Interprofessional education in a New Zealand community polytechnic: A pilot study

Ashleigh Price, Lee Smith, Marcella Gregan, Susie le Page, Reuben Corlett and **Belinda Westenra**
Whitireia Polytechnic, Aotearoa New Zealand

ABSTRACT

INTRODUCTION: Interprofessional collaboration leads to better patient care, enhanced teamwork skills, better communication, and enhanced understandings of each other's professional roles.

METHODS: The objective of the study was to trial an interprofessional education (IPE) simulation activity with students (nine) from three health and social service disciplines in one community polytechnic. A pre-test/post-test design was used to gather data on the students' perspectives of the IPE simulation and what the students learned from it. A simple Likert Scale questionnaire and two focus groups (with five and four participants, respectively) were conducted. A thematic analysis of the focus group data was undertaken while survey responses are presented in percentages for ease of readability.

FINDINGS: The participants enjoyed the simulation, had greater confidence with interprofessional communication post-participation and increased knowledge of each other's scope of practice. The participants welcomed the opportunity to practise handover, which was an area of concern for all.

IMPLICATIONS: IPE is an invaluable tool for preparing students for their future careers as members of an interdisciplinary health team.

KEYWORDS: Social work; paramedicine; nursing; scope of practice; interprofessional education

CORRESPONDENCE TO:
Ashleigh Price
ashleigh.price@whitireia.ac.nz

In Western cultures, professional organisations and journals focused on interprofessional education (IPE) began to emerge in the 1980s. IPE is "when students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes" (World Health Organization (WHO), 2010). Due to the benefits of IPE, the World Health Organization has called on all countries to foster IPE in the health curriculum (Van

Diggele et al., 2020). Several medical, dental, pharmacology, nursing, and the allied health professional organisations now require IPE as central in health care (Buring, 2009)— for instance, the American Public Health Association, and the Institute of Medicine (IOM)—advocate interprofessional health education (IPE) (University of Otago, n.d.).

Given that patients will often present needing multiple health services,

interprofessional collaborations between health professionals are important (Bridges et al., 2011; Homeyer et al., 2018). Interprofessional health collaborations can lead to a higher standard of patient care, which, in turn, can lower patients' length of stay, and reduce treatment errors (Buring et al., 2009; Homeyer et al., 2018; WHO, 2010). Health professionals may also develop greater understandings of each other's scope of practice, knowledge of the workplace challenges experienced by each profession, and gain insight into the unique contributions that each profession provides for patient care (Bell, 2019). Other advantages of IPE include strengthening of one's professional identity, a heightened awareness of diversity, and increased understandings of complex health conditions that involve multiple health professionals (Illingworth & Chelvanayagam, 2007).

IPE prepares students from different professions to work as a team to deliver the highest quality of patient care (Buring et al., 2009; WHO, 2010). The goal of IPE is for health students to learn how to work as collaborative team members and take their learning, knowledge, and skills into their workplaces post-graduation (Buring et al., 2009). Joint decision-making on patient treatment that is based on team members' specialised knowledge and skills is a feature of IPE.

In IPE, health students collaborate in interprofessional teams and learn cooperative skills (such as listening, assertiveness and leadership amongst others) and develop mutual respect for each other's professions (Bridges et al., 2011; Kasperki & Toronto, 2000). Unfortunately, however, health education is often done is isolation, which means that students may graduate without ever discussing patient care with others from different health, and/or social service disciplines (Banks et al., 2019; Buring, 2009; Park & Park, 2021). This lack of experience may hinder

students' confidence to communicate with members of a multi-disciplinary team in the workplace after graduation (Fewster-Thuente, 2014).

