Augmenting students' learning through post-practicum educational processes

A project funded by the Office of Learning and Teaching

Development Conference Handbook

February 15th and 16th 2017

Gold Coast University Hospital, Queensland

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Introduction to handbook

This handbook is intended as a resource to guide activities across the first third and fourth stages of the *Augmenting students' learning through post-practicum educational processes* project that has been funded by the Office of Learning and Teaching within the Commonwealth Department of Education and Training.

The aim of this project is to understand and promote the educational worth of higher education students' experiences in practice or workplace settings, through identifying, trialling and evaluating educational interventions (i.e. teaching and learning strategies) enacted after these students have completed elements of those experiences. The concern is to identify the ways in which different kinds of interventions (i.e. teaching and learning strategies) can be enacted to secure a range of learning outcomes for the students and then appraise their application across a wide range of disciplines and programs. The initial trialling and evaluation of these strategies were undertaken within the healthcare sector across six Australian universities during 2016. The healthcare sector was selected because of long-standing traditions and practices associated with the provision of practice-based experiences and attempts to integrate them within their educational programs. It is anticipated that the educational goals, processes and outcomes from this sector will offer a platform through which those teaching in universities from other disciplines can come to engage, evaluate and implement the strategies within their disciplines in an informed way.

But, first and foremost, this project is a teaching and learning grant whose principal focus is on teaching and learning strategies that can promote the educational worth of higher education students' experiences inn work settings in ways that are applicable across a range of disciplines.

The first two stages of this project were to undertake preparatory work, which included: i) identifying a range of teaching and learning strategies, ii) reviewing what existing literature suggests about post-practicum experiences; iii) identifying student preferences for the purposes and processes of post-practicum interventions; iv) preparing a range of interventions to be undertaken across 2016 and enacting those interventions. The second and third stages comprise: i) evaluating progressively and summatively those experiences; and ii) preparing for and engaging others from other academic disciplines and institution to engage in intervention informed by that earlier work about the strategies; iii) monitoring processes of implementation, and iv) advancing findings and recommendations.

Through these activities, it is anticipated being able to inform the higher education sector about how the educational worth of students' experiences in work settings can be maximised.

Stephen Billett, Melissa Cain and Anh Hai Le, February 2017

Contents of handbook

Introduction to project

This project, as noted, aims to understand how best to augment the educational worth of higher education students' experiences in practice or workplace settings, through identifying, trialling and evaluating educational interventions (i.e. teaching and learning strategies) that can be implemented after students have completed elements of those experiences. Its concerns include identifying for what educational purposes such teaching and learning strategies should be used, and how these strategies can be best used to advance purposes through engaging with students' experiences as part of their programs of study.

A particular concern in this project is to identify how such strategies that can be enacted easily and without recourse to significant resources by those teaching in universities. That is, to identify strategies that busy (time jealous) university teachers can use, and whose use is likely to be sustained because those teachers see benefits for their students in utilising processes that fit within the scope of their work.

Quite deliberately, this project commenced in healthcare disciplines because of their long track record of providing and integrated practice-based experiences. However, this teaching and learning grant, principally, is about promoting the quality of teaching and learning across a range of disciplines, not just healthcare. Hence, in the activities within this grant, a conscious focus is placed on how the particular kinds of educational goals that are aimed to be addressed through and through a range of teaching and learning strategies apply to higher education provisions more generally.

Consistent with these concerns, the stated aim of the funded project is to:

- promote student learning associated with their employability through post-practicum interventions.

The specific goals associated with this aim are to:

- identify and appraise the effectiveness of post-practicum interventions promoting outcomes associated with students' employability, including readiness to practice;
- identify how these interventions are aligned with achieving specific educational goals across a range of occupational sectors;
- generate and test principles and practices supporting the effective enactment of these interventions realising across a range of disciplines and occupations; and
- initiate and support a systematic process of trialling, evaluation and adoption of these processes across Australian universities.

It is this aim and these goals that direct the activities of this grant across its four stages (see Table 1), although this particular resource seeks to inform the third and fourth stages of this grant.

In all, the project progresses through a series of four stages to realise these goals.

In Table 1 below are set out these four stages, their key activities, duration and anticipated outcomes.

Table 1

Stages, activities duration and outcomes

Stage	Activities	Duration	Outcomes
1	Preparatory stage including Dialogue Forum	Aug 2015 to Feb 2016	Identifying approaches and selecting how each project will proceed
2	Trialling and refining selected processes	Feb to Dec 2016	Appraisal of the efficacy of the enactment and outcomes of selected strategies
3	Consolidation & extension incl. Development Conference	End of 2016 – beginning of 2017	Generate key principles and practices, and engaging with a broader range of disciplines
4	Embedding in practice and dissemination	2017 – 2018	Embedding these practice across participating institutions

Progress to date

After an initial review of the literature on post-practicum experiences, the project has progressed through developing and administering an on-line survey of students' preferences for the purposes of post-practicum experiences, what kinds of interventions are preferred and how best they might progress. In addition, the process of participants identifying, preparing and enacting 14 projects has progressed across 2016, including processes and means of gathering and analysing data about their particular interventions.

This document captures much of these initial findings in terms of what the literature is proposing, what kinds of teaching and learning strategies might be used and for what purposes, and some initial findings from the student survey.

It is anticipated that these contributions will support the discussions and deliberations at the Development Conference that will be used as the key device for setting up the project work across 2017.

Introduction to Development Conference

This Developmental Conference is an invitation-only event associated with the Office of Learning and Teaching grant: Augmenting students' post practicum experiences (2015-2018). This teaching and learning grant focuses on the different ways in which students' workplace experiences can be most effectively integrated into their programs of study, once they have participated in their practicums, clinical placements, et cetera. That is, once they have had experiences of the kind of work they are being prepared for and the places where that work is being undertaken. The premise of this grant is that educational interventions in the form of particular curriculum or pedagogic practices can augment these experiences in different ways and for different educational purposes. These premises arose from an earlier national teaching fellowship on work integrated learning.

The first phase of this grant comprises 14 projects being undertaken in the healthcare sector across five Australian universities. At the Developmental Conference, these projects will report their processes and findings on the first day. On the second day, participants involved in 30 additional projects will consider the processes and findings of the first phase projects as they develop their own project plans that they will subsequently enact across 2017 in their host universities

The aims of this Development Conference are to:

- elaborate the purposes of the overall project, how it will progress and the kinds of outcomes to be realised;
- share and discuss the intended purposes, processes and outcomes of the projects and the teaching and learning strategies used in the post-practicum interventions across 2016;
- identify the findings arising from these interventions and processes trialled;
- share the intended procedures through which data about the efficacy of these interventions will be gathered and analysed; and
- establish means for progressing the project, engaging/communicating/sharing across the entire project.

It is anticipated that through a process of engagement and interactions that each of the participants will be informed about others projects, develop greater insights about how their own might progress and refine approaches within their projects, and how data gathering and reporting might best progress.

Process of engagement and interactions

Essential to the success of the Development Conference is the engagement of participants and interactions amongst them.

The following seem to be important principles to enact effective interactions:

- all participants are equal and deserve respect in consideration of their contributions;
- an openness to and valuing of others' perspectives, approaches and possibilities;
- demonstrating the importance of both making contributions and assisting others' contributions; and
- identifying opportunities for collaboration is within these projects for the benefit of individual projects and the entire project that comprises this grant.

It is on these kinds of bases that, hopefully, the Forum will be helpful for participants.

Key considerations

This project is about teaching and learning processes after practicum experiences that support employability.

Employability is taken as having the capacities required for employment: securing initial employment and sustaining that employment across working life.

So, it can have a focus on:

i) developing occupationally-specific capacities;
ii) identifying and securing situationally-specific capacities and
iii) developing capacities to engage in on-going learning, and possibly others.

So, educational goals or purposes are associated with initial preparation, including smoothing the transition to employment, but also preparing graduates to be active and intentional in their personal practices that supports their learning. Hence, being active and agentic in practicum situations, purposefully engaging with practice experiences and integrating them within their coursework, hopefully, establishes habits and practices that that support on-going development that sustains employability in the longer term. So, more than being about the teaching of content associated with an occupation, there are considerations about the requirements for practice and how they vary across work setting (hence, preparing for effective transitions) and also preparing students to be effective in directing and managing their learning across lengthening working lives

So, the focus for the projects that comprise the first year of the teaching and learning grant is on the kinds of teaching and learning strategies that can assist with the development of those capacities.

We want to identify the ways in which the teaching and learning strategies can support this learning.

Overview of Program

Day One: Reporting processes and findings (Wednesday 15th February 2017)

After an initial introduction to the teaching grant, its aims and processes, as well as the program for the two-day developmental conference, the majority of the first day is given over to the presentation of the 14 projects. The aim here for there to be a sharing of the projects undertaken in 2016 with an informed and interested audience, who will be interested in what these projects aimed to achieve, the processes used and outcomes achieved, as well as issues confronted. More than just presentations, it is intended there will be rich interaction between the participants and the presenters of a kind directed towards a set of common goals associated with how teachers working in higher education can utilise and augment student experiences in work settings. At the end of this first day there will be a group activity in which participants will share what they found to be of interest and of great relevance during this first day.

Day Two: Identifying principles/developing practices and projects (Thursday February 16th 2017)

The second day comprises two sets of interrelated activities, and then a concluding session. The participants who engaged in projects in 2016 will use their experiences, data and deliberations to identify some tentative principles and practices associated with augmenting students post-practicum experiences. This will progress across most of the day, culminating in a presentation to all participants. The participants who will be enacting the 30 projects across 2017 will be working individually and in groups to prepare their projects. As part of that development process there will be interactions between the participants from 2016 and those embarking on their projects in 2017, so that the former can advise the latter about their plans and processes. The day will culminate in a joint session in which issues are raised, shared and collated. As part of that process, the tentative principles and practices identified by the 2016 group will be shared with all participants.

The plan overleaf sets out the activities being organised for the two-day event.

The participants at the Development Conference will comprise: i) those involved in the 14 2016 projects (approximately 24 participants); ii) those involved in the 30 projects for 2017 (approximately 37 participants); and iii) possibly members of the ACEN executive (approximately 4). There will be an approximate total of 65 participants.

The presentations on Day 1 will be 45 minutes in duration for each of the 2016 projects. That will comprise a 20 minute presentation and 25 minutes for questions and discussions.

Day One: Reporting processes and findings

Wednesday 15th February 2017

Gold Coast University Hospital Block E

Room	Time	Focus	
E-G-002-PED Sm Lecture Theatre 9:00am to 10:00am	8.00-9.00	Set up –work area, presenters set up in E-G-015/016 and E-G-014	
	9.00-9.25	Welcome, introduction, progress to date (SB) Plan for two days (SB/MC) All participants	
		Parallel session (SB chair)	Parallel session (MC chair)
		E-G-015/016	E-G-014
GCUH-E-G-014 and 015/016 PED 9:30am to 4:30pm	9.30–10.15	Tracy Levett-Jones (UTS), Helen Courtney-Pratt (UTAS) & Natalie Govinda (UTS) Nursing – Evaluation of the Post-Practicum Clinical Reasoning Oral Exam	Garry Kirwan, Neil Tuttle, Ben Weeks & Liisa Laakso (Griffith) Physiotherapy - Specific post-placement learning tasks
	10.20–11.05	Lauren Williams, Lynda Ross, Lana Mitchel & Katherine Markwell (Griffith) Nutrition and Dietetics - Sharing and comparing group activities during week-long debrief	Andrea Bialocerkowsk, Libby Cardell & Shirley Morrisey (Griffith) Speech therapy - Debriefing workshops
	11.05–11.30 Morning tea/coffee (open area)		
	11.30-12.15	Kelly Clanchy & Exc Science (Griffith) Exercise Physiology - Integrating an Employability Intervention into Clinical Practicum Debrief Sessions	Gary Rogers (Griffith, Medicine) - Reflective writing based on critical observation task
	12.15-1.00	Julia Harrison (Monash) & Liz Molloy (Melbourne) Medicine - On-line engagement with peer-led cases	Linda Sweet, Trudi Mannix, Kristen Graham (Flinders), Janice Bass, Mary Sidebotham & Jenny Fenwick (Griffith) Midwifery - Continuity of care experiences: enhancing learning through reflective practice
	1.00-1.30 Lunch (open area)		
	1.30-2.15	Laurie Grealish, Lyn Armit, Thea van de Mortel & Marion Mitchell, (Griffith /Gold Coast Hospital) Nursing - Learning circles to develop inter-subjectivity	Niamh Keane & Carole Sketetee, (Notre Dame) Medicine - Debriefs of work activities
	2.20-3.05	Julia Harrison (Monash) & Liz Molloy (Melbourne) Medicine - Facilitated learning circles	Tracy Levett-Jones (UTS) & Helen Courtney-Pratt (UTAS). Nursing –
	3.05–3.30 Afternoon tea/coffee (open area)		
	3.30–4.15	Jenny Newton (Monash) Nursing - On-line discussion forums	Christy Noble, Lyn Armit, Leigh Collier & Christine Sly (Gold Coast Hospital) and Liz Molloy (Melbourne) Enhancing students' feedback literacy in the workplace: a learner-centred approach
		E-G-002 Small lecture	
E-G-002-PED Sm Lecture Theatre 4:00pm to 5:00pm	4.20-4.50	Group activity - all participants Discussion about presentations	
	4.50-5.00	Final session – Tomorrow	

Note: 45 minute sessions – 20 minute presentation – 25 minutes discussion

Day Two: Identifying principles/developing practices and projects

Thursday February 16th 2017

Gold Coast University Hospital Block E

Room	Time	Focus	
		E-G-002 – small theatre	
		Tea and coffee on arrival (open area)	
GCUH-E-G-001 Seminar Room 8:00am to 4:00pm	9.00–9.15	Scene-setting: Identifying principles (C16) /developing proposals (C17) All participants	
		E-G-001 Seminar Room	E-G-002 – small theatre
		Class of 2016 SB to facilitate	Class of 2017 MC to facilitate
GCUH-E-G-002-PED Sm Lecture Theatre 8:30am to 12:00pm	9.30-11.00	<u>Identifying effective practices and principles</u> Working in 3 groups (5, 5 & 4) using template Identify goals that were to be achieved Identifying processes and what was effective and why (alignments) Issues to be avoided/considered	<u>Brief introductions (9.30-9.45)</u> Six groups of 5 <u>Preparing draft proposals, using template</u> Individual work – (60 minutes) Develop individual proposals Share and discuss with another person then make refinements, changes (15 minutes)
	11.00-11.30 Morning tea/coffee (open area)		
	11.30-12.00 (1.00-1.30)	<u>Generating a consolidated list</u> Three groups join to consolidate listing Share three lists and then consolidate them 2 individuals nominated to present	<u>Secure feedback on draft proposal</u> Discuss with 5 others (i.e. group of 5) 6 X 5 groups – cognate areas??
	12.00–1.00 Lunch (open area)		
	1.00-1.30	Continuing activity before lunch	Continuing activity before lunch
	1.30–2.00	<u>Preparing a draft presentation of principles</u> Preparation by 2 presenters C16	<u>Considering issues for implementation</u> Back in 6 groups – joined by 2 members of C16 – to discuss issues of implementation
GCUH-E-G-002-PED Sm Lecture Theatre 1:00pm to 5:00pm		E-G-002 – small theatre	
	2.00-2.30	Plenary (all participants) <u>Share draft findings, forum for questions</u> Presentation of C16's principles and practices	
	2.30–3.00	Where to from here (all participants) <u>Outline the next steps/goals/processes</u> C16 - progress C17 – implementing projects across 2017	
	3.00	Depart	

Notes: See pages 127 for processes used on Day Two

Teaching and learning principles informing the project

Some teaching and learning principles informing this project are as follows.

Experiences in work settings can assist students learn the kinds of occupational goals and processes that are important for their transition to effective practice and employability.

Yet, those experiences can be diverse and varied, as are the goals and processes are enacted for and in work settings. Therefore, these require means for learners to mediate those experiences to secure effective and comprehensive learning and educational outcomes.

Not the least here is understanding something of the diverse goals and processes for the enactment of the same occupation.

Learning processes are not hybrid or reserved for experiences in particular settings (e.g. universities), but are instead a part of everyday thinking and acting.

However, if that thinking and acting can be augmented in productive ways the likelihood is that the learning outcomes can be richer, far more effectively directed and have greater intentionality.

Augmenting students' workplace experiences through post-practicum interventions has potential to achieve these kinds of educational objectives.

