Preparing students for health and social care practice through interprofessional learning

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It is well accepted that health and social care professionals work under conditions of complexity and uncertainty. This reality shapes the education of students, which aims to equip them for such practice. Part of this complexity arises from having to work with others from a range of other health professions, often with very different professional assumptions about ‘health’ and how health and social care should be provided. The research described in this paper pertains to a compulsory course for second–year occupational therapy and social work students. Located early in their programs, before substantial experience in practice contexts, the course aims to increase students’ readiness for interprofessional practice through both content and learning together. Action Research (AR), a well-established methodology for enhancing quality in learning and teaching, was used to make and evaluate systematic changes to the course. Through two AR cycles, we first gained an understanding of students’ preparedness for interprofessional learning using established scales and then used open-ended questions to elicit their experiences of learning together. We found that explicitly using three models of health provided an important scaffolding for promoting students’ identity formation as occupational therapists or social workers, in that it helped them to locate themselves and other profession with whom they might work. Strengthening students’ professional identity and understanding of the perspectives of other health professionals, as well as understanding health as a complex concept, is important for preparing them for the complexity and uncertainty that arises from working with other health professionals.

Keywords: Interprofessional learning, interprofessional education, preparing students for complexity of practice, scaffolding learning.
Educating students for the complexity and uncertainty of health and social care

Contemporary health and social care professionals face significant challenges as the systems within which they work become more complex and multi-faceted. As argued by Turpin and Higgs (2013), ‘Professional practice is complex and health professionals need to consider the range of factors that impact upon client outcomes when planning and delivering services.’ (p. 354). In Australia, increasing complexity in health and social care has been linked to a range of contextual factors such as an ageing population, heightened patient expectations, greater prevalence of chronic diseases and on-going shortages in the health workforce, particularly in rural and regional practice contexts (Department of the Prime Minister and Cabinet, 2014; Brownie, Thomas, McAllister & Groves, 2014). This increasing complexity contributes to the ‘variable and unpredictable nature of care’ (Buetow, 2011, p. 873).

A renewed emphasis on Interprofessional Education (IPE) within the Australian higher education sector has resulted from the aim of building a future health and social care workforce to meet these challenges of complexity (The Interprofessional Curriculum Renewal Consortium, 2014). It is well recognized that IPE is important in preparing health and social care students for future collaborative practice in a range of contexts (Foster & Clark, 2015; Gould, Lee, Berkowitz & Bronstein, 2014; Pockett, 2010; Pollard & Miers, 2008; Williams et al, 2011). There is a burgeoning international literature on IPE outcomes, including studies of pre-qualifying collaborative learning in the university context (Adams, Hean, Sturgis & Clark, 2006; Pollard, Miers & Gilchrist, 2004; Pollard & Miers, 2008; Stepney, Callwood, Ning & Downing, 2012). However, although interprofessional working is a valued response, it also adds new layers of complexity and uncertainty, such as difficulties attributed to professional differences, hierarchy and status (McAuliffe, 2014).

Research methodology

In this research, we adopted an Action Research (AR) methodology to explore the IPE aspect of a second-year course for health and social care professionals. Through this exploration, we also aimed to contribute to a broader understanding of IPE early in professional programs. AR can be used to systematically investigate and make changes in practice (Efron & Ravid, 2013) and is “appropriate as a vehicle for quality enhancement in education” (Kember, 2000, p. 24). AR is variously described as having cycles of action and reflection. Classically, Carr and Kemmis (1986) described AR as proceeding “through a spiral of cycles of planning, acting, observing and reflecting” (p. 165). More recently, Stringer (2007) explained that AR “provides people with a means to take systematic action to resolve specific problems” (p. 8, italics in original) and involves a “look, think, act” routine” (p. 8). After describing the setting and context, we use the look, think, act framework to present the two action research cycles we undertook.

Setting and context

The research was undertaken at a major metropolitan university that has provided both occupational therapy (OT) and social work (SW) education since the 1950s. University education for both disciplines began about the same time and both value caring for the vulnerable as a key aspect of professionalism. The SW discipline has traditions of charity, social action (Hugman, 2010) and “assisting the downtrodden” (Lonne, 2009, p. 1). Its focus
has been on marginalized and disadvantaged groups, often advocating and caring for women and children within community settings. Anderson and Bell (1988) examined the history of OT in Australia, which began in the early 1940s as a discipline in response to the physical and mental rehabilitative needs of soldiers returning from the Second World War. Therefore, while SW formed within the context of community action in response to social disadvantage, occupational therapy was born under the banner of science in hospital settings.

