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University teachers' experience of students interprofessional education: Qualitative contributions from teachers towards a framework

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ABSTRACT

Background: Health and social care professionals need to be equipped to work together. Universities have a duty of care to their students to incorporate interprofessional education into the curricula. Here, we present findings from focus groups to delve deeper into the issues previously identified.
Method: Three focus group interviews with teachers were conducted—two in Norway and one in the UK.
Findings: We identified four themes: Organizational commitment. Values related to students' interprofessional and collaborative practice. Professional identity and commitment to collaborative practice. Challenges with implementing interprofessional education.
Discussion and conclusion: Educators continue to agree that interprofessional education is important, but the findings highlight the ongoing divide and uncertainty as to what to do and when to equip students for interprofessional collaboration. The educators call for the organization to show commitment and leadership so that stakeholders can come together to develop an Interprofessional education curriculum that students can sign up to. Time is of the essence, and a framework may help us here, especially if we can embrace the concept of social innovation and cocreate.

1. Introduction

Opportunities for interprofessional education (IPE), when students learn with, from and about each other, are intended to help students develop skills important to collaborative practice, which enable them to deliver high-quality and safe care (WHO, 2010; Guraya & Barr, 2018). In the Global Competency Framework for Universal Health Coverage presented by WHO in 2022, educators are provided with a tool that will support a more holistic stance, where learners are able to achieve outcomes necessary for being adequately prepared for practice. The Global Competency Framework presents several competencies organized into domains, one of which is labelled collaboration with a competency in learning from, with and about others. The domains and competencies are interrelated, but what is also clear is the need to make sure that IPE features in the curricula in ways that prepare the learners and support the needs of the workforce. Despite interprofessional education (IPE)

featuring in most health care curricula, benefits have been demonstrated when IPE is embedded in curricula (Guraya & Barr, 2018).

In a previous study, the authors of the present paper investigated university teachers' views of IPE in Norway and the UK and their role in achieving outcomes (Lindqvist et al., 2019). It became apparent that university teachers hold views of the IPE delivered at their institutions, and importantly, they were sceptical about whether their efforts would be worth it. This study emphasized the need for further investigation and support to teachers who were clear on the importance of interprofessional collaborative practice but less certain that the interprofessional learning they had currently experienced was the best way forward. The authors agreed that these views need to be recognized and explored further as we progress with the agenda of pursuing IPE to prepare professionals for practice. In Norway, White Paper 47. (2008–2009), Coordination Reform and White Paper 11. (2011–2012), Education for Welfare, highlights that facilitating collaborative practice requires

changes in the curricula for health and social care courses. It states that educational programmes should place more emphasis on IPE and make explicit that students should learn together across courses and that IPE should contain elements of common placements.

Similarly, in the United Kingdom (UK), the Department of Health and Social Care actively promotes the integration of health and social care through integrated care systems (Exworthy et al., 2017; Kings Find, 2018; Lindqvist et al., 2019). The main professional and statutory regulatory bodies for each health and social work profession emphasize the need for students to learn with students from other courses (GMC, 2016; HCPC, 2017; NMC, 2018). The agenda that drives IPE has been supported and emphasized at the global level for many years to help the workforce meet the challenges of the increasingly complex needs of our global population (Reeves et al., 2016, 2017; WHO, 2010,2016). However, it is ultimately the educators and educational leaders who will ensure that IPE is implemented in an effective and efficient way—both in the classroom and during student placements in practice (Almås et al., 2017, p. pp1).

Lindqvist et al. (2019) underline that it is important to see how we can all help overcome the challenges identified to successfully integrate interprofessional Collaborative practice into education and thus prepare our students appropriately for the interprofessional collaborative practice needed to achieve better outcomes.

The purpose of this study was to explore university educators' experience with students' interprofessional education.

2. Background

Despite increased evidence that engagement in IPE can lead to positive outcomes (Anderson et al., 2016; Lindqvist et al., 2019), the progress is slow, and the ultimate outcome, i.e., positive impact on patient care, is notoriously difficult to demonstrate (Guraya & Barr, 2018; Homeyer et al., 2018; Reeves et al., 2016; Webb et al., 2018). The literature presents evidence that IPE can positively change attitudes towards other professions amongst students (Almås, 2007; Anderson et al., 2011; Croker et al., 2016; Guraya & Barr, 2018; Hawkes et al., 2013). Likewise, the need for positive attitudes towards IPE in the successful facilitation of IPE is recognized (Freeth et al., 2005; Nyasulu et al., 2021). For some educators, this will require attitudinal change for them as well and, more importantly, a willingness to change, learning to overcome the cognitive dissonance that may inhibit the process in individuals, as also discussed by Anderson et al. (2011) and Lindqvist et al. (2019).