There are many established IPE programmes running in international universities, where students have accrued increased competence with inter-professional communication (Stanley et al., 2020). Some international and national universities have struggled to design, implement, and maintain IPE activities catering to all students' professions equally (Jorm et al., 2016). In New Zealand, the University of Otago and the Auckland University of Technology (AUT) have implemented IPE in their health programmes (University of Otago, n.d; Auckland University of Technology, 2016). For instance, at the University of Otago, health students have an optional IPE activity, where dentistry, oral health and dietetic students, alongside occupational therapy students from Otago Polytechnic, and nursing students from Eastern Institute of Technology, work collectively in rural Māori communities in Tairawhiti/Gisborne (Foster Page et al., 2016). Nevertheless, some dental students who participated in the ITP placement did not enjoy the experience, unlike the other students. These students felt that they had missed out on clinical experience and had to treat children (children are under the scope of oral health therapists until they reach 18 years of age), not adults, like a dental professional. The dental students also tended to frame oral health therapists as supporting their role as dentists, rather than peers who had complementary and valuable skills. Steps were put in place to address the students' concerns; however, such comments highlight some drawbacks of IPE which are not often reported in the literature. Although some national polytechnics participate in IPE activities overseen by universities, we were unable to locate any research on IPE in exclusively polytechnic settings. This study partially addresses this gap.

Methods

Study context and design

There are no IPE activities run exclusively with Whitireia Community Polytechnic (henceforth Whitireia, located in the wider Wellington region). In stating this, however, paramedic students have been involved in an IPE activity hosted by the University of Otago since 2019. In this activity, paramedic students work with medicine, dietetics, nursing, and radiotherapy students to explore a patient-centred approach to the management of long-term conditions (Darlow et al., 2018). Social work students from Whitireia were inducted into this IPE activity in 2021. Nevertheless, there is the potential to implement an IPE activity across all health and social service courses offered within the School of Health and Social Services at Whitireia.

Given the paucity of research on IPE in polytechnic settings, a pilot simulation IPE activity was trialled with students from three health and social service disciplines at Whitireia. The objective of the research was to explore students learning from the activity, their experiences of working in a collaborative interprofessional team, and any changes in their sense of professional identity after participating in an IPE simulation activity. The research question was: "How does participation in simulation-based IPE activity impact on students' self-confidence and competence in interprofessional communication?"

The most common IPE research methods are student case studies utilising practice-oriented materials (Barr et al., 2014). In this study, an IPE simulation activity was designed where ākonga (students) from three health and social service disciplines (social work, paramedicine, and nursing) would work in interdisciplinary teams to care for "Rhonda" (a mannequin). Three disciplines were chosen because of the pilot nature of the research and time pressures associated with the study. Rhonda was

an elderly widow who lived alone and had dislocated her hip due to a fall. A social worker found Rhonda and rang the paramedics who provided emergency care. The two paramedic students transported her to hospital where they handed her care over to the emergency room nurses. The scenario was not prescriptive, and the students were invited to provide the best quality of care within their individual scopes of practice. The scenario took place within a clinical laboratory setting at the Whitireia campus, where students had access to specific health equipment (e.g., heart monitors and hospital beds). Good communication and teamwork were essential for the smooth delivery of Rhonda's care.

A pre-test/post-test research design was selected to gather data on the students' perspectives of the IPE simulation and learning from it. A small Likert scale survey was completed pre- and post-simulation, while two focus groups were conducted post-simulation.

After obtaining ethics approval (Whitireia and WelTec Ethics and Research Committee, reference number, 282–2020), the research team began advertising for participants amongst three cohorts of ākonga (Year two social work, Year three nursing and paramedicine). Given the potential conflict of interest (where students may have felt forced to participate if their tutor called for volunteers), one researcher discussed the research with ākonga from outside their teaching discipline. A notice was also placed on the intranet with the contact details of the researcher not employed in a teaching role who subsequently communicated with potential participants via email.

Study participants and data collection

Ideally, we wished to conduct four focus groups, comprised of two nursing, two paramedic ākonga and one social work ākonga (these numbers were designed to mimic real life workplace relationships).

