Journal of Interprofessional Care, (May 2005) Supplement 1: 60–75

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Learning together to teach together: Interprofessional education and faculty development

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Abstract
Interprofessional education for collaborative patient-centered practice has been identified as a key mechanism to address health care needs and priorities. Faculty development can play a unique role in promoting interprofessional education (IPE) by addressing some of the barriers to teaching and learning that exist at both the individual and the organizational level, and by providing individuals with the knowledge and skills needed to design and facilitate IPE. This article highlights a number of approaches and strategies that can facilitate IPE. In particular, it is recommended that faculty development initiatives aim to bring about change at the *individual* and the *organizational* level; target diverse stakeholders; address three main content areas, notably interprofessional education and collaborative patient-centred practice, teaching and learning, and leadership and organizational change; take place in a variety of settings, using diverse formats and educational strategies; model the principles and premises of interprofessional education and collaborative practice; incorporate principles of effective educational design; and consider the adoption of a dissemination model to implementation. Clearly, faculty members play a critical role in the teaching and learning of IPE and they must be prepared to meet this challenge.

Keywords: *Staff development, interprofessional relations, education, medical, continuing, in-service training, teaching.*

Introduction

Interprofessional education for collaborative patient-centred practice has been identified as a key mechanism to address current and emerging health human resource issues (Health Canada, 2003). It is also considered an important way in which to ensure that health care providers have the necessary understanding, knowledge, training and tools to enable them to implement strategies designed to promote the active participation of each profession in patient care. In particular, interprofessional education (IPE) has been said to enhance patient and family-centred goals and values; provide mechanisms for continuous communication among caregivers; optimize staff participation in clinical decision-making; and foster respect for the disciplinary contribution of all professionals (Curran, 2004).

The goals of this article, originally prepared as a discussion paper for the Canadian National Expert Committee on Interprofessional Education and Collaborative Patient-

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ISSN 1356-1820 print/ISSN 1469-9567 online
DOI: 10.1080/13561820500081778

Centred Practice, are to identify and discuss approaches to faculty development that can address barriers and challenges to interprofessional education, foster positive attitudes, raise awareness, and develop competencies in the design and facilitation of interprofessional learning experiences.

Multiple terms have been used to describe the concept of interprofessional education. These terms have included: interprofessional learning, interdisciplinary education, multi-disciplinary learning, multi-professional education, shared learning, and trans-professional education, to name a few. Although it is not the intent of this discussion paper to dwell on the ''terminological quagmire'' that exists (Leathard, 1991), it is important to recognize that the different nomenclatures result, in part, from different educational philosophies that consist of diverse concepts and approaches whereby different professionals can, in some way, learn together (Harden, 1998).

For the purpose of this article, *interprofessional education* will be defined as ''learning together with the specific goal of promoting collaboration'' (Barr, 1996). Although this definition (and many others) mostly refers to students of different health care professions (e.g., nurses, physical and occupational therapists, speech and language pathologists, social workers and psychologists) working together in different settings, the value of students learning from teachers of different professional backgrounds cannot be underestimated (Harden, 1998). It should also be noted that IPE can refer to physicians of different specialties learning together (Ramsbottom-Lucier et al., 1999), and that IPE can occur at each level of the educational spectrum: undergraduate, postgraduate and continuing professional education. In this paper, IPE will refer to students learning together and separately, with teachers of similar or different backgrounds, in a variety of settings and contexts, at different levels of training, with one goal in mind – to learn together in order to work together in the best interests of patients, their families and their communities.

Faculty development refers to that broad range of activities institutions use to renew or assist faculty in their multiple roles (Centra, 1978). That is, faculty development is a planned program designed to *prepare* institutions and faculty members for their various roles (Bland et al., 1990) and to *improve* an individual's knowledge and skills in the areas of teaching, research and administration (Sheets & Schwenk, 1990). The goal of faculty development is to teach faculty members the skills relevant to their institutional and faculty position, and to sustain their vitality, both now and in the future.