Role modelling interprofessional collaboration is important and is likely to positively influence the hidden curriculum (Nagraj et al., 2018). For educationalists planning IPE curricula, it may therefore be necessary to see and recognize the complexity of interpersonal relationships between educators within and across professions. Efforts should therefore be made to ensure that educators engaging with planning and implementation of IPE curricula planning understand the nature and impact of such interactions (Croker et al., 2016; Hall & Zierler, 2015). This is a challenging task, as discussed by Derbyshire et al. (2020), who remind us that module delivery involves a large teaching team, library, leaders, and administrative staff who assist with organization and timetabling, all of whom need to work together to make interprofessional collaborative practice successful. Equally, as Murray et al. (2010) pointed out, there are examples in which leadership does not prioritize the implementation of IPE, which is unfortunate, as without such support, IPE is unlikely to become truly embedded in curricula.

As alluded to earlier, national, and international guidelines state that IPE should be a part of students' health education, but various educational programmes handle this issue differently, as highlighted by Almås (2014). Indeed, much before that, Bourdieu and Passeron (1990) insisted that educational institutions were relatively autonomous, and to some extent, it seems they still are. Clark (2021) points out that university teachers may not be aware of, or take for granted, the existing structures and processes within which they work; the belief that this is how things are done may obscure the reasons for why things are done. It is important to note that his observations relate both to academic culture and the people who embody it. The misalignment of purpose and mismatch of power among the different health professions on campus is unfortunate (Clark, 2021; Iversen & Hauksdottir, 2020).

An earlier study reported the following: a) the informants have clarity on the competencies needed for successful interprofessional practice and b) a willingness to be involved in IPE, but perhaps not the way their university is asking them to; c) there is a lack of leadership and organizational support to integrate IPE as part of the curricula; d) there is uncertainty amongst educators as to how students develop a professional identity that is embracing interprofessional collaboration as well as e) a scepticism as to whether their efforts to promote IPE will be worth it as the students transition into practice (Lindqvist et al., 2019).

Barr (1988) underlined that IPE in universities may lead to a more rounded understanding of collaborative practice. Abbot (1988) specified that professional collaboration involves complicated processes and is the core of all work. Both theorists distinguished between different forms of jurisdiction. Full jurisdiction is full control over the work area by virtue of legislation, while limited jurisdiction entails subordination, such as a medical doctor and nurse, as they negotiate new role responsibilities linked to various tasks as both professions evolve. Clear boundaries for division of labour are established, which is important to maintain safe patient care. However, it is often at these interphases that frictions may occur due to lack of competencies in how to collaborate, as described in the WHO Competency Framework for Universal Health Coverage (WHO). Important here is the focus on behaviour and that we need to closely link with practice as we shape the curricula, not only to create important opportunities for IPE but also to ensure that individuals can apply these in teams for the benefit of colleagues and people in need of care.

We understand that IPE may impact the profession's desire to look after its own and the additional challenges linked with interprofessional collaboration. Likewise, we recognize the importance of individuals to develop their professional identity (Best & Williams, 2019).

The research focus in this study is university teachers' experience in designing IPE interventions that help students develop interprofessional learning skills.

3. Methodology

3.1. Design

A qualitative descriptive methodology was used to emphasize the understanding of a social phenomenon (Polit & Beck, 2017), in this case, how teachers view IPE in the curricula and what drives their scepticism about the interprofessional education they have experienced to date. Focus group interviews used a hermeneutical approach based on theories of interpretation hermeneutics. The goal of this approach is to explore how the parties involved understand the phenomena (Polit & Beck, 2017).

3.2. Sample

Three focus group interviews were conducted with educators at three universities: two in Norway and one in the UK. Educators were contacted by email and asked whether they wanted to take part in the development of a framework that can be used by educators to integrate IPE into the curriculum. Table 1 shows the professional background of university teachers at each university in Norway (N1 and N2) and the UK. We sent questions to the universities about whether there were educators who wanted to participate in the focus group interview. The participants contacted the researchers via e-mail.

Table 1

Professional background of the focus group participants at each university.

Profession	Site		
	N1	N2	UK
Nurse	3	2	
Sociologist		2	
Social anthropologist	1		
Psychologist		1	
Midwife			1
Pharmacist			2
Occupational therapist			1
Doctor	1		1
Speech and language therapist			1

3.3. Data collection

The same semistructured guide was used for each focus group (see Table 2). The duration of each focus group interview was approximately 1 h. In the UK, due to COVID-19, the focus group took place remotely on an online video platform Zoom, whereas in Norway, focus groups took place face-to-face at both universities. The interviews started with asking for participants' views and main impressions of the themes in the study. The transitional question asked for their views on how students best learn interprofessional collaborative practice. Each focus group was concluded with a summary of the discussion. All focus groups were recorded and transcribed verbatim. The main questions with prompts are listed below.

3.4. Data analysis

Focus group data were analysed independently through thematic text analysis (Clark & Braun, 2014). Each transcript was read through multiple times, thus adopting a systematic, repetitive, and recursive process. Categories (nodes) were created where each held content of the data. Words and groups of words were used as units of analysis (Clark & Braun, 2014). Once data from all focus groups were analysed, the authors met virtually to compare findings and elicit main themes from all three groups. Direct quotes from focus group participants are provided, and the educational institutions are described as N1, N2 and UK.

