# Making Interprofessional Education Work: The Strategic Roles of the Academy

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## Abstract

Faculties (i.e., schools) of medicine along with their sister health discipline faculties can be important organizational vehicles to promote, cultivate, and direct interprofessional education (IPE). The authors present information they gathered in 2007 about five Canadian IPE programs to identify key factors facilitating transformational change within institutional settings toward successful IPE, including (1) how successful programs start, (2) the ways successful programs influence academia to bias toward change, and (3) the ways academia supports and perpetuates the success of programs. Initially, they examine evidence regarding key factors that facilitate IPE implementation, which include (1) common vision, values, and goal sharing, (2) opportunities for collaborative work in practice and learning, (3) professional development of faculty members, (4) individuals who are champions of IPE in practice and in organizational leadership, and (5) attention to sustainability. Subsequently, they review literature-based insights regarding barriers and challenges in IPE that must be addressed for success, including barriers and challenges (1) between professional practices, (2) between academia and the professions, and (3) between individuals and faculty members; they also discuss the social context of the participants and institutions. The authors conclude by recommending what is needed for institutions to entrench IPE into core education at three levels: micro (what individuals in the faculty can do); meso (what a faculty can promote); and macro (how academic institutions can exert its influence in the health education and practice system).

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Canadian health and social policy discourse highlights the positive effects of interprofessional collaboration, most notably to improving health care delivery. Canadian leaders believe this type of teamwork to be a fundamental prerequisite for better patient outcomes and the effective and efficient use of resources.[1,2] However, interprofessional collaboration during health care delivery will not develop effectively unless university administrators pay attention to the interprofessional education of health professionals within faculties of medicine and the other health care disciplines.[3] By *interprofessional education* (IPE), we mean any form of health training that emphasizes the team learning of students from a variety of health professions, such as medicine, nursing, social work, and other health disciplines.

The knowledge and skills required by health professionals change over time as new scientific advances emerge, new tasks are created, and, in some cases, professional activities done by one discipline formerly become the purview of another. While the roles and responsibilities of each health profession are defined separately, within a team environment, effective professionals must interface seamlessly with each other and be "adaptable, flexible, collaborative team workers with highly developed interpersonal skills."[4(p876)] Faculties (i.e., schools) of medicine traditionally establish knowledge and skill competencies for the trainees they educate in the various health professions. However, faculties must also develop IPE so that trainees will, by the time they are professionals, come to understand, cooperate with, and value the contributions of other professionals so as to obtain optimal patient and health outcomes.[4]

What are examples of successful IPE programs? To provide an answer to that and other questions, in this article we highlight illustrative examples of, and lessons gleaned from, five successful Canadian IPE programs, describe potential forces that either support or detract from IPE, and identify recommendations for academic institutions and their leaders to consider so that they may further support and sustain IPE initiatives. We explore two related questions: (1) what are the philosophies, cultural contexts, and driving forces within health discipline faculties that support or hinder IPE? and (2) given these factors, what are effective ways for faculties to facilitate a shift toward patient-centered, interprofessional, team-based care? These questions are considered within a framework that identifies three levels of action: (1) micro (relating to the individual), (2) meso (relating to the faculty), and (3) macro (relating to a system, as exemplified by the *academy*).[*]

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[*]*Academy* is usually defined as a society of learned persons organized to advance art, science, or literature. For the purposes of this paper, the term *academy* refers to the consortium of universities and educational institutions on a systems level in their commitment to research and training in the health professions.

Embarking on this endeavor was made possible by Health Canada, the federal health department of the government of Canada, which engaged five universities across Canada to prepare a report outlining the opportunities and challenges academic institutions face in influencing the evolution of the IPE and practice environment. Our group undertook two information-gathering activities to help shape the report: conducting a survey of five Canadian examples of IPE programs, and carrying out a literature review on the opportunities, challenges, and levers in IPE. The findings of these two activities, described in the following pages, serve to illuminate how successful programs stimulate change, and what specific roles academic institutions and individuals in them should undertake to contribute to IPE in the future.

## Five Current, Successful IPE Programs in Canada

Cooke has described a number of well-established, innovative, and effective Canadian IPE programs.[5] On the basis of his study and after discussions among the individuals who would become the authors of this article, all of whom are knowledgeable about IPE at Canadian universities, in 2006 two of us (P.H. and R.H.-J.) sampled five programs (from prelicensure to postlicensure training) that they, using Cooke's analysis, identified as successfully demonstrating national leadership in IPE. As a group, we, the present authors, invited the academic leaders of these five IPE programs to participate in the exploratory study discussed in this article. All of those we contacted were strongly supportive and agreed either to be personally interviewed and/or identified other individuals whose knowledge of their IPE program would prove insightful for our investigation. These leaders did not identify any students for the interviews. We used a semistructured interview in interviewing the key informants to gain insight into their respective IPE programs, with specific focus on exploring how their academic institutions influenced their work and how they, in turn, influenced their respective academic environments.