In particular, the ability to articulate, share, compare and critique those experiences are likely to lead to informed and adaptable outcomes that go beyond what can be achieved through students' own mediated experiences.

Yet, whether experiences alone are being considered or processes of augmentation, the learning process needs to be interdependent, rather than independent, or dependent.

That is, learners actively engaging with and being informed by the contributions of social and physical environments in which they think and act.

Ultimately, experiences provided in educational programs and work settings are nothing more than invitations to change; it is the learners who decide how and for what purposes they take up that invitation.

Hence, finding ways of engaging students, placing them in the 'driver's seat', supporting their construction construal of what is provided for them will be central to the success of educational programs and interventions.

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Review of Literature

A review of recent relevant literature was undertaken to establish the types of teaching and learning interventions and techniques that had been implemented after student work placements. A total of 41 journal articles and reports covering the discipline areas of general medicine, psychiatry, nursing, social work, dentistry, pharmacy, speech pathology, physiotherapy, chiropractic practice, tourism, business, commerce, law, journalism, engineering, education, and information technology were considered.

A key and initial finding from the search is that there is a dearth of reporting on post- practicum interventions. That is despite a broad number of studies stating that feedback from students, academics, and industry professionals provides clear and useful recommendations for improvement. Beyond this, four main themes emerged from this review:

1) Work placements are highly valued by students, are essential in bridging theory and practice, and play a vital role in educating students to meet graduate outcomes and industry standards.
2) Students may experience cultural, religious, and ethical conflicts in their placements which can be stressful as students are often not provided ways to reconcile theory with diverse and unfamiliar situations in practice.
3) Work placements play an important role in introducing students to non-traditional career options, such as remote and rural practice and aged care. Placement experiences provide important support for students who may choose these careers options.
4) Reflection-in-action and reflection-on-action in the work place "plays a critical role in maximising learning potential" (Macleod et al. 2011, p. 32) and provides important information for academics; such as indicators of the success for placement programs and feedback for improving learning both in the work place and at universities.

<u>The importance of reflective practice</u>

Doel (2008) reports on professional development logs kept by university engineering students while on their work placements. For most students, this was an unfamiliar practice but was scaffolded in a two day workshop prior to their placements. Feedback on this assessment tool was gained through surveys and focus groups, and provides evidence that reflective thinking encourages students to analyse learning incidents rather than merely stating what occurred. In addition, placements are held to be more valuable experiences if students reflect on the learning environment and their participation, and then reorganise their processes to improve outcomes (p. 164). Bain et al. (2002) also support the use of reflective journals for pre-service teachers in their research in an Australian university. Feedback on reflections was carefully structured to assist students to 'move' towards the use of higher order thinking skills and to reflect in greater depth on their work place experiences (p. 172). Stockhausen (2004) in reporting on post-practicum feedback from students in a hospital in Queensland demonstrates that reflection "provides a focus for students as they work through clinical situations that contribute to their professional socialisation and identity" (p. 13). Reflecting through generating individual journal entries and peer debriefing sessions allows students to consider what is most important in their clinical experiences, and thus, Stockhausen (2004) urges clinical educators to build upon this feedback to facilitate more effective learning experiences.

Dean and Clements (2010) regard reflection as "critical to professional development and learning" (p. 290) because carefully structured tasks can allow students to "identify links between theory and practice, as well as uncover other issues that concern or puzzle them" (p. 290). The advantages of structuring

reflective assessments for commerce students at the University of Wollongong in the Commerce Internship were investigated by Dean et al. (2012) as part of improving the assessment of work integrated learning experiences. This included a daily *eLog*, reflections on key areas of placement, and a reflective journal (p. 107). Results of the study revealed a significant misalignment between assessment tasks and reflective practice, with some students in the study reported the reflective tasks as irrelevant or a waste of time. A more holistic approach to reflection was recommended as an intervention with templates to help structure reflective tasks. Dean and Clements (2010) note with regard to the same study, that the development of 'soft skills' required for students to engage effectively in the workplace might be achieved by embedding work placement programs into the academic curriculum in partnership with the business community. Lindgren et al.'s (2005) introduction of 'reflective practice' for Swedish students on nursing clinical placements found that reflection, when used as a means for students to gain a deeper awareness of self and others, is widely accepted in the literature. It is held to be compatible with processes of clinical supervision, and that group supervision and reflection served as an important support to students during their placements. Holt, Mackay and Smith (2004) also note that post-placement feedback from students and industry connections are crucial for university staff to refine courses in rapidly changing areas such as information technology. It may well be that the opportunities for students to share their experiences of dynamic areas of occupational practices can provide understandings and procedures for working in such environments or occupations.

Cultural and ethical considerations

As work-integrated learning experiences are situationally, socially and culturally based, some of the sources accessed provided illuminating evidence about the nature of 'culture shock' amongst students unfamiliar with the Australian workplace context—such as International students (Macleod et al., (2012) —as well as Australian-trained students on international placements. Student feedback (e.g. through interviews and discussion groups) from four case studies at Flinders University (Macleod et al., 2012) revealed that when students are placed in situations where cultural expectations differ from what they have experienced in their university classes, ethical challenges are created that can induce stress and anxiety. Fuscaldo's (2013) OLT project report on health ethics education presents detailed evidence concerning how challenging it can be for students to "resolve ethical issues that arise when health care involves culturally divergent approaches, beliefs and values" (p. 5). A variety of case studies is presented in this research demonstrating how ethics as applied in theory may clash with the cultural and religious values of patients and their families. For example, a student found it challenging when a Malay family requested that doctors conceal the diagnosis of a terminal illness from their elderly father; a practice common in many Asian cultures. Post-placement feedback suggests that Western health ethics is not (always) cross-culturally applicable and that students need a framework "to assist them to negotiate between abstract principles and particular cultural contexts" (p. 6). Hence, post-practicum interventions can be used to mediate personal experiences with these expectations.

Non-traditional placements

The University of Notre Dame's Rural and Remote Health Placement Programme (RRHPP) places medical students in remote placements to develop a community-centred perspective on health care and to help students better understand issues associated with the healthcare in rural populations. To optimise their learning, students attend pre- and post-placement briefings, and complete a reflection on their placements

(Mak & Miflin, 2012, p. 605). Feedback from members of the communities in which the RRHPP operates indicates that the program is positively viewed, highly valued, and fosters empathy. The ultimate effectiveness of the program, however, will be measured by future graduates electing to practice in rural and remote communities as a result of the program.

Abuzar et al.'s (2009) presentation of Rural Dental Rotation (RDR) program at the University of Melbourne also supports the importance of rural placements in assisting students to appreciate cultural safety and understand the specific oral health needs of Indigenous Australians. Feedback regarding student experiences affirmed that the RDR program increased the possibility of students taking up practice after graduation in rural and Indigenous communities (p. 223). In placement assessment tasks, students reflected on the discrepancy between the oral health status of the rural and metropolitan communities, and appreciated the opportunity provided to build skills in teamwork in these longer placements. Abuzar et al. (2009) suggests that post-placement strategies need to be adopted to attract and retain dental professionals in rural areas (p. 223). Johnson and Blinkhorn (2012) also support such programs as 80% of Australian dentists practice in the major metropolitan cities. They suggest that one of the roles of clinical placements should be to encourage students to consider working in a rural location after graduation. Post-placement interviews with faculty at James Cook University indicate that students who participated in the rural placement program were clinically more advanced post-placement than those students who did not (p. 106). Evidence presented by Cleland et al (2015) suggest students' abilities to engage effectively in these experiences will shape their effectiveness. Yet, given that not all students are able to secure these kinds of placements or have equal capacities to utilise these experiences that post-practicum processes that involve those who are not able to access these experiences are likely to be helpful for those students, and if facilitated in some way are likely to generate optimal outcomes for all students.

In researching Iranian students' preference for medical specialities, Amini et al. (2013) refer to an Australian study (p. 198) by Pailhez et al. (2005), indicating that although 14.5% of medical students voiced an interest in psychiatry as a specialty, only 1.4% of students named it as their first choice. Amini et al. (2013) note research indicating medical students' attitudes toward psychiatry as a career option is highly dependent on placement experiences and the quality of those experiences is a powerful predictor of students' decision to choose a career in psychiatry (cf Sierles et al., 1995). Although Amini et al.'s (2005) research results did not correlate with the findings in the literature, he suggests that more experience with actual psychiatric work might persuade students to consider psychiatry as a possible vocation. Bernsten and Bjørk's (2010) report similar findings with aged care nursing being less preferred as a career choice by nursing students. Norwegian students consider clinical studies in nursing homes to be extremely challenging, particularly first-year students with limited training in this area (p. 18). The results of Bernsten and Bjørk's study indicate that "major work is needed to develop the learning context for students in nursing homes" (p. 17) and present this area of nursing as a positive choice for graduate students. It is these challenging experiences in and uninviting workplace contexts that may be mediated by post-practicum experiences.

Impact of post-placement intervention strategies

The potential impact of reflective practice as post-practicum experiences was highlighted by Curran (2004) who described the Clinical Legal Education program offered through the School of Law and Legal Studies at La Trobe University. By engaging in 'de-briefing' sessions, students reflected on their experiences in weekly placements in the most disadvantaged communities in Victoria. The aim of the program was for students to

work for positive change in the community through initiating actual law reform (p. 300), thereby generating their own post practicum interventions. Forde and Meadows (2012) report the dimensions of student workplace learning in journalism internships in Queensland, and the resulting impact on their journalism education. Feedback from peer reflective sessions, individual interviews, and student focus groups contributed to evaluating the relevance of content and effectiveness of assessment, as well as industry partners' reflections on the dimensions of internships (p. 4); in turn prompting refinements to the current model. Forde and Meadows (2012) advocate the use of interventions before, during, and after practice-based experiences, as 'workplace variability' (i.e. vastly different individual experiences in similar placements) an important factor highlighted in reflective sessions, and which influenced curriculum design and pedagogy.

Findings from case studies at Flinders University (Macleod et al. 2012), have resulted in interventions such as the development of models for effective practice, and working towards providing a more effective overall experience for International students. Maire (2010) reports on four post-work placement seminars for students of Chiropractic practice at Murdoch University who completed a voluntary placement in Siliguri, India. In the seminars, students shared experiences of different practices encountered whilst on placement, made explicit links between their WIL experience and theory in academic classes, and challenged students to think critically about existing models of chiropractic practices. Results of this intervention support post-practicum seminars as promoting greater integration between academic and workplace settings, and effective and critical learning experiences for chiropractic students.

Several studies underscore the importance of clinical work placements as vital components in the education of student nurses (Chan 2001a, Chan & Yip 2007, Hartigan-Rogers et al. 2007, Papathanasiou et al. 2014, & Ruth-Sahd et al. 2010). Clinical placements provide students with optimal opportunities to "observe role models, to practise by oneself, and to reflect upon what is seen, heard, sensed and done" (Chan 2001b, p. 447). Nash (2011) and Ralph et al. (2009) note that the 'student voice' is frequently missing from placement evaluations, and that clinical settings can be particularly challenging learning environments, as students "frequently find themselves involved in unplanned and often complex activities with patients" (Nash 2011, p. 1). Courtney-Pratt (2012), Nash (2011), and Peters et al. (2013) highlight mounting pressures on clinical placements as student enrolments in nursing courses continue to increase, and highlight that intervention strategies are required as a result of the shortage of these opportunities. Chan (2001a, 2001b, 2002) presents data from undertaking clinical placement in 14 metropolitan hospitals in South Australia. Using the *Clinical Learning Environment Inventory* (CLEI) students' perceptions of the outcomes of their clinical placement strongly reflect the five areas of the CLEI - Individualisation, Innovation, Involvement, Personalisation and Task Orientation in providing positive clinical experiences. Findings from students' post placement interviews suggest that clinicians' management style and the provision of learning opportunities were more valued than teaching (2001b, p. 449) and that there were significant differences between students' perceptions of the actual clinical learning environment and their preferred clinical learning environment (Chan & Yip 2007, & Papathanasiou et al. 2014). The results here provide a clearer picture of what constitutes quality clinical education from students' perspective and can be utilised to develop better educational experiences.

Courtney-Pratt (2012) points to an identified gap between theory and practice in nursing education and suggests a new model of employment to increase the integration of hospitals and universities to close this gap. English (2014) notes that the 'preceptor only' model, which is frequently used in nursing work

placements, contains many problems, especially those regarding student nurse assessments. These problems are due, in part, to the lack of continuity of assessors with an increasing part-time workforce. Nash (2011) also underscores the importance of practice-based experiences that give students the opportunity to "share, reflect and critically appraise their experiences" (p. 30), as central to developing their professional capacities, and that future intervention strategies should include peer mentoring, peer teaching, the development of clinical reasoning skills, and critical reflection" (p. 31). Hartigan-Rogers et al. (2007) and Henderson et al. (2006) point to the importance of supportive learning environments, positive socialisation, and individualisation within placements, as their research reveals that positive experiences in nursing placements are related to "how valued and supported students feel than to the physical aspects of a placement itself" (p. 9). Personalisation was also a critical factor in the success of nursing placements in Midgley's (2006) research with nursing students in the UK (no university specified). The most important factors in successful placement in Papathanasiou et al.'s (2014) study with nursing students in Greece (also utilising the CLEI) were participation, and a feeling of acceptance and 'belonging' to a group.

With regard to the training of dentistry students, Owen and Stupans' (2008) research reveals a need for a stronger focus on outcomes-based programming within work placements with all stakeholders having a clear outline about what is to be achieved. Owens recommends a national repository of experiential placement learning and assessment tasks, "the development of standardised developmental descriptors related to competencies as applicable to university students at the novice and advanced beginner levels" (p. 11) and that collaborative engagement is utilised to identify "quality experiential placement success indicators in relation to preceptors, students, university, site and overall environment" (p. 11). Peters' research with practice nurses revealed a need for further consultation and better communication with universities regarding the allocation of student placements, as poor organisation and communication between universities and clinical facilities greatly impacts the success of placements.

Post-practicum experiences

In sum, the search found that the quantum and extent of literature on post-practicum interventions was quite limited. Much of what is reported related to practices that could be used for a range of purposes and not specifically those associated with exploiting students' post-practicum experiences. So, reflections on practice, peer-based reflections and use of logs were emphasised. However, some strategies such as de-briefs and feedback were features in this literature. From the available literature, four main themes emerged from this review:

- Work placements are highly valued by students, and seem essential for bridging what is referred to as theory and practice, and play a vital role in educating students to meet graduate outcomes and industry standards.
- However, students may experience cultural, religious, and ethical conflicts in their placements which can be stressful as students are often not provided ways to reconcile theory with diverse and unfamiliar situations in practice.
- Work placements play an important role in introducing students to non-traditional career options, such as remote and rural practice and aged care. Placement experiences provide important support for students who may choose these careers options.
- Reflection-in-action and reflection-on-action in the work place "plays a critical role in maximising learning potential" (Macleod et al. 2011, p. 32) and provides important information for academics; such

as indicators of the success for placement programs and feedback for improving learning both in the work place and at universities.

What is noteworthy is that many of the areas referred to in the students' survey (see below) were not addressed. Almost absent were the sets of concerns about classroom based activities (apart from Meadows and Forde (2012) and Maree (2010). That is, the whole array of potential classroom-based activities were largely absent in the reported studies. All of this suggests that the kinds of projects that are being advanced through this project stand to make particular contributions.

It is anticipated that this review and these literature will be helpful in shaping the project.

The list of references is provided in Appendix One

Possible models for post-practicum interventions

As previously circulated, in preparing for or planning your projects, it might be useful to consider some possible kinds of purposes for and interventions that were developed as we prepared the survey instrument. Here, slightly tweaked, are the statements of educational purposes, considerations of timing and kinds of interventions included in the survey.

Educational purpose(s)

Some educational purposes for participating in post-practicum activities are:

- discuss experiences during placement you found worthwhile/interesting/confronting
- linking what is taught at university to practice
- learn more about preferred occupation
- learn about other students' experiences during their practicum
- learn how preferred occupation is practiced in across different work settings
- secure feedback on your workplace experience
- linking work experiences with course work and assessments
- identify how these experiences can make you more employable
- make informed choices about career, work options or specialisations
- make choices about selection of subsequent courses/majors
- improve the experience for the next cohort of students undertaking practicum in that venue

Timing of interventions

Options for timing of interventions include:

- early in the program, perhaps after your first practicum
- after having had a number of practicum experiences
- towards the end of your course
- after every practicum experience

Interventions

Options for interventions include:

- one-on-one with teacher
- one-on-one with a peer (another student)
- one-on-one with a more experienced student
- small self-managed groups (3 to 6 peers) across your course
- small groups (3 to 6 students) facilitated by more experienced students
- small groups (3 to 6 students) facilitated by teachers/tutors
- shared classroom-based group activities
- whole of class activities (i.e. large group processes 10-100 students)
- small groups (3 to 6 students) meeting periodically facilitated by placement supervisor
- individually completed activity with feedback from teachers
- presentations to peers
- as part of usual scheduled class activities

- a special event each semester
- something students should organise
- on-line with peers
- on-line moderated by tutor

Many of these factors have been the subject of the analysis of the survey data that is provided below.