3.5. Ethical considerations

The study was approved by the Norwegian Centre for Research Data (NSD), project no 920871, with no additional approval required for ethical clearance. In the UK, the study was approved by the Faculty of Medicine and Health Sciences Research Ethics Committee (Reference: 2019/20–045). All phases of the study were conducted according to the Helsinki Declaration and ethical principles in research. Data were

Table 2

Guide followed for each focus group.

Main area	Prompt(s)
How are your students taught about interprofessional collaborative practice?	• Can you give some examples? • What approaches may be more/less effective and why?
What type of IPE works?	• Can you give some examples?
What is needed for IPE work?	• What is your role in this process? • How will your professional background impact the process?
How can IPE impact interprofessional collaboration?	• Can you give some examples?
How can educators help students achieve outcomes linked to interprofessional learning and collaborative practice?	• Will they need support and/or training? • If so, what type? • What is your role in that as leader?

transcribed and anonymized accordingly. Written, informed consent was obtained from all participants.

4. Findings

Four main themes emerged from the data:

Organizational commitment

Values related to students' interprofessional and collaborative practice

Students developed professional identity and collaborate competence.

Challenges in implementing interprofessional education in health educations

4.1. Organizational commitment

The findings highlighted a leadership and management responsibility in the implementation and delivery of IPE. It was reflected on whether the culture can be rooted in weak leadership [in the context of IPE]. Participants emphasized the importance of the higher education institution (HEI) showing a true commitment to IPE, its values, and beliefs. For IPE to become truly embedded in curricula, it would need the same priority as other teaching information that is important to health and social care. The participants recognized that both countries have national guidelines to encourage such commitment but stated that for many HEIs, a paradigm shift is needed.

I think there needs to be a paradigm shift in terms of getting all employees to join interprofessional education (UK).

Some participants expressed that they could prepare students for collaborative practice in the classroom. Students could use different IPE models and explore patients' needs, implying that this approach may be more effective. As one participant stated,

Creating IPE models that are not realistic for students is not a good idea (N1).

Participants said that the best environment in which to implement interprofessional collaborative practice is during students' placements. The importance of sharing successful IPE interventions was welcomed, as it also helped plan in terms of embedding meaningful experiences for students. Some participants felt very passionate about promoting IPE in HEIs due to their profession's need to work together with others for the benefit of the patients.

I was hungry for experiences, and I was encouraged to participate in IPE (UK).

New staff were often encouraged to join IPE, which participants suggested could be positive in terms of shaping the values; however, they also mentioned that it could be a way for more senior staff to no longer be involved, which they recognized might impact the overall organizational commitment to IPE.

It was noted by some that one profession can dominate and have power over others in the organization, including both staff and students, and that this can influence IPE and thus shape future collaborative practice from different professions' perspectives. At times, participants felt this power imbalance may inhibit innovation and imply that members of one profession may see themselves as 'better' than others in regard to interprofessional collaboration.

Some nursing educators have been 'brought up' in a 'nursing system' and way of working. When this is the case, they shape our students differently (N2).

4.2. Values related to students' interprofessional and collaborative practice

The participants underlined the importance of students learning to respect each other's professional values and culture. They said that student experiences are often reflected in organizational values. Teachers acknowledged that when educators engage with IPE, and this is made visible in the organization, it is likely to positively affect students' values of interprofessional collaboration. Indeed, one emphasized the importance of IPE throughout the course so that outcomes are consolidated. Some mentioned that there are colleagues who are less clear of the purpose of IPE and mentioned that they receive questions from colleagues asking when and why IPE is a useful component in students' curricula. This participant felt that this confusion highlights a real divide among colleagues and therefore may expose a problem.

> I think there is something with culture and values, maybe, that can be the cause of the collaboration problem (N2).

A root cause of these divergent feelings was suggested by some participants to derive from experiences while practising. As one participant reported,

> … the doctor's word is law (N2).

HEIs are also hierarchical, and therefore, one profession's view can dominate the direction of travel and the values of interprofessional collaborative practice and practice. Although some participants noted a change towards their institution paying more attention to values, it was clear that these changes may not yet be 'lived'.

4.3. Students developed professional identity and collaborate competence

Many participants highlighted the importance of fully utilizing IPE opportunities to optimize health care students' education, strengthen their sense of professional identity and prepare them for interprofessional collaborative practice. However, as mentioned earlier, educators were split in their views, and one educator asked,

> How can we, facilitators, learn collaborative practice when we have not practised this? (N1).

A few said that it was an aspect of professional competence to know whom to collaborate with, and this may come with time. One said,

> It [learning about collaboration] intertwines - even in the teaching of anatomy physiology (N1).