Although there is no specified ideal number of focus group participants, five was considered optimal due to the pilot nature of the study and the desire to repeat workplace relationships (Kitzinger, 1994). Unfortunately, however, there was not enough ākonga interest to achieve this goal. We are unsure why this was the case, but it may have been because the focus groups were held during the mid-semester break. Nevertheless, we did obtain enough participants for two focus groups, albeit with one paramedic in one group instead of two (see results for the professional and gendered composition of each focus group).

Prior to their participation in the research, ākonga informed consent was obtained. Following this, surveys (hard copy) were completed prior to (and immediately after), the simulation in a classroom adjacent to the clinical laboratory where the IPE activity occurred. LS (as an experienced focus group facilitator) facilitated the focus groups. A focus group schedule was devised by all members of the research team, which was influenced by each researchers' professional background, teaching experience, and reading in the field. Ultimately, however, the rich interaction between the focus group participants determined how the focus group progressed and the data collected (Kitzinger, 1994).

Both focus groups were approximately 50 minutes in duration, took place in June 2021, and were audio-recorded. The audio-recordings were entered into an automatic computer transcription program, but this process was inaccurate. Consequently, the transcription was done manually. The audio-recordings were transcribed verbatim, and the transcripts were checked alongside the audio-recording for accuracy.

Data analysis

AP and LS undertook a joint inductive analysis of the focus group data. Two researchers were chosen, as the diversity in their professional backgrounds and life experiences would likely add to the robustness of research findings (Pope & Ziebland, 2000; Smith et al., 2018). Each researcher conducted a separate coding and systematic analysis of the raw data drawing on Braun and Clarke's (Braun & Clarke, 2006, 2012) six-step process for thematic analysis. Each researcher became familiar with the data, generated initial codes, and searched for initial themes. At this stage, the separately identified codes and initial identified themes were compared and were generally found to be consistent. The separate lists were then joined, and this list was used to further identify and refine themes as additional readings of the transcripts were undertaken (Braun & Clarke, 2006). After data-saturation had occurred, 12 overarching themes (with numerous sub-themes) were identified and those directly relating to the research aims are discussed in the following section.

The survey data were not analysed using a complex statistical formula, instead simple pre- and post- percentage scores were tallied for each survey question. These tallies are presented in simple table format for the ease of readers' interpretation (Cloutier & Ravasi, 2021). It should also be noted that because of the larger amount of data produced by the focus groups, the survey data are somewhat overshadowed.

Findings

The survey results are reported in Table 1.

The number of participants in each focus group is reported in Table 2, as is their professional discipline and gender.

When it came to the focus group data, all the participants stated that they enjoyed the simulation activity, as illustrated by the following comment: "I really liked it, it was really good. It was good to see…the other sides…the before social stuff and after…like we see once we put them on the bed that's all we see" (FG2P2). They also stated that

Table 1. Pre- and post-survey results

Survey Questions	Survey iterations	Response n(%)		
		Strongly disagree or disagree	Neither agree nor disagree	Strongly agree or agree
I already have sufficient knowledge about interprofessional communication	Pre	2(22.2)	5(55.6)	2(22.2)
	Post	2(22.2)	2(22.2)	5(55.6)
I am confident in my effectiveness in interprofessional communication	Pre	1(11.1)	6(66.7)	2(22.2)
	Post	3(33.3)	1(11.1)	5(55.6)
I am competent in my effectiveness in interprofessional communication	Pre	1(11.1)	6(66.7)	2(22.2)
	Post	2(22.2)	4(44.4)	3(33.3)
Participation in interprofessional relationship scenarios should be offered to all health & social science students	Pre	–	2(22.2)	7(77.8)
	Post	–	–	9(100)
Interprofessional relationships increases positive patient outcomes	Pre	–	1(11.1)	8(88.9)
	Post	–	–	9(100)
I have already participated in interprofessional communication while on clinical placement	Pre	2(22.2)	–	7(77.8)
	Post	1(11.1)	1(11.1)	7(77.8)
Interprofessional education will assist my preparation for clinical practice	Pre	1(11.1)	–	8(88.9)
	Post	–	–	9(100)
My attitude towards interprofessional relationships is ambivalent	Pre	6(66.7)	3(33.3)	–
	Post	9(100)	–	–

