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Chapter 14

Faculty Development for Interprofessional Education and Practice

Liz Anderson, Sarah Hean, Cath O'Halloran, Richard Pitt, and Marilyn Hammick

14.1 Introduction

Interprofessional education occurs when students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes (WHO 2010, p. 7).

Interprofessional education (IPE) is a response to specific changes within health and social care delivery in the twenty first century, aimed at facilitating the delivery of integrated services and patient-focused care. IPE is shaped by a commitment to safe, patient-centred collaborative practice by national governments worldwide, including the United Kingdom (Department of Health 2000), Canada (Health Canada 2001), Australia (Australian Council for Safety and Quality in Health Care 2005) and the United States of America (Cerra & Brandt 2011), and global workforce policy (WHO 2010).

In this chapter, we will look at how faculty development can prepare faculty to deliver a workable curriculum¹ for the local context and in the process advance faculty members' skills to teach, implement and offer IPE that assures student engagement. In addition, we explore how IPE has the potential to involve practitioners in deeper reflection and analysis of their collaborative working. This, in turn, enhances patient care. Our examples are mainly drawn from undergraduate curriculum development, but they apply equally to post-graduate, classroom and practice-based IPE. We acknowledge the challenges educators face in the development and delivery of effective IPE, outlining how these can be overcome. Using a theoretical curriculum model, we show how these challenges can be managed and how we can bring IPE practitioners together as a community of practice.

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¹ We use curriculum to mean the content and processes of a learning opportunity; this might be a lengthy undergraduate programme or short continuing professional development workshop.

14.2 The Challenges of Developing and Delivering Interprofessional Education

We have identified five challenges associated with the development and delivery of an interprofessional curriculum. Our position is that faculty development is essential to address these challenges, establish interprofessional learning (IPL) throughout a professional curriculum and promote effective interprofessional practice (IPP).

Challenge 1: Crossing professional boundaries

Curriculum development and other educational activities within a single discipline are complex and nonlinear endeavours. This complexity can be articulated at a professional/school level through the use of Engeström's activity theory (2001), and diagrammatically as a triangle representing a single activity system (Figure 14.1). The diagram summarises the many factors within the profession/school that surround and mediate curriculum development. These phenomena include the tools that may mediate this activity (e.g. means of assessment), the rules or social norms that may govern how the profession and its training is managed, as well as the range of individuals (e.g. teachers, students, administrators) who may be involved and the manner in which different roles are allocated amongst them.

INSERT FIGURE 14.1 HERE

This complexity increases when faculty from different activity systems or disciplines collaborate to develop an interprofessional curriculum, as shown in Figure 14.1. To work effectively together, faculty members must learn to understand each other's activity system and work together to create new shared understandings and ways of working. Without an understanding and empathy for the activity system of the other, contradictions within their shared activity remain unidentified and unresolved. This allows the different expectations, priorities and cultures of each system to remain unexplored, and for poor intergroup attitudes and a lack of cooperation to grow (Hean et al. 2012a).

Challenge 2: Integrating interprofessional education into each profession's existing curricula

If the IPE curriculum remains separate to existing curricula it can become an addon activity; subsequently, students can lose motivation and faculty members can prioritise other subjects. The challenge is the integration and alignment of the IPE curriculum so students and faculty members appreciate its fit with professionspecific curricula, its contribution to student learning and its role as a valid part of the educational experience.

Challenge 3: Paying attention to the theoretical rigour and the evidence base for IPE

Interprofessional education has been accused of lacking sound theoretical underpinnings (Reeves & Hean 2013). The design and evaluation of IPE curricula are said to be superficial, descriptive and lacking in rigour. There has been limited understanding of the outcomes or processes at work within IPE (Hean et al. 2009). A growing number of interprofessional educators, evaluators and practitioners now identify and apply theories from sociology, psychology and education in their work (Hean et al. 2012b). Striving to understand and apply theory needs encouragement, with faculty supported in work that pays attention (and gives time) to the development of theoretically sound and evidence-based IPE.

Challenge 4: Managing the changeable and unpredictable nature of interprofessional education development and delivery

Aligning uniprofessional and IPE elements of a curriculum needs a flexible and adaptable team, able to collaborate and continually learn about, from and with each other. Faculty members need to be comfortable with the concept of expansive learning and be able to cope with uncertainty and change (Engeström 2001).

Challenge 5: Recognising that interprofessional learning is complex and different

IPE produces diverse learning groups. The students vary not only through their personal traits but through adherence to values which have shaped their career choice and become further moulded as they take on a professional identity during training (Anderson et al. 2009). One role for faculty development includes critical reflective work to appreciate the unique properties of these mixed student groups and to equip educators with the skills to support students to learn about, from and with each other. Faculty development should aim to support everyone involved in the design and delivery of IPE curriculum as they re-analyse their personal teaching repertoires and become competent in managing interprofessional learning groups.

14.3 The Interprofessional Education Curriculum: Modelling its Complexity

We have borrowed Coles and Grant's (1985) curriculum model to identify the IPE faculty constituency and unpack the development needs associated with the roles different faculty members have in establishing and assuring a credible IPE curriculum.

