Interprofessional Education as a Contributor to Professional and Interprofessional Identities

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Abstract

According to the World Health Organization (WHO, 2010) interprofessional education (IPE) is a necessary step in preparing a collaborative practice-ready health work force. However, the processes of developing professional identity within interprofessional education programs have not been fully explored and require a deeper understanding. Participation in interprofessional education groups may influence the development of professional identity including increased awareness of one's own profession-specific competence as well as socialization into a professional role. Interprofessional education is a dynamic social process related to students' memberships in IPE-groups.

We conducted focus groups with representatives from students in seven different professional education programs involved in interprofessional education during all 3 years of their educational programs. We used the principles of systematic text condensation as an analytical frame.

This article is a contribution towards grasping how IPE can contribute to both professional and interprofessional identity. Group collaboration in interprofessional education enabled students to identify with their profession as well as creating a safe place to gain insight into other professions' competencies. Moreover, students could obtain knowledge about being a professional participant and could enrich their professional identity, as they were involved with students from other professions. IPE-groups strengthened professional identity rather than threatened it.

Introduction

Internationally there is an increasing focus on interprofessional collaboration (IPC) and interprofessional education (IPE) to provide coherent health and social care and to avoid the fragmentation that can often be seen as a result of increasing expertise and specialized

competences (Roberts, Davis, Radley-Crabb, & Broughton, 2018; World Health Organization [WHO], 2010). Good collaboration among health care professions is considered a prerequisite to providing good holistic services. As a consequence global health and social educational institutions are working to prepare their students to become a collaborating health work force. (Joynes, 2018; Pirrie, Hamilton & Wilson, 1999; WHO, 2010). However, some faculty fear that IPE may threaten profession specific identity (Cameron, 2011; Joynes, 2018; Khalili, Orchard, Spence Laschinger, & Farah, 2013). Our aim in this study was to investigate students' experiences during IPE in developing an awareness of their own professional and interprofessional identity.

"Interprofessional education occurs when students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes." (WHO, 2010, p. 7). Educational institutions have been charged to arrange interprofessional education to facilitate interprofessional learning (WHO, 2010). The Norwegian Ministry for Health and Care Services and the Norwegian Ministry for Education and Research have both addressed the necessity for future professionals to meet needs for coherent health and social care services (Government of Norway, 2009, 2012). They have ensured that the curricula of health and social education programs have some common content and described learning outcomes (Government of Norway, 2017). Students are supposed to learn about each other's roles and responsibilities and to learn how to collaborate. Previous guidelines only applied to undergraduate professional programs, such as nursing and physiotherapy, but national guidelines in Norway now apply to all health and social education programs, including professional studies in medicine and psychology. These regulations emphasize the need for professionals to have strong profession-specific competence and to have the necessary competence to collaborate across professional boundaries (Government of Norway, 2012).

As students in health and social care education programs acquire competence, they are socialized into a profession and to the core competence, values, culture, roles, and expertise of this profession (Abrandt Dahlgren, Richardson & Kalman, 2004; Lindquist, Engardt, Garnham, Poland, & Richardson, 2006). The role identity students develop depends on the groups to with which they compare themselves and the groups on which they model themselves (Aubert, 1979). Lindquist et al. (2006) and Howkins & Ewens (1999) described professional socialization as a proactive process that depends on both individual and contextual factors.

According to Burford (2012), a social identity approach "refers to an individual's self-concept in relation to his or her membership of social groups" (p. 144). Jarvis-Selinger, Pratt, and Regehr (2012, p. 1185) defined identity formation as:

> "an adaptive, developmental process that happens simultaneously at two levels: 1) at the level of the individual, which involves the psychological development of the person, and 2) at the collective level, which involves a socialization of the person into appropriate roles and forms of participation in the community's work."

Individuals categorize themselves in relation to a group they identify with, and they identify themselves with the profession's competence, values, and roles. By discovering what they are not, their social identities are created, strengthened, and maintained (Hylland Eriksen, 1995). Researchers looking at the extent to which students feel 'professional' at different stages of their training, have found that the achievement of professional identity is related to a number of factors, including knowledge, practical experience, and reinforcement by qualified staff (Burford, 2012).

