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The Linköping Journey

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In this chapter, we will outline how the curriculum for Interprofessional Education (IPE) at Linköping University was initiated, implemented and developed over the years, to become sustainable and valued by staff and students. A few years ago, a revision process was initiated to assure that the IPE curriculum was based on evidence and best practice (Lindh Falk, Dahlberg, Ekstedt, Heslyk, Whiss & Abrandr Dahlgren 2015). This process was, in hindsight, important regarding sustainability since it engaged faculty in a thorough investigation, especially bringing new teachers and students into the discussion about the core values and pedagogical challenges of IPE.

How Did It All Start?

In the late 1970s, the medical programme within the Faculty of Medicine and Health Sciences (FMHS) at Linköping University consisted of

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the clinical part of the curriculum, following two years of preclinical studies at Uppsala University. Facing the threat of the government closing the Linköping campus, faculty and other stakeholders in the Linköping region initiated a project to establish a full medical programme with a new pedagogical approach at Linköping University. Interestingly, the external threat of losing the medical programme reduced internal tensions and conflicts, making way for new ideas and practices (Savage & Brommels, 2008). Additionally, the support and the shared general understanding between the County Council, the main health care provider in the region, and FMSH was important. It was evident very early on that the representatives of the healthcare provider understood the value of interprofessional collaborative practice, with improved patient safety and better use of available resources.

The project proposed the implementation of problem based learning (PBL) with early patient contact, vertical (between basic science and clinical studies) and horizontal integration (i.e. between disciplines and subjects), and to introduce interprofessional education involving all professional programmes at FMHS (Areskog, 1994; Bergdahl, Ludvigsson, Koch, & Wessman, 1991). The setting of IPE and PBL, with interprofessional tutorial groups, created a learning environment challenging the traditional hierarchies and bridging the silos between teachers and students from different professional programmes (Dahlgren, 2009; Wilhelmsson et al., 2009). In Sweden, all health professionals study at university level for three to five and a half years starting at undergraduate level, without other university courses required as a prerequisite. Therefore, the barrier of different educational levels, i.e. vocational versus university degrees, did not exist.

The IPE Curriculum at FMHS

Interprofessional education was introduced in 1986, as a ten-week compulsory course for all students in the first semester. The programmes involved were biomedical laboratory science, medicine, nursing, occupational therapy, and physiotherapy. Today speech and language pathology are also included. The content was, and still is, about health and disease,

ethics, a holistic perspective in healthcare, and some fundamentals in epidemiology and scientific methods, with the purpose of building a common ground of values for healthcare work across professions. Over time, the IPE activity developed to a three-step curriculum. The interprofessional training ward (IPTW) was introduced in 1996, to be incorporated towards the end of the programmes involved. This made up the third step in the IPE curriculum once the second step was introduced in 2002. The, scope of the second step was initially sexual health but changed to quality improvement knowledge in 2011 (Fig. 11.1).

The initiative to start the IPTW was developed in collaboration between a group of students and teachers, who identified a demand for interprofessional education practice, immersed in a real setting for learning, towards the end of the programme when students typically have developed a professional identity (Wahlström, Sandén, & Hammar,

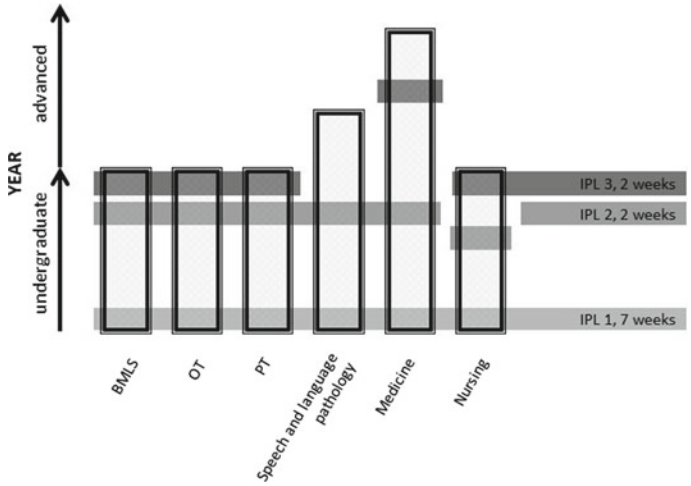

Fig. 11.1 Overview of the IPE curriculum at Faculty of Medicine and Health Sciences, Linköping University. Before the most recent revision, three steps of IPE were distributed over 11 weeks: IPL 1 is the introduction to regulation and ethics in health care; IPL 2 is about quality improvement work; and, IPL 3 is the placement at the interprofessional clinical training ward. Students are from Biomedicine and Laboratory Science (BMLS), Occupational Therapy (OT), Physiotherapy (PT), Speech and Language Pathology, Medicine, and Nursing. Following a revision in 2016, the IPE curriculum now encompasses a total of 8 weeks

