stop & Think 2
Participation in an interprofessional team in my practice means:

Within any team, members typically assume different roles – whether consciously or unconsciously. We look at team roles and types below. Now we turn to leadership and its counter balance in any team, that of follower-ship.

Skilled leadership of interprofessional teams involves adaptation: different styles of leadership for the different situations a practitioner finds him or herself in. For example, leading an established team that has recognized the value of being a learning team to improve the delivery of a service as the case study below describes, is different to leading a newly formed interprofessional team perhaps with members who have not worked and learnt in this way before. In this case one role of the leader is to signal the need for reflection about the different professional roles and the interactions between team members.

Space prevents us fully discussing leadership. It is however worthwhile noting that styles of leadership include distributed leadership (Senge 1990), servant leadership (Greenleaf 1977) and primal leadership and emotional intelligence (Goleman 1996; Goleman et al. 2002). Another important concept is the origins of a leader's power which may come through position, past experience, knowledge or expertize, culture and hierarchy or style and charisma.

One role hardly ever mentioned is that of being a follower in the team. If a team appoints a leader, and this is generally considered a good idea, then all the other members need to accept that appointment and behave accordingly. We would argue that this can be challenging in interprofessional teams which often consist of staff who at other times work within a traditional hierarchy. The leader by tradition may not be the appropriate leader of the interprofessional team. More often in health and social care settings leaders come from the high status professions. Recognizing the need to relinquish a traditional role for the good of the team and its objectives can be challenging. Knowing when and how to be a follower in these situations is one of those interprofessional attributes we referred to earlier. Another one to add to the list in **Stop & Think 1**, if it is not there already.

One of the hallmarks of a successful team is that each of the members takes one of the roles deemed necessary for the team to function well. Much of the work on team roles was done by Meredith Belbin at Henley Management College in the 1970s and you can find full details of this at http://www.belbin.com/ (accessed 17 Jan 2008). Its fun to read this and useful to find out your team type: the website has full details.

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Box 9. Effective interprofessional learning from Hammick et al. (2007).

The value of using principles of adult learning for IPE emerged as a key mechanism for well received IPE in this review. Additionally, the unique nature of IPE demands authenticity from the learning experience, a characteristic that arises when the development and delivery process are customized to the particular learning group and their professional practice. Increasingly this is being recognized as part of *good IPE practice* with, for example, the use of simulated patients and learning in practice or simulated practice settings as a way to realize this. We suggest that authenticity is a mechanism that enhances the effectiveness of IPE through the diverse ways of delivering the curriculum mentioned above. Similarly, the customization of IPE so that it reflects the reality of practice for specific groups of interprofessional learners acts as a mechanism for positive outcomes.

Learning

Now to the third key word in this Guide's title: learning. We showed in our discussion about the meaning of interprofessional that working in this way involved learning. That is why this Guide is called learning in interprofessional teams. In Box 9, you will see evidence on mechanisms related to learning that have been shown to influence effective interprofessional learning. These are taken from a recent systematic review of the interprofessional education for Best Evidence Medical Education (BEME) by Hammick et al. (2007). You can read the full review at http://www.bemecollaboration.org/beme/pages/reviews/hammick.html.

The focus for effective learning in interprofessional teams needs to be on creating learning situations that maximize the potential for adult learning. We have summarized key features of adults as learners in Box 10 drawing on some seminal texts which still have much to recommend them. We also bring to your attention two other learning theories: situated learning and communities of practice. These link adult learning with professional practice and with praxis or the translation of our ideas into ethical actions. See Box 11 for more on praxis and use **'Stop & Think 3'** space to note your experiences of these ways of learning for your practice.

Box 10. Key features of adult learners.

Adult learners:

- Are not beginners but are in a continuing process of growth
- Bring a wealth of experiences and values
- Come to education with intentions
- Already have set patterns of learning
- Need to know why they need to learn something
- Need to learn experientially
- Approach learning as problem-solving
- Learn best when the topic is of immediate value
- Have competing interests – the realities of their lives

Summarized from Knowles (1970) and Brookfield (1996)

Box 11. More on praxis.