The curriculum model (Figure 14.2) comprises three components - the curriculum-on-paper, the curriculum-in-action and the curriculum experienced by the learners. There is always some incoherence between these components; not everything in the curriculum-on-paper will be translated into action by those responsible for curriculum delivery, and learners, with their unique knowledge and skills, will experience different versions of the curriculum. The model recognises the dynamic nature of a curriculum and can usefully guide faculty development through attention to the need to maximise, as much as possible, component coherence. It is particularly useful in health professions learning where courses include practice experiences, often including unplanned, opportunistic learning.

INSERT FIGURE 14.2 HERE

The IPE curriculum is not only influenced by the contributions and interplay of its three different components but additionally by the different professions working in IPE and the diversity of the IPL students. In the following sections, we discuss faculty development initiatives for faculty members responsible for maximising the coherence of the three components of the IPE curriculum and thus, for ensuring effective IPL.

14.4 The Interprofessional Faculty

Faculty development initiatives need to be available to all involved in the planning and delivery of the IPE curriculum and the design of the initiatives needs to reflect the different roles for faculty members. This is a priority for those in roles that are essential to the success of an IPE curriculum which we will define and explore in detail: namely, the *IPE Champion*, the *IPE Professional Leads* and *IPE Facilitators*. Table 14.1, shows there are many other individuals involved in IPE curricula whose contribution to IPE will be enhanced by interprofessional faculty development.

INSERT TABLE 14.1 HERE

The local *IPE Champion* can be defined as the leader and ambassador for both the strategic and operational aspects of the curriculum with management and research responsibilities (Barker et al. 2005; Oandasan & Reeves 2005). Their major task is to maintain strong partnerships across professions, organisations and institutions (Bjørke & Haavie 2006; Gilbert 2005). Mostly there is one *IPE Champion*, a sole voice who is responsible for the early vision for IPE and for initiating the local IPE curriculum. In addition, each profession may appoint an *IPE Professional Lead*, with in-depth understanding about their profession-specific curriculum, to work alongside the champion.

Those involved in the IPE curriculum-in-action are *IPE Facilitators*. The title reflects the mode of interprofessional learning where the educator assists the progress of learning, paving the way for students to construct meaning through debate, discussion and shared reflection (Reeves et al. 2011). *IPE Facilitators* are usually university academics or practitioners who teach in practice (also known as preceptors, mentors, clinical or practice teachers). They may also be patients/service users and students with a teaching role (McKeown et al. 2010; Selby et al. 2011).

14.5 The Purpose of Interprofessional Faculty Development Initiatives

The purpose of interprofessional faculty development is to align more closely the different IPE curriculum components (e.g. written, in-action and experienced). Outcomes should assure a vibrant community of highly competent teachers who advance their practice and student learning through evidenced-based teaching. To reach such goals, faculty development must address the five challenges we outlined for developing an IPE curriculum. We continue by exploring the 'when', 'where', 'what' and 'how' of initiatives designed to achieve this.

14.5.1 Faculty Development and the Interprofessional Education Curriculum-on-Paper

Faculty development events that bring together members of different professions to work together on curriculum development provide opportunities to model interprofessional learning. They promote group work and the formation of a new community of practice. The function of team building cannot be understated (Steinert 2005). Initially we suggest organising 'away days' or 'time-out' events for faculty; the aim here is to encourage ownership of the curriculum-on-paper. The environment for these events needs to be versatile, enabling interactive debate and

discussion towards consensus agreements. A series of events may be necessary to address some or all of the aims of this faculty development, as detailed below.

14.5.1.1 Gain an Understanding of the Education Context of the Other Professions Involved in Developing the IPE Curriculum (Challenge 1)

Early activities should include opportunities for interaction and sharing of professional programmes and underpinning education values. This can be achieved through group work that enables participants to find out about each other, their courses and their interest in IPE development. The end-point of these activities would be the sharing of course documentation, professional body standards, and other relevant materials, as a starting point for identifying the common ground for IPE development and preliminary agreement about the local IPE curriculum strategy.

14.5.1.2 Confirm Common Ground in Professional Curricula Where IPE Could be Developed (Challenge 2)

Patient safety is an example of a topic that provides common ground for the design of IPE. The seminal document within the USA on patient safety, *To Err is Human* (Kohn et al. 1999), mirrored in the UK by the Department of Health's *An Organisation with a Memory* (Donaldson 2000), emphasises the importance of patient-centred team-working in practice. The World Health Organisation (WHO) has a comprehensive guide to including patient safety in health professions' curricula with methods for teaching and assessing patient safety interprofessionally (WHO 2011).

14.5.1.3 Write Interprofessional Learning Outcomes (Challenges 2 and 3)

The goal here is for participants to experiment with writing interprofessional learning outcomes. This means translating the broader philosophical issues discussed in earlier sessions into learning outcomes that are coherent with the IPE curriculum rationale and resonate with curriculum documentation conventions in the academic institutions involved. Intended learning outcomes have been described and include: patient-centred team-working, the different roles and responsibilities of health and social care professionals, interprofessional communication, interprofessional reflection, patient safety and human behaviour and ethical aspects of shared practice (Thistlethwaite & Moran 2010).