Some participants suggested that students learn collaboration later and that students must be confident in their own identity and gain a certain level of competence and area of responsibility before they engage with IPE.

> We had IPE—a day with the biomedical laboratory scientist students where they could learn about the professions [this took place in year 1]. I think the first year is slightly early for IPE (N1).

Regardless of views, teachers agreed that debriefs and/or opportunities to reflect after IPE are important to consolidate learning. One participant mentioned what this was like after students had completed an interprofessional collaboration simulation exercise:

> The reflection afterwards was useful for identity development (N1).

The support in this process of a trained facilitator became evident. One participant said,

> … an IPE facilitator is needed here (UK).

The need for such a facilitator was in relation to making sure students are supported in their learning and they feel empowered both in regard to their own professional identity and their commitment to collaborative practice. All participants expressed commitment to their students developing a sound professional identity and being able to collaborate.

4.4. Challenges in implementing interprofessional education in health educations

Across the three different HEIs involved in this study, teachers confirmed that several pedagogical approaches to IPE have been adopted and tried out. Some participants said that they use the simulation laboratory for IPE. Others reported that their students engage in role plays in the classroom, are offered IPE during their practice placements, and run wards. Regardless of the approach, it was mentioned that the same staff are often involved. As one participant stated,

> … there are key people from education institutions who always are involved in IPE (UK).

Participants mentioned that it is common to use the students' placements as an area for interprofessional collaborative practice. It seemed that regardless of what students did in terms of IPE, students' experience of IPE in practice was well received:

> Students completed IPE before they had practice placement in institutions (N1).

Participants reported that students learned about interprofessional collaboration both in the classroom and in practice, but many expressed concerns about a lack of 'joined-up thinking'. They mentioned that there was a "gap" between the planning and implementation of IPE.

> The curriculum has guidelines that clearly express that IPE should be offered to students in all three years in the bachelor's programme (N2).

Nevertheless, it emerged that educators participating in these focus groups had slightly different views on how much time and resources should be spent on IPE and that it could easily slip. One participant said,

> students have not always been happy with the IPE programme, and we are struggling to get enough staff to run it — it has started to slip away (UK).

Participants from another institution said that there had been a great investment in IPE on one campus that quickly disappeared when there was a restructuring of the curriculum.

> What we had in the first year in the bachelor's degree programme disappeared with the introduction of a new curriculum (N1).

Participants highlighted that planning was important. They said that planning needed to be based on and driven by national and professional guidelines. Additionally, it was mentioned that preparations for practice placement were important, especially in terms of where experience might fit into the curricula. This conversation brought back the question about when students should learn about their own profession and when they should learn about others. One participant said,

> We have fewer resources and less time for the practical organization [for IPE] (N2).

5. Discussion

5.1. Organizational commitment to engage with interprofessional education

Bourdieu and Passeron (1990) stated that educational institutions were relatively autonomous, and to some extent, it seems they still are. Participants from both countries teach courses that are provided with national guidelines and regulations for how students should learn together with other students during their education. According to Abbot's theory about full jurisdiction (Abbot, 1988) and control over the work area by virtue of legislation, it may be assumed that each

individual educational institution prioritizes and is responsible for the implementation of these guidelines. However, our study shows that, despite such guidelines, without clear directives for educators, it remains challenging to implement IPE in the curricula. This is not a new phenomenon, since Barr presented in 1988 a review that looked at how IPE had developed over the previous thirty years with the aim of helping teachers engage effectively in IPE. Interestingly, the review mentions that IPE should be more task-specific and more oriented towards more direct benefit to patients. Years later, this perspective is highlighted in the WHO (2022) report, which focuses on this practical aspect to ensure that learners graduate as competent collaborators who can contribute to the global health and social crisis during their education.

According to Almås (2014), various courses handle this issue differently, partly due to the many challenges involved in developing successful IPE. It might be that these challenges can be overcome with persistence, commitment, and a carefully designed IPE programme. The findings in this study highlight that the direction of programme development is often influenced by one profession's view of how IPE should be integrated into the curricula. Teachers also mentioned that although their institutions say they value interprofessional collaboration, there is some way to go until such values are truly reflected in the curricula and is part of the culture of how students are prepared for their careers.

Some participants wondered whether the lack of commitment to IPE might be rooted in a lack of, or weak, management. In the university setting, this may stem from individuals working as part of interprofessional teams that merge into larger units that lack overall leadership and direction due to a lack of resources (Bleiklie, 2018). Indeed, academia is a highly competitive environment fraught with vested interests, rigid traditions, and scarce resources (Clark, 2021) and thus lacks the time and resources needed to invest in IPE. Hence, despite clear guidelines, there are certainly some challenges linked to the actual implementation of IPE.

