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13. AN EXAMPLE OF INTERPROFESSIONAL CURRICULA

The Linköping IPE Model

THE SETTING

The "Linköping IPE model" at the Faculty of Health Sciences, Linköping University in Sweden has now yielded over 25 years of practical experience and development of interprofessional education (IPE) curricula. It is one of the first systematic attempts to organise IPE academically (Areskog, 1994; Wilhelmsson et al., 2009). Before 1986, medical students at Linköping University spent their first 2 years of preclinical training at the University of Uppsala and the last 3½ years in Linköping, following a conventional medical curriculum. The prospect that the government might shut down the Uppsala–Linköping collaboration in medical education started a process of re-evaluation of the education of health and social care professionals in Linköping. Social care, nursing, biomedical science, occupational therapy and physiotherapy (Areskog, 1988, 1992) had at the same time been established as educational programs within the faculty. In order to begin a complete and also innovative medical education program in Linköping, the university and the county council cooperated in creating a common organisation and education for the different health education programs. One of the fundamental principles in the committee work was that the whole faculty should participate in the development. The proposal from the committee was derived from an analysis of plausible "trends in the future Swedish society." The committee stated three main strategies: the pedagogical approach would be problem-based learning (PBL), there would be early patient contact, and there would be a 10-week IPE module at the beginning of education for all programs (Areskog, 1995).

FOCUS

After some years the IPE curricula were redesigned, partly by launching student training wards and partly by revision of the first introductory module (Wahlström, Sandén, & Hammar, 1996; Wahlström & Sandén, 1998). The new leaders wanted to develop and modernise the faculty and the IPE modules were regarded as being too indistinct in certain aspects. Since the IPE curricula are part of all programs, development of new IPE curricula had to involve the whole faculty. A group of stakeholders and representatives from the programs and students' union began a joint process of renewal of the IPE curricula. The assumption that gaining

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interprofessional competence is a process that occurs over time, as shown in Figure 13.1, together with a focus on public health and epidemiology, were starting points for the group. A series of student evaluations and the vast experience and knowledge accumulated in the group of tutors were resources in the process. The work ended up choosing three themes: health, ethics and learning (HEL). The first IPE module was condensed to be 8 weeks at the beginning of education, with the intention to start a new 2-week IPE module in middle of the education and finally a 2-week placement in the student training wards, totalling 12 weeks of IPE curricula (Wilhelmsson et al., 2009). The faculty presently offers seven programs (medicine, medical biology, biomedical science, nursing, occupational therapy, physiotherapy, and speech and language pathology).

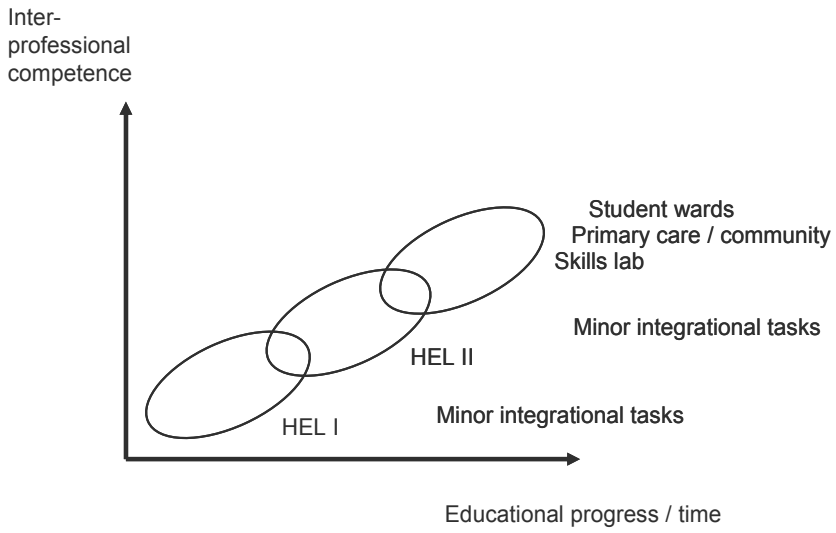

Figure 13.1. Comprehensive interprofessional learning in "The Linköping IPE model." Three steps can be identified as early, middle and final IPE