1997). It is at this stage that both programme directors and clinical supervisors demonstrated leadership, building partnership with the students in the development and implementation process.

Sustainability and Resilience—Revision of the IPE Curriculum

Even though FMHS has incorporated IPE into their medical and health professional undergraduate programmes for more than 30 years, a group of students and faculty members have continuously voiced some concerns. One recurring issue is that IPE 'takes too much time'. However, the content of IPE is selected from what already existed in the different professional programmes; therefore IPE is not adding content but arranging learning activities in a different way benefitting from the interprofessional setting. Another common critique is that students in the very beginning of their professional education cannot benefit from IPE, since they have no references or experiences from a professional perspective. However, we argue that on the contrary, through an early IPE experience, a common ground of values is developed and established, along with life-long friendships and respect for other disciplines.

Other challenges include the increasing number of students, which has increased by 300–400% since 1986, along with the employment of new teachers recruited both from former students at FMHS and other universities. To address these challenges, the Dean of FMHS prompted a group of teachers representing the programmes involved, students and other stakeholders to inquire into and suggest changes for a revised IPE curriculum (Abrandt Dahlgren, 2015; Lindh Falk et al., 2015). The inquiry involved investigating global incentives, national and local policies, and the knowledge base of IPE; so it was not only an evaluation. The pedagogical discussions, which allowed all voices to be heard, subsequently created a renewed legitimacy for IPE, crucial for sustainability. The decision was to continue in line with the existing IPE curriculum, but change the length to a total of eight weeks instead of eleven, with the instruction to implement improvements based on the result of the inquiry. Specifically, the first step was scheduled over six weeks, and was carried

out in parallel with programme-specific content. This step undertook to explore identical scenarios with added programme-specific triggers, thus making the IPE content intertwined with and relevant to the programme specifics. In addition, tutors were assigned to supervise both programme-specific and interprofessional tutorials, engaging more teachers in IPE.

The revised IPE curriculum (Dahlberg & Dahlgren, 2018) and how the development of student leadership capabilities is supported throughout the three steps will be described in the following section.

First Step: Professionalism in Healthcare

The IPE curriculum starts in the first semester with four weeks of full-time study scheduled into each of the six programmes in a way that students will experience how professional learning is tightly integrated with interprofessional learning. During this step, students recognize how their professional knowledge is to be executed in settings with other professionals. The rationale is 'learning together to enable working together'. At this early stage, the professional identification is primarily built upon expectations, rather than experiences from a professional perspective (Uhlin & Pelling, 2010). In addition, students become socially aware of any preconceived ideas of each other's professions and the traditional professional silo structure of the educational programmes and practices. The cohort of all first semester students consequently develops a common foundation of knowledge and values.

Leadership capabilities in this first stage are taught through the social structuring of the group work and the PBL pedagogy. One teacher is assigned as a tutor for each group of eight students, acting as a role model for the students. Gradually, the responsibility for facilitating the group is shifted over to the students. Students take turns in practising leadership concerning responsibility for frame factors and structural aspects, such as keeping to timeframes, pacing and scope of the discussion. Furthermore, the leadership skills also comprise a social and group dynamic aspect, as the tutor is expected to be attentive to the dynamics of the discussion, making sure that all members of the group are heard. Studying together in small groups encourages close discussions aimed at teaching leadership

on an individual level, as the students are also prompted to take responsibility for, and leadership of, their own learning, in order to be able to contribute to the shared learning in the group.