14.5.1.4 Design Theoretically Sound and Evidence Informed Interprofessional Learning Activities (Challenge 3)

Faculty development should expose participants to the wide range of theories that have been applied in IPE and encourage them to use these to design effective IPL. We recommend that this event draws on the emerging research literature which can provide pre-reading material for the session. Syntheses of useful theories for IPE are available (Colyer et al. 2005; Hean et al. 2009, 2012b) to encourage debate that focuses on theories that reflect, explain or hypothesise the means to promote social learning (learning about, from and with each other) which is achieved in groups and mediated by social actors. These theoretical frameworks underpin the guidance to curriculum developers as shown in Table 14.2.

INSERT TABLE 14.2 HERE

14.5.1.5 Select Appropriate Methods for Assessing IPL (Challenge 1, 3 and 4)

This involves sharing the assessment regimes for each profession and (finally) agreeing upon an interprofessional assessment strategy. The following are areas to consider:

- Decide if the assessment will measure learning in action (e.g. how students behave during interprofessional learning) or the attainment of learning outcomes (knowledge recall). There has been a recent growth in the use of competence frameworks to assess the knowledge, skills and attitudinal components of IPL (Reeves 2012; Wilhelmsson et al. 2012). Consider also capability frameworks (Gordon & Walsh 2005).
- An assessment strategy where interpretation offers some flexibility because
 it can be used for the IPE assessment while satisfying profession-specific
 requirements. For example, a case study report or essay following patientcentred, practice-based IPE could both fulfil the professional requirements
 and the agreed local IPE assessment strategy.
- A trajectory of assessments to show progression over time, for example, a
 Professional Portfolio. A progressive accumulation of learning can show
 student development along the continuum from novice to expert. Also, the
 use of a Professional Portfolio is now popular across the professions gaining
 increased importance in medicine (Buckley et al. 2009). As there is overlap
 between the aspects of learning for professionalism and interprofessionalism, a Professional Portfolio can combine both of these assessments
 (McNair 2005).
- The value of practical examinations to reveal student performance. Today, in health and social care, it is common to combine performance examinations with written examinations. Miller has drawn attention to the need to

assess student knowledge ('Knows'), competence ('Knows how'), how this knowledge is applied ('Shows how'), and the more challenging aspect of what students do with this learning when in practice ('Does') (Miller 1990).

It is wise to seek students' views on assessment and encourage their involvement in the assessment process, for example, on the use of peer assessment. Remember to also ask for patient/service user views on work-based assessments of interprofessional behaviours within practice settings (Frankel et al. 2007; Freeman & McKenzie 2002).

14.5.1.6 Ensure curriculum alignment and integration within core profession-specific curricula (Challenge 2,3 and 4)

Finally, the group needs to agree how to align and integrate IPE throughout profession specific curricula (Biggs & Tang 2007; Stone 2010). This requires debate on whether IPE is to be placed within modules at set times, versus approaches where IPE is included as small group activities that can be easily run at different times. We suggest avoiding too much rigidity and focusing on a pathway of learning that starts with theory and knowledge and progresses to application for understanding in practice. Experiential learning to appreciate the complexity of effective team-based collaborative practice, based in practice, should be included as soon as students are familiar with learning alongside other student professions.

To achieve this understanding, faculty development activities should include mapping exercises to ensure that all faculty members can articulate how the IPE curriculum on paper has been (vertically and horizontally) aligned and integrated for coherence within the core profession-specific curriculum of participating professions. Engeström's activity theory is a useful way of looking at alignment and unpacking the interplay of systems and can lead to a pictorial understanding of alignment (Engeström 2001). Figure 14.3 shows the result of a faculty development activity that looked at how IPL informs uniprofessional learning and viceversa.

INSERT FIGURE 14.3 HERE

The IPE curriculum-on-paper may be subject to formal approval, and for faculty members involved in approval processes we suggest a seminar to assist their understanding of these challenges. Do try to include (or invite) a diverse audience including academics or senior clinicians involved in university course approval, professional and regulatory body representatives and senior academics (e.g. Deans with resource allocation responsibility). More specifically, this type of seminar should aim to:

1. Explain the policy drivers for IPE relevant to the approving institution(s).

- **2.** Discuss options for the alignment of learning intentions and how this might appear in course documentation.
- **3.** Explain the importance of stakeholder involvement and what to look for in course documentation.
- **4.** Discuss the importance of leadership and how to recognise whether this has been considered by those developing the curriculum.
- **5.** Explain the resource implications of undertaking IPE and questions the panel should ask about funding, faculty capacity and capability.

14.5.2 Faculty Development and the Interprofessional Education Curriculum-in-Action

We move on to consider faculty development for translating aspirations into reality, to the 'IPE curriculum-in-action' overseen by the *IPE Champion* and the *IPE Leads*. The IPE curriculum-in-action is what faculty members involved in assigning resources and teaching IPE 'do' with the *IPE curriculum-on-paper*. This includes ensuring that sufficient time is available in the timetable, deciding whether student learning groups meet physically in classrooms or in practice, virtually or both, the size and professional mix of the learning groups, the number of appropriately trained facilitators needed, what learning tasks are developed and the administration of the learning events. The translation of the curriculum aspirations heavily depends upon faculty support for the *IPE Champion*, *IPE Leads* and the *IPE Facilitators*.

