

RESEARCH ARTICLE

Interprofessional Learning during an International Fieldwork Placement

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Abstract

The need for competent interprofessional health care professionals is well recognised. Various educational activities have been developed to facilitate the development of interprofessional competence. In this paper we describe an interprofessional, fieldwork experience conducted in a developing country, and the learning gained by the first cohort of students who completed the five week immersion. Eight final year students from Medicine, Occupational Therapy, Physiotherapy and Speech Pathology were interviewed pre- and post-placement by an independent researcher. The transcribed interviews were analysed thematically. Findings indicated that over the placement students gained an appreciation of the skills of the other disciplines and were able to move beyond a textbook definition of what a certain profession did to acquire a real understanding of interprofessional practice. However, students reported that this understanding was predicated on their first clarifying the extent to which they were working in a transdisciplinary or interdisciplinary team, and becoming more confident in their own disciplinary contribution without reliance on formal documentation or standardised assessments. Using daily team discussions, self-reflections and discussions with clinical educators, the students learned to prioritise their busy caseload, share resources and skills, and facilitate team members to achieve therapeutic goals. The interprofessional learning took place in an intercultural context where the students learned to work with children with severe disabilities, with staff with different classroom approaches, and with interpreters, while adjusting emotionally to the level of unmet need of many of the children. Based on the students' experiences, immersion in an intercultural fieldwork experience is a useful way to facilitate interprofessional learning.

Keywords: intercultural communication, IPE, high impact learning, teamwork

Introduction

Peak health policy and service organisations, such as the World Health Organization (WHO 2010), agree that interprofessional collaboration in the clinical setting provides the

best method to meet the diverse and complex needs of patients and communities (Parsell & Bligh 1999, Davidson & Waddell 2005, Pecukonis *et al.* 2008, Solomon 2010, Bridges 2012). Interprofessional practice enables team members to share expertise and develop common goals in the provision of healthcare and has been viewed as a means to strengthen health systems and outcomes while overcoming health workforce shortages (WHO 2010, Bridges 2012).

The education of entry-level health professionals in isolated, profession-specific silos (occupational specialty protocols) has been identified as a limiting factor in the development of interprofessional health competence (Pecukonis *et al.* 2008). When health professionals graduate, they have usually been inculcated with the values and skills of their particular profession (Hall 2005). Professional boundaries, while contributing to professional identity and authority, have been identified as a barrier to effective teamwork and collaboration in clinical settings (Solomon 2010, Clark 2011). Such professional barriers emphasise differences between health professions (Hall 2005). Interprofessional practice becomes possible when health professionals understand and respect the roles of others and are less concerned about protecting professional boundaries (Hall 2005). Without effective interprofessional communication and teamwork optimal safe patient care is compromised (Jones & Jones 2011).

Opportunities are needed for health professional students to learn and work together during their entry-level education (Hall 2005, Begley 2009). Interprofessional Education (IPE) within university curricula assists health professional students from different professions to work successfully as interprofessional practitioners upon graduation, and to be better equipped to provide health care now and in the future (Hinton Walker *et al.* 1998, Frenk *et al.* 2010, Bandali *et al.* 2011, WHO 2010). Through IPE, health students can understand and experience the unique and shared skills of other health professions, and appreciate the value of cooperation and collaboration to obtain better health care outcomes for patients and clients (Pecukonis *et al.* 2008).

Various methods of IPE have been described in the literature, including teaching of health professionals on common courses (Schonfeld & Spetman 2007, Bennett *et al.* 2011), introductory IPE seminars (Rosenfield *et al.* 2011), shared tutorials or seminars (Jackson *et al.* 2006, Mitchell *et al.* 2010, Pelling *et al.* 2011), interprofessional healthcare team activities (Boyce *et al.* 2009, Playford & Hagues 2009, Bridges *et al.* 2011), and patient simulations (Bridges *et al.* 2011, Sharma *et al.* 2011). White *et al.* (2000, p121) argued that "the most effective way to learn is by doing" and that experiential learning is essential in training students. In their report on an elective live-in placement for nursing students at a recreational camp for people with multiple sclerosis, White *et al.* (2000) indicated that students found the immersion was "life-changing", in some cases yielding greater skill development in the space of one week than in an entire semester of traditional clinical experience. This finding suggests that student immersion in IPE learning situations is an effective tool to advance interprofessional health practice.