According to Kant, praxis is the application of a theory to cases encountered in experience, but is also ethically significant thought, or practical reason, that is, reasoning about what there should be as opposed to what there is. (http://www.answers.com/topic/praxis accessed 16 Jan 2008)

Stop & Think 3

Situated learning (Lave & Wenger 1991) happens as learners are immersed in practice, and participate and collaborate in action. Participation includes problem solving, discussing ethical dilemmas, using critical thinking skills and making difficult judgements as a team grapples with the challenges of real life situations. Traditionally seen as an apprenticeship model with learning largely derived from observation of a *master's* everyday work, now the relationship with the wider community replaces the single *master*. Much of this is informal as learners learn about the history and current practices, values and tacit knowledge and underpinning values and beliefs – often by observing established workers demonstrating mastery in their work. Immersion of learners in the team also means that they may become aware of the hidden curriculum. In particular, attitudes to and beliefs about service users and fellow practitioners may be conveyed implicitly and both excellent and poor practice can be modelled. Within interprofessional learning teams we need to be conscious of the beliefs and values we communicate and the impact of this on the personal and professional values of novices in the team.

Concepts closely aligned to situated learning include:-

Informal learning or implicit, unintended, opportunistic and unstructured learning, often in the absence of a teacher that takes place in the course of work (Eraut 2000).

Implicit learning described as 'the acquisition of knowledge independent of conscious attempts to learn and in he absence of knowledge of what was learned' (Reber 1995).

Tacit knowledge: 'that which we know but cannot tell' (Polyani 1958).
It may be self evident but where excellent interprofessional team working is evident these are the ways in which everyone, including students, will learn how to be an interprofessional practitioner. With prompted reflection the learner can be made aware of this and thus their learning becomes explicit. (From Kauffman & Mann 2007).

Communities of practice (Wenger 1998) are real groups who exist to do real work. They have mutual engagement, shared tasks, participation and a joint enterprise. By discussion within a community of practice key components of learning become evident:

- Meaning – learning as experience;
- Practice – learning as doing;
- Community – learning as belonging;
- Identity – learning as becoming.

There is active exchange of knowledge and information and application to the problem under consideration. Learning in this way can be especially rich and effective for an interprofessional team.

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Box 12. Case Study: Learning in a UK General Practice Interprofessional Team.[i1].

A Dorset General Practice found they were having difficulty in responding to incoming telephone clinical inquiries. There was great dissatisfaction with the current system. Patients were having to call repeatedly to get an answer to their inquiry, consultations were interrupted and those responding often did not have the information to hand.

1. They wanted **to improve the service their patients received**.
2. They brought together an **interprofessional team**.
3. They agreed **ground rules** (see below) to help them work together successfully.
4. They **agreed their high level aims**, which were to:
   - Improve services for the patients
   - Appreciate team work
   - Make effective use of resources
   - Offer an additional and different service
   - Help patients access the most appropriate of the Practice's services

1. They worked together to **learn about** the processes of the current situation and decided on some simple measures that would **increase their understanding** of the current situation. They logged all incoming telephone inquiries over a period noting what the caller wanted, how many times patients recalled, who the patient believed could answer their inquiry and who in fact had the information they required.
2. With this information they were ready to **generate ideas** for improvement and choose one with which to begin. Interestingly this entailed **letting go of their initial idea** of creating a nurse telephone clinic. As one participant said ''That would have just shifted the problem, not solved it''.
3. They were able to answer the question "what are we trying to accomplish by this change?" in very specific terms. They hoped for fewer interrupted consultations and a high proportion of enquiries to be answered within the agreed time by the most appropriate team member. They designed measures to check the outcomes of their change.
4. They designed a system whereby the receptionist gathered information about the nature of the inquiry on a purpose-designed form and the appropriate member of the clinical team responded at a mutually convenient time with all the relevant information to hand. They ran a pilot for a limited time, collecting all the forms as an audit. **They met to study** the effect of the change and found it had fulfilled their hopes. It was agreed to adopt this as the usual way the Practice would respond to telephone inquiries and two years later the scheme remains in place.
5. They rechecked the new system against the "high level" aim agreed earlier and found that the improvement was consistent with this.