14.5.2.1 Faculty Development to Lead and Teach on Interprofessional Education Events

The *IPE Champion* requires a unique skill set (Table 14.3) and we suggest that this person attends leadership and change management courses and is supported to work with national and international IPE organisations. (See Chapter 3 for more information about faculty development and leadership opportunities). This would include attending local and international conferences, for example, the conference series All Together Better Health (ATBH VI, on-going) and Collaboration Across Borders (CAB IV, on-going). Skill development can also be enhanced through mentoring opportunities from within the IPE national and international community of practice. With the support and benefits of their own professional development, the *IPE Champion* can subsequently lead the development of *IPE Professional Leads* and *IPE Facilitators*.

INSERT TABLE 14.3 HERE

Developing skilled *IPE Facilitators* is an important faculty development role. IPE facilitation is a complex skill; it cannot be assumed that an experienced educator, from practice or academia, will seamlessly become a skilled *IPE Facilitator* (Anderson & Thorpe 2010; Anderson et al. 2011; Hammick 1998; Howkins & Bray 2008). Our experience is that IPE facilitators need preparation and development for their role. We offer a model to guide the faculty developer to achieve the combination of skills required (outlined in Figure 14.4).

INSERT FIGURE 14.4 HERE

Educators usually develop an understanding of the interprofessional course content quickly. Skilled IPE facilitation means recognising the primacy of learning rather than teaching and the ability to appreciate and reflect from multiple professional perspectives (Wackerhausen 2009). It also demands the desire to facilitate through understanding and managing the complexity of interprofessional group dynamics in a learning context. Faculty development should assist faculty members to achieve an in-depth understanding of these elements of mixed profession group teaching relevant to IPE. As previously acknowledged interprofessional student groups are more diverse than many other learning groups, different not just by age, gender or academic profile, but in respect of their reasons for choosing their profession and over time through the process of taking on a professional identity (Anderson et al. 2009). It follows that there can be tensions that need to be managed as the different individuals come together to learn together, for example, when a student from one profession thinks the approach from another profession is wrong, or where a student feels the medical student is dominant, taking on the leadership role unnecessarily. IPE Facilitators can be helped in this regard through appreciation of the psychological and sociological principles of team working and learning, which we will explore further in section 14.5.3.

IPE facilitation development may include regular in-house teaching events or certificated programmes. Examples of successful local programmes are available (Deutschlander & Suter 2011; Freeman et al. 2010; Freeth et al. 2005; Howkins & Bray 2008). Successful faculty development programmes develop a range of teaching competencies and bring together mixed professional academic and practice faculty working in small groups to mirror the student IPE experience (Anderson et al. 2009). In this way, expert stances are shared between practice and academia and facilitation skill sets are exchanged. See Table 14.4 for a possible framework for facilitator faculty development. This could be set up as a credited course or a series of certificated workshops. The framework offers an assessment process to assure competent *IPE Facilitators* who are confident to work in pairs, to team teach and to support student interprofessional learning. *IPE Facilitators* who are sceptics should be offered opportunities to observe the teaching in action, working with positive role models as this can positively change attitudes to favour IPE (Anderson et al. 2011).

INSERT TABLE 14.4 HERE

14.5.2.2 Developing a Community of Practice

Putting the curriculum into action demands more than IPE champions and skilled facilitators. It needs a community with a common interest in the development, delivery and evaluation of IPE. Through their practice as facilitators, curriculum developers, IPE champions or researchers, faculty members face complex challenges and often, great uncertainty. Forming a recognised Community of Practice (CoP) that adopts the principles presented by Wenger et al. (2002) is a valuable way for colleagues from different professions to learn to deliver collaboratively a successful IPE curriculum. Table 14.5 includes more details of how to do this.

INSERT TABLE 14.5 HERE

A Community of Practice is particularly important in the delivery of practice-based IPE where it has been shown to enable professional exchanges and enhance service delivery (Lennox & Anderson 2012). Sustaining practice-based IPE is dependent upon strong networks (Armitage et al. 2009). Note also that the IPE CoP should, where possible, include patients/service users and students whose needs for support may be time consuming, demanding similar processes of befriending and development as outlined above (Anderson & Ford 2012; Furness et al. 2012).

14.5.3 Faculty Development and the Experienced Interprofessional Curriculum

We mostly learn about the IPE curriculum-experienced by learners or, put another way, the students' lived experience of IPE, through evaluations and/or research conducted for faculty committees. These data may identify issues where faculty development has worked and also where it is failing to achieve its goals. This should lead to an assessment of what further faculty development is needed and/or may help identify small issues for immediate short-term attention.

Student assessment outcomes can similarly alert faculty to concerns that warrant a review of faculty development. The faculty development leadership team needs to ensure on-going faculty meetings to work through each issue. Involvement of a student consultative group and/or researcher(s) able to analyse and collate random samples of uniprofessional student focus group material will ensure clarity of the priority of student concerns. Faculty away days provide opportunities for *IPE Champion*(s)/*Leads* from participating professions to have protected time

to re-explore and review the IPE strategy, leading to a redesigned curriculum-onpaper and in-action that takes account of student experiences of IPL.