One of the richest experiential learning experiences for health students occurs during clinical /practice education placements. If health professional students learn to work collaboratively during placement, there are benefits beyond those provided in a typical classroom or theoretical learning setting. Several studies have examined the impact of short-term IPE placements in university-run training wards. For example, Pelling *et al.* (2011) examined the impact of a two-week rotation in an eight-bed IPE training ward in a hospital. Over a five-year period, 841 students completed a questionnaire at the completion of the rotation. The findings suggest that students had developed understanding of other discipline roles, better understood their own roles, and appreciated the role of teamwork. These findings were supportive of other studies of two-to-three week IPE in Sweden (Hallin *et al.* 2009, Lidskog *et al.* 2009), Canada (Charles 2004) and Denmark (Jakobsen *et al.* 2011). A follow-up study by Jakobsen *et al.* (2011) of graduates who had completed an IPE

placement as students found that these graduates perceived that the learning experience was more valuable in their longer term development of interprofessional and professional identity than they had recognised when they were students.

Fortune et al. (2013) opined that in order to prepare graduates for health professional practice in a 'supercomplex world', undergraduate programmes now need to develop innovative transitional fieldwork experiences characterised by self-direction, collaboration and negotiation. Furthermore, healthcare students need to be prepared not only to work in collaborative teams but also with ethnically and culturally diverse patient populations from a range of socio-economic backgrounds (Geelhoed 2009). Geelhoed found that immersion of healthcare students on international health missions in developing countries resulted in high impact learning, with students reporting that dealing with ambiguity stimulated new ways of thinking. McAllister et al. (2006) described a novel international interdisciplinary placement in Ho Chi Minh City, Vietnam, which aimed to develop intercultural competence of Occupational Therapy, Physiotherapy and Speech Pathology students, while also assisting with capacity building among Vietnamese staff. Although the current project built upon the knowledge gained by McAllister et al., it differed in its focus, which was on the interprofessional rather than intercultural learning aspects. It also used pre- and post-placement interviews, whereas McAllister and her colleagues used critical incidents elicited from students post-placement to gain an understanding of the impact of the Vietnamese placement on cultural competence.

Consistent with the views of Fortune *et al.* (2013) and Geelhoed (2009) and building upon the model described by McAllister *et al.* (2006), the University of Queensland, Faculty of Health Sciences developed an interprofessional placement in Hue, Vietnam, which included final year Medicine, Occupational Therapy, Physiotherapy and Speech Pathology students. The specific aim of the study was to explore students' perceptions and experiences of meeting their interprofessional aims in an intercultural context. This paper adds to the findings of earlier studies in a number of ways. First, it looks at an IPE student team, with more disciplines participating. Second, it specifically focuses on the IPE goals, learning processes and outcomes rather than on the intercultural learning process. Finally, the focus was on understanding how novel fieldwork placements contribute to the development of an interprofessional team.

Methods

Design

This study was part of a larger mixed methods study that utilised both quantitative and qualitative methods. This paper reports on the qualitative analysis of student IPE learning derived from semi-structured, face-to-face interviews. An earlier paper reported on the perspectives of students and clinical educators on IPE supervision during the international placement (Chipchase *et al.* 2012). Students reported that the ideal IPE supervisor was supportive, sensitive and realistic in their expectations of all students, and needed to have had prior experience working in an IPE team. Students also stressed the importance of receiving supervision from their own discipline (Chipchase *et al.* 2012).

Participants

Eight pre-entry health professional students, two each from Occupational Therapy, Physiotherapy, Speech Pathology and Medicine, applied to be selected for the fieldwork placement and consented to participate in this project. The students had an average age of 22.38 (SD = 3.5), were female and had completed prior clinical placements. All had previously travelled overseas at least twice, primarily for holidays with family but also to

take part in a school trip, sporting event or academic conference. Six students spoke another language as well as English. All had previously worked in full-time, part-time or casual employment. Pseudonyms are used for the students when presenting quotes from their interviews. They are not identified by discipline here to ensure anonymity.

Context of the Interprofessional Fieldwork Placement

The students completed a five-week, full-time placement in Hue, Vietnam, in collaboration with the Office of Genetic Counselling and Disabled Children (OGCDC), at the University of Hue, Hue College of Medicine and Pharmacy. At the time, there were a number of medical training programmes and two physiotherapy training programmes in Vietnam, as well as one newly commenced speech pathology training programme. There was no occupational therapy training programme in Vietnam. The students were placed in three different settings, a school for children with disabilities and two orphanages. The students all spent time together in each setting and were not split up into subgroups. Within the orphanages, there were caregivers but no regular health professional staff. The OGCDC employed teachers and locally trained physiotherapists. Each morning, the students provided classroom interventions for some of the approximately 300 children with a range of severe disabilities including cerebral palsy, autism and epilepsy. The interventions included guidance with positioning children to enable successful feeding and play, developing interactive games to enhance the children's social and communication skills, and running workshops on epilepsy management for staff. Local interpreters paid by the Australian university assisted students in their daily interactions with children, staff and families.