### Program descriptions

Below are short descriptions of the five programs chosen from across Canada.

- *University of British Columbia.* The College of Health Disciplines was established in 2002. It offers a number of elective IPE courses and projects for prelicensure students in seven faculties: land and food systems, applied sciences, arts, education, dentistry, medicine, and pharmaceutical sciences.

- *University of Alberta.* This institution offers a 35-hour case-based IPE course, which includes a community-based group exercise, involves prelicensure students in the university's health sciences programs, including medicine, nursing, physical therapy, occupational therapy, nutrition, and recreational therapy. Established in the early 1990s as an elective, it has been compulsory since 1999.

- *University of Ottawa.* The SCO Health Service's Rural Palliative Care Program was established in 1994. This interprofessional continuing professional development program focuses on interprofessional practice in palliative and end-of-life care in rural communities in eastern Ontario. The target audience includes family physicians, community hospital and home care nurses, social workers, pharmacists, occupational and physical therapists, dieticians, and spiritual care providers.

- *Dalhousie University.* A compulsory preclinical learner program, involving a series of five IPE learning modules presented over the preclinical years, focuses on teamwork, professionalism, and specific topic areas through case-based discussions and interactions with expert panels. The faculties of nursing, allied health professions, health and human performance, health service administration, pharmacy, dentistry, and medicine collaborate.

- *Memorial University.* Since 1999, the Centre for Collaborative Health Professional Education has been developing compulsory and elective interprofessional courses at undergraduate, postgraduate, and continuing professional development levels across medicine, nursing, pharmacy, and social work. Continuing professional development components also include occupational therapy, physical therapy, and speech and language therapy.

### Summary of the results of the interviews

**How successful programs start.** Key informants stated that their IPE programs would not have started without champions who brought energy, dedication, persistence and a substantial time commitment to the cause. These champions put IPE on the agenda at their institutions and made programs happen. Some champions were well established in the university hierarchy (including deans, associate deans and directors), whereas others were at the start of their careers. All developed influential links and supports with senior levels of university administration. Under the leadership of these champions, connections among the learners in different professions were established by providing opportunities for them to interact within a variety of learning contexts. The experiences that then arose increased participants' awareness regarding the other professions' roles. This, in turn, led to an internalization of the professional ethos they experienced and a commitment to helping promote the programs' initiatives.

Developing organizational structures that facilitate and coordinate interprofessional collaboration was another common thread raised by key informants, as was the importance of dialogue and developing common objectives among stakeholders. As one interviewee said,

> The heads of all those professions met together, so the will to do this has been easier than if we had been separated into a lot of different faculties.

An important underpinning for the implementation and sustainability of IPE initiatives was funding allocation by faculties. Funding provided human resources and infrastructure to help with both IPE coordination and program development. For example, continuing professional development programs combined funds from discipline-specific sources to create IPE initiatives.

Undertaking IPE initiatives and establishing a sound IPE presence within an institution presented a number of challenges. A key structural challenge was to coordinate the schedules of learners from a variety of different professional training programs to allow participation in IPE activities. In the end, this challenge was successfully met by building relationships that fostered collaboration

and a willingness by all involved to demonstrate flexibility and compromise in developing programs.

**Influences on and influences of academia.** The influences of IPE programs on academia were widespread and occurred on a number of levels. It is important to note that the programs profiled here began before the value of IPE and its role in addressing changing health care needs had been widely recognized in academic circles. As a starting point, IPE champions required high-level support to undertake and initiate IPE activities. Interprofessional educators working in traditional academic hierarchies had to adopt new ways of cooperating and collaborating to develop IPE initiatives. As a result, individual faculty members were often required to go beyond their traditional job boundaries. These champions had to learn to model collaborative teamwork and to highlight that all parties involved stood to gain from participation in IPE.

Just as IPE influenced academia, so too did academia exert an influence on IPE. By its very nature, academia fostered the demand for research and scholarship. Within academia, individuals have increasing opportunities to work collaboratively, share course loads, and combine their expertise and talents on research projects. The programs that received substantial research funding helped raise the profile of IPE within their various academic institutions and helped solidify their place within academia as a viable means of increasing knowledge, interest, and opportunity for new IPE champions.