THE STRATEGY

The aims of the first step, HEL I, are to establish a base of common values and competencies. Although the students at this early stage have not yet established any professional skills, the module is intended to be a platform and common value basis to facilitate IPE. Understanding the multifactor concept of health, problem solving in groups, and analyses of ethical dilemmas on individual, group and societal levels are examples of learning issues in the course. It also contains interpersonal meetings in PBL groups of 7-8 students, at least 2 hours twice a week, systematically evaluated in several perspectives by the participants and their

tutor. Organisation of the work in the group, problem solving, productivity, dealing with conflict, individual and collective contributions, and needs for improvement are examples of issues that may be addressed in the evaluation part of the PBL sessions.

In the first module, HEL I, students are given tools such as problem solving, working in small groups and self-directed learning via PBL, developing knowledge and language together to build a common value base. In their first year the students have an unsettled professional identity based on prejudices and assumptions, and are faced with the task of investigating sets of professional values. By discussing professional culture in small groups the students begin a process of becoming aware of attitudes and roles in today's health and social care systems. A new 2-week IPE module was developed titled "Health, Ethics and Learning part 2" (HEL II). During their fourth or fifth semester, students from all programs again participate in an integrated module with a specific theme. The theme chosen was sexology. Sexuality was not treated as a prominent part of wellbeing and quality of life within the undergraduate health science programs, in spite of the fact that it is considered as an important aspect of a holistic view of humans. In professional practice it is seldom addressed, and if it is, it is rather referred to specialists in specific cases. "Human sexuality" cuts across all programs and encompasses many aspects of health, ethics and learning. It also appeals to the interest, experiences and opinions of many students.

The aims of the second module HEL II are to gain complementary professional competencies and thereby to test and consolidate students' professional identity as a prerequisite to working in interprofessional settings. In the module, the same problems are processed from different professional perspectives in tutorial groups. Every student also presents a role-play to illustrate a realistic professional situation in which sexuality is involved. A concluding written assignment specifically addresses reflection on professional and interprofessional competence in relation to the subject sexology.

By midway through their education students can reflect on their own profession as opposed to other professions and thereby discover its core and specific features. An example of a learning situation is assignments where students report on a complex patient case and discuss and evaluate the reports in seminars. The students are thereby trained in reflection, documentation and evaluation in the IPE groups. Ethical aspects connected to the patient case are also addressed. The process involves comparisons of different situations involving different actors in different contexts. Hopefully, students can thereby feel the strength of the interprofessional group's enacting and developing professional as well as interprofessional competence.

The third module of the "Linköping IPE model" is a 2-week placement at a student training ward late in the program. The purpose is to test and establish collaborative and interprofessional competences in a realistic milieu. Students present themselves and are considered as professionals in the team, although under highly skilled supervision. In the student training ward during the last semester the students are using their skills, theoretical knowledge and practical experiences, and

testing their applicability in "real-life" scenarios. The students at this stage are professional and more capable of learning with, from and about each other. They work in teams as professionals with well-developed interprofessional skills, acknowledging different professional, organisational and disciplinary views.

On the training wards students organise and evaluate the interprofessional teamwork daily. Working with real patients provides a learning opportunity for students to discover the importance of a well-functioning team. As students are allowed to organise the work, they are encouraged to reflect on how to share different tasks between professions so that patients are the ones to benefit from a well-functioning interprofessional team. Well-functioning interprofessional student teams can be regarded as communities of practice (Wenger, 1998). The evaluation process after a working day provides both good and bad examples of how to work and possibly leads to new views on how to work tomorrow.

Other opportunities for interprofessional student training and practice are found in the local community and primary care, in addition to competency training at skills labs at the University Hospital. Small-scale modules are organised within the scope of the different programs. Cooperation between occupational therapy and civil engineering programs is one example, where students from the two programs work together to design technical aids for the functionally disabled.