In recent years, faculty development has become an increasingly important component of health sciences education (Steinert, 2000). Faculty development activities have been designed to improve teacher effectiveness at all levels of the educational continuum (e.g., undergraduate, postgraduate and continuing medical education) and diverse programs have been offered to health care professionals at many levels (e.g., institutional, regional and national). In this context, faculty development will refer to those activities designed to help educators in all settings (e.g., hospital, community, university) teach IPE and collaborative patient-centred practice (CPCP) in a more effective and satisfactory manner and promote organizational change and development. This article does not focus on continuing health education, which targets the clinical practice of health care professionals (Ulian & Stritter, 1996), and which may or may not occur in an interdisciplinary fashion.

To develop the discussion paper for the Canadian National Expert Committee on Interprofessional Education and Collaborative Patient-Centred Practice, the following steps were pursued:

- We conducted a comprehensive literature review to ascertain the existence of faculty development training programs that foster IPE;

- We held two focus group interviews with health science educators at McGill University;
- We surveyed faculty developers in the 16 Canadian Faculties of Medicine and Departments of Family Medicine; and
- We developed a series of recommendations, based on the literature review, the consultations with key stakeholders, and personal experiences in faculty development, to guide the design and delivery of a faculty development program that could foster IPE.

This article is based on the above-outlined steps. The literature search consisted of two separate components: (1) a MEDLINE and an ERIC search, from 1990–2003, using the following key phrases: interdisciplinary; interprofessional; multi-professional; medical education; teaching; and learning; (2) a MEDLINE and an ERIC search, from 1980–2003, using the following key phrases: staff development; in-service training; continuing medical education. The latter search was part of a larger initiative looking at the ''best evidence'' in faculty development (BEME Collaboration, 2003). We also searched the gray literature and examined a number of references cited in key review articles (e.g., Hammick, 2000; Steinert, 2004; Zwarenstein et al., 1999).

The focus group interviews were guided by the following four questions that were also included in the e-mail survey:

- What faculty values and attitudes can be perceived as barriers to interprofessional teaching and learning?
- What aspects of the different learning ''contexts'' can function as barriers or facilitators?
- How can faculty development help to foster interprofessional teaching and learning?
- What faculty development strategies would help – and in what way?

Moreover, as the focus group interviews and e-mail surveys were designed to enrich the literature review and help frame the faculty development recommendations, respondents were asked to share educational resources and identify experts in the field, several of whom were interviewed to obtain additional insights and information.

Review of the relevant literature

The literature on interprofessional education is extensive and has been reviewed earlier in this supplement. However, it should be noted that much of the literature focuses on undergraduate education (Areskog, 1994; Leaviss, 2000; Pomeroy & Philp, 1994), with some examples at the postgraduate (Hammick, 2000; Zwarenstein et al., 1999) and continuing medical education level (Irvine, 1993; Mann et al., 1996; McLaran et al., 1999). There is remarkably little about faculty development and interprofessional learning.

Moreover, in the faculty development literature, which is equally extensive, we note that the majority of faculty development articles in the health sciences focus on ''medicine'' and ''physicians'' (e.g., Nayer, 1995; Reid et al., 1997; Wilkerson & Irby, 1998). However, all professional groups (e.g., nursing; physical and occupational therapy) describe diverse faculty development initiatives (e.g., Geyer & Korte, 1990; Kirsivali-Farmer, 1994; Mitcham & Gillette, 1998; Raehl, 2002; Rothman & Rinehart, 1990), with a major emphasis on teaching improvement and instructional development. In addition, the majority of faculty development programs target academic faculty, with fewer initiatives aimed at practicing clinicians and teachers in the community. Some articles also describe faculty development activities that welcome individuals from different health care backgrounds.

However, this often refers to diverse disciplines within medicine (e.g., Kwolek et al., 1999; Morzinski & Fisher, 2002). Moreover, in those articles that do transcend professional boundaries (e.g., medicine and nursing), the focus is entirely on the description or evaluation of the teaching improvement program (e.g., Gelula & Yudkowsky, 2003) and not on the interprofessional nature of the participants or the impact of the activity on colleague relationships.