Three clinical educators (CEs) were each present for two or three weeks of the placement, thus providing two CEs for students at all times. Clinical educators were qualified and registered health professionals who provided direct supervision of students in their day-to-day clinical work. They modelled therapeutic techniques for students, observed students' work with the children, reviewed the students' treatment plans, facilitated interprofessional practice and provided feedback on students' performance. The students stayed as a group at one of two hotels for the duration of the placement, ate together and shared taxis to and from the workplace. The students ate in local cafes, shopped in local shops and travelled to various local places during their weekends. Each evening the students collaboratively prioritised, planned and prepared interventions and resources for the following day. Prior to the commencement of the placement, the students had begun to work together as a group, sharing their resources and knowledge, and collaborating on their travel plans and other administrative details. Learning support prior to the placement included a briefing session on Vietnam and its culture and workshops on intercultural communication, team functioning and working with children with a disability. A two-hour workshop on children with a disability was presented by four experienced CEs, including the three CEs who accompanied students to Vietnam.

Data Collection

Individual semi-structured interviews with students were undertaken two weeks before and after the placement by an experienced qualitative researcher who was neither an academic staff member nor a clinical educator. Pre-placement interviews explored a range of issues about learning before and during the fieldwork placement. Post-placement interviews explored perceptions of these same issues after completion of the placement.

The following questions were used during the pre-placement interviews:

- 1. Tell me about your aims for this interprofessional intercultural placement.
- 2. To what extent are you prepared for this placement?

- 3. What type and amount of supervision do you think would most assist you? What type of supervision would not be helpful?
- 4. What challenges are you anticipating for (a) the group; and (b) yourself as an individual?
- 5. What strategies, if any, do you plan to use to overcome the challenges?
- 6. Is there anything else that would ensure the success of this project?

The following questions were asked during the post-placement interviews:

- 1. To what extent did you achieve your aims for this interprofessional intercultural placement?
- 2. Can you describe something that happened in Vietnam that was very important to your learning?
- 3. With hindsight would any other education, training or experience have better prepared you for this placement?
- 4. What type and amount of supervision assisted you most? What type of supervision was not so helpful?
- 5. What were the particular challenges for this interprofessional intercultural placement in Vietnam for (a) the group and (b) you individually?
- 6. What strategies, if any, did you use to overcome the challenges? To what extent were they successful?
- 7. Is there anything else that would ensure the success of future UQ SOM and SHRS intercultural interprofessional projects in Vietnam?

When students consented to participate in the study, they were forwarded the interview schedule, enabling them to reflect on and prepare their responses prior to their interview. In particular, for the current study regarding interprofessional learning the students were asked: "Tell me about your aims for this interprofessional intercultural placement". The interviewer encouraged the students to share their individually developed aims and only prompted the students to reflect on criteria for evaluating the successful achievement of their aims if the student did not comment on them. The participants were also asked about challenges in the placement, and any strategies used to overcome them. Interviews were conducted at a mutually agreed time and place, usually a quiet room at the university or a hospital. The average time for each pre- and post-placement interview was 30 minutes.

Data analysis

The 16 interviews were digitally recorded and transcribed verbatim by a professional transcription service. For the present study, data from the pre- and post-placement student interviews addressing their interprofessional learning aims for the intercultural placement and challenges to and perceived extent of achieving these IPE aims were extracted for analysis. (As mentioned earlier, another paper has specifically examined supervision.) The transcripts were analysed thematically using a five-stage framework approach described in detail in Chipchase *et al.* (2012) and based on Pope *et al.* (2007). The five-stage framework approach entails familiarisation with the raw data, identifying the thematic framework, coding line by line against the framework, organising codes into themes and interpretation of themes. The research team all contributed to the analysis and interpretation and were sensitive to the students' responses to open-ended questions.

Findings

The findings are presented as themes based on the students' experiences of meeting their interprofessional aims. The themes were arrived at inductively and are not an artefact of

the questions asked in the interviews. The first theme was an overarching theme of adapting to the intercultural context of healthcare provision. Four other interrelated themes were: (a) developing interprofessional teamwork skills; (b) developing confidence in one's professional contribution to the team; (c) clarifying the nature of the team; and (d) overcoming challenges to team functioning. These themes are now explained and illustrated with direct quotations from the student participants.