Research emphasizes the need for positive attitudes, learning and willingness to facilitate the implementation of successful IPE opportunities in curricula (Nyasulu et al., 2021; Almås et al., 2017, p. pp1; Reeves et al., 2016; Iversen & Hauksdottir, 2020; Croker et al., 2016; Hawkes et al., 2013; Anderson et al., 2011). Perhaps it was assumed that educational leaders have the appropriate attitudes to support other staff in this endeavour, but the findings presented here suggest that teachers do not experience this. However, it is important to note that the organization is composed of the individuals in it and that everyone therefore has a responsibility to shape its values. Again, we relate back to Abbot (1988), who defines professional systems as a structure that connects professions to perform certain tasks. In this case, the task is to prepare students for working together in interprofessional teams that deliver safe patient care (WHO, 2010) by developing meaningful opportunities for interprofessional learning throughout their education.

5.2. Values related to students' interprofessional and collaborative practice

Participants in this study said that if educators are engaged in interprofessional education and help promote the benefits of IPE, this will positively affect the students' values, views, and outcomes of IPE. Hawkes and colleagues' (2013) show that students' views on their own and other professions are likely to be based on traditional values of professions and that students arrive at university with views of their own on other professions. These views can, and probably will, change during their education, and for such change to be positive, the entire IPE approach must be valued by the educational colleagues and leaders. Such values are likely to be based on the traditional values of the occupations (Barr et al., 2005), but when roles change rapidly, values will also change, which became evident during the COVID pandemic, where interprofessional collaboration was deemed key to success and hierarchical barriers declined due to the urgency of care.

In the context of practice hierarchy, doctors are traditionally regarded as the dominant profession (Barr et al., 2005). As discussed by Freeth et al. (2005), doctors did not experience themselves as part of a team but as the leader of the team. Complex decisions require authority and accountability, the latest technology and medical expertise in relatively short periods of time for patients. Some of these decisions may still be the doctor's ultimate responsibility, but they often need to liaise with their teams. When such practice can be showcased to students during interprofessional collaboration during their placements, this can be very powerful (Derbyshire et al.,2020). The statement by one participant in our study "that the doctor's words are law" highlights the existence of a more traditional professional hierarchy. In terms of ultimate IPE outcomes, it is important that we are aware of how such views may be communicated to students during IPE and thus influence students' values and views of other professions.

5.3. Students developed professional identity and collaborate competence

Capitalizing on positive mindsets and using successful IPE pedagogical models are useful approaches to adopt when developing IPE opportunities. Debriefs that allow reflection on the collaboration process afterwards are seen to be very important for identity development and optimization of outcomes, but participants emphasized the need for more trained IPE facilitators who could successfully do this. The findings presented here support that IPE interventions must allow for appropriate debriefs and/or opportunities for reflection so that students develop their professional identity, as well as their approach and commitment to interprofessional collaboration, rather than leaving it to chance. Chin et al. (2020) found that four components contribute to professional identity development: socialization, guidance, practical experience, and reflection. Teachers in our study who had taken part in simulation exercises said that reflections on action, collaboration and students' own identity had taken place after the intervention. As described by Webb et al. (2018), debriefing offers opportunities for critical thinking, and if students feel equally supported, this can offer a rich learning experience based on authenticity, balanced interaction, and reflection about everyone's contribution.

A profession's position in society is defined by people, including other professionals' views of themselves and others. According to Barr et al. (2005), the outcome of such self-assessment will depend on the knowledge they have about the professions they compare themselves to. Hence, if they do not know the other profession through their own experience, ideas, and stereotypes about 'the other' and their identity may be created, which may or may not reflect the 'true' image of the profession (Barr et al., 2005) and thus resonate with the image of 'self' that professions hold. In a study by Hawkes et al. (2013), it became apparent that pharmacy, nursing, and medical students each regarded their profession as more 'caring' than their peers from other professions perceived their profession as being 'caring'. This highlights the need for IPE to help close this gap and facilitate learning with, from and about the different professions that together contribute to patient care. The participants of this study emphasized that IPE is important during students' education, but many thoughts that the students first and foremost need their own identity and core competence. This coincides with the findings of Lindqvist et al. (2019). Several educators still believe that students need to develop their own professional identity before they can successfully and confidently engage with students from other courses in IPE.

We know from the literature that professional identity relates to one's professional attributes, beliefs, values, and experiences and helps preserve psychological wellbeing (Dutton et al., 2010; Makowsky et al., 2009). It is therefore understandable that some educators feel devoted to ensuring that their students will successfully and safely develop this important part of 'self'. Importantly, teachers in this study list several components of IPE that need to be considered for this encounter to remain safe, including the need for trained facilitators, a sentiment also supported by others (Baker et al., 2018; Freeman et al., 2010; Nagraj

et al., 2018; Webb et al., 2018).