CHALLENGES FACED

In a national independent evaluation, the Swedish Medical Association has annually asked all newly examined doctors in Sweden eight central questions about how their undergraduate education has developed their skills and abilities for their future medical specialisation. The eight issues thus addressed are being prepared to work as a doctor, cooperation with other professions in health care, leadership, communication with patients, readiness for lifelong learning, interest in research, medical handling of acute patients, and practising preventive care. The newly educated doctors at Linköping University exposed to both PE and PBL report significantly more confidence that their undergraduate studies have given them interprofessional skills and abilities to cooperate with other professions than medical students from the other medical faculties in Sweden. These results have been consistent for many years (Faresjö, Wilhelmsson, Pelling, Dahlgren, & Hammar, 2007). Using the same research approach and the same instrument, four nursing programs (two with IPE curricula and two without) were evaluated in 2009, with the same results as in the medical group. Nurses with IPE curricula think that they have been better prepared to work together with other professions (Wilhelmsson, Svensson, Timpka, & Faresjö, in press).

Statistics from the Swedish National Agency for Higher Education have shown that students graduating from the Faculty of Health and Sciences in Linköping are sought after in the labour market and easily find employment (Swedish National Agency for Higher Education, report 2006:40R). IPE is only a beginning of collaborating interprofessionally in practice, training/having interprofessional competence or collaborative competence. For advancement in IPE the process of

being interprofessionally competent must continue in daily clinical work, a sort of lifelong learning.

In an evaluation of the first year at the student training ward students reported appreciation of insights into the competence and skill of other professions (Fallsberg & Wijma, 1999). In interviews students focused on the integrated teamwork and how they made use of everyday activities to collaborate and understand each other's competence. Students integrated by applying three different strategies: delegation, differentiation and discussion (Fallsberg & Hammar, 2000).

Medical and nursing students at two Swedish universities were invited to fill in the Readiness for Interprofessional Learning Scale (RIPLS). Regardless of the educational program, female students were more positive towards teamwork than male students (Wilhelmsson, Ponzer, Dahlgren, Timpka, & Faresjö, 2011). Nursing students in general displayed more positive beliefs about teamwork and collaboration than medical students. Exposure to different interprofessional curricula and previous exposure to interprofessional education were only to a minor extent associated with a positive attitude towards teamwork. Educational progress did not seem to influence these beliefs (Wilhelmsson et al., 2011).

CRITICAL REFLECTIONS

There are several important factors which today merit renewed attention, further research and possible interventions of interprofessional education and practice. Nations in the 21st century are becoming increasingly multiethnic and multicultural, with a high degree of mobility and aging populations. Europe, for instance, has the highest proportion of old people in the world. These trends carry implications for the organisation, delivery and cost of health and social care, thereby putting practising professionals under increasing pressure to respond to more complex problems. It requires interprofessional competence to respond effectively and to realise the ideals of holistic care and treatment. Taking a holistic approach to patients necessitates the use of such tools as problem solving and critical thinking. This means that professions in health and social care need to define new roles and create new cultural patterns to ensure patient/client-centred care and to strengthen the clinical pathway. Collaboration between professions is especially important in rural and remote areas, where the available health care resources are often relatively scarcer than in urban areas (Faresjö, 2006).

A general trend in health care worldwide is a transition from hospital care to primary care due to a growing understanding of the value of prevention. Apart from this, rising health care costs, advances in medical technology and changes in demography contribute to the fact that the local community is now the locus of care for an increasing number of patients and users. Bridging health and social care as well as community and hospital care is critical (McNair, Stone, Sims, & Curtis, 2005).

In the post-industrial society, individuals are exposed to a never-ending explosion of knowledge which is easily accessible, not least advice about health

and health-promoting behaviour. The individual as a consumer, not only of goods but also of knowledge, is better informed, more demanding and sometimes more critical. The explosion of knowledge also influences traditional professional boundaries. Emerging new specialties within professions and fields of collaboration between professions challenge old structures and behaviours. Also, evidence-based health care deals with professional problems but allows answers that do not consider borders between professions (Nancarrow & Borthwick, 2005).

Rising expectations with finite resources and sometimes shrinking staffing in health care organisations exacerbate stress, calling for new ways of working together to set limits on the demands made on any profession in order to spread the load and build in mutual support (Hertting, 2003).