Survey data and initial findings

It was decided early in the project to administer a survey of students to ascertain their interests in the educational purposes of post-practicum interventions, the frequency and means by which these interventions might be enacted. A survey was developed through many iterations and rounds of development by members of the project group. Ethical clearance was sought and secured for the use of the survey as an on-line survey across the participating universities and this was administered through Lime Survey and participation was supported in particular ways across the discipline areas and institutions.

Respondents

A total of 484 student informants were recorded as responding to the survey by the 31st January 2016. However, of these only 399 provided workable responses. Consequently, for an initial descriptive account of these data, it was decided to draw upon only those responses. The data presented here are from that cohort. The respondents to the survey were drawn from across the six participating higher education institutions, if Tasmania is included as Helen Courtney-Pratt has transferred to that institution from Newcastle. As indicated in Table 1, the respondents providing complete responses were from across these institutions, which are listed in the left hand column, the frequency in the middle and percentage in the right hand column.

Table 1

Institutional affiliation

HIE	Frequency	%
Griffith	103	28.5
Notre Dame	81	22.4
Newcastle	56	15.5
Monash	50	13,8
Tasmania	50	13.8
Flinders	21	5.8
Total	364	99.8

A range of demographic information about these informants indicates the factors associated with the composition of this overall cohort. Firstly, they reported being overwhelmingly female (80%), with only 19% indicating being males (see Table 2). In this table, the reported gender of the informants is indicated in the left column, the frequency in the middle and percentage in terms of the overall cohort of informants in the right column. This distribution of the gender may well reflect the large numbers of respondents indicating they came from Nursing (90% Female) and Midwifery programs (see Table 4), yet whilst this distribution may be representative of those programs it fails to be representative of the gender distribution across Australians higher education. The respondents' reported age groupings are well distributed, with a predominance of

those at school leaving age through to the late 20s. However, there were reasonable samples from each age grouping. So, as indicated in Table 3, there is representation across age groupings in the complete responses to the survey. The age groupings, which are those used by the Australian Bureau of Statistics, are listed in the left column, the frequency of responses to those groupings in the middle column and percentage of respondents reporting that age grouping in the right column.

Table 2

Respondents' gender

Gender	Frequency	%
F (Female)	296	80.2
M (Male)	69	18.7
Total	365	98.9

Table 3

Respondents' age groupings

Age groups	Frequency	%
15-19	20	5.4
20-24	130	35.2
25-29	81	22.0
30-34	45	12.2
35-39	28	7.6
40 and over	60	16.3
Total	364	98.7

Table 4

Respondents' disciplines

Discipline	Frequency	%
Nursing	162	43.9
Medicine	109	29.5
Midwifery	38	10.3
Dietetics	28	7.6
Physiotherapy	15	4.1
Pharmacy	2	0.5
Occupational Therapy	5	1.4
Speech Pathology	3	0.8
Education	3	0.8
Exercise Science	2	0.5
Social work	1	0.3
Total	368	99.7

The disciplines represented in this cohort are uneven, with Nursing (44%), Medicine (30%), Midwifery (10%), the strongest elements, followed by Dietetics (8%) and Physiotherapy (4%), as indicated in Table 4, which reports the discipline in the left column, the frequency in the middle and percentage of informants in the survey in the right column. They were small numbers of respondents from Pharmacy, Occupational therapy, Speech Pathology, Education, Exercise Science and Social Work. This finding indicates that the survey

responses represent perspectives from some disciplines more than others. Hence, the findings here are offering general patterns of responses that some disciplines can claim as being more predictive of what is occurring in their programs than others.

The respondents represent perspectives of those who attended higher education as those full and part-time students with the former predominating (Table 5) and also those of both domestic and international students (Table 6), again with the former predominating. In addition, and as indicated in Table 7, those reporting as both undergraduate and postgraduate students are represented in the respondents. Moreover, these informants report participating in the range of year levels of study (i.e. 1 through to 5), with the majority having had more than one year of study as indicated in Table 8. Hence, the survey respondents are from students to report participation as the full and part-time students, from Australia and overseas and both at undergraduate and postgraduate levels of study, and across a range of year levels, but broadly representing students who have had more than a year of higher education.

Table 5

Respondents' mode of study

Mode of study	Frequency	Percentage
Full-time student	337	91.3
Part-time student	24	6.5
Total	361	97.8

Table 6

Respondents' nationality

Student nationality	Frequency	Percentage
Domestic student	341	92.4
International student	17	4.6
Total	358	97

Table 7

Respondents' level of study

Level of study	Frequency	Percentage
Undergraduate student	233	63.1
Postgraduate student	123	33.3
Total	356	96.5

Table 8

Respondents' year of study

Year	Frequency	Percentage
1st	44	11.9
2nd	99	26.8
3rd	173	46.9
4th	27	7.3
5th	21	5.7
Total	364	98.6

In sum, the respondents offer perspectives from a cohort of informants that are distributed across 6 higher education institutions and from different disciplines in healthcare and from both genders, diverse age groups and at different year levels in their higher education programs. These data, that can be collectively considered or analysed on the basis of any of the variables set out above. Here, these variables are presented as descriptions of frequencies and percentages of respondents to offer broad sets of findings about student preferences and goals. Further analyses can be undertaken on the basis of specific variables, however.

Educational purposes

The survey respondents were asked to indicate their preferred reasons or educational purposes for participating in post-practicum interventions. They were given a list of options for educational purposes that were identified during the development of the survey, and asked to indicate levels of interest in each of these purposes (i.e. *Very interested; Some interest; Interest; Not interested; and Irrelevant*). They were also given the option of stating other purposes and indicating a level of interest at the end. Table 9 presents the frequencies of responses to these options in terms of numbers and percentages for each of the stated purposes and categories of interest. The data has been arranged hierarchically in this table on the basis of levels of frequencies of reported *Very Interested*.

Across the cohort of respondents, the most frequently preferred purposes, indicated a strong interest in learning more about their selected occupation, including specialisms, and how these students performance within the workplace can lead them to being employable. Hence, feedback on individual performance, how that relates to occupational requirements and learning more about the occupation were purposes that these students reported as being the strongest focus of the interest. In many ways, these responses are not surprising and are aligned with why practice-based experiences have been included in higher education courses. Just below these key interests were those associated with performance within that program, with interests associated with linking what had been experienced in the work setting with what they need to learn for their preferred occupation, and linking those experiences with their course requirements and assessment.

Table 9

Respondents' preferred educational purpose

	N (%)					
Educational purpose (aggregated Very Some interest, and Interest N/ %)	**Very interested**	**Some interest**	**Interest**	**Not interested**	**Irrelevant**	**Total**
make informed choices about career, work options or specialisations (341/92.4)	190 (51.5)	96 (26)	55 (14.9)	15 (4.1)	3 (.8)	359 (97.3)
identify how these experiences can make you more employable (339/91.9)	180 (48.8)	104 (28.2)	55 (14.9)	16 (4.3)	3 (.8)	358 (97)
secure feedback on your workplace experience (337/91.3)	179 (48.5)	101 (27.4)	57 (15.4)	19 (5.1)	1 (.3)	357 (96.7)
learn more about your preferred occupation (338/91.6)	179 (48.5)	98 (26.6)	61 (16.5)	22 (6)	0 (0)	360 (97.6)
linking what is taught at uni to practice (341/92.4)	172 (46.6)	113 (30.6)	56 (15.2)	17 (4.6)	1 (.3)	359 (97.3)
learn how your preferred occupation is practiced in across different work settings (335/90.3)	168 (45.5)	104 (28.2)	63 (17.1)	22 (6)	0 (0)	357 (96.7)

Educational purpose (aggregated Very Some interest, and Interest N/ %)	N (%)					
	Very interested	Some interest	Interest	Not interested	Irrelevant	Total
linking your work experiences with course work and assessments (333/90.1)	150 (40.7)	118 (32)	65 (17.6)	25 (6.8)	2 (.5)	360 (97.6)
improve the experience for the next cohort of students undertaking practicum in that venue (335/90.3)	150 (40.7)	115 (31.2)	70 (19)	16 (4.3)	3 (.8)	354 (95.9)
discuss experiences during placement you found (332/89.9)	140 (37.9)	109 (29.5)	83 (22.5)	25 (6.8)	0 (0)	357 (96.7)
worthwhile/interesting/confronting (332/89.9)	140 (37.9)	109 (29.5)	83 (22.5)	25 (6.8)	0 (0)	357 (96.7)
learn about other students' experiences during their practicum (327/88.6)	110 (29.8)	114 (30.9)	103 (27.9)	31 (8.4)	1 (.3)	359 (97.3)
make choices about selection of subsequent courses/majors (312/84.6)	136 (36.9)	109 (29.5)	67 (18.2)	22 (6)	19 (5.1)	353 (95.7)

Also associated with the educational provision was about improving the experiences for subsequent cohorts of students, which was of less interest than the items above. The three least valued purposes were those associated with enriching the learning from specific kinds of experiences, making informed choices about subsequent subject selection, and, finally, an interest in learning about other students' experiences during practicums. So, the overall interest in enhancing understanding about the occupation and individuals' engagement with it, then improving the educational experience. The least level of interest was on utilising both their own and others' experiences to enhance educational processes. All of this is a little concerning given that this project is strongly focused on the latter. That is, using students' experiences, their sharing, comparing and critical engagement to enrich the quality of the learning outcomes.

Respondents were also asked to indicate preferences amongst a set of desired outcomes from the practicum experiences identified during the development of the survey (Table 10), again, responding on a scale (i.e. *Essential, Very important, Important, Not very important, and Irrelevant*). Their responses are presented in Table 10 with a data ranked again in terms of frequencies, with the items having the highest frequency in *Essential* at the top of the table and then moving down to those which are seen as being less essential or important. The most frequently desired outcome reported was the development of capacities for coping in the workplace, followed by input they would receive from a practising professional as part of their practicum experience, and then providing feedback to the practicum site about the kind of experiences that were provided.

The next ordering of responses are those associated with elements of the course (i.e. content, assessment and engagement with peers, and with as many perspectives as possible, and through some kind of structured experience. So, these suggestions indicate a desire for there to be structured experiences whose focus relates their experiences to the content of the course, their assessment and this is to be realised through engagement with other students and their perspectives. Of less interest was engaging with students at different stages in their programs, and activities that are organised by students to promote learning. Of interest, given the context of a healthcare orientation of the respondents, there was the lowest interest in engaging with students from other disciplines.

Table 10

Respondents' desired outcomes

Features (aggregation of Essential and Very Important n/%)	N (%)					
	Essential	Very important	Important	Not very important	Irrelevant	Total
development of coping skills for the workplace (262/71)	157 (42.5)	105 (28.5)	61 (16.5)	19 (5.1)	3 (.8)	345 (93.4)
input from a practicing professional (251/68)	127 (34.4)	124 (33.6)	78 (21.1)	12 (3.3)	3 (.8)	344 (93.2)
opportunity to provide feedback to the practicum site about student experiences (239/64.8)	121 (32.8)	118 (32)	86 (23.3)	17 (4.6)	4 (1.1)	346 (93.8)
focussed on work activities of selected occupation (225/34)	113 (3.6)	112 (30.4)	92 (24.9)	24 (6.5)	2 (.5)	343 (65.9)
focused on course content (223/60.4)	116 (31.4)	107 (29)	90 (24.4)	29 (7.9)	5 (1.4)	347 (94.1)
linked to assessment items (218/59.1)	111 (30.1)	107 (29)	76 (20.6)	49 (13.3)	5 (1.4)	348 (94.4)
engaging with students at similar stages in the program (206/55.8)	95 (25.7)	111 (30.1)	117 (31.7)	16 (4.3)	4 (1.1)	343 (92.9)
opportunity to share and discuss with peers (182/49.3)	88 (23.8)	94 (25.5)	127 (34.4)	25 (6.8)	7 (1.9)	341 (92.4)
engaging as many students' perspectives as possible (185/50.2)	80 (21.7)	105 (28.5)	116 (31.4)	35 (9.5)	5 (1.4)	341 (92.5)
opportunity to share and engage in structured consideration of experiences (176/47.7)	75 (20.3)	101 (27.4)	122 (33.1)	35 (9.5)	7 (1.9)	340 (92.2)
teacher-led and implemented (170/46.1)	72 (19.5)	98 (26.6)	142 (38.5)	26 (7)	5 (1.4)	343 (93)
engaging with students at different stages in the program (147/39.9)	50 (13.6)	97 (26.3)	109 (29.5)	74 (20.1)	10 (2.7)	340 (92.2)
student-led and implemented (99/26.8)	37 (10)	62 (16.8)	127 (34.4)	102 (27.6)	13 (3.5)	341 (92.3)
engaging with students from other disciplines (87/23.5)	30 (8.1)	57 (15.4)	84 (22.8)	130 (35.2)	42 (11.4)	343 (92.9)

Of course, these analyses are just patterns across the entire cohort. Further analyses based on cross tabulations of these two measures of educational purposes and desired outcomes, and the occupational disciplines, plus other measures such as year of study, for instance. Overall, what these undifferentiated data suggest that the respondents are keen to use post practicum experiences to understand more about their preferred occupations, and how they are progressing towards being prepared adequately to participate in the work, including learning more about the work, its variations and how this might inform their actions as students.

Interventions

The respondents were also asked about their preferences for the timing and focus of post practicum interventions. In the first question they were asked to indicate their preference for the timing of these interventions (i.e. *early in the program, after a number of practicum experiences, towards the end of the course or after every practicum experience*). Respondents could indicate more than one preference. Table 11 presents these data, which are ordered hierarchically with those most frequently preferred being placed at

the top of the table. The informants could indicate more than one preference. The strongest preference was for that to be interventions after every practicum (58%) followed by a preference for early in the program, perhaps after the first practicum (46%), after a number of practicum experiences (40%) and towards the end of the course (25%). It would seem that from these responses the students would welcome interventions after practicums, particularly at the beginning of the program with a suggestion that these are seen as being highly valued as students come to engage with practicum experiences, and seeking guidance and feedback.

Table 11

Respondents' preferred timing for post-practicum interventions

Timing of interventions	**N**	**%**
after every practicum experience	215	58.3
early in the program, perhaps after your first practicum	170	46.1
after having had a number of practicum experiences	147	39.8
towards the end of your course	93	25.2

In terms of the kinds of interventions the informants would engage in preferred to engage in, some patterns emerge from these data. The students were presented with a list of interventions and as to indicate their preference (i.e. *High preference*, *Okay, Low preference* and, with an option to indicate they *Would not participate*). Table 12 presents the responses to these options. In the left column are the kinds of interventions, with also a measure of aggregating *High preference and Okay*. Although ordered hierarchically based on the frequencies of respondents indicating '*High preference'*, the columns to its right present frequencies and percentages of measures of interest. It is also worthwhile considering measures which the respondent suggested those in which they *Would not participate*.

Throughout, so far, the assumption has been that through ranking the responses in terms of frequencies of preferences that patterns of desire processes and outcomes could be identified. However, these data also provides a different kind of preference associated with students being resistant or reluctantly engage. This measure is important because student engagement is essential in such activities, even when they are teacher or expert-led. The strongest patterns of preferred interventions are those associated with small group work being led by either teachers or placement supervisors. This is followed by one-on-one interactions with teachers. Then, there is a considerable gap to the next set of preferred responses. Across these options, peer-organised or led processes are far less well supported, and generate the highest frequency of reluctance by the informants. Those responses associated with *Would not participate* offered a similar pattern, with 'Online with peers' (114-30.9); 'on-line moderated by tutor' (107-29); 'something students should organise' (105-28.5); 'presentations to peers' (99-26.8); and 'as part of scheduled classes' (24-6.5) indicating interventions that would meet with high levels of reluctance, when taken as being reported by at least 25% of the respondents (see also bolded in Table 12).