An additional positive benefit of participation in IPE programs noted by key informants was the increased attention paid to, and recognition given to, practitioners in the community. The resulting community-based experiences and projects often served as sources of inspiration, which increased university and government awareness of the need to prepare students for collaborative, patient-centered practice. As senior leaders from different faculties met to change pedagogical approaches, their discussions fostered administrative collaboration. This, in turn, encouraged these leaders to consider other issues such as curriculum development, clinical placements, resource allocation, and opportunities for research.

**The future of IPE in academia.** Key informants reported being hopeful about the future viability and impact of IPE programs in Canada. These hopes were well summarized by one interviewee, who stated,

> We'll have students learning together in common courses and working together in small-group projects. We'll have students doing activities in the community in interprofessional teams. We'll have a number of practice settings, across the province, which are established as interprofessional learning sites. And we'll have an ongoing annual continuing professional education series focusing on the interprofessional teamwork. These are great dreams but they're not really dreams. I think they'll be reality. It's just going to take a few years.

As government agencies, academic institutions, and individual health professionals recognize and commit to engaging and supporting IPE practices, and as patients become increasingly aware of patient-centered care that crosses professions, the need for interprofessional care is increasingly solidified. Thus, the current challenge is not to champion the idea of IPE but to establish IPE and interprofessional collaboration and carry out knowledge translation that will inform and encourage professionals to make these routine practices across Canada's health system at all levels.

## Factors That Facilitate IPE

Our study of the five successful IPE programs and a review of the literature led us to identify key factors that drive and sustain academic institutions in facilitating the integration of IPE as a routine part of health education and practice.

For interprofessional learning to succeed on a program level, a number of key conditions must be present. Parsell and Bligh[6] identified two components of successful team-based collaboration:

- Perspective-taking is critical, as it allows for the development and exploration of the common goals, values, and beliefs of the different professional groups involved.

- Knowledge and skills for effective interprofessional teamwork must be developed in order to encourage an

understanding of the scopes of practice of professions involved.

Opportunities to learn and work together in meaningful ways contribute to positive outcomes in IPE and help to develop collaborative skills that collapse professional silos and bridge the barriers of professional isolation.[2,7] As IPE often requires professionals to be physically proximate, it should facilitate collaboration and relationship building while reducing professional territoriality and atavistic behaviors, which is particularly relevant for dealing with conflict.[8,9] IPE curricula must address pragmatic issues such as shared space, timetabling, and equipment use in addition to opportunities for cooperative learning.[9] Identifying and creating opportunities for informal learning, socialization, and role integration provide opportunities for professionals to develop and put into practice the skills necessary for successful IPE.[10,11] Experiential learning is particularly important in IPE, and workplace learning offers an ideal setting in which professionals can reflect on their professional practices and the ways in which they intersect/overlap/complement the professional practices of others within a multidisciplinary setting.[7]

### Faculty development

Faculty members play a critical role in the design, development, implementation, and delivery of IPE. Key informants recognized that professional development for faculty plays a key role in encouraging participation and faculty buy-in to IPE initiatives.[12–14] Examples of faculty development initiatives include the development of role models, supporting role integration for health professionals involved in collaborative practice, and addressing some of the barriers to teaching and learning that exist at both individual and organizational levels.

As comprehensive faculty development programs are an important means by which an institution can move toward implementing and sustaining IPE, these programs should encompass both individual and organizational development.[12,13] At the individual level, faculty development should address attitudes and beliefs that might impede or facilitate successful IPE and collaborative, patient-centered practice. It should also be a method of knowledge transfer and exchange about the practices and benefits

of interprofessional learning, practice, and teaching. Further, faculty development can make a significant contribution to developing skills in teaching, curriculum design, and interprofessional work that is at the core of successful IPE. At the organizational level, faculty development offers several advantages, including the creation of cooperative learning opportunities, the support of teams, the recognition and reward of collaborative practices, and the addressing of factors that might impede IPE.

### Champions, governance, and regulatory or legislative changes

The research literature and our knowledge of the five successful IPE programs strongly suggest that the ongoing involvement of champions is a key factor for overcoming structural barriers to successful organizational change.[15,16] Formal leaders can use their positions of power to set the direction for change, establish structures and parameters for implementation, allocate human and fiscal resources, and stimulate interest and commitment across a variety of stakeholders.[9,15] Supporting teams fosters collaborative practice and helps ensure the implementation of IPE programs.[17,18]

Governance and management structures should offer a collaborative environment for participating disciplines, including interprofessional curricular development, the management of collective resources, and the promotion of educational changes that are in accord with those occurring in the larger workplace. Governance structures should make it imperative that faculties recognize and contribute to solutions that overcome barriers hindering IPE implementation and practice.[10] Accreditation at institutions that employ or educate health professionals can act as a powerful force for change in influencing faculty members' and learners' behaviors to facilitate the advancement of interprofessional collaboration.[10] Flexibility in organizational structure and designated IPE funding that can be used across faculties are critically important to support academic administrators in their efforts to implement and sustain IPE.