Although we did not find one article that specifically addresses faculty development for IPE, a number of authors have highlighted the need for faculty development in this area (e.g., Casto et al., 1994; Freeth et al., 2003). For example, in 1988, the WHO Study Group reported that structured teacher training programs concerned with educational principles and application of multi-professional education are relatively rare (World Health Organization, 1988). The situation has not changed significantly more than a decade later, and the need remains to provide teachers, in both the clinical and the classroom setting, with the knowledge, skills and attitudes needed to foster IPE. In particular, training faculty for interprofessional education needs to focus on a change in attitudes (WHO, 1988), increased understanding of the roles and responsibilities of other health care professionals, and skill acquisition in the areas being taught to students. As Byrne (1991) has pointed out, most teachers are products of an educational system whose perspective is limited to that of their own discipline. The majority did not train in an interprofessional environment and many do not practice within one either. As a result, teachers may be either uncomfortable with this approach to teaching and learning, or not sufficiently knowledgeable to teach within it. Faculty development programs, in which teachers of different health professions learn together about teaching methods and the content of IPE, are a critical ingredient to success in this area. As the WHO Study Group has said, multi-professional education cannot meet its desired goal or objective without first focusing on faculty development. If teachers are not given an opportunity to learn the necessary educational skills, they will revert to more conventional methods already familiar to them (WHO, 1988).

Summary of findings from focus group interviews and e-mail surveys

The responses from the focus groups and surveys, which helped to shape the approaches and strategies to faculty development outlined in the following section, are summarized according to the questions asked.

What faculty values and attitudes can be perceived as barriers to interprofessional teaching and learning? In response to this question, the focus group and survey respondents most frequently noted ''condescension and defensiveness''; a lack of respect between professionals; a sense of ''academic elitism''; and a ''silo'' approach to health education. They also commented that the different professional groups do not have enough knowledge about each other to work effectively and often adhere to incorrect, preconceived notions. As one individual commented, ''We pay lip service to interprofessional collaboration; our actions do not match our words''.

What aspects of the different learning ''contexts'' can function as barriers or facilitators? When asked to comment on learning contexts, a lack of time – to learn about each other and to work together – was most frequently noted. In addition, the respondents highlighted structural barriers, such as limited resources and complex timetables, which one individual referred to as ''curriculum gridlock''. Differences in students' ages, learning styles and motivations were also identified as potential barriers.

How can faculty development help to foster interprofessional teaching and learning? The majority of respondents felt that faculty development can help to foster interprofessional teaching and learning, and they made a number of very useful suggestions. These included: having faculty from diverse disciplines come together for faculty development sessions; creating a safe space that promotes dialogue and exchange; discussing the roles of the different professions and where they overlap and cause friction; and finding ''common ground through teaching'' as the skills are generic and the content of the discipline is less important. As one individual commented, ''Getting to know one another on neutral territory is a valuable step towards mutual respect. Just get people together and they will learn from each other.''

What faculty development strategies would help – and in what way? Respondents also made some specific suggestions regarding faculty development strategies that could help to foster interprofessional collaboration. For example, they suggested that presenters could come from different disciplines, to model collaboration and demonstrate the expertise and contributions of the different professions; that faculty development should be inclusive and aim to change the work environment; and that we should educate faculty members in teams. As one individual stated, ''A change in culture requires a commitment to support collaborative and interprofessional work; faculty development has a key role to play in promoting this change''. Another respondent opined, ''If you expect people to work in teams, best educate them in teams''.

Faculty development approaches and strategies

The overriding objective of the Canadian National Expert Committee was to identify principles that could foster interprofessional education across Canada. It is the premise of this paper that faculty development can play a unique role in facilitating IPE by addressing some of the barriers to teaching and learning that exist at both the individual and the organizational level, and by providing individuals with the knowledge and skills needed to design and facilitate IPE.

The following section, which has been informed by the literature review, focus group interviews, e-mail surveys, and personal experiences in faculty development, highlight approaches and strategies that can address barriers and challenges to interprofessional learning, foster positive attitudes, raise awareness, and foster competencies in the design and facilitation of IPE. Each recommendation (summarized in Table I) can also be seen as an opportunity for development and change.