Table 12

Respondents' preferred kinds of interventions

Intervention (aggregation of High preference and Okay/%)	N (%) High preference	Okay	Low preference	Would not participate	Total
small groups (3 to 6 students) facilitated by teachers/tutors (299/81.1)	184 (49.9)	115 (31.2)	38 (10.3)	11 (3)	348 (94.4)
small groups (3 to 6 students) meeting periodically facilitated by placement supervisor (280/75.8)	154 (41.7)	126 (34.1)	54 (14.6)	11 (3)	345 (93.4)
one-on-one with teacher (259/70.2)	146 (39.6)	113 (30.6)	79 (21.4)	12 (3.3)	350 (91.9)
shared classroom-based group activities (219/59.4)	104 (28.2)	115 (31.2)	93 (25.2)	32 (8.7)	344 (93.3)
small groups (3 to 6 students) facilitated by more experienced students (238/64.5)	106 (28.7)	132 (35.8)	75 (20.3)	33 (8.9)	346 (93.7)
one-on-one with a more experienced student (261/70.7)	106 (28.7)	155 (42)	65 (17.6)	19 (5.1)	345 (93.4)
small self-managed groups (3 to 6 peers) across your course (231/62.6)	90 (24.4)	141 (38.2)	84 (22.8)	31 (8.4)	346 (93.8)
individually completed activity with feedback from teachers (198/53.6)	89 (24.1)	109 (29.5)	112 (30.4)	32 (8.7)	342 (92.7)
one-on-one with a peer (another student) (214/58)	68 (18.4)	146 (39.6)	97 (26.3)	36 (9.8)	347 (94.1)
as part of usual scheduled class activities (216/58.6)	66 (17.9)	150 (40.7)	101 (27.4)	24 (6.5)	341 (92.5)
a special event each semester (169/45.8)	48 (13)	121 (32.8)	130 (35.2)	42 (11.4)	341 (92.4)
whole of class activities (i.e. large group processes 10-100 students) (137/37.1)	38 (10.3)	99 (26.8)	132 (35.8)	70 (19)	339 (91.9)
on-line moderated by tutor (108/29.2)	33 (8.9)	75 (20.3)	125 (33.9)	**107 (29)**	340 (92.1)
on-line with peers (95/25.7)	27 (7.3)	68 (18.4)	131 (35.5)	**114 (30.9)**	340 (92.1)
presentations to peers (101/27.3)	23 (6.2)	78 (21.1)	146 (39.6)	**99 (26.8)**	346 (93.7)
something students should organise (82/22.2)	19 (5.1)	63 (17.1)	152 (41.2)	**105 (28.5)**	339 (91.9)

Overall, the data across the entire cohort indicates that interventions in small groups led by the person in authority/standing, but outside of student group is the most highly preferred option. This is consistent with some of the findings above about students wanting feedback from that practicum from either a teacher or a workplace supervisor.

Student nurse responses

As the largest single cohort of respondents, it is worth considering the responses from nursing students, to identify particular patterns pertinent to these students and their educational processes, and also to compare the findings with the entire cohort. There were a total of 161 complete responses identifying as nursing students whose data was calculated to be complete. Below, some selected findings are drawn from that student cohort.

Table N 1 presents the year level of study reported by these informants. What this table indicates is that it is students in the second and third year of their nursing programs who largely responded to the survey. It seems reasonable to assume that these students have had practicum experiences, not the least because in Table N7 indicates high numbers of practicum experiences across this cohort. So, it would seem here that the informants have had practicum experiences and are reporting in an informed way on the basis of those experiences.

Table N

Year of study

N (%)					
1st	**2nd**	**3rd**	**4th**	**5th**	**Total**
24 (15)	66 (41.3)	68 (42.5)	0	2 (1.25)	160 (100)

The modes of study reported by these students in Table N2 are overwhelmingly as full-time students with 88% of this cohort indicating that mode of study, and the remaining 12% indicating they were part-time students. In Table N 3, the nationality of the students is reported with again, even more overwhelmingly these students presenting as being domestic (99.5%) and a total of seven students across this cohort reporting as being international (4.5%). Also overwhelmingly the students reported in Table N4 as being undergraduate students (95%) and only seven students or 5% reporting being postgraduate students.

Table N2

Mode of study

N (%)		
Full-time student	**Part-time student**	**Total**
137 (88)	19 (12)	156 (100)

Table N3

Student status

N (%)		
Domestic student	**International student**	**Total**
149 (95.5)	7(4.5)	156 (100)

Table N4

Level of study

N (%)		
Undergraduate **student**	Postgraduate **student**	**Total**
148 (95)	7 (5)	155 (100)

The age cohort of the students is quite diverse, yet with key clusters around the 20 to 40 year age grouping (42%) and 40 years and over (26%), as is reported in Table N5. This suggests that a combination of student experience, which includes school leavers as well as mature age students, likely bring particular kinds of attributes, including those who have undertaken vocational qualifications in nursing and may already be

enrolled nurses or nursing assistants. The reason for mentioning this is that such students may well have had extensive work experience prior to undertaking the course and engaging in university organised practicum experiences and in ways distinct from school leavers.

Table N5

Age groupings of student cohort

			N (%)			
15-19	**20-24**	**25-29**	**30-34**	**35-39**	**40 and over**	**Total**
9 (6)	67 (42)	12 (8)	15 (9)	14 (8)	42 (26)	159 (99)

Table N6

Informants' gender

N (%)		
F (Female)	**M (Male)**	**Total**
144 (90)	16 (10)	160 (100)

The gender of the informants is overwhelmingly female (90%) and with 16 informants (10%) reporting as male, as presented in Table N6.

Practicum experiences

The respondents were asked to indicate the number of practicums included in the current degree program. They reported this against a scale which had numbers from zero through to 10 or more. As indicated in Table N7, the nursing students indicated a wide range of practicums would occur in that current higher education program. The most frequent numbers were 5 and 6 practicums (25.4% and 22.8%, respectively) with those reporting 7 and 8 practicums also at reasonable numbers (14.3% and 17.6%). In this way, the students indicate that practicum experiences are an inherent part of their programs and that all report having practicums as part of their degree programs.

Table N7

Number of practicums included in your current degree program

					N (%)					
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10 or >**	**Total**
5 (3.3)	1 (.65)	0	13 (8.5)	39(25.4)	35(22.8)	22(14.3)	27(17.6)	2 (1.3)	9 (5.6)	153

The informants were also asked to make preferences in terms of their interest in particular educational purposes to be realised through post-practicum interventions. The survey comprised a list of different purposes and respondents were able to indicate along the continuum of interest (i.e. *Very interested*; *Some interest*; *Interest*; *Not interested* and *Irrelevant*. In Table N8, the responses to these items are presented. The table has been organised with those purposes reported most frequently on the Very interested measure are at the top of the table and progress downwards to lower reporting measure.

The four most frequently reported purposes are associated with using these experiences to make informed choices about nursing work and also to become more employable, which extended to securing feedback about performance and also learning more about the occupation of nursing. In the fifth most

ranked response, this emphasis extends to understanding how the occupation is practised across different healthcare work settings. So, the first and most weighted responses were those associated with using these experiences to understand the nature of nursing work and how these respondents can learn and work towards being employable and effective in those settings. Following this, the purposes were associated with making links between what is taught within the University and practice settings and also making choices about courses and specific majors (i.e. educational specialisms). The next most frequently reported purpose was to provide feedback to improve the experiences for the next group of students undertaking practicum in that particular workplace setting. Then, perhaps surprisingly, given the emphasis on pragmatic concerns about employment and employability above, there was the concern about linking the work experience with the requirements within the respondents' higher education courses (relevance to coursework and assessments).

Table N8

Respondents' preferred educational purpose

Educational purpose	*N (%)*					
	Very interested	**Some interest**	**Interest**	**Not interested**	**Irrelevant**	**Total**
make informed choices about career, work options or specialisations	103 (65.6)	29 (18.5)	21 (13.4)	4 (2.57)		157
identify how these experiences can make you more employable	101 (64.3)	35 (22.3)	17 (10.8)	4 (2.57)	-	157
secure feedback on your workplace experience	100 (63.7)	34 21.7)	18 (11.5)	5 (3.2)	-	157
learn more about your preferred occupation	99 (62.7)	38 (24.1)	17 (10.8)	4 (2.5)	-	158
learn how your preferred occupation is practiced in across different work settings	96 (61.1)	42 (26.8)	16 (10.2)	3 (1.9)		157
linking what is taught at uni to practice	92 (58.2)	43 (27.2)	21 (13.3)	1 (.63)	1(.63)	158
make choices about selection of subsequent courses/majors	87 (55.8)	42 (26.9)	22 (14.1)	2 (1.3)	3 (1.92)	156
improve the experience for the next cohort of students undertaking practicum in that venue	86 (54.8)	44 (28)	23 (14.6)	3 (1.9)	1 (.64)	157
linking your work experiences with course work and assessments	84 (53.2)	46 (29.1)	20 (12.7)	7 (4.4)	1 (.63)	158
discuss experiences during placement you found worthwhile/interesting/confronting	75 (47.8)	46 (29.3)	32 (20.4)	4 4 (2.57)	-	157
learn about other students' experiences during their practicum	66 (41.8)	43 (27.2)	39 (24.7)	9 (5.7)	1 (.63)	158

The four most frequently reported purposes are associated with using these experiences to make informed choices about nursing work and also to become more employable, which extended to securing feedback about performance and also learning more about the occupation of nursing. In the fifth most ranked response, this emphasis extends to understanding how the occupation is practised across different healthcare work settings. So, the first and most weighted responses were those associated with using these experiences to understand the nature of nursing work and how these respondents can learn and work towards being employable and effective in those settings. Following this, the purposes were associated with making links between what is taught within the University and practice settings and also making choices about courses and specific majors (i.e. educational specialisms). The next most frequently reported purpose was to provide feedback to improve the experiences for the next group of students undertaking practicum in

that particular workplace setting. Then, perhaps surprisingly, given the emphasis on pragmatic concerns about employment and employability above, there was the concern about linking the work experience with the requirements within the respondents' higher education courses (relevance to coursework and assessments).

Also, surprisingly was the relatively low ranking of using post-practicum experiences that were seen to be worthwhile, interesting or confronting to reconcile those experiences with the study focus of their courses and are personal responses to what they had witnessed or experienced directly. Finally, and most lowly ranked, was the purpose of learning about other students experiences during their practicum.

The respondents were also asked to indicate their preference for the timing of any post practicum intervention using a set of prompts comprising "early in the program, perhaps after your first practicum"; "after having had a number of practicum experiences"; "towards the end of your course" and, "at every practicum experience". Table N9 presents the responses to this item of the 161 students by providing the frequency of responses to each prompt and also indicating a percentage Association with each response. As can be seen in this table, the most frequent response is that students prefer to have post-practicum interventions after each practicum experience with 66.5% of the respondents reporting this preference. The second most frequent preference was early in the program after the first practicum (38.8%). Least preferred was having an intervention towards the end of the course. What such figures are taken to indicate is the perceived importance of such interventions and to achieve the kind of educational purposes that were advanced in Table N8 above. This then leads into a consideration of what kind of interventions are the students requesting and those to be held frequently. This is discussed in Table N10.

Table N9

Timing of interventions (n=161)

Timing of interventions	**Yes** **N (%)**
after every practicum experience	107 (66.5)
early in the program, perhaps after your first practicum	62 (38.8)
after having had a number of practicum experiences	44 (27.3)
towards the end of your course	27 (16.8)

The nursing students were also asked to indicate their preference for post-practicum interventions. They were provided with a list of interventions, and also the option to add their own preferred approach, not contained within the list. They were requested to weight each of these suggestions in terms of their preferences*: High preference; Okay; Low preference and, Would not participate*. The aim here was to capture not only their most preferred options but also to identify interventions that would meet with resistance or reluctance, and which might require particular kinds of actions to enact should they be seen important enough. The findings are reported in Table N10 which indicates the interventions and the level of preference in terms of frequency of responses and also the percentage of that response. The listing of options has been ordered in terms of those which were reported with the highest level of frequency in High preference from the top of the table to those with the lowest frequency at the bottom.

The first of four preferences most frequently reported in this table indicates that these nursing students most value small group work that involves or is led by individuals who are either teachers or

practicum supervisors. There is a pattern here which seems consistent with some of the findings about educational purposes reported in Table N8. That is, a concern to secure advice and feedback from individuals who seem to be informative and authoritative. The fifth most proposed intervention is of small group processes led by a more experienced student, again emphasising a desire to be engaged in discussion and informed by a more informed partner than through peer interactions alone. This pattern then continues with individual activities and feedback from a teacher, and on to one-on-one with more experienced students. The first instance in peer support processes is the eighth most preferred option and only 25% of the students see this as a highly preferred option.

Table N10

Respondents' preferred approach to post-practicum interventions

Intervention	*N (%)*				
	High preference	**Okay**	**Low preference**	**Would not participate**	**Total**
small groups (3 to 6 students) facilitated by teachers/tutors	82 (55.4)	45 (30.4)	15 (10.1)	6 (4.5)	148
small groups (3 to 6 students) meeting periodically facilitated by placement supervisor	72 (49)	50(34)	20 (13.6)	5 (3.4)	147
one-on-one with teacher	66 (43.7)	47 (31.1)	32 (21.2)	6 (4)	151
shared classroom-based group activities	56 (37.8)	42 (28.3)	36 (24.3)	14 (9.5)	148
small groups (3 to 6 students) facilitated by more experienced students	49 (33.3)	55 (37.4)	26 (17.7)	17 (11.6)	147
individually completed activity with feedback from teachers	45 (31.3)	41 (28.4)	47 (32.6)	11 (7.6)	144
one-on-one with a more experienced student	37 (25.5)	68 (46.9)	31 (21.4)	9 (6.2)	145
small self-managed groups (3 to 6 peers) across your course	37 (25)	67 (45.3)	33 (22.3)	11 (7.4)	148
as part of usual scheduled class activities	32 (22.2)	60 (41.7)	40 (27.8)	12 (8.3)	144
one-on-one with a peer (another student)	29 (19.5)	61 (40.9)	45 (30.2)	14 (9.4)	149
whole of class activities (i.e. large group processes 10-100 students)	26 (18.1)	40 (27.8)	48 (33.3)	30 (20.8)	144
a special event each semester	23 (16)	46 (31.9)	51 (35.4)	24 (16.7)	144
on-line moderated by tutor	13 (9.2)	30 (21.1)	53 (37.3)	56 (39.4)	142
on-line with peers	8 (5.6)	28 (19.7)	55 (38.7)	51 (35.9)	142
presentations to peers	8 (5.5)	31 (21.2)	61 (41.8)	46 (31.5)	146
something students should organise	6 (4.2)	23 (16.2)	66 (46.5)	47 (33.1)	142

The ranking of preferences then move through one-on-one with peers and large group activities. At the same time, the percentage of students claiming they would not participate in particular interventions increases as the high level of preference decreases. For instance, whilst 18% of the students suggests that whole group activities is a highly preferred option more than that number (20.8%) claim they would not participate in such an activity. This pattern then follows with a special event each semester being supported by 16% of the students whilst 16.7% of the students suggest they would not participate; online activity is mediated by a tutor attracts only 9.2% of responses as a high preference but 39.4% of the students (almost 4 times that number) suggests they would not participate in this activity. Then, online interaction with peers and presentation to peers are supported by only 5.6% and then 5.5% of the students respectively were as

35.9% and 31.5% of the students indicate they would not participate in such activity. Then, in reflecting the strong emphasis above on guidance and advice from the authoritative figure, the responses to the option for students to organise something themselves attracts only 4.2% as a high preference and 33.1% as something in which students suggest they would be reluctant to participate.

Some further analyses of the nursing data were undertaken to discern whether there are difference amongst age grouping of nurses in their interest in the purposes for post-practicum interventions. This analysis was prompted by presence of distinct clusters of ages in the nursing informants and knowledge of there being two distinct pathways into nurse training. Two tables were generated through a three way cross-tabulation to provide a descriptive analysis of any patterns of differences in frequencies of preferences for interventions the purposes of educational.

Table N12, presents the data about preferences of purpose for Nursing students as delineated on the basis of age groupings as gathered in the survey. Table N11 below presents the same data but collapsed into three age groupings (i.e. 15-24; 25-34 and 35 and above years). In each of these tables the respondents indication of interest is against the labels of *Very interested* (v); *Some interest* (s); *Interest* (i); *Not interested* and *Irrelevant* (n), except the latter two are presented under *Not interested*.