The Ground Rules for the Project
- Say what you think – no matter what
- Listen – let people finish
- Value everyone's contribution – and their right to silence
- Timekeeping
- Confidentiality
- Not knowing/asking for clarification is OK!
- Disagreement is alright – it may be creative
- Keep to subject (perhaps?)
- Ownership of statements
- Wilcock et al. (2002, 2003)

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Application to practice

The case study above that follows illustrates how the key attributes of learning in interprofessional teams we discussed above are mirrored by examples of this type of working in two different practice settings. In each, we have set in **bold** the key words of this Guide's title and some of the key aspects of interprofessional, team working and learning we have discussed. As you read them you might like to identify some of the other attributes you added in your list in **'Stop & Think 2'**. We also suggest that you evaluate an interprofessional team you are part of using the bolded words and attributes. This could be an interprofessional learning exercise for the team: do the evaluation individually and then discuss the results and what these can teach you about the practice of being in an interprofessional team (Box 12).

This section has demonstrated the meaningfulness of learning in interprofessional teams, showing links with some longstanding and substantial theories about teams and learning and explaining what describing a learning team as interprofessional means. Having established this, we now look in more detail at the practice of this sort of team. We consider the value, importance and integrated nature of learning and working interprofessionally.

The interprofessional learning team examined

In this section we look at what it means, in practice, to participate in interprofessional learning. In turn, we examine two of the most common ways this is experienced.

First, we look at students on courses that include formal interprofessional education initiatives i.e. those that are planned to promote opportunities to learn and change through interprofessional interaction (Freeth et al. 2005).

Second, we consider those occasions when practitioners from two or more professions learn with, from and about each other to improve collaboration and the quality of care[2] and where this is integrated into their work. In many places both are becoming part of what is considered to be normal practice and we anticipate that the future workforce will increasingly see both as part of their learning and working lives. Other ways of sharing learning are also popular, for example, multiprofessional learning and these initiatives often create opportunities for informal or serendipitous interprofessional learning.

Formal planned interprofessional education most usually takes place on-campus or in work settings as part of initial health care sciences programmes and for

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Table 1. Types of interactive learning (modified from Barr (1996) and Freeth et al. (2005)).

Type of learning	Examples
1. Exchange-based	Debates, seminar or workshop discussions, case and problem-solving study sessions.
2. Observation-based	Work shadowing, joint client/patient consultations.
3. Action-based	Collaborative enquiry, problem based learning, joint research, quality improvement initiatives, practice or community development projects, work-related practice placements for students.
4. Simulation-based	Role play, experiential group work, the use of clinical skills centres and integrating drama groups within teaching sessions.

postgraduate programmes. Many different examples exist of such programmes and in Appendix 2 (on Medical Teacher website www.medicalteacher.org) you will find a brief description and full reference for the 21 interprofessional programmes that were reviewed by Hammick et al. (2007). This shows the diversity of learners involved and the range of ways the education was organized. Many more such programmes exist and are available to read about in the literature and on university websites.

As Appendix 2 shows, formal learning in an interprofessional team often combines classroom and practice based interprofessional learning and includes simulation as part of the interprofessional curriculum. There are also increasing examples of blended learning making the most of e-learning formats and enabling large numbers of students to experience interprofessional learning. This also means that students on distance placements for their practice learning can continue to learn with their peers. The essential element in all these teaching approaches is that the learners interact with each other to enable learning about, from and with to take place. Table 1 gives you examples of four different types of interactive learning.

An example of shared or multiprofessional learning is the two first year courses – 'Becoming a Professional' and 'Becoming a Health Professional' – offered at the University of Cape Town. Students from medicine, occupational therapy, audiology, speech therapy and physiotherapy come together to learn about professionalism and more specifically the broad themes of interpersonal skills and the primary healthcare approach. The methodology is largely experiential with focus on gaining knowledge as well as developing skills of reflection and empathy within what is called the 'The Integrated Health Professional' (Olckers et al. 2006).

Stop & Think 4

Use this space to note your experiences of multiprofessional education

So far, in this section, we have described formal interprofessional education that is developed and delivered by educational institutions and has a known curriculum. This often provides the first experience of interprofessional learning for new entrants into the health and social care workforce. It is increasingly accepted as part of most programmes that lead to a professional qualification in the health and social care sciences. However, we stressed earlier that learning in interprofessional teams is also often embedded in daily work, or reflection on it, by many practitioners.

The following paragraphs examine this informal but increasingly common form of interprofessional education.

Box 13. Experiences of learning in interprofessional teams by the UK general practitioners.

Vocational training for general practice trainees means an apprenticeship and immersion in the interprofessional team. The year long attachment provides many opportunities for involvement in team meetings for information exchange and interprofessional learning events, often combined as care review meetings.