Adapting to the intercultural context of healthcare provision

Students identified that their interprofessional learning took place in an intercultural context with a number of challenges. The students also perceived that they adapted to the different context of healthcare provision in Hue, Vietnam. A challenge for the students was the level of need of the clients. Clare reflected on the emotional demands they faced working with children whose severe disability was only one of several problems as "you were surrounded by desperate children in desperate poverty [and in addition]... a lot of these children had things like scabies and lice - and trying to manage ...". Anne also found that "it was quite overwhelming and there were a lot of kids at one particular place which needed assistance ... how were we going to achieve our goals ... or make a difference?"

The physical environment also presented a challenge for the students. Elizabeth summarised the climatic conditions they experienced: "Just the physical demands of the environment that we were working in was actually particularly challenging. It was ridiculously hot and dirty and dusty and dry, and just very draining to even be out in that type of heat".

The students worked each day with a number of different people, including teachers, nurses, overseas trained health professional volunteers, locally trained physiotherapists, nuns and family members. Kate echoed the sentiments of the group when she said they "put strategies into place for the professionals over there in a respectful way. So that we're not imposing on their roles ... and [by] knowing our boundaries". Still, some local practices for managing children with a disability in the classroom were difficult for the students to understand. For example, staff preferred children to lie on the floor rather than using available wheelchairs. As Emily observed: "It's just very frustrating ... we got the wheelchairs down and got the children in them and ... just the happiness on their face was so obvious. ... They saw it was good ... all the staff even admitted yeah, this is good, [but] we can't do this every day". Staff explained to Emily that the equipment was only used on special occasions as it was too difficult for them to place the children in wheelchairs each day.

The students' most anticipated intercultural challenge was that not speaking the local language would hinder their work, in spite of paid interpreters being present. On their return all students concurred with Kate, who stated that "without the interpreters, it would have been really, really challenging". On reflection, although the interpreters were very helpful, Elizabeth observed how "the language barrier turned out to be really quite a substantial issue ... you just missed so much of what was going on in the peripheries...".

Despite the challenges, the students identified that they adapted to the intercultural context of healthcare provision and partly attributed this to the pre-placement workshops on Vietnam and its culture and advice on how to work with interpreters. All students explained that they had travelled overseas at least twice and so were prepared for "cultural immersion" (Anne). Several had previously travelled to Southeast Asia. Erin found that the Vietnamese people were friendly and easy to work with. Although she carefully observed the dynamics of her communication with the Vietnamese staff via the interpreters, she did not recognise any instances of them being hesitant or embarrassed. Erin said that "the interpreter seemed to interpret directly and didn't deviate, so I didn't feel that I was saying something that may be incorrect or inappropriate". Her impressions were supported when the teachers asked questions of the students and followed through on recommendations made with the help of interpreters.

Developing interprofessional teamwork skills

Prior to their placement, each student participant explicitly aimed to develop skills in working successfully in the interprofessional team, and some identified potential challenges to achieving their aims. Emily said that although they "had lectures about what each other does," they had not had an opportunity to work together. Kate previously had only worked with one other profession and was aware that the team dynamics would change in a larger team, and she considered how to "overcome some of the obstacles that we might face as a team". Erin anticipated that they would "really learn how to work and collaborate with other people". Maree described the process she anticipated they would follow to develop as an effective team:

I haven't had much experience working with occupational therapists and speech therapists before; so working out their role ... their knowledge and backgrounds that they can bring to the team. Then ... work out how each of our roles can work together.

Despite the challenges, the aims which the students identified pre-placement about how to develop as an interprofessional team were largely achieved on the placement. Elizabeth reflected post-placement, "I guess that I had textbook knowledge of what they [allied health team members] looked after ..., but I think now I have ... an appreciation of what the different ... rehab sciences especially can contribute to health care." Maree reflected on her learning when she said that "we met our IP goals quite well in the end, and my personal goals around working with a team." Pre-placement, Maree said her interprofessional aims were "working out ... the knowledge and backgrounds ... [and] strengths" that other team members bring to the team then "working [out] how we can all work together."

The students gained an appreciation of how the skills of the other team members both benefited their clients and increased the effectiveness of their own interventions. For example, many of the children in one of the facilities had marked athetoid movements associated with cerebral palsy, and were often lying on the floor on mats. One of the students, Anne, commented that "the physio [students] had said, 'For this particular child you should position him like this' ... and by the end, that was sort of second nature [for me to be able to do]." Kate reflected on one of the fundamental reasons for working in interprofessional teams when she said that "if you are working in a team, share your goals with the team and they can help you to achieve them."