1. Faculty development initiatives should aim to bring about change at the individual *and the* organizational *level.*

Wilkerson and Irby (1998) have said that comprehensive faculty development programs should include both individual and organizational development. In the context of interprofessional education, both aspects are critical.

At the *individual* level, faculty development should:

- Address *attitudes* and beliefs that can impede successful IPE and collaborative patient-centred practice;
- Transmit *knowledge* about interprofessional learning, practice and teaching; and
- Develop *skills* in teaching, curriculum design and interprofessional work.

Table I. Faculty development approaches to promote interprofessional education.

Faculty development initiatives should:
(1) Aim to bring about change at the *individual* and the *organizational* level.
(2) Target diverse stakeholders.
(3) Address three main content areas:
(a) Interprofessional Education and Collaborative Patient-Centred Practice
(b) Teaching and Learning
(c) Leadership and Organizational Change.
(4) Take place in a variety of settings, using diverse formats and strategies.
(5) Model the principles and premises of interprofessional education and collaborative practice (e.g., teamwork).
(6) Incorporate principles of effective educational design.
(7) Consider the adoption of a dissemination model to implementation.

As described in an earlier section, the results of our enquiries suggest that faculty members are not prepared to teach students in an interprofessional fashion and to develop programs in this area. They also possess diverse attitudes that can interfere with success and must be addressed. For example, focus group respondents commented that many faculty members do not understand the goals or benefits of IPE; that they frequently do not work together in an interprofessional fashion; and that teachers demonstrate and experience diverse attitudes and values that can act as a barrier. They also stated that faculty development could be beneficial in overcoming negative attitudes and beliefs, in increasing knowledge about other health care professionals as well as IPE, and in providing essential skills.

Barriers to IPE (detailed in another chapter in this supplement) also stem from different educational systems and learning contexts (e.g., a ''silo'' approach to health education) that inculcate different values and attitudes, and processes of socialization (Larson, 1995) that foster different roles and needs. These, too, should be addressed in a faculty development initiative.

At the *organizational* level, faculty development should help to:

- Create opportunities for learning together;
- Empower teams and reward collaborative practices; and
- Address systems issues that can impede IPE.

Ulian and Stritter (1997) have described organizational strategies for faculty development that include the following: providing resources that address faculty needs; changing systems through which teachers are evaluated and rewarded; and fostering mentoring and professional networks for faculty members. In this context, faculty development can create opportunities for shared teaching and learning (e.g., interprofessional teaching rounds); reward collaborative practices; and help to change the language we use. Muller et al. (2001) have described a number of organizational characteristics that can facilitate interprofessional collaboration in this area (e.g., support from the institution; ''protected time'' for faculty members; a commitment to larger curricular and educational goals). Faculty development should aim to target these organizational characteristics as well.

Lipetz and colleagues (1986) have raised the important question of ''who is the client in faculty development?'' This question is particularly important in this context. Is it the student, the patient, or the health care system? Given the challenges and the opportunities, faculty development has a key role to play in organizational development and change in IPE. As Rubeck and Witzke (1998) have said, ''if you are making an important cultural shift in an

institution, not doing faculty development does not make sense''. The need for organizational change was similarly noted by the focus group respondents, one of whom stated, ''A change in culture is required to support collaborative and interprofessional work''.

2. Faculty development initiatives should target diverse stakeholders.

Rubeck and Witzke (1998) defined faculty development as the enhancement of faculty members' educational knowledge and skills so that they can make educational contributions that advance the educational program rather than only teaching within it. This definition is particularly relevant in this context. In order for educational and curricular reform to succeed, faculty development initiatives should target curriculum planners responsible for the design and delivery of IPE programs; administrators responsible for education and practice as well as the organizations in which IPE and collaborative patient-centred practice occurs; and all health care professionals involved in teaching and learning. The latter group might include: faculty members working in a university setting; clinical teachers of diverse backgrounds in the hospital and the community; and other members of the interprofessional health care team. As one of the survey respondents noted, ''Maximizing faculty development activities which are interdisciplinary themselves is a good start! By having the participants and the facilitators come from different disciplines, networks are formed, comfort develops, and a greater awareness of each other's abilities and skills is fostered''.