We have already highlighted how learning within IPE sessions is different for every learner because of what each of them brings to the learning context. Our experience, supported by the literature (Anderson & Thorpe 2010; Carpenter & Hewstone 1996; Hean et al. 2006), is that there are some common issues within interprofessional learning groups. These include what students feel during the IPE experience, such as negative stereotyping, and may depend on how well students are prepared for the difference of IPL to uniprofessional learning and the perceived relevance of the session and how it relates to practice (Freeth et al. 2005). Table 14.6 offers some ideas for faculty development relating to these issues.

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The underpinning differences between student groups can be easily understood by considering social capital theory described as 'an unceasing effort of sociability, a continuous series of exchanges in which recognition is endlessly affirmed and reaffirmed' (Bourdieu 1997, pp. 51-52). The learning, skills and trust of other professional groups created within this exchange is cumulative in nature, constituting social capital, and encourages the learner to reinvest and build future collaborations when joining interprofessional teams in practice. The advantage gained through this social network may be afforded to some but denied to others. Similarly, not all professionals come to the IPE learning group on a level playing field. Students may bring in social capital (and other forms of capital such as human capital) from their professional groups (or other networks) that afford them greater status, skills and/or experiences. This enables them to take advantage of the knowledge transfer that happens in the IPE group to a greater degree than other learners denied these networks.

Student engagement by faculty members should be encouraged with greater understanding of the local possibilities and constraints for IPE. Students can become peer-teachers and support the development of the IPE curriculum where a collegiate approach is taken.

14.6 Conclusion

There is growing evidence of the value of interprofessional faculty development (Simmons et al. 2011). Preparing tomorrow's workforce for interprofessional practice requires IPE to be carefully woven into health and social care professional education curricula. This, in turn, is dependent upon effective faculty development for all faculty members involved.

In this chapter, we have suggested how to best achieve faculty development across the diverse faculty groups involved in IPE, planning and delivery. Our aim

has been to highlight effective ways to move the three IPE curriculum components, the curriculum-on-paper, the curriculum-in-action and the curriculum experienced by the learner, into closer harmony. A future challenge for faculty development is to ensure that faculty members are able to correctly direct the pace and direction of movement of each component. The question of what should move where will only be answered when all three are based on sound theory, shaped by evidence, and faculty members can apply this understanding to their teaching.

For long lasting acceptance of the curriculum-on-paper there is a need for opportunities for faculty from the different professions to learn to continue to work together. In this way, the separate professional education activity systems embed an IPE curriculum that is likely to endure. Sustainability is also enhanced through the development of a Community of Practice. Here, a learning environment built on strong interpersonal relationships between faculty, alongside students and patients/service users, supports its members through the complexities of IPE development, delivery and review.

The IPE curriculum needs to maintain credibility and nowhere is this more so than within practice. The current trend is to develop practice-based IPL that is focussed on learning within already effective team-based care (e.g. rehabilitation, cancer care, mental health, further enriching faculty and benefitting patients) (Kinnair et al. 2012). This enables students to see interprofessional practice (IPP) at its best. Other clinical settings where teams are more fluid and practice is fraught with challenges are marginalised. They miss the potential to transform their practice and improve health and social care outcomes. These practice settings present new challenges for faculty members developing the interprofessional curriculum-on-paper and for faculty development initiatives aimed at supporting their work.

A successful curriculum-in-action requires the development of leaders and team members who understand how to best deliver the curriculum-on-paper. Here, faculty development aims to develop in faculty the same interprofessional competencies set for students: team working skills, an understanding of other faculty roles and responsibilities, the ability to communicate across professional, faculty and institutional barriers, and dealing with uncertainty. These are always likely to feature in interprofessional faculty development initiatives, but in the future we will need facilitators who are in tune with twenty-first century learning. This means greater use of information technology, social media and recognising the role of individual learning. We will need facilitators who can empower and support students as they translate the curriculum-on-paper into their own curriculum-in-action especially in practice settings. 'In situ' faculty development, as suggested by Silver and Leslie (2009), may well suit emergent IPE practitioners already used to interprofessional learning and keen to guide practice-based interprofessional learning in their work settings.

The curriculum experienced by learners offers important clues to tailoring faculty development following implementation of the planned IPE curriculum. But, in writing this chapter, we have realised the lack of material from the learner expe-

rienced curriculum available to guide faculty development initiatives. In the future, we would hope for enhanced use of programme evaluations and robust research to identify key mechanisms for bringing the experience of interprofessional learning closer to the curriculum-on-paper, and for ensuring that this is driven by student learning needs.

The curriculum model used in this chapter offers a theoretical basis for research into the mechanisms needed for effective and sustainable interprofessional faculty development. In turn, this will lead to an evidence base for faculty development for IPE and IPP. There is an on-going need to refresh interprofessional faculty development as emerging practitioners who have experienced IPL in pre-registration programmes and continued professional development courses shape and naturally develop IPE opportunities within practice. We suggest that future faculty development needs to be continually shaped by the views of patients, service users and students, the fresh insights offered by developments in the theory of interprofessional learning and practice and the growing evidence base of IPE and IPP.