Second Step: Quality Improvement and Learning

The second step of the interprofessional curriculum runs over two weeks in the last third of the undergraduate programmes. As in the first step, students from the six disciplines form interprofessional tutorial groups and use quality improvement projects from the clinical practice of the County Council (main provider of healthcare in the region) as scenarios or study objects while learning quality improvement knowledge. The purpose of the scenario is to enable students to inquire about the problems presented in the scenario, raise questions regarding what they need to learn and consequently develop their interprofessional understanding. During the learning process, the scenario is approached from the different professional perspectives of the participating students. In this process, new practical understandings and proposed solutions to the problem emerge. As the student groups are given the mandate of analysing and driving processes of change, they lower the boundaries between the academic and clinical contexts, as well as becoming 'leaders of change' in the professional context. Our experience is that students are fearless ambassadors of change, since they have no obligations to the culture of the working place they study. The assignment of executing a quality improvement project in a clinical setting provides a tool to negotiate practices between the student group and the health professionals; thus the whole team receives the opportunity to experience leadership in a clinical setting. While the purpose is to learn from, with and about each other to improve health and patient safety, the focus of the students is not purely their professional focus. Interestingly, interprofessional practice does not appear to be the only competence developed (Gjessing, Torgé, Hammar, Dahlberg, & Faresjö, 2014). Rather, the student teams act as united leaders for change based on their newly acquired general knowledge. Hence, there is a shift from the students' first experience during the first IPE step, where individual leadership is

the primary focus, to jointly forming a team with a common interest in leading a process of change in the second step.

Third Step: Professional Perspectives in Collaboration

In the final step of the interprofessional curriculum the context involves a student-led training ward in one of the County Council hospitals (Fallsberg & Hammar, 2000). In Linköping, students from biomedical laboratory science, medicine, nursing, physiotherapy, occupational therapy and social work do placements together in one of four training wards during a two-week period. The student teams are supervised by a team supervisor and clinicians from their own profession. The learning objectives incorporate teamwork, communication, and ethics, while executing the skills of their own profession, with the goal of providing high quality care. The patients are highly involved and become partners within the learning environment. The students take joint responsibility for the total care of the patients while contributing their own professional perspective.

How Is Leadership Executed in This Setting?

In the early stages of the IPE curriculum, we suggest that students develop and practise leadership in their own tutorial groups and develop responsibility for their own and the group's learning. Recent research shows that this fundamental 'knowledge' is brought to the foreground of the placement in the clinical training ward towards the conclusion of the students' studies (Lindh Falk, Hult, Hammar, Hopwood, & Abrandt Dahlgren, 2013). Different professions enact different types of leadership and responsibilities, expected and unexpected, through the socio-material arrangements of IPTW, which is relevant for learning to occur. This creates an 'unexpected practice' that is unfamiliar to the students but a prerequisite for their interprofessional learning (Lindh Falk et al., 2013).

Proximity for Negotiations and Boundary Work

The socio-material arrangements of the ward signal a collaborative practice where all students share the responsibility of caring for the patients' basic needs, regardless of which professional programme they are studying. The proximity between the students in the enactments of these caring activities encourages negotiations and decision-making with respect to every specific task. The negotiations and decision-making are not only about specific professional activities but also involve a common set of values for professional healthcare work. The material arrangements at the ward also include the round room specially equipped with a round table and chairs for discussion, and a white board for daily notes, used for the analysis and reflection of the team together with the team supervisor at the end of the day. This room functions as a boundary zone (Edwards, Daniels, Gallagher, Leadbetter, & Warmington, 2009) where the students clarify how their respective professional roles and practical understandings of the caring situation contribute to the team and ultimately to the general understanding of the welfare of the patient.

Dealing with the 'Expected'

Organizing rounds in the IPTW involves a round table discussion, involving all the students, and is usually led by one of the medical students. This setting seems to be important for producing an execution of confident leadership. To understand and plan the treatment and care of the individual patients on the ward, the medical student interacts with the other students of the team, discussing their specific professional contributions. The team interaction requires that team members express their opinion regarding specific patients, in both what is said and done. To actively listen to and integrate the professional perspectives of others in decision-making are some of the 'doings' produced by the specific material arrangements. Therefore, the enactment of the rounds, from a leadership position, are an 'expected' professional responsibility of the

medical students. From a pedagogical perspective, students from different professions could take turns leading the round table discussion; however, this is usually not practised.