The course under investigation has been compulsory for OT and SW students in the second year of their respective programs for more than two decades. The historical backgrounds highlight the commonalities but also the divergences between the two professions that have shaped professional purpose and identity in unique ways. The OT program emphasizes definitions of health and disease based on science and individual phenomenology, while the SW program engages with diffuse structural and political explanations. Not limiting itself to discipline-specific concerns, the design of this course broadly explores varying health perspectives in both historical and contemporary contexts, and reflects on their assumptions, contributions and limitations. It aims to develop in students a critical understanding of the concept of health and an appreciation of different approaches to health care. It uses the following three models of health (Taylor, 2008) as a theoretical framework to assist students in developing this complex understanding:

- Biomedical, in which the concept of health is understood as the absence of disease in the body;
- Biopsychosocial, which emphasizes the health and wellbeing of the individual in the context of their environment (e.g. physical & social); and
- Socio-ecological, which focuses on the structure of society and how this affects the health of populations.

The course is structured to provide interprofessional education to students, who mostly come from OT and SW, but also includes students from other programs who choose the course. The professional backgrounds of the teaching team were SW and OT. While each member had a primary professional qualification and experience in one or other discipline, all had a blend of experience of both disciplines through avenues such as research, training and professional experience. All were committed to and had extensive experience of interprofessional practice, as well as a firm commitment to IPE. We considered ourselves practitioner-researchers with respect to both undertaking research relevant to the fields of health and social care and using the AR process to systematically explore and enhance the professional education of OT and SW students. McNiff (2013) argued that “improving knowledge and learning is the basis for improving practice” (p. 73) and claimed that practitioner-researchers have a responsibility to exercise their influence. Through two AR cycles, we combined our own observations and experiences of teaching this course with information systematically gained from students. These cycles are described.

**Cycle One**

The goal of the first cycle was to understand students’ attitudes to and experiences of learning in an interprofessional context. Although as health and social care professionals ourselves, we knew the importance of understanding different perspectives for successfully working in multi-disciplinary teams, we did not have a good sense of how students in the early part of their professional programs might approach this and, as educators, how best to prepare them. Although this course had been compulsory for both OT and SW students for many years, the
The findings of the first cycle are reported in detail elsewhere (Lynch, Spermon, Turpin & Meissner, 2014); an overview is presented here. We collected pre-post data regarding students’ experiences through a survey that included two of the three scales from the University of the West of England’s (UWE) Entry Level Interprofessional Questionnaire (ELIQ) (Pollard, Miers & Gilchrist, 2004) (the first scale, Communication and Teamwork, was more relevant to a clinical setting and not appropriate for class-based education, so not used in this research). The Interprofessional Learning scale addressed students’ attitudes to learning in an interprofessional context and the Interprofessional Interaction scale investigated students’ existing perceptions of how health and social care professionals relate to each other. Each scale has nine items, which are rated on a five-point likert scale from strongly agree to strongly disagree. Additional open-ended questions, administered only at the end of semester, addressed student’s overall perceptions of the course and their understanding of their own profession and the other profession, as well as attitudes towards working together in their future practice.

**Look**
As expected for a course early in their programs, we found no significant changes in students’ perceptions of professional interactions. However, significant differences were found in their attitudes to learning in an interprofessional context. The results indicated that, after the course, students were less positive about interprofessional learning.

Responses from the open-ended questions were inductively coded and four themes were generated. These were labelled: 1) *widening perspectives on health*, whereby responses indicated that students felt they gained a more complex understanding of the concept of health and showed us that using the three models of health was important in facilitating this understanding of ‘health’ as a complex concept and gaining an appreciation of the advantages and limitations of different ways of intervening; 2) *interprofessional interaction*, where students discussed opposing views regarding learning together, whereby some students found it a positive experience and others a negative one (there was a strong polarity in student experience between these two positions); 3) *development of own professional identity*, in which students often expressed a growing regard for their chosen profession and the value of both OT and SW to society; and 4) *building an understanding of another profession*, in which student comments demonstrated an understanding of both the service delivery roles and conceptual perspectives of other professions.

**Think**
First, we were not alarmed by the less positive direction of change in attitude towards learning together, as this has previously been found by others (McFadyen, Webster, Maclaren & O’Neill, 2010; Pollard and Miers, 2008). However, it made us more aware of the potential challenges of IPE. Our results suggested that students saw the value of IPE but experienced a number of challenges as they interacted with another discipline that used an unfamiliar worldview. Second, averaging the scores on the two scales masked the range of reactions, particularly the polarity between positive and negative student experiences. Awareness of these first two results made us much more intentional about making the difficulties of interprofessional learning more explicit to students. Third, while we expected that the three models of health would assist students to understand the complexity of health, we had not anticipated how important a role they appeared to play in facilitating professional identity.
Student comments showed that the models provided a theoretical framework that enhanced their understanding of their own discipline and their place within it, as well as being aware of the perspectives taken by other professions. Therefore, we maintained our commitment to using the three models of health as a theoretical scaffolding for student learning in the IPE context.