The aim of this study was to explore, describe, and discuss the connection between IPE and development of professional and interprofessional identity. Students in IPE had two

different roles. They were students in their specific education programs and referred to themselves and the others as nurses, physiotherapists, etc. In addition, they were members of an IPE-group. The role they achieved in the latter was not determined initially, but depended on the people with whom they interacted, the role they choose, and the role they were assigned by the other group members. This role created expectations related to behavior in the IPE-group (Erickson & Shultz, 1982). They categorized themselves and thereby determined how they perceived themselves as members of various groups and identified similarities and differences (Chatman, Polzer, Barsade, & Neale, 1998).

We adopted a social-constructivist approach to IPE in this study. This approach emphasizes that understanding socialization into a profession and the various roles people have in this development requires examining the interaction that is taking place, the tasks carried out and the contexts of this interaction (Coster et al, 2008; Hutchings, Scammell & Quinney, 2013; Lave & Wenger, 1991; N. Patton, Higgs & Smith, 2013). In this approach IPE is understood as a dynamic social process in which knowledge is considered a response to social interaction rather than something that develops among individuals (Hutchings et al., 2013; Lindquist et al., 2006; Vågstøl & Skøien, 2011). Learning is part of activity and appears as changes in how individual people participate in the world (Lave & Wenger, 1991). In IPE, the interaction involve a fellow students on campus and professional practitioners.

Background

IPE described in this study involved students at an institution of higher education in Norway. They were enrolled in seven different health and social programs: nursing, radiography, occupational therapy, physiotherapy, social education, social work, and biomedical laboratory sciences. IPE was organized as three joint interprofessional modules where students from all seven bachelor programs joined for a few lectures and worked

together in assigned interprofessional groups to consider patient cases. The IPE-groups were not supervised by faculty. In the early part of the modules, the IPE-groups were given several patient cases that described realistic situations. The groups each selected one case to work on that week. At the end of the week they presented their results to several other IPE-groups as an examination. The cases were designed to involve knowledge from all participating professions. If necessary, the groups were asked to add information to the case to include all professional perspectives within their group. The students were encouraged to take the role of their own profession in the IPE-group work and to contribute to the discussion from their professional perspective.

Table 1: Interprofessional on-campus education

When / what	Learning activities	Assessment
1st semester Topic: Communication (1st week) Ethics (2nd week)	Monday + Wednesday: Lectures Tuesday + Thursday: Interprofessional student groups collaborate to consider given cases.	Friday all weeks: Each group present their product to 4 other groups and two internal examiners in a seminar.
3rd semester Topic: Health and social policy	Monday : Lectures Tuesday, Wednesday and Thursday: Interprofessional student groups collaborate to consider given cases	Assessment: passed/not passed
5th semester: Topic: Interprofessional collaboration and conflict management	Monday : Lectures Tuesday, Wednesday and Thursday: Interprofessional student groups collaborate to consider given cases	

We were interested in changes in the students' experience of both professional and interprofessional identity during the IPE-group work. Our research question was: Does IPE-

group collaboration contribute to developing both profession specific and interprofessional identity?

Methods

Research Design

We invited the students from the seven education programs to join a focus group interview after completing their IPE in the 3rd (last) year. Each focus group involved students from the same bachelor's program to elicit both individual experiences and experiences that emerged from the group. The focus group members had been members of different IPE-groups, and they could stimulate each other to identify both common and unique conditions. By interviewing students from the same programs we wanted the students to have the same background, but diverse experiences so they could compare their experience as they interacted in a known situation (M. Q. Patton, 2015).

Table 2: Program, number of students enrolled and number of participants in focus groups

Each focus group had 3–6 students with a total of 31 participants, and their ages ranged from 20 to 48 years. Only two of the students had been in the same IPE-group. The students with whom we spoke had experience from 30 of the 60 IPE-groups. The focus group interviews included 2 men and 29 women, which reflects the gender composition in these educational programs.

Data Collection

The focus groups were conducted within 6 months after the last module ended. A single researcher led all of the focus group meetings and another assisted. Neither of them had been IPE faculty. The assistant took notes that became part of the database. The interview guide was semi-structured with the themes of group work, collaboration, attitudes,

competence, and relevance. Each of these themes were asked about if the students did not mention them in the conversation. The students in each focus group started by describing the IPE-groups collaboration during the 3 years. The purpose of this start was to gain insight into each theme and ensure that the students helped each other to remember their IPE-group work, as several months had elapsed since they had participated in IPE. The students were given a theme to talk about, and the researchers emphasized that students should speak to each other and that there were no right or wrong answers. The focus group interviews were recorded and transcribed.