Table 2. Focus Group Composition

	Social work (n)	Paramedicine (n)	Nursing (n)	Gender (n)
Focus group 1	1	2	2	4 F, 1M
Focus group 2	1	1	2	3 F, 1M

they found the activity "really beneficial and [said the researchers] should include it in all the courses" (FG2P2). In both focus groups, however, the paramedic and nursing students reported that the IPE activity should come prior to clinical placement. For instance, "the earlier the better and don't wait till we're about done so, you get experience with it before you go out to the hospital you should definitely include it in all courses […] in the final year of their course" (FG2P3). The following exchange occurred between the participants in focus group one when they were asked if an IPE activity on a bigger scale should be introduced into their courses:

F1P3: Absolutely yeah.
F1P4 &P5: Yeah
F1P5: Because…the problem lies through lack of communication between even nurses and doctors…
F1P2: Paramedics and nurses have a lot to do with each other as well…
F1P5: Like we see each other every day… it should be more common to communicate better.

Learning about different scopes of practice and advocacy

The participants explained how they learned about each profession's scope of practice from the simulation activity. For example, "That's probably been the most eye-opening part about this and so I have been [made] more aware of what social workers actually do". A nursing student in focus group two also explained how the activity made him realise the complexities of patient care and the holistic nature of health and wellbeing.

Seeing how the other two teams work is really important because when you're dealing with patients, it is important to understand that it's not just you, that's their carer… you have to look at it holistically about…what happens before they're in the hospital with paramedics, and while they're in the hospital with nurses, social workers, doctors everything and then…the care, they need

afterwards… and getting back to full health because they're not always perfect when they leave the hospital. (FG2P4)

All participants also advocated for their specific health discipline, especially the social work and paramedic students who stated that their role was looked at simplistically (paramedicine) or as an inferior profession to other health fields (social work). For instance, the paramedic in focus group two explained how she enjoyed the activity as:

FG2P3: …there's no judgment… because… you don't know really what paramedics do, so we could say whatever [laughter], so it's actually quite cool to show off what paramedics actually do… because most people think [we're just] ambulance drivers.

The social work participant in focus group two stated:

The way that some social workers are viewed by medical professionals… they're not viewed…very well [in] the medical world and…we are seen as quite, airy, fairy and kind of getting in the way…making sure that the person fully understands before medical procedures are done. And… that's annoying is the impression that I've got…I think that was on the back of my mind…that I need to actually be advocating for the social work profession. (FG2P1)

This notion of advocacy may be why the social work participant in focus group one asked the others "What's your guys' understanding of what a social worker actually does?" and reinforced the strength of social work as "advocation and looking at the social side…and looking at the big picture". Although not specifically advocating for her profession, when the focus group facilitator stated that it was good to see what nurses, paramedics and social workers do during the simulation, FG2P4 said, "It was a very small insight into what nurses do [laugh]".

Communication and terminology

The participants stressed the importance of communication in interprofessional practice. For instance, "It is pretty important in our jobs to be able to [communicate] and do it effectively…so, scenarios like this are really good because you don't really know… what's going on in front of you until you get hand over" (FG2P4). Most participants also reported that they or other participants communicated well with one another. For instance:

> FG1P2: I actually thought the communication was good like you guys together communicated really well.
> FG1P1: You guys were on to it.
> FG1P4: Oh I think we're all on the same page, so, it was easy for us to collect notes and answer our questions.

In some instances, however, being solely focused on caring for Rhonda meant they missed obtaining information from the other participants. For instance, in both focus groups the paramedic students said that they were "fixated" on Rhonda's care, meaning they lost opportunities to gather information from the other participants. For example, FG2P2 said:

> I feel like I could have also asked [names social work participant] a few more questions about like previous falls that she may have had or anything like that… but I just got so fixated on what I was doing…I forgot to get a little bit more from the back story.