**Act**

Prior to this research, the course had not included explicit exploration of the value and difficulties of interprofessional learning. In response to the data obtained in the first cycle, the next time the course was offered, we incorporated opportunities to discuss with students how professions differed or shared some characteristics, and how all might contribute to comprehensive health and social care. We incorporated into our teaching an awareness that when students gained an understanding of other disciplines, there also were benefits for development of their own professional identity. We were more purposeful in providing opportunities for reflective thinking, asking students how they came to their positions in assessing health and social care problems and interventions, and the possible unintended consequences of those positions.

**Cycle Two**

**Look**

In the second cycle, we gained further information through a purpose-designed survey, administered during the final class of the semester. We used seven questions. The first two questions explored the students’ perceptions of the learning experiences. They asked students to: 1) rate how valuable they thought their IPE experience was and to explain their response; and 2) identify their most significant learning experiences. The following three questions addressed their learning with and about others and their own profession. These related to: 3) the impact of the shared learning context on their attitudes to other disciplines, 4) whether they thought the course content impacted upon their attitudes to working with other disciplines, and, if so, how; and 5) whether they thought the course content impacted upon their understanding of their own professional discipline, and, if so, how. The final two questions inquired specifically about the three models of health, in which students were asked to rate: 6) how strongly they agreed or disagreed with the statement “Knowledge of the three models of health helps me to analyse cases” and explain their answer; and 7) their response to the statement “Knowledge of the three models of health helps me to consider a wide range of interventions” and explain. These final two questions were in response to the findings in Cycle One, as we wanted to explore further the role of the models of health in student learning in this course. Of 193 students enrolled on this course, 81 students participated in the research (49 OT students, 29 SW students, and 3 students from related degree programs). The responses to each question are outlined.

*Value of the IPE experience:* Students were asked to rate their overall interprofessional learning experience on a 5-point Likert scale (1 = extremely valuable, 5 = not at all valuable). 61% of respondents found it valuable or very valuable, 4% reported that it was not valuable (with none saying that was it not at all valuable), and 35% were neutral. Comments included: that it was useful to have different views and disciplines within this course, with some saying that greater understanding of other disciplines was needed; that there was value in considering different perspectives, and that the IPE experience assisted in confirming their career choice and could be helpful in their future practice.
Most significant learning activities: This question received the most commentary from the student body. Students made comments about specific components of the course, including: lectures on a diversity of topics and practice areas (e.g. hospital, community, disability services) and contributions by guest practitioners and service users, as well as the interactive nature of tutorials and collaborative, interprofessional learning activities. Integrating theory and practice emerged as a consistent theme in student comments regarding these activities. Individual students made reference to concepts such as the social determinants of health and the process of considering the historical and social context of an issue.

Impact of shared learning context on attitudes to other disciplines: Half of OT students and two-thirds of SW students who responded stated that the shared learning in this course impacted on their attitudes to other professions. Comments included: that they valued discipline differences and were appreciative of the perspective of others and that they believed they now had a better understanding of their own discipline.

Impact of knowledge of the course content on attitudes to working with other disciplines: Just over half of the respondents believed that the course content influenced their attitudes to other professions, with only a third stating that it did not influence their attitudes and the others not responding to the question. Student comments included: that they had a better understanding of how the other discipline makes decisions and that there was value in multiple perspectives.

Impact of knowledge of the course content on understanding of own discipline: Three quarters of students who responded indicated that the course content influenced their understanding of their own discipline. Students commented that: their view of health and health care had broadened; they saw the value of multiple health perspectives to service provision; and they had an awareness of a broader range of intervention options, a better understanding of their own beliefs about health, and found value in reflecting on health concepts in different practice settings.

The three models of health and analysing case material: We asked students to indicate the strength of their agreement or disagreement on a 5-point Likert scale (1 = strongly agree, 5 = strongly disagree) to the statement “Knowledge of the three models of health helps me to analyse cases”. 63% agreed or strongly agreed with the statement, 17% disagreed or strongly disagreed and 20% were neutral. Comments included that it widened their view of factors that influenced health and was a useful way to structure understanding.

The three models of health and considering a range of interventions: The other question on which we asked students to rate their agreement or disagreement using the same scale was “Knowledge of the three models of health helps me to consider a wide range of interventions”. 66% agreed or strongly agreed to this statement, 18% disagreed or strongly disagreed and 16% were neutral. In comments, students said that the models assisted them in thinking about interventions at more than the individual level.