On the other hand, for the nursing students, the organisation and administrative planning of daily work stands out as an important and 'expected' professional responsibility, such as a 'spider in the web', whereby one is responsible and oversees the activities, while people around you depend on your competence and type of leadership. The planning of caring tasks shared by all student members in relation to time for treatments provided by a specific profession requires liaising with other student team members and an awareness of their different competences. For both occupational therapy and physiotherapy students, the socio-material arrangements of the student team and the ward produce enactments of the 'expected' professional responsibility of being the only representative in a specific field of competence.

The socialisation process into a profession is challenging for the students and the experience from the IPTW is not sufficient to overcome the challenges of a traditional health care practice. A tentative conclusion is that the IPTW both predicts and thereby produces a practice where different professional responsibilities are performed in ways that produce expected and assumed roles.

Dealing with the 'Unexpected'

At the same time, the arrangement at the IPTW expects that all students, independently of professional training, are part of daily work which shapes practice, for instance caring for the basic needs of the patients, e.g. patients' morning routines. This arrangement seems to produce conflicting understandings. The 'unexpected' overall responsibility for and allocation of time for the basic care and needs of the patient clashes with the preparation for professions-specific work for the rest of the day and creates a conflict regarding the understanding of professional responsibility, a characteristic of a specific profession, and the general understanding of the tasks, roles and mobility of the professions in question.

The socio-material arrangements of the ward, requiring all students to be in the ward at all times, are an authentic feature of practice to the nursing students. Their practical understanding of tasks and general understanding of the role of the nurse is that of 'being stationary', in other words that the nurse's activities are confined within the ward. The nurse supervisor, usually the team supervisor too, reinforces this by being present in the ward. For the medical students, this 'practice' is not in harmony with their practical understanding of a doctor's practice. They have the general understanding that physicians are mobile, connected to different practices in the hospital throughout the day, e.g. the ward, outpatient clinic and operating theatre. This unforeseen conflict between the learning practice and the experience from earlier professional placements is also reinforced by the fact that the medical supervisor is only available in the ward for part of the day. The student team supervisor is usually a nurse who cannot compensate for the medical students' perceived need of professional supervision.

Capabilities for Leadership

As described, the IPE activities at FMHS are sequentially arranged and with increasing levels of demands, achieving progress to fulfil learning objectives defined from the core competency domains of the Interprofessional Education Collaborative Expert Panel (IPEC, 2011), including: (1) values/ethics for interprofessional practice, (2) roles/responsibilities, (3) interprofessional communication, and (4) teams and teamwork. These domains constitute and realise the socio-materiality of healthcare practice within the professional curriculum in a tangible way (Abrandt Dahlgren, Dahlgren, & Dahlberg, 2011). The domains cut across the practices of education and learning and are enacted within curriculum practice, with each step involving enactments of leadership activities in different social and material settings, progressing in the development of the competences described. Therefore, it is essential that an interprofessional curriculum is integrated from the outset through to the successful completion of a programme.

What Does It Take to Make IPE Sustainable?

Professor Nils-Holger Areskog was the leader and champion at FMSH in the early days (Areskog, 1994). He played a pivotal role in the development and implementation of IPE. At the time, as Dean of the faculty, he demonstrated courageous leadership and acted as a role model for many, both locally and internationally. Over time, the setup and the different activities within the IPE curriculum can be seen as a dynamic interplay between the policy level, the organisational level, the curriculum level, and the learning activity level. This is facilitated and made possible by the management structures within the faculty, where the Board of Education have a leading role. The Director of the IPE curriculum has a mandate in the Board of Education, possessing the responsibility and mandate from the Dean towards the programmes involved, for the planning and realisation of the educational activities, with interprofessional learning as a focus across the faculty. The Director is also a member of the Strategic Centre of Development and Research of IPE at FMHS, bringing a continuous reflexivity into the management of the IPE curriculum.

So, what makes the IPE curriculum sustainable? This question is difficult to answer. Over the years, barriers and challenges to IPE have arisen (Lawlis et al., 2014) but have been overcome due to robust organisation, committed leadership and dedicated teachers. Our impression is that the IPE curriculum per se has never been in question; the discussion has been about the length and content of the programme. Perhaps there is something in the Swedish academic culture, where the commitment from the leadership and the unquestionable value of an IPE learning experience bring stability and assertiveness to everyday work?

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