Common across all three age groups was the high frequency of 'Making informed choices about career, work options or specialisation'. So, regardless of age grouping and level of clinical or other kinds of work experience, the informants want to use these experiences to inform future planning it seems. Seemingly different amongst the three age cohorts were the following. The younger (school leaver?) gave high priority to wanting to learn about their selected occupation, which was of less interest to older students, perhaps for reasons mentioned above (i.e. older students having already had some experience of this work). Securing feedback on clinical performance was more highly valued by the younger cohorts than the older one, perhaps again because of the lack of procedural experiences and capacities. Yet, shared across both the younger and older cohorts was high levels of interest in processes informing about employability

Table N11

Frequencies of preference for educational purposes across age groupings

Purpose	*n (%)*											
	15-24				**25-34**				**35+**			
Total	**76 (48)**				**27 (17)**				**56 (34)**			
	v	***s***	***i***	***n***	***v***	***s***	***i***	***n***	***v***	***s***	***I***	***n***
discuss issues that you found interesting	31	28	13	2	12	6	9	0	31	11	9	2
linking what is taught at uni to practice	38	26	10	0	14	9	4	0	41	7	6	1
learn more about your preferred occupation	45	22	8	0	18	5	3	2	36	11	5	2
learn about other students' experiences during their practicum	25	21	23	4	13	6	7	1	28	15	8	4
learn how your preferred occupation is practiced in across different work settings	38	29	5	2	19	5	3	1	39	8	7	0
secure feedback on your workplace experience	41	20	5	0	20	3	3	1	36	11	5	1
linking your work experiences with course work and assessments	33	27	9	6	16	6	5	0	34	13	5	2
identify how these experiences can make you more employable	41	24	8	1	17	5	3	2	42	7	4	1
make informed choices about career, work options or specialisations	44	20	8	2	25	9	9	3	40	6	8	0
make choices about selection of subsequent courses/majors	38	23	9	1	15	6	5	1	36	8	7	2
improve the experience for the next cohort of students undertaking practicum in that venue	33	25	13	2	16	7	4	0	36	12	5	1

Note: labels of *Very interested* (v); *Some interest* (s); *Interest* (i); *Not interested* and *Irrelevant* (n), except the latter two are presented under *Not interested*.

Table N12

Composite data of nursing students' preferences for purposes of post-practicum interventions

Purpose	**15-19 n (%) 9 (6)**				**20-24 n (%) 67 (42)**				**25-29 n (%) 12 (8)**				**30-34 n (%) 15 (9)**				**35-39 n (%) 14 (8)**				**40+ n (%) 42 (26)**			
	v	***s***	***i***	***n***	***v***	***s***	***i***	***n***	***v***	***s***	***I***	***n***	***v***	***s***	***i***	***n***	***v***	***s***	***i***	***n***	***v***	***s***	***i***	***n***
discuss issues that you found interesting	5	2	1	1	26	26	12	1	7	1	4	0	5	5	5	0	9	3	1	0	23	8	8	2
linking what is taught at uni to practice	4	4	1	0	34	22	9	0	9	2	1	0	5	7	3	0	14	0	0	0	27	7	6	1
learn more about your preferred occupation	5	4	0	0	40	18	8	0	11	1	0	0	6	4	3	2	11	3	0		25	8	5	2
learn about other students' experiences during their practicum	2	2	3	2	23	19	20	2	7	3	2	0	6	3	5	1	9	3	1	1	19	12	7	3
learn how your preferred occupation is practiced in across different work settings	5	4	0	0	33	25	5	2	10	1	1	0	8	4	2	1	12	1	1	0	27	7	6	
secure feedback on your workplace experience	4	3	2	0	39	17	3	0	11	0	1	0	9	3	2	1	10	3	0	0	26	8	5	1
linking your work experiences with course work and assessments	3	4	2	0	30	23	7	6	10	1	1	0	6	5	4	0	12	1	0	0	22	12	5	2
identify how these experiences can make you more employable	5	2	1	1	36	22	7	0	10	0	1	1	7	5	2	1	12	2	0	0	30	5	4	1
make informed choices about career, work options or specialisations	5	2	1	1	39	18	7	1	16	7	6	2	9	2	3	1	13	1	0	0	27	5	8	0
make choices about selection of subsequent courses/majors	5	3	1	0	35	20	8	1	8	1	3	0	7	5	2	1	12	1	0	0	24	7	7	2
improve the experience for the next cohort of students undertaking practicum in that venue	4	4	0	1	29	21	13	1	8	1	3	0	8	6	1	0	11	2	0	1	25	10	5	0

Note: labels of *Very interested* (v); *Some interest* (s); *Interest* (i); *Not interested* and *Irrelevant* (n), except the latter two are presented under *Not interested*.

The following are some of key findings and deductions from the survey data.

1. Students are motivated to optimise the educational potential of their work experiences, albeit for diverse reasons.
2. There is an expectation by these students that their teachers or supervisors will play a role in this process through:

a. Engaging them in activities
b. Providing advice
c. Feedback on their performance and progress

3. They want interventions that lead to applicable (i.e. practical/tangible) outcomes related to their ability to practice.
4. They prefer that these interventions occur frequently (e.g. after every practicum)

A key educational question arising from such data is the degree by which and on bases is it appropriate to accommodate students' preferences or contest them. That is, whether the findings here suggest agendas and priorities that need to be addressed, or alternatively worked to overcome.

For instance, the findings on purposes identify issues and concerns that stand as bases to be addressed through educational (i.e. teaching and learning) interventions. However, some of the preferences for interventions indicate that these are preferences that need to be redressed and changed. For example, preferences for others to take action may work against those in which students should be engaging

Specific findings

Educational purposes

These students reported priorities for using the post-practicum experiences for learning more about:

their particular occupation, including specialisms
their performance within the workplace
what can lead/assist them to being employable

The lowest level of interest was on utilising both their own and others' experiences to enhance educational processes. This is of concern, given the focus of this project is strongly focused on the latter. That is, using students experiences, they are sharing, comparing and critical engagement to enrich the quality of the learning outcomes. Such a project is made tough if students are reluctant to engage. Hence, feedback on individual performance, how that relates to occupational requirements and learning more about the occupation were purposes these students reported as being the strongest focus of the interest.

Forms of interventions

The strongest patterns of preferred interventions are those associated with small group work being led by either teachers or placement supervisors. This is followed by one-on-one interactions with teachers. Overall, the data across the entire cohort indicates that interventions in small groups led by the person in authority/standing, but outside of student group is the most highly preferred option. All of these findings hopefully provide helpful guidance on how to proceed with the individual projects.

Day One materials

Project Reports

	Project	Participants/contacts	Institution	Discipline
1	Evaluation of the Post-Practicum Clinical Reasoning Oral Exam	Tracy Levett-Jones, Helen Courtney-Pratt and Natalie Govind	UTS	Nursing
2	Peer group simulation activity post-practicum	Helen Courtney-Pratt and Tracy Levett-Jones	UTAS	Nursing
3	Post-practicum strategies to translate clinical experience to attributes of employability	Garry Kirwan, Neil Tuttle, Ben Weeks and Liisa Laakso	Griffith (AH)	Physiotherapy
4	Post-placement week – using students' experiences to enrich understandings of distinct kinds of nutrition and dietetics practice	Lauren Williams Lynda Ross, Lana Mitchel and Katherine Markwell	Griffith (AH)	Nutrition and dietetics
5	Post-practicum debrief focussing on the development of resilience and occupational identity	Andrea Bialocerkowsk, Libby Cardell and Shirley Morrisey	Griffith (AH)	Speech therapy
6	Integrating an Employability Intervention into Clinical Practicum Debrief Sessions	Kelly Clanchy; Grad Dip Ex Sci Teaching Team.	Griffith (AH)	Exercise Physiology
7	Individual student feedback: critical reflective piece of writing	Gary Rogers	Griffith	Medicine
8	Feedback from practicum using web-based engagements with peers	Julia Harrison and Liz Molloy	Monash/Melbourne	Medicine
9	Reflective learning circles	Julia Harrison and Liz Molloy	Monash/Melbourne	Medicine
10	Graduate entry students community practice/facilitating reflective group activities	Jenny Newton	Monash	Nursing
11	Midwifery continuity of care experiences: enhancing learning through reflective practice	Linda Sweet,Trudi Mannix, Kristen Graham, Janice Bass, Mary Sidebotham & Jenny Fenwick	Flinders/Griffith	Midwifery
12	Learning circles to develop inter-subjectivity	Laurie Grealish, Lyn Armit, Thea van de Mortel and Marion Mitchell	Griffith/GCH	Nursing
13	Using programmed de-briefs to augment students' experiences	Niamh Keane and Carole Steketee	Notre Dame	Medicine
14	Enhancing students' feedback literacy in the workplace: a learner-centred approach	Christy Noble, Lyn Armit, Leigh Collier Christine Sly and Liz Molloy	GCH/Melbourne	Medical, Allied Health, Nursing, Midwifery

Projects: Principal focus for teaching and learning strategies and participants

	Project	Actors	Principal focus (Day One)	Implementation (Day Two)
1	Post-Practicum Clinical Reasoning Oral Exam -	Tracy, Helen & Natalie	Peer feedback	Approximately 100 second year undergraduate nursing students
2	Peer group simulation activity post-practicum	Tracy & Helen Newcastle - Nursing	Simulation – pre-brief activity	60 first year nursing students
3	Post-practicum strategies to translate clinical experience to attributes of employability	Garry K, Neil, Ben & Liisa, Physiotherapy	Specific post-placement learning tasks	72 second year students
4	Using students' experiences to enrich understandings of distinct nutrition and dietetics practices	Lauren, Lynda, Lana and Katherine, Nutrition and Dietetics	Sharing and comparing group activities during week-long debrief event	All final year undergrad ND students
5	Debrief focussing on the development of resilience and occupational identity	Andrea, Libby & Shirley, Speech therapy	Debriefing workshops	All first and second year masters students 35-40 per year)
6	Integrating the Employability Framework into Grad Dip of Exercise Science Post-Practicum Debrief	Kelly & Grad Dip Ex Sci Teaching Team	Enhancing debriefing sessions	20 students enrolled in
7	Individual student feedback: critical reflective piece of writing	Gary R, Medicine	Reflective writing pieces based on critical observation task	150 final year medical, ~30 pharmacy, ~80 physiotherapy, ~20 exercise physiology, ~30 clinical psychology students
8	Feedback from practicum using web-based engagements with peers	Julia & Liz, Medicine	Online engagement with critical thinking, reflection and peer discussion	500 final year medical students via on-line forums
9	Using reflective learning circle post clinical placement	Julia & Liz, Medicine	Facilitated learning circles	120 final year medical students
10	Students discussing placement experiences through producing a video clip	Jenny, Nursing	On-line discussion forums	60 masters level nursing practice students

	Project	Actors	Principal focus (Day One)	Implementation (Day Two)
11	Midwifery continuity of care experiences: enhancing learning through reflective practice	Linda, Trudi, Kirste, Janice, Mary & Jenny, Midwifery	Reflective writing and group discussion	1st year: 60 (approx.), 2nd year: 60 (approx.) and 3rd year: 40 (approx.) midwifery students
12	SUCCEED 2.1: Learning circles to develop inter-subjectivity	Laurie, Lyn, Thea & Marion, Nursing	Facilitated student appraisal of practice	2nd and 3rd year nursing students (70-120)
13	Using programed de-briefs to augment students' experiences	Niamh & Carole, Medicine	Debriefs of work activities	Two groups of 20 Fourth year medical students
14	Feedback strategies at end of practicums	Christy, Lyn, Leigh, Christine & Liz	Combination of self-evaluation and feedback from expert others	Three groups of 6-8 students from allied health, medical, nursing and midwifery

Evaluation of the Post-Practicum Clinical Reasoning Oral Exam

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Abstract

Background – Nurses with effective clinical reasoning skills have a positive impact on patient outcomes. Conversely, those with poor clinical reasoning skills often fail to detect impending patient deterioration. It is vital for students to understand the process and steps of clinical reasoning and demonstrate their ability to 'think like a nurse'. However, teaching and assessing a complex cognitive skill such as clinical reasoning can be challenging for educators.

Aim – The aim of this project was to evaluate student performance in and perceptions of in a newly introduced post-practicum oral clinical reasoning exam.

Post-practicum experience being evaluated – Nursing students were provided with a verbal clinical handover and the health care records of four patients. In the individual oral exam that followed students were required to describe how they would prioritise, plan and manage the care of the four patients using a clinical reasoning cycle as their organising framework. The exam was marked by an academic staff member.

Method of evaluation – Following ethical approval and on completion of the oral exam, students were invited to complete a short evaluation survey with closed and open ended questions. Qualitative data was thematically analysed and quantitative data was statistically analysed.

Evaluation results – There were 471 students enrolled in the clinical course and invited to complete the evaluation survey. Of these, 181 participated giving a response rate of 38%. The mean satisfaction score was 3.03 out of a maximum of 5 indicating a moderate level of participant satisfaction with the oral exam. Three themes emerged from qualitative analysis: "Better than written assessment items", "Authenticity of the approach" and "The need for better preparation".

Brief description of academic area and students involved

This project was undertaken in a school of nursing situated within one large semi-metropolitan university in NSW. All undergraduate nursing students enrolled in a second-year clinical course were required to undertake the oral clinical reasoning exam as a mandatory course assessment item. Participation in the linked research project was voluntary and anonymous.

Particular purpose

What is clinical reasoning?

Clinical reasoning is defined as a 'process by which nurses (and other clinicians) collect cues, process the information, come to an understanding of a patient problem or situation, plan and implement interventions, evaluate outcomes, and reflect on and learn from the process' (Levett-Jones et al. 2010, p. 516). Clinical reasoning requires a critical thinking 'disposition' (Scheffer & Rubenfeld 2000) and is influenced by a person's assumptions, perspectives, attitudes and preconceptions (McCarthy 2003).

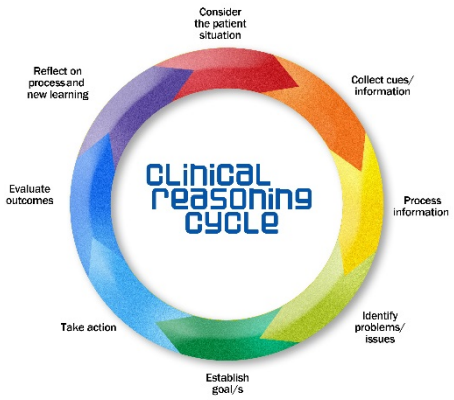
Clinical reasoning is often used interchangeably with terms such as 'clinical judgment',

'problem solving', 'decision making' and 'critical thinking'. While there are some similarities between these terms, clinical reasoning remains a discrete, ordered and cyclical process that often leads to a series of linked clinical encounters, particularly in response to unpredictable, emergent and non-routine situations.

The clinical reasoning process

A diagram of the clinical reasoning cycle is shown in Figure 1. The cycle begins at 1200 hours and moves in a clockwise direction. The circle represents the cyclical nature of clinical interventions and the importance of evaluation and reflection. The clinical reasoning cycle consists of eight main stages or steps: *look*, *collect*, *process*, *decide*, *plan*, *act*, *evaluate* and *reflect*. In reality, however, the stages merge and the boundaries between them are often blurred. Although each stage is presented as a separate and distinct element in this diagram, clinical reasoning is a dynamic process and nurses often combine one or more stages or move back and forth between them before reaching a decision, taking action and evaluating outcomes.

Figure 1. The clinical reasoning cycle



Why is clinical reasoning important?

Nurses are responsible for a significant proportion of the judgments and decisions made in healthcare and they engage in multiple clinical reasoning episodes every day. For example, nurses on a medical ward have been observed engaging in up to 50 significant clinical reasoning encounters per shift (Thompson et al. 2004). Similar research findings were also identified by Bucknall (2000), who observed that intensive care nurses faced a clinical judgment or decision every 30 seconds.

The ability to respond to challenging and dynamic clinical situations requires, not only psychomotor skills and knowledge, but also sophisticated thinking abilities. Application of clinical reasoning skills has a positive impact on patient outcomes. Conversely, nurses with poor clinical reasoning skills often fail to detect patient deterioration, resulting in a 'failure-to-rescue' (Aiken et al. 2003). In fact, cognitive failure has been identified as a factor in 57 per cent of adverse clinical events (Wilson et al. 1995).