5.4. Challenges in implementing interprofessional education in health educations

Not all approaches to IPE are equally good and/or suitable for all students. Indeed, one participant from a Norwegian university mentioned that an IPE project was poorly evaluated, which reminds us that not all IPE enables learners to achieve positive outcomes, according to research (Clark, 2021; Guraya & Barr, 2018; Homeyer et al., 2018). In our study, some participants use simulation, whereas others conduct role plays in the classroom or create opportunities for IPE during student placements. Nisbet et al. (2020) provided a "Practice-Based IPE Multi-Dimensional Assessment Tool". In this context, it is worth noting that the participants in this study reported that there is a "gap" between the planning and implementation of IPE, which implies that there is not sufficient thought into what type of IPE should be offered when and to whom. Limited time and lack of priority from leadership to implement IPE are contributing factors as reported by participants in our study. However, participants acknowledge national guidelines as to what the courses should include in relation to IPE and recognize that the most natural environment for students to engage in interprofessional collaboration is during students' placements. Nevertheless, for optimal outcomes, we still need to develop meaningful IPE within such placements.

Research clearly emphasizes how educators must engage with theory throughout the integration and maintenance of IPE in curricula. However, educators encounter several challenges discussed by several groups (Clark, 2021; Guraya & Barr, 2018; Hall & Zierler, 2015; Hean et al., 2018). Perseverance, commitment, and precise outcomes in the curriculum are likely to facilitate the process. Participants in this study expressed the importance of 'key people' being involved in the implementation of IPE opportunities, but we also know from our findings that this will depend on the values of key people, as discussed above, and how they engage others in the process. The 'key people', often referred to as IPE champions, may leave, burn out, or simply change direction inside the organization, which may end or halter the progress made.

In regard to time, IPE is more time-consuming and logistically challenging than simply offering education to one profession (Clark, 2021). It involves agreeing with the timing of IPE featuring in the curriculum, how it fits in with other or existing learning outcomes and what may be 'core' to the profession-specific learning that educators say students must engage with. Indeed, participants said that there are many aspects to consider and that time pressure is a problem. They stated that IPE is important as well but that the 'core competence' for the profession is deemed essential, and some implied that students will learn how to collaborate as they enter practice. The overall impression is that there are divided opinions about what 'core' professional competence entails and whether interprofessional competence is a part of this core competence or separate. Findings from this study suggest that teachers agree that students need to develop interprofessional competency but that there is still uncertainty about the timing. As discussed earlier, this uncertainty is linked with how teachers relate this to students' development of their professional identity and thus readiness to confidently learn about how they function as part of an interprofessional team.

This is where a framework can help offer a solution to educators as they develop and integrate IPE into curricula according to empirical data collated by this study and others together with guidelines from professional bodies and global organizations such as WHO. Educators clearly wish to help their students to the best of their abilities. Times are changing, and quickly. We have a duty of care, not only to our patients but also to our learners to prepare them as best we can for what is to come. We need our graduates to become practice ready and part of an agile, resilient workforce where staff work together to support each other as they help others with their care needs. For this to happen, HEIs need to invest in an interprofessional learning strategy that guides educators through the process of integrating IPE into the curriculum.

Senior leaders will play a key role here, and thus, in the next step in the data collection feeding into this framework, which will be presented in a future article.

5.4.1. Strengths and weaknesses of this study (limitations)

This study offers further insights and understanding about the phenomena of how teachers view IPE in the curricula and what drives their scepticism about the IPE they have experienced to date, which was found in an earlier study (Lindqvist et al., 2019).

The educational system varies across countries. Despite the small sample size, we had nine different professions in the study and therefore had information from several points of view. We collected rich and contextualized information from educators about factors that are perceived as either facilitators or barriers that relate to IPE. Further research will continue to add to a framework that we deem meaningful for the integration of IPE into the curriculum. The study is non-generalizable but offers valuable insights and an understanding of the phenomena of IPE in academia.

6. Conclusion

In this study, educators in three universities showed their experience on IPE, what works best and when. They had a mixed experience, and there is a recognition that the organization should show greater commitment to IPE so that it becomes a priority for educators. There is a recognition that the organization needs to live by its values and show greater commitment to IPE and the students' curriculum. Organizations need to live the values that embrace interprofessional education and collaborative practice in line with national and global guidelines. Instead of leaving universities to their own devises regarding to their interpretation of these guidelines, educators must come together with stakeholders and students to plan, deliver, and evaluate interprofessional collaborative practice and thus cocreate an IPE strategy that truly works and is meaningful to students and that supports urgent and complex practice needs. As with all cultural change, this process will take time, and educators will need to carefully use the short time they have with students to influence thinking and encourage learning and positive attitudes, values and behaviours that will support interprofessional collaborative practice.

Declaration of competing interest

The authors report no conflicts of interest. The authors alone are responsible for the writing and content of this article. The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Abbreviations

HEI	Higher education institution
IPE	interprofessional education
IPL	interprofessional learning

References

Abbot, A. (1988). *The system of professions. An essay on the division of expert labor*. IL University of Chicago Press. https://doi.org/10.7208/chicago/9780226189666.001.0001

Almås, S. H. (2007). *Interprofessional education. An analysis of the introduction of a common core in curricula for selected health professions*. PhD (diss). Norway: University of Bergen.