Developing confidence in one's professional contribution to the team

The students identified that one unanticipated barrier to interprofessional practice was their initial lack of confidence in their own discipline-specific role. Clare said, "I think that none of us were confident enough or knowledgeable enough or secure enough in what the actual role of our profession was, in order for us to be effective as a team." Contributing to the lack of confidence in their roles was a lack of professional precedence, especially at the orphanages which had the greater need for services. Not only were local staff and some students unfamiliar with some professions (e.g., occupational therapy), but there was a paucity of client information and a lack of standardised assessments to assist students to confirm their interprofessional roles in established healthcare settings. Kate said: "There was no background information, no case files. . . . [We] had to start from scratch . . . [because of] the severity of the clients, and just relying on observations only to give us knowledge about them." Students communicated with their CEs who guided them in building their roles and in undertaking suitable assessments and interventions.

Clarifying the nature of the team

An associated challenge was the lack of clarity about the extent to which they were working in an interdisciplinary team (i.e., one in which individual professionals worked collaboratively on shared client goals but in their own unique roles) or a transdisciplinary

team (i.e., one in which the professionals share many roles). Some students experienced a tension between wanting to further develop their profession's unique individual assessment and intervention skills and providing suitable transdisciplinary activities which would address the needs of larger numbers of children in classroom settings. Through discussion of the many tasks facing them and negotiation about which skills could be shared, the team perceived that adopting transdisciplinary roles was a practical way to address the basic rehabilitation needs of a large number of children. Maree stated: "We had specific things that we wanted to do and we realised that the only way we were going to be able to achieve it in the five weeks was to teach the other areas [disciplines] or let them know what we wanted to do or what we had to achieve and our aims and how they could help." Transdisciplinary roles included strengthening and positioning (taught by the physiotherapy students), use of communication devices to elicit "yes/no" responses and giving choices (taught by the speech pathology students), and sensory awareness and gaining attention before participation (guided by the occupational therapy students). At other times, students took opportunities to develop their unique professional skills (e.g., the medical students worked at a local hospital; physiotherapy students provided individual movement therapy; occupational therapy students introduced play; speech pathology students worked on swallowing). Although the medical students' contribution to the transdisciplianry roles and to discussions about interventions was valued by the allied health students, Kate, Clare and Elizabeth commented that it was harder for medical students to find an interdisciplinary role at the orphanages, for although the medical students gave advice on sick children they were unable to treat really sick children without qualified medical supervision. Further, there was no doctor on the clinical educators team.

Overcoming challenges to team functioning

All students had strategies for dealing with challenges to team functioning. Showing respect for others was frequently mentioned. Erin said it was important to respect "other people's space there. . . . just respecting the other people, respect their ideas, respect their opinions, their thoughts, their discipline. Like, just making sure that you are really consciously thinking of how what you say or what you do might impact upon other people." Similarly Maree perceived that team challenges would be met by "respecting one another and listening will be a big part. Listening to other people and their opinions and taking them on board and working out for yourself whether you agree and disagree. I suppose [finding a] respectful way to let someone know if you don't agree." Anne encapsulated some other commonly identified strategies prior to departure when she said, "if somebody was to have an issue for some reason, it's probably best to discuss it early on rather than [let it] grow into a larger problem than it really is. . . . I think also just being really flexible, open minded and easy going with everyone else will definitely help."

The development of rapport through dealing with complex yet shared challenges (working within a different health system, working with children with multiple needs, and having limited local language skills) helped the team to develop. Being far from home and in constant contact with each other provided an added imperative to be able to work together as a team. Furthermore, the respect team members accorded each other also helped the team become more cohesive. As Clare said, "I thought that was a real strength of the group in terms of nobody was set aside or disregarded or anything like that." All students commented on how the placement assisted them to work with other team members. Clare commented that it was "a really collegiate friendly group that you could feel comfortable talking about . . . concerns about what we were seeing."

The team also learned to prioritise and share resources. For example, Kate described how "we'd kind of discuss with each other highest priority for who needed the interpreter. Then we'd divide their time. That seemed to work quite well." As Kate said, "It took us a little while just to develop our roles and responsibilities, ... mainly midway through and towards

the end we really worked well as a team." The development of a cohesive team occurred once role clarity was established by using discussion, negotiation and prioritising.

Some of the student participants reported that an additional challenge was working within multiple teams across the three placement facilities in Hue. Within the larger facility, where the teams included teachers, health professionals and carers, the students reported that they intentionally adopted the same strategies they used in their interprofessional student teams, i.e., open communication (Maree, Melanie, Erin, Clare), respect for individual contributions (Erin, Elizabeth, Clare), provision of resources to aid the ongoing work of the teams at the centres (Kate, Maree, Clare), and assistance to others to reach their goals (Emily). Table 1 contains quotations illustrative of these strategies.