Too often new graduate nurses lack the requisite level of clinical reasoning skills needed to respond appropriately to clinical situations. For example, one American study showed that 70 per cent of graduate nurses scored at an 'unsafe' level of clinical reasoning despite having satisfactory content knowledge and adequate procedural skills (del Bueno 2005). The reasons for this are multidimensional and include the tendency to make errors in time-sensitive situations where there is a large amount of data to process, and difficulties in distinguishing between a clinical problem that needs immediate attention and one that is less acute (Hoffman 2007). Graduate nurses are frequently required to care for and make decisions about complex patients with diverse health needs; this requires effective and well-rehearsed clinical reasoning skills.

Enacted post-practicum interventions

Clinical reasoning requires practice and active engagement in deliberate learning activities. Educators must model, teach and assess students' developing clinical reasoning skills, in both academic and clinical settings. Written assessment items are not always an effective approach for students to demonstrate understanding and application of clinical reasoning in an authentic manner. However, an oral exam has the potential to facilitate students' ability to describe their practice more fully without the constraints imposed by formal academic writing.

The post practicum oral clinical reasoning exam was designed to assess nursing students' content knowledge (domain-specific) and process knowledge (clinical reasoning ability). The constructivist approach adopted allowed students to construct knowledge by being actively engaged in a learning activity that was situated, experiential and authentic. The clinical scenarios presented to students provided the opportunity for reiterative learning which leads to deeper levels of processing, thus improving retention and recall of information. This approach also promoted cognitive rehearsal of the clinical reasoning process; a method of mentally practising effective responses to specific situations in order to develop and integrate effective skills into one's repertoire of knowledge and skills.

On the day of the clinical reasoning exam nursing students met individually with an academic staff member who provided a verbal clinical handover and the health care records of four patients. Students then had 30 minutes to describe how they would prioritise, plan and manage the care of the four patients using the clinical reasoning cycle as their organising framework. The exam was marked using a structured rubric with clear performance criteria.

Data gathered and analysed

Following ethical approval and on completion of the oral exam students were invited to complete a 16 item evaluation survey with closed and open ended questions. Qualitative data was thematically analysed and quantitative data was statistically analysed. Student performance in the clinical reasoning exam was also examined.

Key findings

Participants – There were 471 students enrolled in the clinical course and invited to complete the evaluation survey. Of these, 181 participated in the survey, giving a response rate of 38%. The majority (91%) of participants were female and 63% were currently or previously employed in the healthcare industry mainly as assistants in nursing, enrolled nurses or healthcare assistants.

Student performance – The clinical reasoning exam was worth 30 marks. The mean mark for the assessment item was 20.36 and the median 20 (SD 4.46). Twenty-eight students achieved a mark of less than 15 and received a fail grade for this assessment item.

Student perceptions – as might be expected with this type of newly introduced and reasonably challenging assessment item, students' perceptions of the oral clinical reasoning exam varied. The mean satisfaction score was 3.03 out of a maximum of 5 indicating a moderate level of participant satisfaction with the oral exam. Table 1 lists the scores for students' degree of agreement with each of the 14 Likert scale survey items.

The three highest scores were for:

Item 1: *The educator made me feel comfortable and at ease during the oral assessment* (M 3.38); Item 4: *The oral assessment helped me to recognise my strengths and weaknesses in terms of problem solving* (M 3.58); and Item 6: *The oral assessment caused me to reflect upon my clinical reasoning ability* (M 3.56).

The three lowest scores were for:

Item 8: *I believed I performed better in the post-practicum oral assessment than I would have had I undertaken it prior to my clinical placement* (M 2.29); Item 12. *The oral assessment was an appropriate way to assess my clinical reasoning ability* (M 2.77); and Item 13 *The oral assessment was a fair way of assessing my clinical reasoning ability* (M 2.77).

Table 1

Scores for students' degree of agreement with each of the 17 Likert scale survey items

Answer Options	Strongly disagree	Disagree	Unsure	Agree	Strongly agree	Mean
1. The educator made me feel comfortable and at ease during the oral assessment	16	20	23	60	65	3.38
2. I was able to use what I learned from my clinical placement in the oral assessment	23	37	25	66	33	2.86
3. The oral assessment allowed me to demonstrate my knowledge about patient care	16	38	30	62	38	2.88
4. The oral assessment helped me to recognise my strengths and weaknesses in terms of problem solving	11	25	13	78	57	3.58
5. The oral assessment helped me to recognise my strengths and weaknesses in terms of prioritising and planning patient care	13	24	21	82	44	3.31
6. The oral assessment caused me to reflect upon my clinical reasoning ability	10	19	17	83	55	3.56
7. The educator's questions during the oral assessment helped me to learn	17	36	27	59	45	2.99
8. I believed I performed better in the post-practicum oral assessment than I would have had I undertaken it prior to my clinical placement	14	37	59	36	38	2.29
9. I will be able to use what I learned from the oral assessment in my future practice	14	23	22	80	45	3.29
10. The educator provided constructive feedback following the oral assessment	21	38	29	55	39	2.81
11. The oral assessment was a valuable form of assessment	39	27	22	39	57	2.90
12. The oral assessment was an appropriate way to assess my clinical reasoning ability	30	29	31	47	46	2.77
13. The oral assessment was a fair way of assessing my clinical reasoning ability	34	36	23	46	43	2.77
14. I preferred the oral assessment rather than a written assessment item for assessing clinical reasoning	43	24	22	21	74	2.96

Three themes emerged from qualitative analysis: “Better than written assessment items”, “Authenticity of the approach” and “The need for better preparation”. Participant quotes supporting each of these themes are provided below:

Better than written assessment items

- *I liked that it was face-to-face and individualised*
- *it took a lot less time than a written assessment item and there was no need for references!*
- *it was clearer than written assessment items as we could ask the assessor questions*
- *it was good being able to interact with the assessor*
- *I was able to able to articulate my clinical reasoning and provide justification for my answers*
- *feedback was immediately provided so we knew exactly how we were going*

Authenticity of the approach

- *the patient scenarios were realistic and authentic*
- *the oral assessment allowed me to carefully think about and prioritise patient care just like I would on the job*
- *I was able to articulate and demonstrate my knowledge and understanding of the patient situations*
- *it made you think and reflect*
- *undertaking the assessment item after my clinical placement allowed for practical application of what I had learned*

The need for better preparation

- *I would have benefited from some sort of preparation workbook prior to the assessment item*
- *there should have been something like a clinical handover provided before the exam to help us prepare*
- *a cheat sheet with the clinical reasoning cycle included would have helped us to structure our thinking*
- *a clearer and more detailed assessment description was needed to give us an idea of what to expect*
- *more information was needed each of the patients and could have been provided before the assessment*
- *I needed more time to think through each answer is I don’t feel I was able to prepare well for this assignment*

Students’ performance and evaluation feedback indicated that although this assessment item was positively received by many students, others found it stressful and difficult to prepare for. As this was the first time this type of oral exam had been introduced, these perspectives are valuable and can be used to improve future iterations of the post-practicum clinical reasoning exam.

Issues arising for discussion

- The oral clinical reasoning exam allowed students to apply what they had learned on the clinical placement, 'think on their feet' and cognitively process and prioritise patient care needs.
- An oral exam provides some advantages to the usual written assessment items and exams, particularly for assessment of cognitive skills.
- Students need adequate preparation and clear instructions for oral clinical reasoning exams, as well as opportunities to practice and rehearse these types of challenging assessments.
- The effectiveness of the oral clinical reasoning exam was influenced by the immediacy, quality, clarity and amount of feedback provided by the assessor.

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Peer Group Simulation Activity Post Practicum

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Intended Project

Background – The purpose of the simulation is to provide an opportunity post practicum to apply, explore, recognise, and consolidate learning that has resulted from participation in clinical practice. The focus is on communication skills and clinical safety through undertaking a patient assessment during the simulation. We elected to focus on first year undergraduates immediately following first clinical placement, a time recognised as challenging in relation not only to application of skill in the clinical environment but also communication and exposure to complex cultures, all impacting on areas of attrition, further placement experiences and preparedness to progress in the degree.

Aim – The aim of the pilot delivery of the simulation is to enable exploration of a clinical scenario likely to have been experienced in practice.

Post-practicum experience being evaluated

In a safe supported environment, undergraduates can explore past events, reconsider outcomes and alternate actions and determine new learning post-practicum. Providing an opportunity to explore a scenario immediately following placement will allow students to plan what they may do differently in future placement and to identify positive aspects with an aim to replicate in the clinical milieu. The approach is suitable for health care undergraduates and could be extended to a multidisciplinary simulation following pilot

Method of evaluation – Ethics approval was provided by the HREC TAS. Data to be collected included audio recording of debrief session and completion of a short validated survey (CARE inventory tool). Qualitative data will be thematically analysed and quantitative data statistically analysed.

Suspension of project -the project stalled post ethics. Delays in faculty support, student recruitment and timelines of clinical placement impacted in such a way that the project was suspended.

Timeline:

Dates	Action
June – July 2016	Ethics prepared and submitted to faculty
9th Sept 2016	Faulty approval to submit ethics after long delay related to perceived conflict with proposed implementation of faculty simulation program
9th Sept 2016	Ethics submitted for review to HREC
13th Sept 2016	Ethics approval received
21st Sept 2016	Invitation to participate (3rd October) sent to all first year students by third party (gatekeeper). Three students responded – cancelled session
1st Oct 2016	Rescheduled dates to 18th October and 7th November. Six participants recruited for 7th November with two subsequently cancelling

Reflections on Process

We have learnt valuable lessons in the process that include:

1. The difficulties of providing a simulation experience when students have limited prior exposure to such experiences.

   At this site undergraduate nursing students have had very limited exposure to simulation.

   This may have provided some uncertainty regarding participation.

2. The benefits or otherwise of the simulation are not immediate apparent to the student group.
   It is thought that if they had prior exposure (with positive experience) that students may have felt more confident about participation and may have positive perceptions regarding potential learning outcomes.
3. It is now evident that post practicum the focus for students is on completing assessment tasks and preparing for upcoming exams;
   Due to delays in ethics approval we were later in the scheduling of sessions and were competing with assessment task deadlines and exam schedules.
4. 'extra-curricular' activities (over and above usual course requirements) are difficult for student to prioritise and attend
   It may have been wiser to embed the requirement into course or unit assessment items in order to increase participation in the simulation and research.

Comments from Survey instrument: Post Practicum project from February 2016

Responses to the question of how post practicum experiences would occur and what would happen during them identified:

- Students had preference for small group activities led by an academic.
- Critical reflection was a highly regarded activity
- Non-judgemental, confidential environment was required

The proposed project met the requirements of students articulated in the survey however did so through a simulation and debrief. Marketing of the benefits of simulation and prioritising the timing of information and provision of the activity are paramount.

Post-practicum strategies to translate clinical experience to attributes of employability – Responding to graduate selection criteria

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Abstract

Graduate employability is important to students, educators and universities [1, 2]. Although students develop attributes essential for employment throughout their study, it is important that they are also able to effectively communicate those attributes to potential employers [3]. Therefore, the aim of the project was to enrich the skills of physiotherapy students in demonstrating university skills and knowledge and clinical placement experiences as attributes of employability.

Forty-seven final-year physiotherapy students volunteered and consented to participate. Each student wrote an application for a hypothetical new graduate position in one of four employment sectors. A sector representative evaluated each application, provided written feedback to the applicant and a score to the investigators. Guided by feedback, students were then able to improve the content and presentation of their applications, before subsequently applying for another hypothetical position in a different sector and undergoing a mock interview. Sector representatives scored written applications and interviews, and provided direction to the students on how to improve their application in both verbal and written formats.

Between the first and second rounds, written application scores increased from 6.2/10.0 ±1.8 to 7.2/10.0 ±1.7 ($p=0.01$), with a score of seven significantly more likely to result in an interview ($p\leq0.001$) according to employer comments. Student confidence in communicating attributes of employability through a written application increased from 1.6/5.0 (0.6) to 2.7/5 (0.6). Therefore, it appears the intervention was successful in improving student ability to translate clinical experiences into employable attributes through a job application process

Brief description of academic area

Students of the physiotherapy program in the School of Allied Health Sciences, Griffith University participated in the project. A total of f 47 students enrolled in 7037AHS Practice of Physiotherapy VI volunteered and the project was undertaken between April 2016 and September 2016 at the Gold Coast campus. The mean participant age was 25.1±5.3 years with 66.7% (n=30) of participants being female. Only 6.7% (n=3) of participants had undergone previous training in job application processes.

Particular purpose

Physiotherapy has a long history of incorporating Work Integrated Learning (WIL) into its programs under the term ‘clinical placement’. At present, students enrolled in the Griffith University Master of Physiotherapy program undertake six placements totalling 27 full-time clinical weeks. The placements are integrated throughout the program, with each one focusing on specific aspects of physiotherapy and healthcare practice.

The program provides successive levels of scaffolding. Students cover an area of content on campus followed by pre-placement planning sessions and, in some cases, simulated learning environments modelled on the placement that is to follow. Their clinical placement is directly related to the preceding on-campus content and each placement is followed by a post-placement reflective practice session. Each subsequent on-campus block builds on the knowledge and skills from previous blocks and clinical placements. In summary, each on-campus block is followed by a related clinical placement which in turn supports the following on-campus block. Modules are in place to facilitate the transitions to and from clinical placements.

The entire program is structured to prepare students to being employed as qualified Physiotherapists. Some of the attributes of employability (such as the ability to effectively communicate, to work autonomously or to show leadership) have not been a part of the program to date. Although we have been diligent to assist transitions between on-campus blocks and clinical placements, student feedback has highlighted a perceived lack of readiness to successfully transition from university to employment.

One aspect of the transition to employment is the concept of employability. Although employability is complex and dependent on many factors, it is recognised that the skill of applying for a job is a critical component [1, 2, 4]. Generally, within the physiotherapy profession, new graduate physiotherapists engage with a competitive recruitment process involving a written application (with cover letter and response to key selection criteria), curriculum vitae and an interview. Competition for new graduate physiotherapy positions is increasing each year in Australia with a greater than 300% increase in numbers of university programs and concomitant number of graduates. Students undertake extensive training to acquire knowledge, skills and competency in the practice of physiotherapy. The ability to communicate these attributes and capabilities during the job application process, which is essential for employment success, has not previously been a focus of our program.

The aim of this project was to apply the same principles of scaffolding that we use to assist students to transition between on-campus teaching and clinical placements and apply them to the transition from university education to employment. Specifically we aimed to develop a set of post-placement learning tasks for students that were focused on translating previous clinical experiences into attributes relevant to new graduate employment. In line with current professional practice, the tasks included writing job applications and participating in simulated new graduate interviews based on key selection criteria typically found in new graduate applications.

Enacted post-practicum interventions

The intervention consisted of two stages. Historically, students attended one lecture on applying for physiotherapy positions and this took place prior to the project. In the first stage, final year physiotherapy students wrote an application for a new graduate position based on previously advertised selection criteria in one of four areas of practice. Applications were submitted and reviewed by one industry representative from each of the four areas of practice. Each representative had previous experience in the employment of new graduate physiotherapists. Students received individual written feedback as well as a score out of 10 based on standard written application criteria. Finally, applications were categorised to indicate if the application would likely progress to interview or not.

After students had reviewed their feedback, a facilitated focus group was conducted to discuss the elements of a written application that were considered more and less desirable. Furthermore, the key attributes of employability sought by employers were discussed. At the conclusion of the focus group, students identified personal goals to improve their attributes of employability based on the knowledge gained in the focus groups. The students then had the opportunity to develop these skills during clinical placements conducted between phase one and phase two.

In the second stage students selected a different area of practice and prepared a second, written application, incorporating the learnings and additional skills developed from the first stage. Students again received written feedback as well as a score out of 10 and an indication as to whether an interview would have been offered.

Finally, students underwent a simulated new graduate interview. The interview panel consisted of the same industry representative who reviewed the application, a member of academic staff and a student peer who was also involved in the project. The interview was rated and verbal feedback provided including aspects of their performance and strategies for improvement. The two stages were intended to iteratively replicate the application process for new graduate physiotherapy positions.

Data gathered and analysed

Both quantitative and qualitative methods of data collection were employed to evaluate the project. Firstly, written applications and interview performances were scored on a scale from 0 – 10, where 10 represented the best performance. The score was based on the student's ability to meet the employment criteria of the relevant clinical setting. The mean and standard deviation for applications from each phase of the project was calculated and compared using a paired samples t-test., Chi Squared analysis was conducted comparing the significance between an application score of seven or greater and the likelihood of achieving an interview.

Student perception of confidence and understanding in applying for new graduate positions was collected before and after each application. Student perception of their ability to demonstrate attributes of employability through a written application or interview process was also collected. Student responses were aggregated and descriptive statistics presented to determine how student perceptions changed over the course of the project.