14.7 Key Messages

- Faculty development for interprofessional education involves building strong partnerships with diverse stakeholders, including students, clinicians and colleagues from external organisations.
- Interprofessional faculty development aims to enable faculty members to understand the work and values of colleagues from other professions and institutions.
- As interprofessional education becomes a key part of professional curricula, faculty development has a role in helping faculty adapt and extend their teaching skills repertoire.
- Interprofessional faculty development is an opportunity for faculty to experience and understand the processes of interprofessional learning and practice.
- Well planned interprofessional faculty development has the potential to enrich and enhance all teaching, learning and research activities across university and related practice settings.

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 Table 14.1: Faculty members involved in an interprofessional education curriculum

Curriculum Areas	Faculty Members Involved		
	External experts involved in curriculum approval (e.g. senior clinicians, managers or representatives from licensing bodies)		
The Curriculum-on-Paper	Deans, Heads of School		
	Faculty Committee decision-making members		
	• IPE Champion(s)		
	Faculty IPE leads (profession-specific)		
	Students involved in curriculum development		
	Patient/service user reference groups		
	Administrators		
	IPE Champion(s)		
The Curriculum-in-Action	IPE Faculty leads		
	Facilitators from academia and practice		
	Administrators		
	External reference group (e.g. external examiners, external advisors to the research group)		
The Curriculum Experienced by Learners	IPE lead researcher(s)		
	Evaluators responsible for IPE quality control mechanisms		
	Student feedback groups		
	University assessment committee members		
	Administrators		

Table 14.2: Guidance for curriculum developers (adapted from O'Halloran et al. 2006)

Questions To Be Asked of all IPL Activities

Will the activity provide the students with a productive learning experience? Is it relevant and will it allow students to meet the learning outcomes?

- Is it sufficiently challenging? (e.g. Is it based on realistic cases from practice; is it at the correct academic level?)
- Is there adequate support in place? (e.g. Are appropriate learning or technical resources available; will access to a facilitator be needed?)
- Will students have control over their own work? If the activity is overly prescribed, the group will have no freedom to decide how to tackle the task.
- Does it require students to formulate questions and seek the help of other group members?
- Does the group have to produce something (e.g. a report, a presentation, public information)?
- Does it only require students to act as representatives of their profession in a way that
 is appropriate to their stage in their programme? (e.g. Final-year students can be expected to provide an informed professional perspective on a practice problem, but
 first- year students could be asked to research which professions would be involved.)

Will the activity generate genuine interdependence? Do the students have to depend on each other to complete the exercise successfully?

- Does it allow division of work between members of the group? When the work is divided are there enough tasks and roles to ensure everyone has an essential contribution to make?
- Will it allow group members to contribute unique skills that will enable the group to achieve goals that the individuals otherwise could not? These may be professional (e.g. negotiation skills, data analysis) or non-professional (e.g. artistic ability, IT skills).
- Will it require students to share resources such as information, meanings, concepts and conclusions?
- Does the assessment reinforce the inter-dependence? Are the students assessed as individuals or as a group? Is everyone in the group subject to the same assessment? Are the consequences of passing or failing the same for each profession in the group?

Will the activity foster differentiation and mutual inter-group differentiation? Will the activity allow students to explore the differences as well as the similarities in the professions they represent?

- Will each profession be able to contribute something special to the exercise?
- Will the contributions to be made by each profession encourage the students to acknowledge and value the strengths of other professions?

Will the activity allow equal contribution? Will the activity allow all members of the team to invest in the success of the project?

- Will it allow the group to generate shared goals? The patient is the reason why health
 and social care professions work together and so activities based on practice scenarios, clinical cases, service improvement, patient safety or public health challenges are
 helpful.
- Will all members have equal status? Activities must not favour one professional group over another.

Table 14.3: Unpacking the skill set of the interprofessional education champion

Aptitudes that IPE Champions Should Seek Through Faculty Development

Core Aptitudes

- Credibility: From both the local and national IPE community which is underpinned by educational research and androgogy which aspires others to follow.
- Capability: To lead and initiate the necessary steps for faculty development and to work
 alongside relevant colleagues to steer the emerging joint vision.
- Authority: To use wisely within the IPE Community of Practice. This authority is not
 just that bestowed from Heads of Faculty for chairing meetings but earned through scholarship and professional behaviour.

Other Aptitudes

- Problem solver: Able to tackle the key obstacles in a collegial way which assures solutions.
- Communicator: To work closely with others using excellent communication strategies
 which aim to assure the delivery of the local IPE aspirations, while ensuring to listen to
 all viewpoints, to seek compromise and remain non-judgemental.
- Scholar: Through the application and alignment of theoretical thinking to curriculum design, development and research/evaluation.
- Political: To be aware of linked systems and issues which could undermine IPE and to
 assure solutions to sustain IPE when challenged. Seeks relevant external reference group
 support in these endeavours.
- Reflective: Able to see things from many viewpoints and especially using second order interprofessional reflection (Wackerhausen, 2009).
- Economical: Aware of financial pressures and resource issues seeking internal and external funding where necessary.