Apart from observing the end results of their interventions, the team used frequent feedback from CEs, team discussion and self-reflection to evaluate the extent to which they achieved their aims. As Kate, one of the students, said, "… just our own self-reflections and discussions as a team, and also feedback from the clinical educators were good indicators of our success as well'. Additional reflection on practice also occurred for the students via after-hours Skype sessions with staff in Australia.

Erin summed up the interprofessional experience: "In the end we did have ... a good idea of why we were there, and how we could fit into the interprofessional team and into the cultural setting."

 Table 1 Examples of the strategies adopted by students.

Strategy	Example
Open communication	Melanie: "Just through discussions with each other we talked about what was working"
Respecting others	Clare:"everyone showed each other a lot of respect and a lot of friendship and a lot of support"
Providing resources	Maree: "the last day and second last day when we went to each of the sites and had a meeting with the staff and presented them with the information we were going to be leaving them with."
	Clare: "[The medical students] did a very simple translation of basic first aid – a seizure management poster [and left it for the staff]."
Assisting others	Emily: "Yeah, sometimes we just got in there and helped out if the other girls wanted to do something."

Discussion

This interprofessional placement in an international setting provided the vehicle for students of four health professions to "learn with, from, and about each other in an interprofessional environment" (Bandali *et al.* 2011, p75). They learned about the strengths of their individual disciplines, about other disciplines and their contributions to health care, and how to work together to achieve shared client-centred goals. The novel fieldwork placement in Vietnam challenged the students to collaborate, negotiate and perform as a productive team in order to meet their goals; that is, to deliver interventions to a large number of children with high-level needs in classroom settings and to leave resources for the local staff. In this unfamiliar setting, the students interacted with each other on an almost continuous basis for the duration of the placement. The students were not isolated into separate professional departments during the day, such as a Physiotherapy Department and a Speech Pathology Department; they were literally in each other's company seven

days per week for almost every waking moment. Such interactions, outside of personal and professional silos (occupational specialty protocols) have been posited as a powerful way to develop interprofessional competence (Pecukonis *et al.* 2008, Begley 2009).

The post-placement interviews demonstrated the growth and development of the students' interprofessional competence. The students could see that their interprofessional practice was beneficial to their clients and to the effectiveness of their discipline-specific treatment. One example of this was seeing how the input of the physiotherapy students to position the children facilitated the speech pathology students' efforts to enhance a child's swallowing. As we know, there are barriers to practising health professionals working interprofessionally, especially with the different disciplines retreating into their specialist routines (see Pecukonis *et al.* 2008, Solomon 2010), so the development of interprofessional competence by the students is an important outcome of this educational programme. However, given the findings of researchers such as Jakobsen *et al.* (2011), that the value of immersive IPE placements is appreciated much more once participants have entered the workforce, a follow-up assessment should be made of this student cohort.

The growth in the professional competence of the students in this project was also apparent. In previous placements in the Australian context, students had had access to extensive resources including standardised assessments and particular treatment protocols. And, of course, in the Australian context, in the main English was spoken by clients, families and other staff. In Hue, students learned to be effective health practitioners in the absence of such resources. Observation and reflection skills were enhanced.

Just as Jakobsen *et al.* (2011, p1) reported, "Knowing more about the other professions clarified my own profession," so too it was for these students. These were not inexperienced students. All were in the final year of their university programmes and had undertaken prior clinical placements. Yet, in a totally new environment, working with clients, families and staff from a different culture and language group, the students needed to identify and delineate their roles. The students described the development of collaborative planning and respect for all members of the team. This is similar to the report by Jones & Jones (2011), who describe how a service improvement project on a hospital rehabilitation ward assisted in the development of collegial trust and shared client objectives. Good team dynamics and respect can help mitigate the profession-centric nature of most health professional training.

As did other students on international placements in Vietnam (McAllister *et al.* 2006, Whiteford & McAllister 2007), our students described several cultural factors that challenged their ideas of therapy, and of the level of success they could achieve on the placement. The nuances of language were problematic, despite the availability of interpreters. The level of need of the children and the number of children in need, combined with minimal documentation and the total absence of standardised assessments, posed challenges for the students, especially in the beginning of the placement. Furthermore, the lack of resources available for therapists, staff or families was at times challenging. However, the students were resourceful, such as when they used discarded drink bottles as play equipment for their games with the children.