Table 2: Programs, number of students enrolled and number of participants in focus groups

Program	Number of students	Number of participants in focus groups
Nursing	160	3
Radiography	26	6
Occupational therapy	30	5
Physiotherapy	67	5
Social education	67	3
Social work	56	4
Biomedical laboratory sciences	34	5

Data Analysis

The data comprised the transcribed focus group interviews and the notes written during the interviews. We used the principles of systematic text condensation in the analysis work (Malterud, 2001, 2011, 2012). Systematic text condensation is a modification of Giorgi's analysis and based on phenomenological philosophy (Malterud, 2001). Malterud (2012) recommended a four-step analysis procedure, which we followed.

1) Two researchers (mjh &mma) read the data to get an overall impression. Each summarized the preliminary themes they found. They then discussed and agreed on themes that highlighted the issues.

2) These researchers identified meaning units in the data, grouped and coded them in themes. Then they assessed similarities and differences in the themes found in steps 1 and step 2.

3) They developed a first-person condensed text with quotation that illustrated what appeared in the themes.

4) Three researchers then created texts for each theme, which were descriptions of the participants' views based on the text condensation. This text is presented in the results section with quotations.

The researchers (mjh &mma) involved in steps 1 to 3 were not faculty in the IPE. The third researcher (sjb) had been faculty. She added institutional knowledge and minimized potential bias due to limited knowledge about this IPE, in data analysis (M. Q. Patton, 2015). The authors wrote this article in Norwegian and an authorized translator translated it into English.

Ethical Approval

This study was conducted in compliance with the ethical guidelines of the Declaration of Helsinki. All participants received information about the purpose of the study and were informed that the data would be collected anonymously and treated confidentially. The Norwegian Social Science Data Services and the academic institution approved the study.

Results

We identified three parallel processes that took place during all 3 academic years: the first two were social and collaboration processes in the IPE-groups, and the third was the individually experienced relationship between profession specific competence and role development. The students described several characteristics of their IPE-groups. Although there was some overlap, these characteristics fell into three main types that we have labeled: (a) the efficient ones, (b) the achievers and (c) the process-oriented ones.

Social Process in the IPE-Groups

Most of the students said that they had mixed expectations about meeting students from other education programs and collaborating in IPE and that their expectations changed over the 3 academic years. Most reported that they had positive experiences in the first year, and this influenced their expectations for the second and third year. The students described the social process as crucial for the collaboration, and they described their IPE-group work experience overall as positive. However, several students mentioned that the collaboration in the IPE-groups was initially chaotic and sometimes confusing regardless of which type of IPE-group they were in. This changed over the 3 academic years. Some students said that they were reserved and reticent at the start but that they gradually gained more self-esteem and strength to stand up for their views as they became familiar with each other and felt more secure in the IPE-group.

Several students in a, the efficient ones, and b, the achievers, IPE-groups said that they had experienced unsatisfactory collaboration and conflicts, and for some, this led to them becoming tougher and at the same time listening to the others to make sure they contributed to a climate open for different members to express their opinion. One student said, "I had to dare to speak even though there were many other professions. I think it is important to trust myself, but also important to listen to what the others want to say." In some groups lack of trust in each other, lack of self-esteem and some members' lack of contribution to the presentation at the examination seminars, made the group climate challenging. One student said: "Everyone else can do more than I can, and if the various professions can do more than I can, I am not so important. It became difficult because I could not control what I should do." For some IPE-groups this changed during the 3 years as members gained more self-confidence in expressing their opinions and confidence in other group members, experiencing that the climate for speaking and listening to each other changed. In addition, they realized that the requirements for passing the examination were not as strict as they initially assumed. The students in c, the process-oriented IPE-groups, who invested time in getting to know one another and had meetings in other settings in addition to IPE-group meetings at the university, reported good group processes and a good social climate in the IPE-groups.

The Collaboration Process in the IPE-Groups

The expectations individuals had about the modules and the work in the IPE-groups shaped the focus they had all 3 years. The efficient ones a, were concerned with external issues such as another examination after the module, maximizing leisure time or a job someone in the IPE-group had, and these IPE-groups wanted to get the work done rapidly and efficiently. The students distributed tasks and otherwise worked individually until they put their different individual work together just ahead of the exam. The achiever b, focused on the examination and presentation at the seminar. These IPE-groups wanted to be efficient and

carry out the task but also wanted the various professional perspectives to emerge. The process-oriented IPE-groups c, were concerned with the process and learning from each other. Efficiency was not so important for them.