In focus group one, the paramedic and social work participants discussed how they forgot to introduce themselves and their professional status:

> FG1P3: Like we didn't introduce ourselves to you…who we are and what we do…
> FG1P1: But when you're in crisis across situations [there] needs to…be a mutual respect that that we don't have time for

that sort of stuff…I'm not going to get offended and up in arms about the fact that a paramedic did not ask who I was or…what I do.
> FG1P2: I do think it is important to some extent because…for example, if she was to go into cardiac arrest and we needed… to start compressions. It would be important for us to know your name so that we can delegate tasks.

At the same time however, these "gaps" (FG2P4) in communication were mentioned as providing learning opportunities. For instance, FG2P4 made the following comment in response to a paramedic student who felt that she did not communicate with the nursing students and hand over very well.

> What you said to us…was good…even the parts that you missed, [we] could use the information you had already given us to…piece together a rough idea, which is…what you have do when you haven't got everything you need, you sort of piece together what you've got, and what might be happening… I mean I had to get you to repeat two medications because I just didn't hear them. And [that] responsibility falls back on you, as you have to also ask questions…if we think something.

Despite the participants reflecting on what they did not do well in terms of their communication, the focus group two participants also reported that they all interacted and communicated well with Rhonda. These comments are typified by the following:

> FG2P3: I sort of felt like we…had…the same sort of…manner in the way that we talked to Rhonda and…maybe it's just as like our roles as paramedics and social workers and nurses…I don't know gentleness or empathy, but I felt that there were similarities in all of us, like we're here, it's our job…

Handover

Handover was an area that the participants welcomed as a chance to practise because some reported that they found it challenging. For instance, F1P3 stated:

> I suppose being comfortable about [handing over] because sometimes it's real scary. Especially if you're picking up a patient from a GP practice, and it's this old scary GP [all laugh] and you're like this second-year student and they give you this big, long handover, and use all these fancy words and then I don't know I feel uncomfortable [in some] situations because…they're sort of scary.

The other participants in focus group one went on to describe the benefits of practising handover.

> FG1P2: Paramedics and nurses have a lot to do with each other…
> FG1P5: We see each other every day…it should be more common to communicate better.
> FG1P4: Yeah, I also struggle with a placement is all the different medical terms we use, and it's all the same…
> FG1P4: And you guys have your own jargon within paramedicine as we do as nurses. I found that quite hard, taking handovers from you guys and I was like, what does that one mean again…So I think it'd be cool if we got to know each other interactively and then it would be more comfortable…in real life.

Suggestions for future IPE activities

The participants in both focus groups maintained that the simulation was "quite paramedic heavy" (FG2P2). The nursing participants also said that they do not normally work in pairs which was "why we were probably all over each other" (FG1P5). Both social work participants stated that they felt their role was largely redundant because Rhonda was capable of advocating for herself and required little social support. This is highlighted by the following excerpt:

> I was kind of struggling to know what my role was there…if it had been…a complex situation where it was a woman and she had kids at home that she had to leave behind… I would have felt… more comfortable in my role…I was just in hospital…with someone…a few weeks ago and her health literacy was really, really, poor…I knew what my role was in that situation because I could see that she wasn't understanding what was being told to her before surgery… whereas in this particular scenario… I wasn't comfortable in that role as a social worker. (FG2P1)

The participants in both focus groups provided suggestions for how the IPE simulation could have been improved so the students from each discipline could be more evenly involved. The nursing participants in focus group one also wanted to hand over to "a higher up nurse or…specialty nurse" (FG2P4). This participant went on to state that "[if] you guys are trying to understand what…nurses would do in that scenario, it's important…to see how we hand over and how we use the information they've given us [to] investigate [and] get our own ideas".

The nursing and social work students in focus group two also suggested changing the scenario so that they could be more involved. A patient having a more complex illness or injury was suggested as one way of achieving this.