 Table 14.4: A faculty development framework for preparing IPE facilitators*

Competencies for IPE Facilitation (Freeth et al. 2005, p. 106)	Proposed Faculty Development Activities	How to Assess IPE Facilitators' Competence (Anderson et al. 2009)
A commitment to IPE and IPP	 Knowledge exchange: Ask the group to map the national and international IPE policy requirements (e.g. on patient safety) and link research evidence on poor team working and collaborative practice to outcomes. Showcase the literature on how team working enhances patient care. 	 a) Informal Feedback The IPE Champion/IPE Leader asks questions and seeks clarification for understanding from attendees. b) Formative
Credibility in relation to the particular focus of the IPE to which the educator contributes	 Explore collaborative practice in modern health and social care. Ask faculty members to share their experience and expertise (e.g. within mental health, child and elderly care, acute adult hospital care, public health and other sectors). Faculty members with expertise in research and education (non-clinical staff) can share their expert stances (e.g. application of theory to practice in education and health and social care delivery, educational research approaches suitable to evaluate IPE). 	Faculty members are helped to practice and work through problems receiving feedback from both peers and the session leaders. c) Summative The attending faculty members seeking to become IPE Facilitators complete an IPE Teaching Portfolio, containing:

Positive role modelling	 IPE Champion/IPE Leads who run the sessions should role model what is required. In this way, the leads should team-teach and come from different professional backgrounds. Place participants in small and interprofessional working groups. Discuss group tensions throughout. 	i) Theory applied to IPE events in which they participate. (e.g. why this design?).
An in-depth understanding of interactive learning methods and confidence in application	 Relate adult learning theories to IPE. Ask groups to design IPE using interactive teaching methods. Explore psychological and sociological theories of power and difference (e.g. stereotypes). 	ii) Reflections on how the teaching event was facilitated. (e.g. Could they have acted differently to support student learning, were there problems? What could have been done differently and why?)
A knowledge of group dynamics	 Consider how to set ground rules at the start of IPL. Ask participants to practice managing poorly functioning groups by working through real examples from IPE events. Ensure facilitators understand how to remain non-judgemental and to motivate group work and encourage student group discussions. 	iii) A reflection on observer feedback to include a personal critical analysis on their performance.
Valuing diversity and unique contributions	 Share medical and social models of health. Share the value base of the professions. Discuss patient/service user-centred care. 	

Balancing the needs of in- dividuals and groups	 Set up debates and discussions on corrupting factors in team working, leadership battles, etc. Explore Belbin's (1993) model of group roles. 	
Inner conviction and good humour in the face of difficulties	 De-brief on how those leading the session role model IPE facilitation. Share examples within the group. Explore the use of humour to dissipate group tension. 	

^{*}The competencies for IPE facilitation are adopted from the literature as shown.

Table 14.5: Developing an interprofessional community of practice (CoP)

Principles of designing a community of practice (from Wenger et al. 2002)	Strategies for application	
Treat the development and delivery of an IPE committee as an evolutionary process	Allow facilitators, curriculum developers, IPE champions and researchers, practitioners from different professions, faculties and institutions to share their interests. The IPE agenda evolves from the CoP participants.	
Create an open dialogue between people inside and outside of the CoP	Enable a dialogue between the members of the CoP themselves and those outside (e.g. students, academics from other disciplines-education, psychology, and external reference groups such as the UK Centre for Interprofessional Education (CAIPE); Canadian Interprofessional Health Collaborative (CIHC); Australasian Interprofessional Practice and Education Network (AIPPEN); American Interprofessional Health Collaborative (AIHC).	
Invite different levels of participation	There are three levels of participation in a CoP. The Core group, the active membership and peripheral membership. The core group forms the strategic and operational committees, those engaged in IPE while the peripheral members may in the future take on this role if they are helped to perceive the benefits. Although active participation is encouraged, it should not be forced. Different faculty members may play different roles at different stages of development. Faculty members may begin as facilitators when they first enter the community but progress to greater involvement as curriculum designers and eventually IPE champions as their skills and confidence develop.	
Focus on value	Involvement in the CoP must have an active value for its members who can perceive benefits (Anderson et al. 2011).	
Develop both public and private community spaces	A CoP is about building strong individual relationships between its members. Public spaces may include seminars, workshops, facebook pages, blogs and discussion forums open to all faculties to attend and discuss. Private spaces are more protected and include confidential spaces such as emails between selected individuals or special interest groups engaged in more discrete or focussed activity.	

Combine familiarity and excitement	The CoP should mix a set of activities to generate comfort and familiarity, while novel activities such as away days need to be included to maintain vibrancy.
Create a rhythm for the community	A regular pattern of activity should be established in the IPE CoP. This could include a schedule of working meetings, a seminar programme to promote sharing of ideas, teleconferences focussed on particular projects, with a central tenet that during these activities participants learn about, from and with each other.