3. Faculty development initiatives should address three main content areas:

(a) Interprofessional education and collaborative patient-centred practice.
(b) Teaching and learning.
(c) Leadership and organizational change.

It is the premise of this paper that faculty development initiatives focusing on all three content areas are needed in order to achieve one objective: the fostering of interprofessional education. As well, based on our findings, it is believed that a focus on all three content areas will help to address barriers to success and transmit knowledge and skills needed to implement interprofessional learning.

(a) Interprofessional education & collaborative patient-centred practice. Faculty development in this area should focus on the following main topic areas:

- What is IPE?
- Why IPE?
- What is the evidence?
- Barriers to IPE.
- Models of IPE.
- Models of collaborative practice.
- Strategies for promoting IPE and collaborative patient-centred practice.
- Team functioning and team building.

As stated before, any program in this area must address attitudes and beliefs as well as knowledge and skills. For example, a module on *What is IPE?* could include a review of definitions (e.g., interprofessional vs. interdisciplinary) and their evolution over time. In

addition, each group or school could develop a consensus on its working definition. A module on *Why IPE?* could include an overview of the changing context of health care delivery and the need for IPE highlighted by many different stakeholders (e.g., the World Health Organization; the World Federation for Medical Education). Also, this module could highlight the primary goals of IPE (e.g., the development of collaborative skills and the ability to work together as a team; a better understanding of the roles and responsibilities of other health care professionals as well as an appreciation of healthcare delivery from diverse perspectives) and solicit teachers' views on the benefits of collaboration. A module on *Team Functioning and Team Building* could aim to build on current strengths and experiences, and target the knowledge base (e.g., what is a health care team; the goals of team work), attitudes (e.g., positive contributors and obstacles to team functioning) and skills (e.g., shared leadership; involvement of all group members) that contribute to effective team functioning.

(b) Teaching and learning. Clearly, there are distinct advantages to focusing specifically on interprofessional education and collaborative practice. However, much is to be gained from addressing more general topics in teaching and learning, with an interprofessional audience. In our own setting, faculty development workshops are offered to all health care professionals. Feedback at the end of these sessions often highlights the value of working with colleagues from different professions in a way that enables them to appreciate each other's unique backgrounds and experiences as well as similarities in approaches and values in a ''non-threatening'' environment. Although clinical needs may differ, health care professionals' educational needs are often the same, as all teachers wish to promote excellence in teaching and learning. Comments from survey respondents indicated the merit of this approach as well. As one individual stated, ''Getting people together on the topic of teaching and learning is vital''.

Content areas that would be appropriate to foster both collegiality and skill in educational design and principles of teaching and learning include the following:

- Curriculum design and development.
- Interactive lecturing.
- Small group teaching.
- Case-based teaching.
- Feedback and evaluation.

(c) Leadership and organizational change. Medical educators have suggested that changes in organizational structures and leadership strategies may be needed to promote a productive educational climate (Bland et al., 1990). The same can be said in this context. Clearly, teachers involved in IPE need to show leadership in both practice and educational settings, and they need to understand and influence the organizational systems in which they work. Specific content areas to be addressed might include the following:

- Leadership and management skills.
- Organizational behaviour, structure and dynamics.
- Organizational change and development.
- Conflict management and negotiation.

Examples of leadership competencies pertinent to this content area include the development of a shared vision and attention to shared goals, communication of a sense of purpose and meaning, the fostering of collaboration and cooperation, empowerment and the establish-

ment of trust. Additional competencies include analyzing ''formal'' and ''informal'' organizational structures, diagnosing organizational systems and needs, and identifying economic, political and organizational pressures and trends. As Bogdewic et al. (1997) have said, organizational and leadership skills can no longer be thought of as an adjunct to the traditional roles of teaching, research, and service. These skills are of central importance, and especially so, in the context of IPE.