### Successful implementation and sustainability

Because creating a climate for change is not always easy, the circumstances and needs of an organization must be analyzed before the implementation of any change initiative.[19] Champions play a key role in establishing a climate for change, as well as implementing and sustaining change.[16,19] Organizational structures that facilitate interprofessional collaboration, such as research awards, specific portfolios to stimulate curricular change toward IPE, or faculty positions with emphasis on IPE, need to be developed with the full expectation that participants will commit to ongoing communication and continued meetings to see the task through.[8]

The attitudes of senior academic administrators are key determinants of IPE success. As implementation of IPE requires administrative decisions, support is needed from senior administrators who have the authority to decide on educational policies and control resources.[9–11] Administrators at all levels (e.g., associate deans, department heads, and associate directors) need to be involved for successful IPE to be sustained. Participants at these levels are more likely to support and implement changes that directly affect learners if they believe that success will promote their organizational goals and if they have been consulted and directly involved in planning for the change.[16,19]

## Barriers and Challenges to IPE

In contrast to the factors discussed above that assist change, in this section we examine the barriers that need to be considered and overcome to successfully implement IPE.

### Interface between professional practices

An important component of program funding is often student enrollment. An enrollment-based funding formula can strongly influence the structure of university programs and contribute to a lack of flexibility for allocating financial and human resources to interdisciplinary activities.

The allocation of money may present an external barrier on an individual level as well, because the majority of health educators are members of professional

associations.[8] Professional compensation (fee-for-service) hinders collaboration in two ways: time allocated to the team engagement process is uncompensated time, and fee-for-service systems have the potential to create competition among health professionals who might otherwise collaborate.[20] Finally, a lack of clear policies from physician and nursing associations or licensing bodies on the boundaries of professional jurisdiction represents an additional structural barrier to IPE.[20]

### Interface between academia and professions

The literature is inconclusive on the appropriate time to introduce IPE to trainees. Some authors are advocates for early intervention, some for middle stages, and others for more advanced levels beyond basic training.[4] Other issues within the curriculum or learning environment include scheduling problems, discrepancies in numbers from different professions, divergent learning and assessment styles, different curricular periods, lack of commitment or buy-in, and limited resources.[4,21] The differences in learning environments for various health professions students combined with learning situated exclusively in one homogeneous environment may reinforce an intraprofessional culture within each profession and discourage interprofessional practice later in trainees' careers. Administrative issues such as a lack of financial resources, a lack of administrative support, rigid curricula, and battles for professional boundaries are among the identified barriers to implementing IPE.[22] Finally, differences in professional values and cultures as well as a lack of opportunities for knowledge exchange represent barriers that can help maintain and even reinforce stereotypical perceptions.

### Influence of faculty attitudes

The attitudes of individual faculty, as reflected in their personal biases toward different professions, present an important challenge. When negative biases are evident, it is difficult for trainees to achieve perspectives of the variety of professional roles, even though that would otherwise be possible through education.[2,6] It is thus important to acknowledge those faculty behaviors and expectations that influence in ways that are unintended, involving the subtle

transmission of social norms and values that may constitute positive or negative forces in the complex process of institutional change.[23] Unwillingness, conscious or otherwise, on the part of faculty and students to experiment with new ways of teaching and learning may undermine efforts to implement IPE.[22] Recent empirical work evaluating health professionals' readiness for interprofessional learning found significant differences among the professions with respect to their openness and willingness to collaborate with professionals outside their immediate areas of expertise.[24]

### Interface between social contexts

Issues of power dynamics in society as they relate to gender, social class, and racial identities have been explored in only a limited way thus far, yet IPE education must occur in a setting where context and differences are taken into account.[1,25]

Recognition that gender, class, and race play an integral part in institutional processes means that not only professional identity but also the distribution of power are developed through distinctions between men and women.[26,27] Power has been more readily attributed to professions dominated historically by middle- to upper-class men (e.g., medicine, dentistry) versus professions dominated historically by middle- to working-class women (e.g., nursing, dental hygiene).[26] For IPE to thrive, those considering implementing IPE must pay attention to use of language that "is embedded within institutions and organizations and influence[s] the relations of power within them" as part of a process that is dedicated to examining and addressing inherent social issues.[28]

### Translating IPE into Practice: Strategic Recommendations

In our exploration of Canadian IPE exemplars and the factors and barriers that can help or hinder the implementation and practice of IPE in academic institutions, three key observations emerged: (1) change is complex and multidimensional, (2) change takes time and must be approached strategically, and (3) it is important to implement facilitating factors at the same time rather than

in isolation. Arising from these observations, we propose the following set of recommendations for the micro, meso, and macro levels of the health care professions to consider for accelerating the adoption of IPE as a routine part of academic training and professional behavior.