> F2P4: Change the injury or the illness… the hips, like [if] it's fractured, displaced, popped…there's not a hell of a lot nurses can do…other from keeping them comfortable and monitoring them…so… whatever's wrong with the person… needs an investigation or something like that.
> FG2P1:…if she had had a hypo [associated with diabetes] and that's what had caused her fall, then you've got a whole lot of different scenarios…the fact that…when she gets into the hospital, if she's had a hypo and you've treated

that then…what does she normally do…being the detective…and…getting involved [in the] kind of complexities of the scenario…for me as a social worker, I think if she's having regular hypos and she's at home, that's a real problem.

The focus group one participants maintained that an IPE activity focusing on mental health would be beneficial because they felt underprepared for working in this domain. For instance:

> FG1P3: …If we do get a mental health patient and they probably could be left at home even if we have to give them medication to settle them down and the criteria means we can leave them at home, but not take them to hospital…in our guidelines it says that, if they don't think they're safe at home, they have to go.
> FG1P1: …and then [if] you are in an emergency crisis, mental, the health teams are called and that can take hours…
> FG1P3: And realistically someone could be left at home if they had like the right support networks…So, there is often a paramedic and a mental health nurse… And then the mental health nurse has a chat and if there need to be interventions…the paramedic can intervene…It'd be really cool to work with mental health nurses…because I don't really know what they do.

Discussion

Taking part in the IPE simulation increased the participants' self-confidence working as a member of an interprofessional health team, provided them with an opportunity to practise interprofessional communication and handover, and alerted them to specific areas of their own practice that needed improvement. However, the survey responses also highlighted one potentially negative result. Prior to participating in the IPE activity, 66.7% of participants disagreed or strongly disagreed with

the statement that their attitude towards interprofessional relationships was ambivalent, which increased to 100% post-simulation. This result is at odds with 100% of participants agreeing or strongly agreeing with the statement that participation in interprofessional relationship scenarios should be offered to all health and social science students. We pose one possible explanation for this disparate result. Two participants asked the focus group facilitator what the term *ambivalent* meant. Consequently, the lack of clarity around the definition of the term may potentially explain the disparate finding.

The participants reported that they enjoyed the IPE activity and the opportunity to practise their specific role in the simulation; however, the most pronounced aspect of learning reported by the participants was gaining insight into each other's scope of practice. Such a finding supports the results of other IPE research (Bridges et al., 2011; Kasperski & Toronto, 2000). In particular, the participants reported gaining insight into the role of a social worker. Due to the variety of fields where social workers are employed (e.g., mental health, child welfare, substance dependency and so on), there is a general lack of clarity about a social worker's role (Cramer, 2015). Learning about the social work profession will set the participants in good stead for the workplace where they will likely work in interdisciplinary health teams (Bridges et al., 2011).

Of interest is how the social work and paramedicine participants discussed how they considered their professions were viewed in simplistic terms. One paramedic participant said people generally viewed paramedics as "ambulance drivers". Although the profession of paramedic did originate as an ambulance driver, it has rapidly developed to become an occupation that is an "integral part of the health care system" (Williams et al., 2010). Moreover, social workers and social work students alike, have reported feeling marginalised in interprofessional care and

education, respectively (Barr et al., 2014; Hobbs & Evans, 2017). Perhaps because of the fluid and rapidly developing nature of these occupations, the social work and paramedicine participants passionately advocated for their professions.

There are also many IPE opportunities that exist for biomedical students, but social work students tend to be excluded from these (Adamson et al., 2020; Council on Social Work Education, n.d; de Saxe Zerden et al., 2017). This is unfortunate, since social workers frequently practise in interdisciplinary teams in primary health and mental health care (Adamson et al., 2020; Council on Social Work Education, n.d; de Saxe Zerden et al., 2017). Rather than solely focusing on a person's physical health, social workers consider the mental and social factors that impact on a person's wellbeing and thus, provide a valuable addition to IPE activities. After all, the term *holistic health* was repeated across both focus groups where the psychological, social, and spiritual aspects are considered to impact on a person's physical wellbeing (Zamanzadeh et al., 2015).