4. Faculty development initiatives should take place in a variety of settings, using diverse formats and educational strategies

The literature on interprofessional education for students at the undergraduate and postgraduate level discusses important considerations in program development that include: the setting for IPE; learning strategies and formats; and the ''appropriate'' stage of learning (Steinert, 2004). Each of these issues is equally important in the design and delivery of faculty development initiatives, and will be considered here.

Setting. Faculty development activities frequently take place in a centralized or university setting. To be successful in this context, faculty development should take place where interprofessional collaborative patient-centred practice occurs. Thus, diverse programs and activities should move out of the university setting into the hospital and the community. ''Moving into the community'' allows us to build on research and practice opportunities, and to target individuals who might not otherwise participate. The literature on community-based faculty development (e.g., DeWitt et al., 1993; Quirk et al., 1998; Langlois & Thach, 2003) is particularly relevant in this context.

Suggested formats. Numerous faculty development formats, ranging from two-hour short courses to year-long fellowships and sabbaticals, have been described in the literature (Steinert et al., 1993; McLeod et al., 1997). The following section will briefly describe those formats that have particular appeal in this context.

Workshop, seminars and short courses. The faculty development literature describes workshops, seminars and other short interventions as the most common formats of faculty development (Ulian & Stritter, 1997). Clearly, these formats play an important role in designing faculty development for IPE.

Integrated longitudinal programs. Some schools and universities have created integrated programs using a variety of faculty development methods in which faculty commit 10–20% of their time over 1–2 years in an attempt to increase their skills in particular faculty roles. The Teaching Scholars Program at McGill (Steinert et al., 2003) is one example of such a program. By learning together over time, irrespective of the content area (e.g., education or research), health care professionals from different backgrounds can begin to collaborate together and break down barriers without explicitly being told of the benefits of collaboration. Integrated longitudinal programs have particular appeal in this context because teachers and faculty members can continue to practice and teach while improving their educational knowledge and skills. As well, these programs allow for the development of educational leadership and scholarly activity as well as teaching improvement.

Peer coaching. Peer coaching as a method of faculty development has been described extensively in the educational literature, and more recently, in the health sciences (Flynn et

al., 1994; Hekelman et al., 1994; Orlander et al., 2000; Sekerka & Chao, 2003). Key elements of peer coaching include the identification of specific goals (e.g., improving specific teaching skills), focused observation of teaching by colleagues, and the provision of feedback, analysis and support (Flynn et al., 1994). Peer coaching has particular appeal for IPE and CPCP because it occurs in the participants' practice setting, enables individualized learning, and fosters collaboration. It also models many aspects of interprofessional practice and consultation and allows for health care professionals to learn about each other as they teach together. In fact, co-teaching, another variant of this faculty development format, has been seen to be an effective method for promoting interprofessional collaboration in health and social care (Crow & Smith, 2003).

Self-directed learning. Self-directed learning initiatives are not frequently described in the faculty development literature. However, there is clearly a place for self-directed initiatives that promote ''reflection-in-action'' and ''reflection-on-action'' (Schön, 1987), skills that are critical to interprofessional practice, teaching and learning. Westberg and Whitman (1997) have pointed out the need for more ''state of the art'' resources to help faculty enhance their skills. Developing educational resources that could be available to teachers in site-specific settings and that could guide teaching practices is clearly an area of untapped potential.

Web-based learning. Web-based learning is closely tied to self-directed learning initiatives, though all educational resources for independent learning do not need to be available on-line. Web-based learning for community preceptors has been described in the faculty development literature (e.g., Beasley et al., 2001; Lee et al., 2003). Based on these experiences, it would seem that on-line resources and learning programs could be considered as a supplement to site-specific and centralized programs. They could also be used in a ''staged approach'', later in the development of teachers and faculty members.

Clinical teaching rounds. Lye and her colleagues (1998) have described an interesting method of faculty development entitled Clinical Teaching Rounds, which emphasizes teaching improvement through a faculty development series modeled on clinical rounds. Given the importance of multidisciplinary rounds in the clinical setting, this type of one-hour format may have particular value and appeal.