Somewhat surprisingly, the intercultural issues proved less challenging for our students than had been expected in the light of other reports of intercultural international fieldwork (e.g. McAllister *et al.* 2006), and this despite students observing and having to contend with substantial differences in practices, such as local staff not using wheelchairs. A number of factors may have contributed to their cultural adaptation including previous international travel experience to Asia (the students were seasoned travellers and the majority had travelled overseas more than twice with family or friends), and their having received pre-placement training in intercultural competence and how to resolve intercultural communication difficulties. The pre-placement workshops held prior to the students'

departure also provided the opportunity for the group to develop cohesion; such cohesion may have provided an additional mechanism for debriefing, reflection and support. Positive cultural experiences outweighed the negative ones; the students were able to accept that people of different cultures have different resources available to them and different ways of dealing with thorny issues in life.

On review of the learning experiences of the students who participated in this intercultural, interprofessional, international placement, it was decided to retain and build upon this placement experience in future years. Transformational changes were observed by the student participants. The students described how the placement facilitated innovative thinking, and how it enriched their perspectives on health care. Whether this learning is unique to international, interprofessional placements is a question needing further examination. While the first student group was small in number, and consisted of well-travelled female students, the subsequent, and equally successful, placement was larger, included one male student and one first-time overseas traveller.

A limitation of the study is that the findings may not be transferrable outside the interprofessional and intercultural context of the fieldwork placement, although details of the Australian students and their placement are given to assist in replication for a similar study. The sample was a small convenience sample. Nevertheless, the richness of the data is derived from 16 individual interviews and dual foci on intercultural and IP fieldwork placement. Rigour was exercised through triangulation of data collection from four health professions and data analysis and interpretation by five researchers from a range of professional backgrounds.

Conclusions

Interprofessional, intercultural international fieldwork placements for health sciences students provide an immersive learning environment to equip graduates to work successfully in healthcare services needed in the global world of the future. We contend that these placements extend and prepare students for work in the 'supercomplex world' that is, and will be, our reality.

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References

Bandali, K., Niblett, B., Pok Chi Yeung, T. and Gamble, P. (2011) Beyond curriculum: embedding interprofessional collaboration into academic culture. *Journal of Interprofessional Care* **25**, 75–76. doi:10.3109/13561820.2010.503948.

Begley, C.M. (2009) Developing inter-professional learning: tactics, teamwork and talk. *Nurse Education Today* **29**, 276–283. doi:10.1016/j.nedt.2008.09.006.

Bennett, S., Hoffmann, T. and Arkins, M. (2011) A multi-professional evidence-based practice course improved allied health students' confidence and knowledge. *Journal of Evaluation in Clinical Practice* **17**, 635–639. doi:10.1111/j.1365-2753.2010.01602.x.

Boyce, R.A., Moran, M.C., Nissen, L.M., Chenery, H.J. and Brooks, P.M. (2009) Interprofessional education in health sciences: The University of Queensland Health Care Team Challenge, *Medical Journal of Australia* **190** (8), 433–436.

Bridges, D.R. (2012) Mapping and integrating online interprofessional teaching Strategies to achieve interprofessional student competencies. *Health and Interprofessional Practice* **1** (3), 2159–1253. doi:10.7772/2159-1253.1030.

Bridges, D.R., Davidson, R.A., Soule Odegard, P., Maki, I.V. and Tomkowiak, J. (2011) Interprofessional collaboration: three best practice models of interprofessional education. *Medical Education Online* **16** (6035). doi:10.3402/meo.v16i0.6035.

Charles, G. (2004) *Interprofessional rural program of BC final report*. British Columbia Academic Health Council.

Chipchase, L., Allen, S., Eley, D., McAllister, L. and Strong, J. (2012) Interprofessional supervision in an intercultural context: a qualitative study. *Journal of Interprofessional Care* **26**, 465–471. doi:10.3109/13561820.2012.718813.

Clark, P.G. (2011) Examining the interface between interprofessional practice and education: lessons learned from Norway for promoting teamwork. *Journal of Interprofessional Care* **25**, 26–32. doi:10.3109/13561820.2010.497751.

Davidson, R.A. and Waddell, R. (2005) A historical overview of interdisciplinary family health: a community-based interprofessional health professions course. *Academic Medicine* **80**, 334–338.

Fortune, T., Ryan, S. and Adamson, L. (2013) Transition to practice in supercomplex environments: are occupational therapy graduates adequately prepared? *Australian Journal of Occupational Therapy* **60**, 217–220. doi:10.1111/1440-1630.12010.

Frenk, J., Chen, L., Bhutta, Z.A., Cohen, J., Crisp, N., Evans, T. *et al.* (2010). Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. *Lancet* **376** (9756), 1923–1958.

Geelhoed, G.W. (2009) Transformational Learning in Health Care Students through International Service in Developing World Environments. [Dissertation] The George Washington University.

Hall, P. (2005) Interprofessional teamwork: professional cultures as barriers. *Journal of Interprofessional Care Supplement* **1**, 188–196. doi:10.1080/13561820500081745.