The following is not a description of "how to do it" but rather summarises our experiences for successful implementation of IPE. It is important to underline that IPE in different ways is criticised and challenged even within our organisation, and that the underlying principles and design need constant and vigilant scrutiny and reform. The most fundamental issue is that the organisation and Faculty endorse IPE. A positive attitude toward IPE within the faculty from the Dean and professors, lecturers and teachers is one of the main prerequisites for favourable reception of the interprofessional project among students.

- Constantly evaluate, revise and discuss IPE in the organisation and, in that process, remind all stakeholders of the general goals of IPE, namely interprofessional practice. Every organisation needs to be able to shift focus and address questions of different magnitude in everyday work, but not lose sight of the long-term objectives.
- There is a need for leadership with enough interest, knowledge and preferably experience to legitimate IPE. Indeed, IPE is the art of the possible, and levelling all kinds of interests is one of its main features in the organisation as well as in enacting it.
- Organisers of IPE certainly need diplomatic and interprofessional skills, constantly listening to all actors involved, arranging regular meetings with discussions on curriculum and content, seriously considering all perspectives of the subject. Process leadership is desirable. Support from and close contact with faculty leaders in relevant positions is essential for success.
- All programs involved in IPE must have a sense of ownership based on true influence and a conviction that IPE contributes to the positive formation of professionals of today. The material in the IPE curriculum must be selected carefully and designed to fit well with organisational and logistical aspects in order to be significant within the programs. The involvement of faculty members from the different programs in the IPE activities is crucial, as they will be mediators in conflicts of interest and, hopefully, knowledgeable defenders in difficult times. They have a distinct role as co-designers of IPE activities, and in the group of lecturers joined to solve common problems, true interprofessional learning will take place, thus adding to the critical mass of experience needed to propel the project over time.

- Students and students' unions must be involved in the process. Students in the latter part of their education who have had full experience of the IPE curricula are important contributors when re-organising. They have great influence as role models and ambassadors for first year students and reluctant members of the faculty. Former students, who have had the opportunity to test their competence and reflect on the importance of their basic training, may turn out to be the most influential advocates of IPE.
- Small group learning, whether intra- or interprofessional, contributes considerably to the understanding of the "other," as a person, a professional or a representative of disciplines and organisational entities. Interprofessional skills cannot be taught by others, but must be learned in interaction with others.
- Our experience is that faculty members are key actors for successful IPE. Their engagement in IPE encourages their students to be engaged in IPE and in turn IPE is successful. Based on the outcomes of evaluations with both students and teachers we have re-organised the IPE (Wilhelmsson et al., 2009).

Can the designer of a curriculum design it so that the students can be trained to become more or less interprofessionally competent? It is very difficult to fully understand what outcome the curriculum will provide; one can only speculate. But carefully thinking through how to train the students, as described in this chapter, will perhaps be more effective.

The construction of IPE curricula has a key role if the IPE training is to be successful. The interprofessional learning situations exemplified in this study may be helpful tools for IPE educators and for developing professional practitioners with a focus on patients' problems from more than one profession's perspective. In the end, the overall winner of interprofessional practice is the patient.

Is it possible to educate students to be interprofessionally competent, filling the gap between ability and capacity? As this issue is complex, I would like to point out the importance of having tools that can be used by all professions in order to facilitate the work of the team. By using common tools, communication and collaboration between team members should be facilitated (Wilhelmsson et al., 2012).

I conclude by summarising with a metaphor that illustrates the differences between traditional education and IPE and foregrounds the benefits of IPE. When a theatre director is setting up a production, what happens if he or she decides to let the actors rehearse their roles separately and then meet one another for the first time on stage on opening night? Unfortunately, in Sweden, as in many other countries, students who are going to work together in health and social care organisations have not, for the most part, "met" one another during their education/training "rehearsals," even though they are going to act every day in the same arena with the same patients and clients. Thus, rather than having accumulated interest or gains, they, and more importantly their patients, are disadvantaged by the lack of opportunities to be educated collaboratively, interprofessionally.

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