Suggested educational strategies

Faculty development strategies highlighted in the faculty development literature (e.g., micro-teaching and experiential learning) are as relevant here as they are in other domains. However, some strategies have particular potential as we try to foster interprofessional learning and collaborative practice. For example, role modeling is essential, as is the need to ''make the implicit explicit''. In addition, some of the following strategies, suggested by focus group respondents from the Centre for Medical Education at McGill, may have particular appeal:

Showcase ''best practices'' and analyze the ingredients of success. Examples of effective interdisciplinary practice and learning do exist (e.g., in Geriatrics; Palliative Care). As many respondents commented, ''It would be valuable to showcase what works – and what doesn't''.

Analyze case studies. Case discussions and presentations are a common method of teaching and learning in the clinical setting. The use of cases in faculty development for IPE should be promoted.

Provide complex tasks that cannot be done alone. The value of teamwork and collaborative practice is not self-evident to all health care professionals. Accordingly, there is value in providing complex tasks that cannot be done alone in a faculty development activity in order to demonstrate the value of teamwork, critical to the success of IPE and CPCP.

Use examples from other professions. The educational literature (e.g., Morris et al., 1997) contains diverse examples that are particularly pertinent in this context. As highlighted by the respondents, ''We need to build on the experiences of others, adapting their strategies to our settings, needs and priorities''.

Develop and utilize appropriate educational materials and resources. Harden (2000) has described different approaches to integrated teaching and learning that include eleven steps on a continuum, from discipline or subject-based teaching at one end of the spectrum to integrated or multidisciplinary teaching at the other. The stages in this continuum can be related to the specific learning situation and to whether students from different professions are taught together or separately. Harden's model is useful for conceptualizing the spectrum of IPE and as a tool in curriculum planning and evaluation. Casto and colleagues (1994) have also developed a series of case studies that would be particularly helpful in a faculty development program, and many useful resource materials are available on the CAIPE website (www.caipe.org.uk). In addition, the UK-based Interprofessional Education Joint Evaluation Team (JET) is finalizing its guide to assist teachers, trainers and others responsible for developing, delivering and evaluating effective interprofessional education in health and social care (Freeth et al., 2005). This guide, which draws upon data derived from 107 evaluations of interprofessional education worldwide (Barr et al., 2005) and is complemented by the authors' experience in research, teaching and practice, will become an invaluable resource in the design and development of a faculty development initiative in this area.

5. Faculty development initiatives should model the principles and premises of interprofessional education and collaborative practice (e.g., teamwork).

Many authors have defined characteristics of effective teams (Leathard, 1994; Cott, 1998; Pritchard, 1988; Drinka & Clark, 2000; Eva, 2002). Common to these definitions is a shared sense of purpose (Casto et al., 1994) and an underlying belief that by ''working together'' team members will be able to accomplish more than by working alone. This belief needs to pervade the development of faculty development programs as well. It has been said that contributors to positive team functioning include open communication, effective leadership, respect and sharing of expertise, support between members and institutional support (Drinka & Clark, 2000). These same characteristics should be seen in the design and development of all faculty development initiatives in this area.

In many ways, faculty development programs should model what we are trying to promote. That is, all faculty development activities should be developed – and delivered – by individuals coming from different health care professions. Moreover, in addition to the use of teams for program design and delivery, we should consider inviting ''teams'' rather than individuals to specific faculty development activities, to recognize their importance and to

build on their expertise. At the same time, some activities should be conducted separately, to clarify attitudes and values, and to strengthen identities. The literature on IPE talks about the benefits of learning together and separately, and the need to respect unique roles and identities. The same is true in this context.

The literature on IPE programs at the undergraduate level has also highlighted that teaching and learning should not occur in a vacuum, and that the students (at whatever level) see the learning and teaching as ''real'' (Steinert, 2004). For example, students need to witness teams in action, to participate in clinical and community experiences, and to observe appropriate role models. As Carpenter and Hewstone (1996) have so eloquently said, ''students must observe other professionals working as equals, and they must view the members of the team as typical, not just exceptions to the stereotype.'' The need for relevance, role modeling and ''reality'' is equally important in all faculty development initiatives. As well, many of the programs designed for students (e.g., Pomeroy & Philp, 1994; Parsell et al., 1998; Leaviss, 2000; Thurlow et al., 2001) could serve as examples for faculty development. For example, Parsell and colleagues (1998) describe three small group teaching techniques that encourage a high level of learner collaboration and teamwork. The different techniques used in their program could be equally effective with faculty members.