Hallin, K., Kiessling, A., Waldner, A. and Henriksson, P. (2009) Active interprofessional education in a patient based setting increases perceived collaborative and professional competence. *Medical Teacher* **31**, 151–157. doi:10.1080/01421590802216258.

Hinton Walker, P., Baldwin, D., Fitzpatrick, J.J., Ryan, S., Bulger, R., DeBasio, N. *et al.* (1998) Building community: developing skills for interprofessional health. *Nursing Outlook* **46** (2), 88–89.

Jackson, C.L., Nicholson, C., Davidson, B. and McGuire, T. (2006) Training the primary care team – a successful interprofessional education initiative. *Australian Family Physician* **35**, 829–832.

Jakobsen, F., Hansen, T.B. and Eika, B. (2011) Knowing more about the other professions clarified my own profession. *Journal of Interprofessional Care* **25** (6), 441–446. doi:10.3109/13561820.2011.595849.

Jones, A. and Jones, D. (2011) Improving teamwork, trust and safety: an ethnographic study of an interprofessional initiative. *Journal of Interprofessional Care* **25**, 175–181. doi:10.3109/13561820.2010.520248.

Lidskog, M., Löfmark, A. and Ahlström, G. (2009) Learning through participating on an interprofessional training ward. *Journal of Interprofessional Care* **23**, 486–497. doi:10.1080/13561820902921878.

McAllister, L., Whiteford, G., Hill, B., Thomas, N. and Fitzgerald, M. (2006) Reflection in intercultural learning: examining the international experience through a critical incident approach. *Reflective Practice* **7**, 367–381. doi:10.1080/14623940600837624.

Mitchell, M., Groves, M., Mitchell, C. and Batkin, J. (2010) Innovation in learning: an inter-professional approach to improving communication. *Nurse Education in Practice* **10**, 379–384. doi:10.1016/j.nepr.2010.05.008.

Parsell, G. and Bligh, J. (1999) The development of a questionnaire to assess the readiness of health care students for interprofessional learning (RIPLS). *Medical Education* **33**, 95–100. doi:10.1046/j.1365-2923.1999.00298.x.

Pecukonis, E., Doyle, O. and Bliss, D.L. (2008) Reducing barriers to interprofessional training: promoting interprofessional cultural competence. *Journal of Interprofessional Care* **22**, 417–428. doi:10.1080/13561820802190442.

Pelling, S., Kalen, A., Hammar, M. and Wahlström, O. (2011) Preparation for becoming members of health care teams: findings from a 5-year evaluation of a student interprofessional training ward. *Journal of Interprofessional Care* **25**, 328–332. doi:10.3109/13561820.2011.578222.

Playford, D. and Hagues, I. (2009) Problem-based-learning effectively teaches patient-centred interprofessional care to medical, nursing and allied health students [online]. Focus on Health Professional Education: A Multi-disciplinary Journal 10 (3), 51–56.

Pope, C., Ziebland, S. and Mays, N. (2007) Analysing qualitative data. In *Qualitative Research in Health Care* (eds. C. Pope and N. Mays) (pp63–81) Oxford: Blackwell Press.

Rosenfield, D., Oandasan, I. and Reeves, S. (2011) Perceptions versus reality: a qualitative study of students' expectations and experiences of interprofessional education. *Medical Education* **45**, 471–477. doi:10.1111/j.1365-2923.2010.03883.x.

Sharma, S., Boet, S., Kitto, S. and Reeves, S. (2011) Interprofessional simulated learning: The need for 'sociological fidelity'. *Journal of Interprofessional Care* **25**, 81–83. doi:10.3109/13561820.2011.556514.

Solomon, P. (2010) Inter-professional collaboration: passing fad or way of the future? *Physiotherapy Canada* **62**, 47–55. doi:10.3138/physio.62.1.47.

Schonfeld, T.L. and Spetman, M.K. (2007) Ethics education for allied health students: an evaluation of student performance. *Journal of Allied Health* **36** (2) 77–80.

White, M.J., Kouzekanani, K., Olson, R. and Amos, E. (2000) Camp Can-Do: outcomes of an experiential learning experience. *Nurse Educator* **25**, 121–124.

Whiteford, G.E. and McAllister, L. (2007) Politics and complexity in intercultural fieldwork: the Vietnam experience. *Australian Occupational Therapy Journal* **54**, S74–S83. doi:10.1111/j.1440-1630.2006.00607.x.

World Health Organization (WHO) (2010) Framework for Action on Interprofessional Education and Collaborative Practice. Geneva, Switzerland: World Health Organization.