Almås, S. H. (2014). Bourdieu's theory on the educational system. In E. Willumsen, & A. Ødegård (Eds.), *Interprofessional collaboration – a social mission.* Oslo University Press.

Almås, S. H., Nilsen, H. K., Spjutøy, R., & Vasset, F. (2017). Interprofessional learning through shadowing in rehabilitations department: A qualitative study of the Student's placement in hospital setting. *European Scientific Journal, 13*(28), pp1–17. https://doi.org/10.19044/esj.2017.v13n28p1

Anderson, E. S., Smith, M., & Hammick, M. (2016). Evaluating an interprofessional education curriculum: A theory-informed approach. *Medical Teacher, 38*(4), 385–394.

Anderson, E. S., Thorpe, L. N., & Hammick, M. (2011). Interprofessional staff development: Changing attitudes and winning heaths and minds. *Journal of Interprofessional Care, 25*(1), pp11–17.

Baker, B., Drane, C., Chambers, J., & Lindqvist, S. (2018). Training students as Interprofessional learning facilitators: An exploratory study highlighting the need to build confidence. *Journal Of Interprofessional Care, 32*(4), 473–480.

Barr, H. (1988). *Interprofessional education today, yesterday and tomorrow - a review. Commissioned by the learning and teaching support network for health Sciences & practice from the UK.* Centre for the Advancement of Interprofessional Education.

Barr, H., Koppel, I., Reeves, S., Hammick, M., & Freeth, D. (2005). *Effective interprofessional education: Argument, assumption, and evidence.* Blackwell Publishing.

Best, S., & Williams, S. (2019). Professional identity in interprofessional teams: Findings from a scoping review. *Journal of Interprofessional Care, 33*(2), pp170–181. https://doi.org/10.1080/13561820.2018.1536040

Bleiklie, I. (2018). Changing notions of the governance-creatively nexus. *European Review, 26*(S1), S11–S24. https://doi.org/10.1017/S1062798717000503

Bourdieu, P., & Passeron, J. C. (1990). *Reproduction in education, society, and culture.* Sage.

Chin, D., Phillips, Y., Woo, M. T., Clemans, A., & Yeong, P. K. (2020). Key components that contribute to professional identity development in internships for Singapore's tertiary institutions: A systematic review. *Asian Journal of the Scholarship of Teaching and Learning, 10*(1), 89–113.

Clark, P. G. (2021). Looking below the surface of interprofessional education uncovering organizational factors and forces. *Journal Of Allied Health, 50*(19), 182–189.

Clark, V., & Braun, V. (2014). What can "thematic analysis" offer health and wellbeing researchers? International. *Journal of qualitative Studies on Health and Well-being, 9*(1), Article 26152. https://doi.org/10.3402/qhw.v9.26152

Croker, A., Wakely, L., & Lays, J. (2016). Educators working together for interprofessional education: From "fragmented beginning" to being "intentionally interprofessional". *Journal of Interprofessional Care, 30*(5), 671–674. https://doi.org/10.1080/13561820.2016.1181613

Derbyshire, J. A., & Machin, A. (2020). The influence of culture, structure, and human agency on interprofessional learning in a neurosurgical practice learning setting: A case study. *Journal of Interprofessional Care.* https://doi.org/10.1080/13561820.2020.1760802

Dutton, J. E., Roberts, L. M., & Bednar, J. (2010). Pathways for positive identity. Construction at work. Four types of positive identity and the building of social resources. *Academy of Management Review, 35*(2), 265–293. https://doi.org/10.5465/amr.35.2.zok.265

Exworthy, M., Powell, M., & Glasby, J. (2017). The governance of integrated health and social care in england since 2010: Great expectations not met once again. *Health Policy, 121*(11), pp1124–1130. https://doi.org/10.1016/j.healthpol.2017.07.009

Freeman, S., Wright, A., & Lindqvist, S. (2010). Facilitator Training for educators involved in interprofessional learning. *Journal of Interprofessional Care, 24*(4), 375–385.

Freeth, D., Hammick, M., Reeves, S., Koppel, I., & Barr, H. (2005). *Effective interprofessional education: Development, delivery, and evaluation.* Blackwell Publish.

GMC. (2016). *Promoting excellence: Standards for medical education and training, 2016.* London: General Medical Council.

Guraya, S. Y., & Barr, H. (2018). The effectiveness of interprofessional education in health care: A systematic review and meta-analysis. *Journal of Medical Sciences, 34*, 160–165. https://doi.org/10.1016/j.kjms.2017.12.009

Hall, L. W., & Zierler, B. (2015). Interprofessional Education and Practice Guide No. 1: Developing faculty to effectively facilitate interprofessional education. *Journal of Interprofessional Care, 29*(1), 3–7. https://doi.org/10.3109/13561820.2014.937483

Hawkes, G., Nunney, I., & Lindqvist, S. (2013). Caring for attitudes as a means of caring for patients – improving medical, pharmacy and nursing students' attitudes to each other's professions by engaging them in interprofessional learning. *Medical Teacher.* https://doi.org/10.3109/0142159X.2013.770129. Web paper e1-e7.