Key findings

The primary outcome measure for the project was student performance on the written application based on the 10-point scoring criteria. The written application score directly represents the students' ability to meet the employers' expectations for the position description, hence, is the best predictor of a student's likelihood to progress to interview. Therefore, it was considered reasonable for the application score to be the primary measure to evaluate the effectiveness of the intervention. The mean written application score, significantly improved from 6.1±1.8 in the first phase to 7.1±1.7 in the second phase ($p=0.01$). This outcome demonstrates that the intervention was successful in improving student capabilities in demonstrating attributes of employability when writing a new graduate application. Furthermore, Chi Squared analysis demonstrated that a score of seven or greater on the written application was significantly more likely to result in an interview ($p<0.001$). As

the mean score for written applications increased to a score more likely to result in interview demonstrates the practical importance of the intervention.

Over the course of the project, student self-rated confidence in applying for new graduate positions increased from 1.6±0.58 to 2.7±0.6 on a 5-point Likert scale where 5 represented 'very confident'. Student feedback at the conclusion of the project also recognised the benefits of the focus group in improving written application skills (3.5±0.5) and the simulated interviews at improving confidence in undertaking an interview (3.5±0.5). Overall student satisfaction in achieving the project aim of improving employability was 89. 9%±10.6 indicating a high level of student satisfaction for the inclusion of this form of curriculum activity.

The findings of this project reinforce the importance of students engaging in practical employment activities to augment their likelihood of progressing through expected recruitment processes. Authentic activities, delivered by current employers of new graduates, appear to be an effective method to achieve such an outcome. In professions, where standardised new graduate employment practices are common place, integrating strategies that develop skills for translating learning experiences into attributes of employability through a written application and interview application process are critical for maximising student success upon graduation.

Issues arising

There was a 12.8% (n=6) attrition of students across the project and only 61.8% (n=47) of the eligible student population volunteered to participate. The primary reason for not participating or to withdraw was competing academic and clinical placement requirements. Due to the fact the project was extracurricular, core academic and clinical tasks were required to be completed concurrently with the project. Therefore, in order to ensure maximum accessibility, integration of the project into the curricular would be ideal. This would allow students to dedicate time and thought to develop their job application skills.

A small number of students (n=2) reported the focus groups to be confronting when discussing undesirable aspects of their applications. A perception of failure was reported, which left the students with a perception that this may hinder their future opportunities in applying for employment opportunities. Our methodology was designed to blind employers from the identity of student's, however, within the focus group some students felt it was 'easy to figure out who it was'. In future practice, it would be important to ensure anonymity is maintained within the focus groups to ensure a safe opportunity for students to build competence is provided.

There was consistent student feedback that a greater opportunity for one-to-one guidance from the focus group facilitator would be highly valued. This was coupled with a perception that some of the focus groups were too large, which hindered the ability to address individual needs. Obviously, the main difficulty with reducing group size is the need for an increase in resources. In our situation, certain clinical areas were more popular than others. Thus, dividing these focus groups into two and providing two facilitators may be a solution in future iterations of the project.

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Reflections and Future Directions: Post-practicum workshops to assist Student Dietitians to Transition to Accredited Practising Dietitians

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Abstract

This project aimed to assist dietetic interns make the transition to practice through post-placement workshop activities. Bachelor of Nutrition and Dietetics students at Griffith University spend the final six months of their degree undertaking 20 weeks of placement followed by a week-long workshop (Post-placement week) upon return to University. We redesigned the existing Post-placement week using design-based research principles, to make it consistent with the overall pedagogy of the degree. Three particular activities were developed: reflection and debriefing from the hospital experience, goal setting for continued professional development and a simulated job application and interview process. The new version of the workshop was implemented in June 2016, evaluated then redesigned for implementation and evaluation in November of 2016. Process and impact evaluation data were collected by a series of questionnaires using Survey Monkey, which included Likert scale ratings and open-ended comments. Other qualitative data was collected through focus group discussions with students and reflections of small group facilitators.

The first iteration of the workshop was implemented as was intended, however student satisfaction scores were not as high as expected for some activities. Qualitative comments suggested that the introduction of written examinations as assessment items at the beginning of the week created a negative feeling among the group that coloured the way in which students perceived most activities. In semester 2, 2016 we altered the assessment tasks and better communicated the purpose of Post-placement week to the students prior to, and during, placement. Minor modifications were made to program delivery. Satisfaction scores were higher in this second iteration, with all students finding the sessions at least moderately useful and of above average interest. Evaluation of employability initiatives showed their perceived usefulness to be time sensitive. Several learnings about post-practicum interventions are evident from this work.

Brief description of academic area

Bachelor of Nutrition and Dietetics students at Griffith University undertake 20 weeks of professional placement at the end of their degree. The aims of fieldwork are for students to be able to demonstrate entry level competence as Dietitians according to national standards, and to have a positive experience that enhances future confidence in dietetic practice. After placement, students return to the University for a mandatory, week-long Post-placement workshop to complete final assessment and consolidate their learning. Two cohorts of students undertake placement each year, one in each semester. In semester 1, 2016, 31 students attended Post-placement week and 15 in semester 2.

Educational purpose

In the Bachelor of Nutrition and Dietetics at Griffith University, the major placement (20 weeks) occurs at the end of the degree program, predominantly in the acute hospital setting. Students are placed all over Australia with just one or two of their peers, and do not return to the University

setting until placement is completed. Thus after 3.5 years as a co-located cohort, their experiential learning takes place in relative isolation from their peers and the academic team, and immediately prior to graduation. This constrained the opportunity to formally and collectively reflect on their placement learning in the stressful environment of the hospital setting, before seeking employment in that setting.

The highly competitive job market in Australian dietetics means that hundreds of new graduates are competing for advertised positions in hospitals, which are still the major employer of the dietetic workforce (Health Workforce Australia, 2014). The ability of final year dietetic students to reflect has been found to be important in developing the critical thinking and clinical reasoning essential for success in the hospital setting (Palermo et al, 2009). As health professionals in an evidence-based field, continuing professional development (CPD) is vital to high quality patient outcomes and development of the profession (Petrillo, 2003). In Dietetics, CPD is a professionally audited but self-directed process, and students need to make the transition from having their learning directed by academics to directing their own learning as graduates.

Skills in reflective learning, career planning and employability therefore have the potential to provide graduates with an edge in obtaining these highly contested positions and making a successful transition to the workforce. Such skill development would require a dedicated intervention program.

In 2015 a week-long Post-Placement workshop was created (prior to that students only attended a single day at University to each deliver an unstructured five minute presentation on their experiences).

The aim of the original version of Post-placement week was to provide students with the opportunity for reflection and preparation for employment. While student feedback was fairly positive, some key elements were lacking, including reflection on hospital based experiences, and we felt the event would benefit from redesign on pedagogic principles.

The aim of this project was to assist students to transition to the role of health professional by developing skills in hospital placement-focused reflection, career planning and employability in a post-practicum intervention (a redesigned version of Post-placement Week).

The educational goals of the post-practicum intervention were for students to be able to:

1. process their experiential learning in the hospital setting in order to integrate it with their learning from other sources such as their theoretical knowledge base and the experiences of other students
2. develop future career learning goals for CPD according to the program of the Dietitians Association of Australia necessary for their attainment of Accredited Practising Dietitian status
3. translate their coursework and practicum experience into marketable skills to enhance their employment opportunities.

Enacted post-practicum interventions

We redesigned the existing Post-placement workshop using design-based research principles, where development and research take place through continuous cycles of design, enactment, analysis, and redesign (Edelson 2002; van der Akker et al nd). This project was part of a broader initiative to improve practicum consistency with the overall curriculum pedagogy (Ross et al, in press). Through seeking and acting on student feedback, the students become co-designers of the curriculum.

Given the relative isolation of students while on placement, a face-to-face delivery mode was chosen to bring students back to their learning environment, with their teachers and peers, for degree closure. Three activities were developed: reflection and debriefing on hospital experiences, CPD goal setting and a simulated job application and interview process (see Appendix 1 for the workshop program).

For the hospital experience reflection and debriefing, we used critical incidents and stages of critical reasoning (Delany & Watkin, 2009). Trained dietitian facilitators led 60 minute small group discussions with 6-8 students per group. Small group format was chosen to create an atmosphere of trust and honesty to debrief over what may have been difficult experiences. Key learnings from the small groups were then considered by the entire group in a facilitated discussion for a further 45 minutes, to reflect on commonalities and differences in the hospital experience.

A 30 minute session on setting CPD career goals was led by a facilitator, and each student developed three individualised goals.

The simulated job application and interview was held over 1.5 days, with a full day workshop from a Careers professional then a half day simulated interview process. Prior to Post-placement week, students submitted a job application in response to their choice of one of four advertisements, and learned how to modify this CV in the full day workshop. Interviews were conducted by real Dietitian Managers and careers staff to enhance networking and create a realistic interview environment.

Data gathered and analysed

Process, impact and outcome evaluation materials were developed at the time of planning. Outcome evaluation (employment success) will be conducted outside the time frame of this project.

Process evaluation

- Data was collected from students (satisfaction with program materials and delivery) at the end of each workshop day via an online survey (Survey Monkey). Items included 5-point Likert scales and open ended questions.
- Focus group discussions were held with students at the end of the workshop.
- Data was collected from group facilitators (implementation record and reflections) and careers staff (reflections) in the form of documents.

Impact evaluation

The following data was collected to measure whether each educational goal was attained:

- Written reflection completed by students after participation in small group discussion for hospital debriefing to examine learning integration.
- Learning contracts addressing CPD goals using the format of the Dietitians Association of Australia were collected from students.
- Students submitted a CV after a CV writing workshop and prior to the simulated job interview
- Feedback on student performance at interview was collected from Dietitian Managers and careers staff.

The quantitative data was analysed using descriptive statistics. Qualitative data was thematically analysed.

Key findings

Semester one 2016 implementation of the Post-practicum intervention: Post-placement week

The first iteration of the workshop was implemented as intended according to the Semester 1 program (shown in Appendix 1), including the new components of the hospital experience reflection and debriefing, the CPD goal setting and the simulated job application.

The student satisfaction scores (see Table 1) were not as high as we had hoped for the hospital experience reflection and debriefing or for the CPD goal setting. The item evaluating the hospital experience debrief asked only about the activity as a whole, so it was difficult to determine whether the students found the small group discussion or the large group discussion component more useful. Qualitative comments varied with individuals, with one students stating '*The individual group reflection sessions were good but the one with everyone was a waste of time'* and another saying *'The smaller group sessions are probably unnecessary. We could have just had a longer, larger group session'*.

The small-group facilitators found these sessions to be useful and felt that the students reflected well in terms of both positive and negative hospital experiences. Students who had emotion-provoking experiences (such as a patient having a cardiac arrest in their presence) were able to release some of that emotion and be supported by their peers who described similar experiences. As one facilitator said '*I should have brought tissues'.* They described other students as having 'lightbulb moments' in the small group session where students were able to see how they might have done things differently or how they might learn in future. The large group facilitator found that it was difficult to draw responses out of the group, but that the summary by those who did participate was very insightful.

The focus group discussions held at the end of the week revealed that the introduction of written examination as assessment items at the beginning of the week had created a negative feeling among the group, which coloured the way in which students perceived the debrief and goal setting activities. This suggested we had not successfully communicated the importance of the workshop activities to the students and that we were expecting too much of them in a one week period.

In contrast, the semester one students found the simulated job application process to be highly useful, interesting and engaging. Several of the students reported having already applied for advertised positions, so this was timely in terms of their interest, but perhaps slightly late in terms of the real job application process. Students perceived these workshops as being offered by other sections of the university so they escaped the overall negative evaluation effect of assessment introduction.

Changes made to the Post-practicum intervention as a result of semester one evaluation

According to design-based research principles, we considered student feedback and impact on their learning in the redesign of Post-placement week before implementing it in semester two.

The key changes made were that we:

- communicated the purpose of the new assessment tasks and post placement weeks to the students prior to placement, and throughout the placement in the lead up to Post-placement week

- removed the written examination components and introduced OSCE formats instead
- created separate evaluation items to individually assess the small-group and large-group components of the hospital experience reflection and debrief on the survey
- engaged only experienced clinical educators to facilitate the small group debriefs and arranged for a University counsellor to offer a drop-in session for students following the debrief
- asked the Dietitians Association of Australia speaker to introduce the importance of goal setting for CPD in their session
- trialled the delivery of the simulated careers component prior to placement rather than post-placement.

Semester two 2016 implementation of Post-practicum intervention: Post-placement 'week'

An improved version of the workshop was implemented in November-December of 2016 for the 15 students completing placement in Semester two. The new versions of the reflection and debriefing on the hospital experience and the CPD goal setting were implemented as intended. Improvements to the session content and communication around the purpose of these activities resulted in much higher mean satisfaction scores (see Table 1), and more positive qualitative comments being made by the semester two students: '*I enjoyed these sessions and found them very helpful. Particularly the DAA speaker and the small group debrief* "and '*The small group debrief was a good amount of students to reflect with*. Separating the assessment of the small and large-group activities revealed that the students found the small-group activity to be more useful and engaging.

Table 1: Mean (SD) scores for student satisfaction on a 5 point scale for semester 1 and semester 2 versions of post-placement week (number completing survey/total students participating)

Process evaluation criterion (mean (SD))	Usefulness of session		Interesting and engaging	
	S1 (26/31)	S2 (14/15)	S1 (26/31)	S2 (14/15)
Goal setting for career continuing professional development	2.4 (1.16)	3.27 (1.01)	2.79 (1.06)	3.45 (0.69)
Debrief about hospital placement (both activities)	2.5 (1.27)	NA	3.19 (1.39)	NA
Small group debrief about hospital placement	NA	3.18 (0.6)	NA	4.36 (0.5)
Whole group debrief about hospital placement	NA	2.82 (0.6)	NA	3.73 (1.47)
Simulated interview process as a whole	4.37 (0.50)	3.86 (0.36)	4.47 (0.61)	4.64 (0.50)
Simulated interview feedback from dietitian managers	4.6 (0.50)	3.71 (0.47)	NA	NA
Careers service feedback on CV	4.19 (0.75)	3.6 (0.52)	4.31 (0.79)	4.27 (0.64)

NA= not asked

The simulated job application activity was not part of this workshop and this Post-placement 'week' was actually conducted over three days. The simulated interview had already been implemented prior to placement for these students, so they only had a 'careers refresher' session.

This was for resource, rather than pedagogic reasons, although the variation allowed us to evaluate alternative timing for this activity. The simulated interviews are resource intensive to organise and conduct, and it was not feasible to conduct the activity for only 15 students. Thus the semester two placement students attended the same simulated job application sessions as the semester one students in June. While they made positive comments about this activity: '*…discussing my CV … was very helpful. Feedback from interview was very helpful and insightful' and 'Very hopeful and confidence building'* scores were not as high as for the semester one students who completed the activity post-placement.

Implementation feasibility

The teaching team met regularly to revise the Post-Placement week program and materials. However, it was imperative to have a project officer to drive the changes given the teaching team was understaffed. While they were interested in the activities, they did not feel they had the capacity to introduce the new initiatives themselves.

Issues arising for discussion

- Contrary to some findings in the literature, these students were interested in hearing the practicum experiences of other students provided they could learn from the experience, which requires skilled facilitation
- High quality activities will only be perceived by students as useful if conducted at a relevant point in student development
- External agencies can help increase perceived relevance of activities for students
- It is important to obtain both quantitative and qualitative feedback on new activities, and to ensure that feedback is obtained on each individual component of an activity being evaluated
- Changing assessment processes can negatively impact student satisfaction and counteract any positive initiative we can introduce. Students need to see the relevance of assessment at this stage with sensitive delivery of the message.