Table 14.6: Listening to the students' experiences of interprofessional education: Messages for faculty development

Issues which might hinder student learning	Proposed Faculty Development Activities
Students arrive unprepared for the IPE activity	 Design written materials (handbooks) and verbal materials (virtual or actual presentations) for preparing students for IPE. These could be shared within the IPE faculty community using blogs and wikis (e-technology). Design other educational tools (e.g. short films) to help orien- tate students see: http://youtu.be/Fh7tIr4Tl1o
	 The TIGER Open educational resources have materials for re-purposing to help students to get the most out of group learning (TIGER 2012).
	• Ensure student preparation for IPE is part of the IPE Facilitator training. Ensure IPE facilitators have the skills to engage all students at the beginning of any event using relevant ice breakers and developing ground rules.
	 The IPE Champion may need to convene a meeting with all IPE Leads to ensure the same approach is followed for student preparation by all schools.
Students fail to learn because of the location and the environ- ment	• IPE Champion and IPE Leads will need to revisit the location and reflect on student insights. Change venues where they are not conducive for IPE.
	 Develop partnerships with students so that they better understand why certain environments are chosen for IPE and seek their help to get the environment right. This may mean students repre- sentatives at IPE faculty curriculum meetings.
	 Re-assess all materials that inform students about the 'place' for IPE and prepare design materials to help orientate students to the location.
	 Agree upon a neutral learning environment where an emphasis is placed on equality between participants.
	IPE Champion and IPE Leads work to develop relevant clinical sites for IPE in practice.

Students are overwhelmed by the status, power and territory of some or one of the participat- ing student professions	 Reflect on the content of IPE facilitation to ensure IPE Facilitators can recognise these issues and deal with them in a collegial way during the sessions. This may include engaging students in debate on power and territory in health and social care practice. Run events with facilitators to enhance their understanding of these issues from a theoretical perspective using, for example, social capital theory (Bourdieu 1997).
Students fail to recognise the learning content as it does not apply to their future work (e.g. authenticity of the event)	 The IPE Champion and Leads should review the curriculum map for each school(s) to ensure the content of IPE has relevance for all students participating in the IPE curriculum. Liaise with clinical practitioners to ensure participating students are aware of how the IPE is appropriate for their learning requirements. Run a student focus group to seek their views on orientation for, and engagement in, IPE.

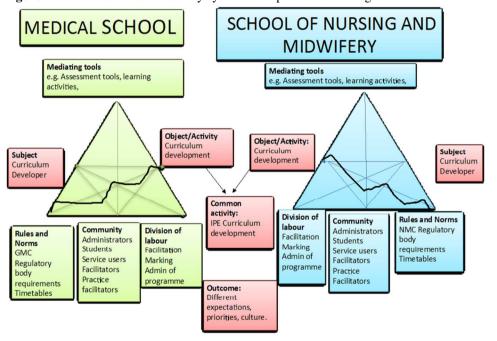
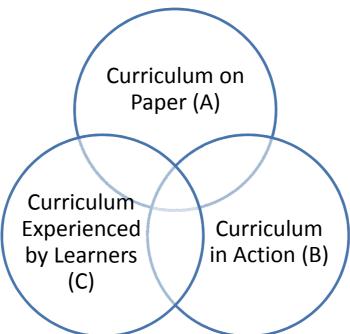


Figure 14.1: Education as an activity system: Interprofessional integration

The diagram is adapted from Engeström 2001 and shows the activity systems of a nursing and medical school coming together to form an Interprofessional Education Curriculum. The thick black line across each activity system represents a contradiction within each system (the requirement by the regulator to deliver IPE) that is resolved if the two systems interact successfully. If unresolved, different cultures, priorities and expectations prevail.

Figure 14.2: Model of curriculum design (adapted from Coles & Grant 1985)



Written for curriculum evaluation purposes we have taken the original concepts from Coles and Grant's paper of the curriculum as three distinct overlapping circles; the curriculum on paper (A), the curriculum-in-action (B) and the curriculum experienced by the students (C). We have not addressed those parts of the circles which overlap.

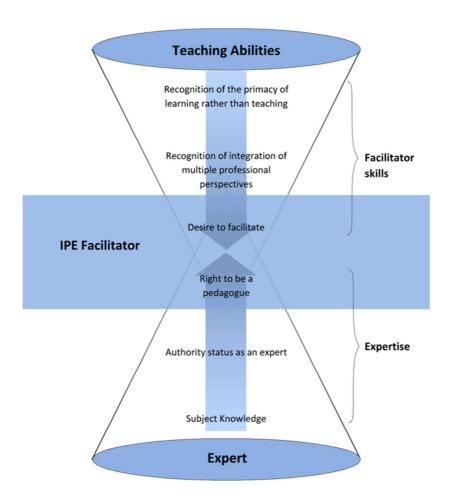
Health and social care professions participating in Interprofessional Education (IPE) Core professional curriculum for health & social care students (assessed throughout) **IPE** learning events at the beginning of a curriculum alignment theme **IPE** learning events in the middle of a cura curriculum riculum alignment **IPE** learning events towards the end of a as curriculum alignment 귎

Figure 14.3: Alignment of the IPE curriculum within the core profession-specific curriculum

The cylinder represents the core profession-specific curriculum with interprofessional curriculum running through as a theme of learning, here with three distinct learning episodes. The arrows from the IPE events link to uniprofessional learning as students, helped by faculty members, integrate and align their learning within their professional training programme.

Ongoing post-registration IPE

Figure 14.4: Developing interprofessional education facilitators



An IPE facilitator must combine being an **Expert** (a full understanding of the aspects of teaching for learning to become a pedagogue) with competent **Teaching Abilities** (facilitation skills for managing small mixed-professional IPE students groups underpinned with interprofessional values) for the management of effective learning.