Students said that in their IPE-groups they improved their skills at organizing the work through the 3 years with IPE. They said that work in the first and second years provided direction and goals for the work in the third year. The students worked more purposefully and distributed tasks more easily as they became familiar with what the students from the various professions could contribute and the strengths of each member of the IPE-group; they said they transitioned from collaboration to interprofessional collaboration. In the IPE-groups, the members had roles that were quite stable during the 3 years. Some students were good at providing ideas and some at viewing the situation comprehensively. Some students said they took responsibility and helped to manage the process right from the start, either from necessity because the others were so passive, or because they "managed" by partly excessively managing the others. "I do not know if it was just my personal choice, but I took on great responsibility. I am well schooled in group work, but had to take considerable initiative to consolidate the group and to make progress." The cases in the third year IPE module required more interprofessional collaboration . One student said, "I began to view collaboration differently. I learned how to use the other professions in the IPE-group collaboration and contact them when I needed it."

Some students did not contribute much either to the IPE-group work or to the presentation. Most of these were often absent. However, some of the students who were often absent from the IPE-group work participated in the presentation and sometimes said things that the group did not always agree with. Nevertheless, in the presentation the other members of the IPE-group did not express their disagreement.

The Relationship Between Profession-Specific Competence Development and Roles

The students viewed themselves as social educators, radiographers, etc., as did the other IPE-group members in all 3 academic years. In the IPE-group work, individual students held "responsibility" for their professional knowledge even if they in the first year and somewhat in the second year did not know much about their own profession and even less about the other professions. What they knew was common knowledge and information received from teachers and others. They had little profession-specific knowledge and had limitations in what they could tell the other students that was relevant for the particular cases. The students acted as members of an IPE-group, but had to collect profession-specific information, which they then shared with the other group members. They carried out assignments in which everyone had various types of information to contribute depending on which educational program they were attending, but also on former life and work experiences. In the second and especially third years, this changed, the students' positions as representatives of their professions became clearer, and the members discussed the cases based on their professional perspective, because they now knew what it meant to be an occupational therapist, social worker or another professional. Students changed from talking about their profession to categorizing themselves as representatives of their profession and discussing their professional perspectives and knowledge with the other students. In addition, the differences and similarities in the discussion became more pronounced. One student said,

> The third year I had a little more control. My competence became inherently valuable, but some time elapsed before I realized it. I noticed that I became more receptive to the competence of others and was more likely to see things from other people's perspectives. I thought much more broadly and learned that one does not have to have all the competence oneself.

Discussion

Social Process in the IPE-groups

The students in the IPE-groups were aware of the importance of the social processes and climate in the groups and their overall impression was positive. Even though the students had mixed expectations and experiences in the beginning, this changed during the 3 years. This shows that it takes time to establish good social IPE-group processes.

The students in IPE-groups a and b had to struggle to collaborate. And students had to become tougher to dare to speak, which can be of value to the students. To make an IPE-group function well it is important that the members acknowledge and respect each other and that conflicts, stress and insecurity within the group do not cause the members to withdraw to protect their integrity and dignity (Hall, 2005). Withdrawal for some students can also result from conflicts between personal values and the IPE-group and profession-specific values they must represent. Those students that experience this cannot therefore be loyal to the IPE-group or profession that they must represent (Johnson, Cowin, Wilson, & Young, 2012; Levett-Jones & Lathlean, 2008). In the IPE-groups in our study, the members could not withdraw due to the examinations they had to pass. If the students who did not contribute did this to protect their integrity and dignity or if they did that due to lack of interest, was not possible to know from the data. Moreover, the students who contributed to collaboration became more self-confident, participated more in the discussions, and were better able to interact with the other group members. They probably developed a more positive attitude towards IPE and began identifying with the group, described as in-group favoritism (Burford, 2012).