Think
On the basis of the results of Cycle One and the literature indicating that IPE experiences can reduce students’ initially positive attitudes (McFadyen, Webster, Maclaren & O’Neill, 2010; Pollard and Miers, 2008), we did not expect this course to result in a positive change in attitudes to IPE. However, the majority of students rated the course as a valuable IPE experience and we wondered whether emphasizing the value of IPE from the beginning of the course might have been successful in positively influencing student perceptions. For at least
half the students who participated in the research, learning together was perceived as valuable in learning about other professions. However, as teachers, we observed the difficulties that students can have when learning together in an interprofessional context, so, while we believe we have made progress towards creating a valuable IPE experience, there appears to be much more for us to learn.

The overall aim of the course is for students to develop a critical understanding of the concept of health and different approaches to health and social care. Students identified the diverse topics covered in lectures and tutorials and the integration of theory and practice through exploration of issues in the context of a range of practice areas as significant to their learning. It appears that exploring the complexity of health in a wide range of practice areas was important for students to gain this critical perspective.

As in the first AR cycle, we found in Cycle Two that the course played a positive role in professional identity formation. It appears that, through learning to take a critical perspective on health and about the different perspectives of different professions, students gained an improved sense of their own profession’s perspective and their own place within this. Thus, student comments referred to an enhanced understanding and valuing of their chosen profession, as well as indicating an element of personal growth as a professional.

In this cycle, we specifically explored the role of the three models of health in assisting students to develop a critical understanding. We had used the three models of health as a theoretical framework for understanding the different ways health and social circumstances might be perceived and interventions approached (e.g. intervening at the level of the body, the person and their particular circumstances, or societal structures). We did not privilege one over another, but presented the view that a range of different perspectives is required to address the complex phenomenon of health. It appears from student comments in Cycle Two that the models of health continued to provide theoretical scaffolding for broadening their concept of the factors and circumstances that can affect health, the different types of interventions that can be used to improve health and the different levels at which interventions can be targeted.

Only 41% of those enrolled in the course participated in the research, so whether the findings of Cycle Two represent the views of the whole cohort is uncertain. As educators, we believe it is important to combine student responses with our own observations and experiences of the course.

**Act**

At this point, we are planning for the next phase of action. We plan to continue to make explicit to students the value of IPE in developing a critical perspective of health, to make explicit the challenges in learning with students from other health disciplines, to provide students with examples of a diversity of practice areas, and to use the models of health as ‘theoretical scaffolding’ for learning.

**Reflections on the AR cycles**

This course aims to promote a critical understanding of health in order to prepare students for the complexity and uncertainty of practice in health and social care. IPE, in the form of students from occupational therapy and social work learning together early in their programs, is a core strategy used in this course to enhance student understanding of diversity in
concepts of health and preparation for the complexity of practice. Central to this process is exploring those concepts underpinning different disciplinary perspectives as well as assisting students to develop an understanding of how different perspectives shape concepts of health and options for intervention.

Systematic collection of student perceptions over two AR cycles gave us a clearer understanding of their experiences of learning in the course. This, in turn, guided us in taking action to enhance their course experiences and achieve the course learning outcomes. Continuing on from these two AR cycles, the next time the course is offered we plan to focus in two ways. First, we plan to more explicitly use the “sociological imagination” (Germov, 2014, p. 7), a framework for considering issues in terms of their historical, cultural and structural aspects, in order to enhance student development of a critical perspective of health issues and their complexity. Through the two AR cycles undertaken, we have observed the positive effects of making expected learning explicit and we anticipate that this framework will assist us to make explicit for students the process involved in taking a critical perspective. Second, our plan for further improving students’ experience of learning together and about each other is to make more explicit the sociological basis of the course and how this is shared by both OT and SW students. OT has been referred to as lying on a “professional fault line” between health and social care (Blair & Robertson, 2005) and the sociological basis of SW is very much embedded in their knowledge base. We believe that emphasizing the philosophical bases of OT and SW will further assist students’ professional identity formation and experience of learning together.

**Conclusion**

Our purpose in reporting this research was to contribute to the discussion with educators about student experiences of learning together in a second-year course that aims for students to develop a critical perspective of health. An AR process was useful for systematically exploring students’ experiences of learning in this course, with a particular focus on its IPE aspect. By using this “look, think, act” process, we were able to make well-reasoned changes to the course. Generally, students found that learning together helped them to consider different perspectives on health and contributed to their own professional identity. Having a strong sense of professional identity, an appreciation for the diversity of perspectives of other health professionals, and an understanding of the complexity of health are important foundations in preparing students for the complexity and uncertainty of professional practice.

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**References**