HCPC. (2017). *Standards of education and training guidance, 2017.* London: Health and care professions council.

Hean, S., Green, C., Anderson, L., Morris, D., John, C., Pitt, R., & O'Halloran, C. (2018). *The contribution of theory to the design, delivery, and evaluation of interprofessional curricula: BEME guide No. 49.* Medical Teacher.

Homeyer, S., Hoffman, W., Higst, P., Opperman, R. F., & Dreier-Wolfgramm, A. (2018). Effects of interprofessional education for medical and nursing students: Enablers, barriers, and expectations for optimizing future interprofessional collaboration- a qualitative study. *BMC Nursing, 17*, 13. https://doi.org/10.1186/s12912-018-0279-x

Iversen, A., & Hauksdottir, N. (2020). *Tverrprofesjonell samhandling og teamarbeid: Kjernekompetanse for fremtidens helse og sosialarbeidere. (Interprofessional collaboration and teamwork: Core competence for the health and social workers of the future).* Gyldendal.

Kings Find. (2018). Making sense of integrated care systems, integrated care partnerships and accountable care organisations in the NHS in England. Available at: https://www.kingsfund.org.uk/publications/accountable-care-explained.

Lindqvist, S., Vasset, F., Iversen, H. P., Hofseth Almås, S., Willumsen, E., & Ødegård, A. (2019). University teachers' view of interprofessional learning and their role in achieving outcomes – a quality study. *Journal of Interprofessional Care, 22*(2), 190–199. https://doi.org/10.1080/13561820.2018.1534809

Makowsky, M. J., Schindel, T. J., Rosentahl, M., Campbell, K., Tsuyuki, R. T., & Madill, H. M. (2009). Collaboration between pharmacists, physicians, and nurse practitioners: A qualitative investigation of working relationships in the inpatient medical setting. *Journal of Interprofessional Care, 23*(2), 169–184.

Murray, R., Calulier-Grice, J., & Mulgan, G. (2010). Open book of social innovation. http://youngfoundation.org/wp-content/uploads/2012/10/The-Open-Book-of-Social-Innovating.pdf.

Nagraj, S., Harrison, J., Hill, L., Bowker, L., & Lindqvist, S. (2018). Promoting collaboration in emergency medicine. *The Clinical Teacher, 15*, 500–506.

Nisbet, G., McAllister, S., Morris, C., & Jennings, M. (2020). Moving beyond solutionism: Re-imagining placements through an activity systems lens. *Medicine Education, 00*, 1–10. https://doi.org/10.1111/medu.14345

Nursing and Midwifery Council. (2018). *Realizing professionalism: Standards for education and trainingPart 1: Standards framework for nursing and midwifery education.* NMC.

Nyasulu, J. C. Y., Dreyer, A. R., & Mothoagae, G. (2021). Interprofessional learning (IPL) innovation through community site assessment: The faculty of health science students' and facilitators' reflections. *Innovations in Education & Teaching International, 58*(3), 328–339. https://doi.org/10.1080/14703297.2020.1744468

Polit, D., & Beck, C. (2017). *Nursing research.* Lippincott Williams & Wilkins.

Reeves, S., Fletcher, S., Barr, H., Birch, I., Boetd, S., Daviese, N., McFayden, A., Rivera, J., & Kitto, S. (2016). A BEME systematic review of the effects of interprofessional education: BEME guide No. 39. *Medical Teacher, 38*(7), 656–666.

Reeves, S., Pelone, F., Harrison, R., Goldman, J., & Zwarenstein, M. (2017). Interprofessional collaboration to improve professional practice and healthcare outcomes. *Cochrane Database of Systematic Reviews, 6*, Article CD000072.

Webb, L.-A., Lindquist, S. M., Bowker, L., & Leinster, S. (2018). Clinical skills as a vehicle for interprofessional learning. *The Clinical Teacher's Toolbox, 15*, 1–6.

White Paper 11. (2011-2012). *Utdanning for velferd. Samspill i praksis. (Education for welfare. Interaction in practice).* Oslo: Kunnskapsdepartementet.

White Paper 47. (2008-2009). *Samhandlingsreformen. Rett behandling - på rett sted - til rett tid. (Coordination Reform. Straight treatment - in the right place - to the right time).* Oslo: Helse- og Omsorgsdepartementet.

World Health Organization. (2016). *High level commission on health employment and economic growth.*

World Health Organization. (2022). *Global competency and outcomes framework for universal health coverage.* World Health Organization.

World Health Organization (WHO). (2010). *Framework for action on interprofessional education & collaborative practice.* World Health Organization. WHO/HRH/HPN/10.3.