Interprofessional learning also takes place at clinically focussed meetings, learning not only about knowing-how but also about and from the capabilities and strengths of other team members.

Post graduate situated interprofessional learning occurs in clinical settings and at specific interprofessional courses e.g. child protection, alcohol & drug misuse, palliative care master-classes

Many GPs now gain much of their continuing professional development (CPD) and continuing medical education (CME) at interprofessional practice meetings. The content of these meetings is often guided by a Practice Professional Development Plan where practice wide and individual learning needs to enable the Practice to meet the challenges and opportunities presented may be met. As the care of many conditions become increasingly interprofessional, clinical updates are aimed at the interprofessional learning team.

In these situations interprofessional learning has the potential to not only enhance individuals knowledge and understanding of the role, skills, training, knowledge and professional ethos of other professions but to promote reflection on and clarify their own sense of professional identity. To further develop their sense of what it means to be a nurse, social worker or doctor, the strengths and limitations of their professional role, what it brings to the care of patients and clients and what is lacking that needs to be complimented by other professional colleagues. Box 13 demonstrates the integration of continued professional development with interprofessional learning for general practitioners in the UK.

This brief review of interprofessional education has shown interprofessional learning is part of lifelong learning. Formal undergraduate or pre-registration interprofessional education prepares students for their practitioner-role in interprofessional teams where, although less explicit and certainly less formal, their interprofessional learning continues.

One aspect of interprofessional education we have not discussed is those organizational and professional challenges that present themselves during the development of formal courses of interprofessional learning. Informal interprofessional learning also presents challenges and although they are more usually of a local nature, they are none the less significant. We recommend the second part of Freeth et al. (2005) to those readers interested in these and in ways to manage them during the development and delivery of interprofessional education. Our experience has been that,

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despite these challenges, it is worthwhile and important that opportunities for learning in interprofessional teams are available to the health and social care workforce and to an increasingly wide number of practitioners in for example, education, housing and welfare services. We develop this argument further in the following paragraphs.

Reasons for learning in interprofessional teams

Learning in interprofessional teams is increasingly seen as the way to enable practitioners to work better together, and for service users to then experience improved collaborative services. For this reason we see learning in interprofessional teams as (one of) the means of achieving this improvement. The delivery of heath and social care services to individuals and communities is highly complex. Good health is dependent upon more than these services can provide: housing conditions, educational opportunities and access to employment are amongst numerous factors influencing our physical and mental well being. Outcomes are not related to inputs in a linear way and relationships, values, communication and flexibility can have as great an effect on these outcomes as facts and technical aspects of care. Most of you work in a world where much is uncertain and not all decisions can be based solely on clinical evidence.

One of the aims of the interprofessional learning team should be to improve capacity to deliver as well as competence (Fraser & Greenhalgh 2001). This often relates to how the team as a whole functions, though capacity still needs to be underpinned by individuals having the appropriate skills, competence and training.

Fraser & Greenhalgh (2001) remind us that, while traditional education and training is largely focused on the acquisition of factual knowledge and skills in today's complex world, there is a need for more than just competence. These authors suggest the need for capability as the ability to adapt to changes, generate new knowledge and continuously monitor and improve performance that is essential for success in the fast changing world of health and social care where neither the external environment nor the systems within it are constant. The challenge of working in unfamiliar situations and feedback on performance as well as small group and problem-based learning and the sharing of narratives all enhance capability. It is important to acknowledge and develop individuals' creativity so progress can be made even where problems cannot be solved. The lack of linear relationship between inputs and outputs needs to be highlighted – small changes can have great effects.

Education, and that includes interprofessional education, that accepts and encompasses this complex world prepares learners for the reality in which they will be working. This education must focus on an understanding of the process of care and the contribution of different professional groups to this and earners should be encouraged to identify their own learning needs and set their own goals. The only certainty they face is that there will be more change and increasingly new and different ways of delivering health and social care.

Without doubt the future workforce will at some time be part of an interprofessional learning team: many such teams are part of the present landscape of public services for health and well being. You will have been part of, or met, some contempory interprofessional working and learning teams. They operate in almost all areas of public services and many are part of quality improvement initiatives with the means to enhance service provision. The list below gives but a few examples and you will notice the specific nature of some and that others have more general headings. Use this list to help you complete **Stop & Think** for the teams that you meet in your work.