Moreover, prior to completing the activity, 22.2% of students agreed or strongly agreed that they felt confident in their effectiveness of interprofessional communication, which increased to 55.6% post-simulation. Interprofessional communication often calls for highly developed interpersonal and group communication skills (Krepps, 2016). Practising communication in a multidisciplinary setting before graduation will likely foster students' understanding of the need to exchange knowledge about a patient in a clear manner, so that others can make informed healthcare decisions based on that knowledge (Krepps, 2016). Furthermore, the 33.4% increase in the number of participants who strongly agreed or agreed with the statement that they felt confident in their effectiveness of interprofessional communication between the two surveys, highlights the value of

including IPE in health and social service curricula.

Almost all participants reported that handover was the area in the simulation that they did not do well. Some participants also said that handover was something they found "scary". During a clinical handover, efficient communication is necessary to ensure continuity of patient care (Bridges et al., 2011; WHO, n.d.). Providing students with the opportunity to practise written and verbal handovers improves student confidence to engage in handovers on placement (Malone & Manning, 2014). This may explain why the participants stated that practising handover was one of the highlights of the simulation and something that would have been useful prior to their clinical placements.

The participants also reported that this simulation was not ideal, as paramedic students were more heavily involved than social work and nursing participants. Participants in focus group one suggested an IPE mental health scenario would be ideal because they felt that they had not received enough mental health training in the curricula. Mental health is often siloed into one or two theory-laden lessons in health education, while students generally do not have any mental health placements prior to graduation (Smith et al., 2020). Globally, mental health care is an issue of growing concern, while paramedics are often the first on scene when it comes to treating a mental health emergency (Ford-Jones & Daly, 2020; Smith et al., 2020). Mental health is also the least favoured career path for nurses, post-graduation (Ong et al., 2017). Including an IPE activity focusing on mental health may boost students' confidence in treating a mental health emergency. Ideally, having a mental health scenario may also reduce any stigma students may have towards those who have mental health concerns and encourage more students to specialise in mental health post-graduation.

The nursing and social work participants in both focus groups said that this simulation did not provide an optimal opportunity to best highlight and practise their professional skills. Students often achieve to a greater extent when they have agency in their learning (Chateris, 2015). Providing ākonga with the opportunity to both co-design and participate in an IPE may potentially boost their investment in the activity as well as their learning. Moreover, given their positioning as learners, then ākonga may be in a more suitable position to address any gaps in their knowledge than tutors.

Evaluating the research

University IPE activities tend to target students from the more traditionally esteemed professions (medical and dental students) over those in allied professions. In this study, however, the IPE activity was specifically designed for polytechnic social work, nursing, and paramedic students, which is a strength of the research. Given most research on IPE in a New Zealand context has been centred in the university sector, then trialling an IPE activity in a polytechnic session, which is more aligned with vocational training, is also a strength of the study. However, the study is limited in that there were only a small number of participants due to the pilot nature of the study. Future studies of students' knowledge acquisition and developing confidence in IPE should endeavour to include a larger number of participants.

Conclusion

The simulation activity highlighted the many benefits of IPE, that is increasing ākonga knowledge of different health profession's scope of practice, confidence in interprofessional communication and handover while, at the same time, developing their interprofessional teamwork and communication skills. Given the positive results of this pilot, a larger

IPE activity will likely be introduced in Whitireia's School of Health and Social Service in 2022. Moreover, New Zealand's polytechnics are currently merging into one large organisation (Te Pūkenga). Given this merger, then a larger study where an IPE activity is introduced across paramedicine, nursing, and social work courses nationally, would provide further information on the educational, professional, and individual benefits of IPE, while simultaneously partially filling a gap on the benefits of IPE in polytechnic settings.

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