6. Faculty development initiatives should incorporate principles of effective educational design.

In a recent review of multi-professional education, it was pointed out that, as in all other educational endeavors, we need to: develop clear learning outcomes; design appropriate teaching and learning strategies; and create appropriate methods of evaluation, of both the students and the curriculum (Steinert, 2004). We also need to integrate theory with practice, and ensure that the learning is perceived as relevant to the work setting and to the profession. Moreover, learning should be interactive, participatory, and experientially based, using the students' previous learning and experience as a starting point. Detailed planning and organization, involving all stakeholders is critical, as is institutional support for the curricular program and learning objectives. A positive learning environment (communicating respect and understanding of similarities and differences), and ''equal'' participation of all the participants, is also essential, as is teacher ''readiness'', ''buy in'' and commitment.

Moreover, for faculty development programs to be effective, they must match the institution's culture; be responsive to individual and institutional needs; promote buy-in and joint ownership; offer diverse programs and activities; incorporate principles of adult learning and other applicable conceptual frameworks (e.g., Knowles, 1980; Kaufman et al., 1999); remain relevant and practical; work to overcome common problems; and demonstrate effectiveness (Steinert, 2000). Clearly, the design of any faculty development initiative to promote IPE must follow these principles and ensure that research informs practice.

7. Faculty development initiatives should consider the adoption of a dissemination model to implementation.

Given the scope of IPE and CPCP, and the challenges of preparing faculty in this area, we may wish to consider the adoption of a dissemination model at local, regional and national levels. For example, at a local level, we may wish to develop a ''core group'' of educators who will then be prepared to disseminate this content area in their communities. Clearly, we cannot reach all individuals involved in IPE through one or two centrally-based activities. It is therefore important to empower, assist and support a core group who will become

''champions'' in this field. We may also wish to consider a ''train the trainer'' approach at a regional or national level. A number of the individuals interviewed suggested that we create a ''train the trainer'' program to foster teaching and learning in this area. Based on previous work in this area (e.g., Skeff et al., 1992), it appears that such an approach would be an effective method for disseminating a faculty development curriculum in IPE.

To support these initiatives, we may also wish to develop and disseminate diverse faculty development materials and resources. As one focus group respondent suggested, we may wish to consider the development of a ''toolbox'' of faculty development materials to help teachers and faculty developers. This toolbox might include written materials that have already been developed in diverse programs across the country or ''templates'' for workshops, self-directed reading programs or on-line learning programs. Workshop templates could include both core content and educational methods. In addition, we may wish to consider the development of a ''case-based workbook'' for faculty development, using case examples to highlight attitude and values and to stimulate discussion of knowledge and skills. Case-based discussions are one of the key methods used in interprofessional practice; we should build on this educational strategy to ensure relevance and utility.

Conclusion

It has been said that education is the key to expanding and changing clinical practice methods within the health care community (Majumdar et al., 1998). If this is true, we must explore different approaches to helping faculty prepare students for collaborative practice at each level of the educational spectrum. Although the literature is replete with examples of interprofessional educational programs at the undergraduate and postgraduate levels of training, few professional development programs are described; and yet, without appropriate and effective role models, teaching in this area is bound to fail. As we look to the future and the changing needs of patients, families and communities, there is a critical need to develop faculty development programs that will foster interdisciplinary teaching and learning to promote collaborative patient-centred practice. As Parsell and Bligh (1998) have so eloquently said, we must ''develop a context in which learning together becomes a vital part of working together''.

Acknowledgements

I would like to gratefully acknowledge the members of the Centre for Medical Education at McGill University and colleagues across Canada for responding to my request for information. I hope that they will recognize their ideas and contributions in the approaches and strategies described in this paper. I would also like to thank Health Canada for initiating this important dialogue, and Drs. Vernon Curran, Ivy Oandasan and Marilyn Hammick for their insightful comments and suggestions.

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