Even in IPE-groups a and b that struggled to collaborate, stimulating conversations gave opportunities to verbalize profession-specific competence. However, if few listened, there were fewer openings for detecting differences and similarities in the various professions

competences and less development of profession identity in contrast with others (Hylland Eriksen, 1995). The students in c had a good social climate, which could have to do with the members being more concerned about common knowledge, which created fewer conflicts. If that was the situation, they did not get the opportunity to test their profession-specific knowledge and their professional identity. It would be interesting to know, whether there were disagreements in these IPE-groups and whether these were experienced as conflicts but that is not in our data.

The Collaboration Process in the IPE-Groups

It is not clear if the students in variant a developed IPE-group identification, as the groups distributed tasks and otherwise worked individually. If there were no discussions when the students put the individual work together, they probably experienced little team cohesion, not being required to discuss their own profession-specific competence in relation to the others. The consequence might be less insight into the competences of other professions and untreated prejudices due to stereotypes (Burford, 2012). If these IPE-group members only in a very limited sense explored differences, their IPE-group might not stimulate the establishing of neither profession identity nor group identification. Students in IPE-group variant (b) were both efficient and explored own and others profession-specific competence. Students in IPE-group variant (c) focused on the collaboration process. However if collaboration and common knowledge was their only focus they probably tried to find common ground to agree upon rather searching for differences. They had in addition, a time-consuming way of working. To what degree professional identity or group identification was stimulated depended on the effort paid to their different profession-specific competences. Lave and Wenger (1991) stated that active participation in the social context not only creates who they are, but also what they do as a group. Through these IPE-groups, students achieved learning situations with various perspectives and had the opportunity to develop a more complex identity since it had

developed in a complex and composed IPE-group. This is in accordance with the views of Eraut (1998), N. Patton et al. (2013) and Wenger (1998) on developing identity.

The students categorized themselves and the others as representatives of a profession, but also categorized themselves as IPE-group members and were very loyal to the IPE-group and had extensive group identity. They wanted to appear as a team in the examination even though some students had not contributed to the presentation. They took on various roles in the IPE-group work, and these were quite stable throughout the three years, but how they fulfilled the roles changed. The challenge in the IPE-groups seemed to inhibit some students, but reinforced others by closing the gap and some students making an extra effort to pull the group through. This again reinforced the identity of those who carried the burden, who experienced the challenges as learning for future collaboration in the workplace.

During the 3 years, the students' role as professional representatives became more prominent, and they became aware of how the professions could complement each other. That might be why they described how IPE-groups underwent a transition from group collaboration similar to other group work they had at their different education programs, to work as a team in the IPE-groups. In interprofessional teams, the members assume profession-specific roles, joint responsibility and are familiar with the expertise and functions of the others' roles (Hall, 2005).

The Relationship Between Profession-Specific Competence Development and Roles

The IPE-group participants shared their professional knowledge and strategies. The first year they gave and retrieved information mainly built on common knowledge, which was one topic for the module that year, whereas in the second and third years they spoke as professionals. The students went from knowledge disseminators to holders of competence. It seems the students had internalised their professional knowledge, in this setting speaking from

a professional perspective (knowing as participation), indicated by Sfard (1998) as significant for learning. This may indicate that they had undergone a socialization process, they identified with the core concepts, culture, and expertise of their profession, what Linquist et al. (2006) and Abrandt Dahlgren et al. (2004) characterized as being a professional. The students went from being placed in a profession to identifying with the profession ("there I became a ..."), which Johnson et al. (2012) also indicated was important. In this position differences and similarities became clearer; they found the common ground, how they differed and what was profession-specific (Barr, 1998; Willumsen, 2016). Having confidence in competence and identity, they did not feel intimidated by others' competence, allowing them to listen and see the perspective of others. This is an example of how social identity was created through role identification and contrasting, as described by Burford (2012) and Hylland Eriksen (1995).

The IPE-groups contributed to professional and interprofessional socialization and identification processes by forcing the students from the start to express profession-specific knowledge, reason as professionals, and disseminate this to the others in the IPE-groups (Lave & Wenger, 1991). These requirements are not present in uni-professional groups.

Concluding remarks

This article contributes towards understanding how IPE can be a contributor to both professional and interprofessional identities. The IPE-group collaboration enables students to experience going from group work to IP-team work and developing IP identity, identify with their profession as well as creating a safe place to increase understanding of other professions' competence. Moreover, in IPE students are provided with a setting where they can develop from obtaining knowledge to being a professional participant, also enriching their professional identity because they are involved with students from other professions. IPE, therefore, strengthens professional and interprofessional identities rather than threatens it.

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