Teenage pregnancy
Mentally ill elderly people
Chronic ill health management
Transitional care for learning disabled adolescents

These teams can include any who can contribute to the best care of the patient and might include the patient or carer – or at least seek their views and preferences. For example, general practice based teams reviewing the palliative care of patients nearing the end of their life includes

the patient
their carer(s)
family doctor
district nurses
specialist cancer care nurses
administrator
pharmacist
palliative care specialist doctor and
social worker.
complementary healthcare practitioners
hospice support staff.

Even if a patient is unable to attend the team meeting in person, his or her preferences about the place of care and views on further interventions including cardiopulmonary resuscitation should be considered as their care is planned. Carers are essential members of the team –they are an unpaid part of the workforce in many areas of health and social care and have unique insights about the patient and their care needs. We look in more detail at learning about, from and with service users and carers in the following section.

Stop & Think 5

The Interprofessional learning and working teams I am part of are . . .

Interprofessional learning and working teams I meet or know about are . . .

Interprofessional learning and working teams should be in place for . . .

Learning with service users and carers

Changes in health and social care are moving to more equitable sharing of information and power with service

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users/patients and their families and friends who often act as informal and unpaid carers. There is recognition that a health care system where the patient or client or service user is the passive recipient of care is neither morally acceptable, financially sustainable nor particularly effective. This has lead to a fundamental shift in relationships, with professionals providing information on which patients can base rational choices and focussing on maximizing self efficacy. This different role for professionals is ideally provided by small interprofessional teams with complimentary though sometimes overlapping skills; hence the value of learning interprofessionally and reaching mutual agreement about each other's scopes of practice.

The need to continuously monitor and improve the service we give to patients is an accepted part of professional practice. The guiding principle is that the better a service matches the need of those who rely upon it, the higher the quality of the service. However, understanding the needs of service users is not easy and it is the responsibility of the practitioners to enable their clients/patients to feel comfortable making their contribution to care planning.

Techniques such as flow charting patients' journeys through the system often identify bottlenecks and places where errors are more likely to occur. Such systematic examination of the process of care can only be done by an interprofessional team that includes the service user and their carers. No one individual will have knowledge of the whole process: when all come together there is great depth of knowledge and understanding.

Planning and facilitating interprofessional learning

In this section, we briefly look at two important aspects of interprofessional learning: planning what to teach and facilitating the learning in teams.

Curriculum planning for interprofessional learning

There is evidence that interprofessional education that reflects the authenticity of practice is more effective (Hammick et al. 2007). The reality is that course planners have to start with what they have. This means working with the courses taught in their institutions, contracts with service providers for CPD and often within geographical and teaching space constraints. Take another look at the studies listed in Appendix 2 (on Medical Teacher website www.medicalteacher.org) and you will see examples of curriculum development that was tailored to the context of particular institutions or developed in response to a specific service need in a particular place. Often these initiatives started small as pilot initiatives and importantly they were evaluated as a way of developing and improving for the next stage. Pollard et al. (2008) highlight some suggestions for enhancing pre-qualifying interprofessional education as shown in Box 14.

Box 14. Improving interprofessional education from Pollard et al. (2008).

Suggestions for enhancing pre-qualifying IPE included broadening the professional mix of IPE groups and soliciting input from professionals, service users and carers in the academic environment; and learning with students from different professions, engaging in interprofessional activities, shadowing practitioners from other professions and including specific interprofessional competencies in learning outcomes while on placement.

Stop & Think 6

One important issue is the sustainability of these initial courses. You can listen to the views of staff from the three UK universities about how to ensure that interprofessional learning in teams is developed and taken forward by going to http://www.health.heacademy.ac.uk/ where the resources section has a podcast (or healthcast) recorded on 20 May 2007. One important point to note is that funding for interprofessional education was not seen as essential. We've left some space for you to **Stop & Think** about the reasons for this. After you have listened to the podcast, make a note of what is important for sustaining interprofessional learning in teams.

Staff development

Finally, we turn our attention to some aspects of facilitating interprofessional learning. This is a case of last but by no means of little importance as the quotes in Boxes 15 and 16 confirm. These highlight the role of all staff (teacher and clinical practitioners alike) and the importance of staff development for them in enabling the interprofessional learning undertaken by students to be enjoyable and effective.