### The micro level: What individuals can do

Individuals in and associated with academic institutions, including but not limited to faculty members in health professions schools, clinical educators, and health professionals, can do much to foster, promote, and improve IPE and interprofessional practice. The power of individual champions is illustrated in the experiences of the Canadian IPE programs described earlier. In educational contexts, IPE champions can be educators and role models who positively influence and encourage students and learners across different professions to take an interest in understanding others' roles, which, in turn, helps promote the IPE ethos and practice. These individual champions can carry out the following culture-changing actions:

- They engage, lead, and participate in research that contributes to the body of evidence that IPE improves care; they foster opportunities for building on this evidence through practice-based research.

- They utilize research and engage institutional colleagues involved in this research as powerful persuasions toward implementing interprofessional collaboration in the education and practice environments.

- They build enthusiasm, celebrate successes, and build advocacy through academic venues, such as conference presentations and publications, and community venues, such as town hall meetings and dialogues at the local community level, to recognize community members' and practitioners' central contributions.

- They apply effective communication and foster a community of IPE academics and practitioners toward sustaining IPE programs through individual and collective commitment.

### The meso level: What academic institutions can do

Academic institutions denote universities and colleges where health professions training and scholarship take place, and faculties refer to professional education branches within such institutions. At the faculty and school levels, senior administrators must support a system that recognizes the academic work of faculty members participating in IPE for the purposes of promotion and tenure. Further, faculties and schools must allocate appropriate funding for IPE program start-up and maintenance. Cooperation among faculties and schools within an academic institution, starting with senior faculty and school leaders and permeating through various levels of leadership, is necessary to influence institutional culture to facilitate students participating in IPE courses and initiatives.

Here are our recommendations for faculties:

- Support faculty member and professional development initiatives at the individual faculty or school level that foster building an interprofessional community, including curriculum on effective communication and intercultural understanding.

- Support individual-level change and leadership by valuing commitment and contributions toward IPE (e.g., remuneration, recognition among peers, and public awards).

- Support teams in practice through promoting shared vision and effective, distributive leadership versus reifying top-down hierarchical leadership.

- Build and promote mechanisms for reflective practice and research that take a critical approach to social construction of professional roles and systems.

- Build and promote mechanisms that create safe spaces for discussing and dealing with issues of power in education and practice settings within faculties and schools.

Here are our recommendations for academic institutions:

- Build and promote mechanisms that create safe opportunities for discussing and dealing with issues of power in

education and practice settings across faculties and schools.

- Convene stakeholder faculties and schools to solve the "timetabling issue" to build on the organizational work done in, and lessons learned from, existing IPE programs.

- Provide infrastructure for centralized coordination and staffing for faculties and schools.

- Provide incentives to utilize IPE, such as institutional exploratory grants to stimulate IPE cooperation and practice.

**The macro level: What the academy can do**

The academy can drive IPE and advance its sustainability primarily through promoting collaboration between institutions and spearheading policy decisions and changes nationally.

Here are our recommendations for the academy:

- Set accreditation requirements for different professional training programs to ensure that IPE is a component of the core curriculum.

- Recognize and reward collaborative efforts—build on current, "grassroots" projects by providing funding support and formal recognition for evaluation and sustainability.

- Develop, promote, and implement system-level incentives and rewards for local action.

- Invest in collaborative evaluation strategies to contribute to strong evidence linking IPE to better collaborative, patient-centered practice and patient outcomes.

- Promote the generation of evidence that IPE improves care; foster opportunities for building on this evidence through practice-based research and implementation.

- Innovate and fine-tune professional accreditation systems to promote lifelong learning through interprofessional team-based practice models.

- Partner with decision makers and research institutions to monitor the efficacy of policy through evaluation.

## Conclusion

IPE is both timely and highly relevant for the current context of team-based health practice motivated by the desire to carry out quality, patient-centered care. Academic institutions and their members can contribute significantly at both the individual and system levels to influence positive change. The findings and recommendations we have presented here are meant to stimulate dialogue and help inspire, illuminate, and animate others to further their own IPE programs. We hope that the recommendations can be considered, modified as needed, and put into practice by individuals and organizations in their respective contexts.

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