To facilitate the process of interprofessional learning, educators need to understand how groups function and the know-how to skilfully put their knowledge about this into their teaching practice. We remarked earlier that much of what we said about the skills of team working applies to facilitating a learning group. So now would be a good time to return to the section above that looks at this and to remember that what Barnes et al. (1992, p. 2) say about a group applies to interprofessional learning teams, namely that:

> *A group is more than people who happen to be doing the same thing at the same time in the same place;*

Box 15. The role of staff and staff development in effective interprofessional learning from Hammick et al. (2007).

'The capability of staff with the responsibility to facilitate interprofessional learning is a key factor in students' experience . . . of the IPE. Staff development to ensure the competence and confidence of interprofessional facilitators is a key mechanism in the delivery of well received IPE.'

Box 16. The role of mentorship in effective interprofessional learning from Pollard et al. (2008).

'Mentors' support and encouragement for students' engagement in interprofessional working was considered invaluable.'

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> *to be a group, the people must have some connection . . . . with a common aim, purpose or function.*

Research suggests that personal qualities of a facilitator of a learning group are often more central to their success, than subject expertize (Moust and Schmidt 1995 in Makoni 2000). Qualities described by psychologist Carl Rogers such as empathy, openness, support, interest and unconditional positive regard (Cowan 1998) have to be demonstrated by the group facilitator and it is important to adopt a "student-centred approach" (Gibbs 1992). Learning groups are examples of formed groups (Toseland & Rivas 2001) and are typically either treatment or task-orientated in their focus. Whatever the focus, all groups go through clear and predictable stages that typically involve a beginning, middle and end.

With interprofessional learning teams in particular, the facilitator may need to draw out preconceptions and stereotypes held by the members by exploring the foundations on which they are based. Exercises that ask learners to see themselves, or their opinions and behaviours through the eyes of others can be fruitful at the beginning of interprofessional learning sessions. Ground rules or group agreements – possibly based on reflection on successful or less positive interprofessional work – or an appreciative enquiry visioning exercise of how the learning would be if successful – can be very valuable. It can also be helpful to elicit:

- specific statements about the value of each participant's contribution,
- the acknowledgement that people will bring different and complimentary knowledge and understanding to the learning team,
- an agreement about the use of jargon as this can be particularly excluding,
- permission that its OK to ask for clarification of uncertain points and to express disagreement.

Recognition that disagreement (properly managed by a skilled group facilitator) can be creative and lead to important learning may need to be made explicit. With the involvement of service users and their carers in both initial education courses and service development aspects listed above have an added importance. The facilitator and practitioner team members have a responsibility to remember that these members may be in a group of learners for the very first time. Being empathetic to their feelings about the learning team processes brings its own set of challenges.

Before we conclude this section on planning and facilitating learning in interprofessional teams we have a comment to direct to those who manage classroom and practice based teaching staff and mentors. One of your responsibilities is to ensure that your staff are capable of these roles and to recognize that facilitating learning in interprofessional teams is not simply a case of just transferring skills needed to do this for learners from your own profession or work setting. Working with an interprofessional learning team has its particular challenges and when done well is rewarding and satisfying.

Workshops and courses to enable skilled facilitation and mentorship of interprofessional learning teams are available. For example, the UK Centre for the Advancement of Interprofessional Education runs a series of workshops tailored to different staff, for more details see www.caipe.org.uk and InterEd has a bi-annual conference where experiences and expertize is shared amongst international colleagues (www.healthdisciplines.ubc.ca/intered).

Conclusion

We leave you with a reminder of the importance of interprofessional learning for the future, and the necessity of continuing to provide an interprofessional curriculum for undergraduates and staff CPD that equips practitioners for the 21C world of work. This is not part of our education and training that can stand still but as Pollard et al. (2008) found

> *there is a need for IPE to go further, in that it should also make students explicitly aware of how organisational factors can affect interprofessional working (and) it is necessary to get students to start thinking about how interprofessional working happens within different organisational contexts; and, in particular, to encourage a habit of thinking creatively about strategies for change within all situations.*

Our best wishes to you as a learner in your interprofessional team.

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Notes

1. This case study originally appeared in *Interprofessional learning to improve patient care (2001)* Institute of Health & Community Studies, Bournemouth University and is reproduced here with the permission of the authors, Charles Campion-Smith, Eloise Carr, and Peter Wilcock.
2. This draws on the CAIPE definition of interprofessional education and that used by Freeth et al. in 2005. For a discussion of this, see Chapter 1 in Freeth et al. (2005).

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