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Appendix 1: Post-placement week program Semester 1 &2 with OLT activities shown in blue

PROFESSIONAL PLACEMENTS POST PLACEMENT WEEK: Monday 20 to Friday 24 June 2016

DAY 1: Mon 20th June

8.30 Welcome to Post Placement Week

9-4 Exams and Placement Portfolio Submission

4:30 Briefing for Days 2 and 3

DAY 2: Tues 21st June

7:55 CPHN and FSM project presentations and panels

3:15 Conclude and Sign Off

DAY 3: Wed 22nd June

8:00 ICM Panel

11:30 Post placement hospital experience reflection and debrief- small group

12:30 Post placement hospital experience sharing and discussion- large group

1:30 DAA Guest speaker (Sally Moloney, APD Program)

2:30 How to get that job! (Guest Speaker panels)

4:00 Learning Goals Presentation and Creation

4.30 DAY 3 Survey & Briefing for Day 4

DAY 4: Thurs 23rd– Careers part 1 Semester 1 and 2 students: Paul Fitzmaurice, Careers Service

8:30 Your Career Portfolio: identifying strengths, weaknesses, transferable skills

11:00 Resume Workshop: CV writing

2:00 Application and selection criteria

4:30 Day 4 Survey & Brief for Day 5

DAY 5: Friday 24th June. Post Placement Week – Careers day part 2

Students wear professional interview attire and bring: pen, paper, hard copy of CV and job application

7:30 Simulated Interviews

12.30 Focus Group Evaluation Sessions

2:15 Day 5 Survey

2.30 Farewell Afternoon Tea

PROFESSIONAL PLACEMENTS POST PLACEMENT WEEK Tuesday 29 Nov – Dec 1st 2016

Day 1: Tuesday 29th November: FSM and CPHN Assessment

Day 2: Wednesday 30th November

8-12 ICM Assessment. Congratulations on Completing Assessment.
1:00 DAA Guest speaker (APD Program) **visitor:** Dr Paul Wilkinson
2:00 Setting your CPD Goals
2:30 Hospital placement reflection and debrief - 2 groups of 7
3.30 Hospital placement whole group discussion
4:00 Survey, Day 3 briefing

Day 3: Thursday 1st December: How to get that job! Guest Speakers & Careers Day

9.00 Dietitians in different roles to present on their career paths
1.30 Careers CV Feedback AND/OR Counselling Catch up with Patrick (optional)
2.30 Careers Refresher
3.30 Day 3 Survey & Congratulations from Course Convenors

Bouncing Forward: A clinical debriefing workshop in professional identity, self-efficacy, and resilience in Master of Speech Pathology students

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Abstract

Intensive professional preparation programs, such as the 2-year Master of Speech Pathology program at Griffith University, require rapid development of knowledge, skills, and attributes. Students report high levels of stress associated with this accelerated learning trajectory which focuses on professional knowledge and clinical competencies. Although often not targeted, resilience, self-efficacy, and professional identity are central qualities for successfully managing tertiary education demands and those in the workplace. This project developed and piloted a post-practicum workshop to facilitate students' self-awareness of professional identity, self-efficacy, and resilience to enable students to actively identify targeted strategies to "handle the unexpected" using their recent practicum experiences as a reference point. Twenty-nine second-year speech pathology students completed three questionnaires (resilience, self-efficacy, professional identity) 1-week prior to their Semester 1, 12-week practicum and in the final week of this practicum in Week 13. The students participated in the 2-hour "Bouncing Forward" post-practicum workshop, which was specifically developed to address these three areas. Students strongly engaged in all activities, openly sharing conversations about less positive clinical experiences, their reactions, strategies used, and their effectiveness.

Over the semester, positive changes occurred in professional identity and self-efficacy from participation in the Master of Speech Pathology program. Having established that the questionnaires furnished useful information and that the workshop created a safe environment which stimulated active learning, the workshop's specific effect on building students' resilience, self-efficacy, and professional identity will be evaluated in 2017. Feedback suggests that this workshop might also be well positioned pre-practicum, as an inoculation, with post-practicum evaluation regarding the impact of the workshop. Furthermore, the workshop has generic transferability across health disciplines, and was successfully piloted with undergraduate nutrition and dietetic students.

Brief description of academic area and students involved

The Master of Speech Pathology program at Griffith University is a 2-year accredited professional preparation program which admits approximately 40 high-performing students per year (i.e., minimum GPA of 5.0) from any undergraduate background. Currently, the majority of students are female (> 95%). Gaining the competencies and capabilities required to be an entry-level speech pathologist must occur very quickly, and students report high stress levels associated with the intensive workload.

Particular purpose

There is a paucity of evidence underpinning the development of heath students' attributes related to professional identity, self-efficacy, resilience, which are central to student success in professional preparation programs. Professional identify is developed over the course of study and consists of a

range of beliefs and attitudes about the chosen profession, its boundaries and interactions alongside other professionals.[1,2]. Self-efficacy refers to people's beliefs about their own capabilities to produce designated levels of performance that have influence over meaningful events in their lives.[3] Bandura (1994)[3] argues that a strong sense of efficacy enhances performance and a sense of well-being. Resilience can be defined as the ability to cope with life's uncertainties and challenges, and to be able to rebound quickly to a positive, productive state following a negative event.[4] Arguably, self-efficacy and resilience are the cornerstone of being able to handle higher education and workplace demands and well-being, more generally.[3,5]

Intensive professional preparation programs, such as the Master of Speech Pathology (MSpPath), require students to develop their professional identify, as well as knowledge, skills and attributes of the profession in a short time frame (2 years). Students in the Griffith University program have reported that their former identities are deconstructed then reconstructed, and have reported high levels of stress associated with this accelerated learning trajectory that has a focus on professional knowledge and clinical competencies. While attrition rates are not high, feedback from students has indicated that some of the attrition can be attributed to the intensive nature of the program and students' stress levels. Historically, attrition has been the greatest at the end of semesters 1 in Year 1 and 2. Therefore, the introduction of targeted post-practicum (and potentially pre-practicum) activities on professional identity, self-efficacy, and resilience may provide support to students in areas which are typically neither identified nor specifically targeted but are important to successful student outcomes. This in turn may aid student retention.

Although standardised tools have been developed and are implemented to evaluate student competencies in the MSpPath, no routine evaluation focuses on attributes and capabilities such as professional identity, self-efficacy, and resilience which are known to enhance student outcomes. A long-term goal is to understand changes in students' perceived levels of professional identity, self-efficacy and resilience across the entire program. As a first step towards this, the aim of this project was to develop and pilot a post-practicum workshop to facilitate knowledge and self-awareness of professional identity, self-efficacy, and resilience, and for students to build upon these by identifying strategies to "handle the unexpected" in the context of clinical placements. The next stage of this project is to investigate whether the workshop (1) has a positive effect on student managing challenging situations in the clinic or in their lives, more broadly (2) enables students to reflect on past negative clinical experiences and understand strategies that are helpful for the future and/or reframe these experiences in a different light.

Enacted post-practicum interventions

A 2-hour post-practicum workshop developed for clinical debriefing was implemented following students' practicum in Year 2, Semester 1, a placement in which students must reach entry-level across a range of competencies. This practicum, therefore, has the capacity to place additional stress on students. The workshop, "*Bouncing Forward*", employed a constructivist approach to create a collaborative and supported learning environment to facilitate reflections, awareness, learnings, and sharing about professional identity, self-efficacy, and resilience.

The workshop consisted of three modules: professional identity, self-efficacy, resilience. At the start of each module, an appropriate questionnaire was completed. The *Personal Resilience*

Questionnaire was scored by students so that they gained a profile of their performance across various resilience domains, to reflect upon and use as a reference point. Students were then invited to pair-and-share their insights and learnings, and then to share with the larger group, resulting in whole group discussion of trends, differences, and themes. Mini-lectures consisting of key definitions and strategies were then provided. Students were invited to pair-and-share any strategies that they use, then invited to share with the larger group.

Following the third module, a summative interactive small-group session (6-8 students) required groups to outline a clinical dilemma that one student had faced. Then the following prompt questions discussed:

- How did you react initially (feelings and behaviours)?
- What did you do to resolve this dilemma?
- Did it help? Why, why not?
- Can the team come up with some other helpful strategies?
- What could you do differently next time?

Groups shared their dilemma which was then followed by large group discussion. Finally, students were asked to write down 2-3 specific strategies that emerged from the workshop that they would take to their next (final) clinical placement to include in their Learning Contract.

Data gathered and analysed

Twenty-nine second-year speech pathology students (all female) participated in the workshop. The following data were collected

1. *Student and Professional Identity in Speech Pathology* (developed in another study in 2015). Six questions on student identity and the program of study (rated on a 0 – 10 scale) and 10 questions on the profession (rated on a 1 – 6 scale) were completed. 2015 data (end of O-week and end of Semester 1) were combined with data collected at the start of the workshop and analysed using one-way ANOVA.
2. *Professional Attributes.* During the workshop, each student produced 5 words which exemplified qualities and attributes of a practising speech pathologist. Counts of words were undertaken and themes clustered to produce a list of professional attributes.
3. *General Self-Efficacy Scale*.[6] Students rated themselves (on a 1 – 4 scale) on 18-questions 1-week prior to the practicum and at the workshop. Descriptive statistics compared pre- and post-means.
4. *Personal Resilience Questionnaire.* The 42-item *Personal Resilience Questionnaire* was completed 1-week prior to the Semester 1 practicum. Means for each of the 7 domains were calculated. Students also completed this questionnaire during the workshop and self-scored it for their own reference point for the workshop activities.

Key findings

A post practicum workshop targeting professional identity, self- efficacy, and resilience appears to be a useful additional to the MSpPath curriculum.

Professional Identity

- Student identity: Significant increases in feeling like a speech pathology student (F=4.261, p=0.000) and having strong ties with other students (F=2.847, p=0.008) occurred compared to historical data. Data also demonstrated a decrease in connectedness to former student/professional identify. This occurred rapidly; by the end of Semester 1, Year 1
- Professional identity: Students were very proud to be members of the speech pathology profession. For 5 out of 10 questions (i.e., *I feel like I am a member of the speech pathology profession; I feel I have strong ties with the speech pathology profession*; *I can identify positively with the speech pathology profession; Being a speech pathologist is important to me; I feel I share characteristics with people in the speech pathology profession*), professional identity increased compared to historical data, from earlier in the students program of study. It is thus hypothesised that knowledge and experience gained from studying in the MSpPath translated to a generalised positive increase in professional connectedness

Professional attributes

The top five group of words (based on frequency $\geq$ 15) which exemplify a practising speech pathologist's professional attributes were 1) empathetic, sympathetic, compassionate, genuine (n=18); 2) professional, confident, competent, capable, hardworking (n=17); 3) knowledgeable, intelligent (n=16); 4) good communicator, good listener, friendly, personable, approachable (n=15); 5) patient, caring, warm (n=15). This group of words exemplify many of the principles detailed in the Speech Pathology Australia's Code of Ethics.

Self-Efficacy

Overall, students presented with moderate-to-high levels of self-efficacy across many areas pre workshop. Self-efficacy increased slightly post workshop in 11 out of 13 areas. Of the 13 positively-framed questions, questions 16 (*Some aspects of the program are easier than expected*) and 17 (*I generally find the clinical demands to be more stressful than the academic demands*) were the lowest across both time points. Additionally of the negatively-framed questions, question 7 (*Coping with the academic demands of this program is difficult*) reinforces the responses from question 17. These findings suggest that the program is challenging, and that academic demands invoked higher stress than clinical demands. The highest means occurred in questions 1(*I can always manage to solve difficult academic and/or clinical problems if I try hard enough*), 11 (*I can solve most academic problems if I invest the necessary effort)*, and 15 (*If I am in clinical or academic trouble, I can usually think of something to do*). This demonstrates that the students have reported high-levels of coping, taking responsibility for their learning, and appreciate the value of effort indicates that the development of students' capabilities in these areas is relatively on track.

Resilience

Six domain scores were calculated from the Personal Resilience Questionnaire data. The majority of students agreed that they had a moderate *sense of purpose* (mean=4.05 from a maximum of 5). This finding aligns with the professional identity data. For the other domains (*connected with others*=3.84; *determination*=3.82; *looking after yourself*=3.64; *taking control*=3.61; *positive mental attitude*=3.35) on average students presented a neutral orientation which trended towards positive.

These findings suggest that further resilience data should be collected to gain insight into these results. However, this data justifies the need for a workshop with resilience as a focus, and highlights areas to target.

It must be noted that the workshop mode was effective in its constructivist approach, with guided facilitation, offering reflection and safe environment. This mode was aligned with the current MSpPath curriculum, which adheres to a relatively purist PBL pedagogy, and therefore is underpinned by collaborative, shared learning and authorship. Students strongly engaged and shared in all activities. During informal verbal feedback elicited at the completion of the workshop, in response to the question, "How useful was this workshop?" there was a consensus that the workshop was very useful, and that it would have been good to have this at the start of the semester, before this critical entry-level placement. This workshop has since been piloted in Week 13 in Bachelor of Nutrition and Dietetic, as a pre-placement activity.

Issues arising for discussion

When is the most appropriate time to introduce a workshop on professional identity, self-efficacy and resilience in relation to the timing of clinical placements?

1. How can positive mental attitude and looking after yourself be further facilitated during post graduate study?
2. What are the most appropriate methods to evaluate the effect of the clinical debriefing workshop in professional identity, self-efficacy, and resilience?

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Integrating an Employability Intervention into Clinical Practicum Debrief Sessions

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Abstract

Career development learning is proposed to "inform, guide and assist students to critically appraise not only the world of work, but also the specific occupation they have selected.... and may be deployed to raise students' awareness of employability and how to self-manage their studies and extra-curricular activities to optimise their employability."[1] This report details the outcomes of integrating an employability intervention into the post-practicum debrief sessions of a postgraduate Exercise Physiology program through the development of employability skills in the context of work-integrated learning (clinical practicum). Employability strategies utilised included: participation in employment skills and career development seminars; case-conferencing and panel discussions with practising Exercise Physiologists; and delivery of learning modules on key practice-based areas. Twenty participants (9 male, 11 female), with a mean age of 25.3 ± 4.0 years, participated in the study. All were full-time domestic students enrolled in the Graduate Diploma of Exercise Science at Griffith University. The outcomes of the intervention are presented which include participants' perceptions of the intervention on their perceived employability, the perceived effectiveness of the strategies included in the intervention, and participants' engagement in extra-curricular employability activities while enrolled in university study. This study demonstrated that an employability intervention integrated into post-practicum debrief sessions improved indices of work readiness and provided valuable learning outcomes including improved decision making (mean change 0.25 ± 0.46; p= .042), transition awareness (mean change 0.63 ± 0.67; p= .001) and self-awareness (mean change 0.42 ± 0.66; p= .016). Ranking of the intervention activities from 1 = very ineffective to 5 = very effective indicated an overall ranking of the employability intervention at 4.5 ± 0.5. Fifteen (94%) participants indicated they participated in extra-curricular employability activities while enrolled in university study.

Brief Description of Academic Area

Participants were students enrolled in a clinical practicum subject in the Graduate Diploma of Exercise Science, an 80 credit-point postgraduate degree (in Exercise Physiology) at Griffith University. Students enrolled in this degree need to have completed, at a minimum, an undergraduate degree in Exercise Science or equivalent. While enrolled in the clinical practicum subject, students completed: two 6-week practicum placements tailored towards gaining competency in key areas of practice; and five 3-hour debrief sessions, each separated by a 6-week period.

Particular Purpose

The importance of integrating employability-related activities into a curriculum is highlighted by studies indicating that economic motivation is more important than the pursuit of knowledge for students undertaking higher degree learning.[2] Consequently, it can be hypothesised that the

inclusion of activities relating to employability will promote higher student engagement in learning and increased student satisfaction. Furthermore, it is proposed that there has been a shift in industry expectations relating to university graduates, from academic excellence to the demonstration of workplace-specific skills.[3] As a result of these factors, activities directed towards employment are increasingly expected of higher education degrees.

Previous studies evaluating the integration of an employability intervention for undergraduate Exercise Science students demonstrated the following perceived benefits: improved ability to synthesise their key strengths; a demonstrated understanding of their goals and motivations as they apply to job searching; improved understanding of the requirements of graduate recruiters; improved self-awareness of different employment opportunities; and a demonstrated understanding of effective job search strategies.[4] Despite the perceived importance and benefits of these interventions for the students, this type of intervention has not been evaluated in postgraduate students enrolled in a profession-specific program in Exercise Physiology. This study sought to address this knowledge gap.

The employability intervention evaluated in this study was designed with the following desired outcomes: Enhanced integration of theoretical and practical coursework in clinical practicum;

- Facilitation of stronger engagement in practicum activities and extra-curricular activities for career development;
- Development of a database of extra-curricular learning opportunities for career development in order to target student learning towards their intended career path;
- Improved student outcomes and satisfaction; and
- Identifying generic employability skills and providing a framework for the tailoring of their content to different streams to improve employability outcomes across the School of Allied Health Sciences and beyond.

Specifically the primary aim of this study was to evaluate the efficacy and perceived importance of an employability intervention integrated into practicum debrief sessions. Secondary aims include identifying opportunities for improvement of the included intervention activities.

Enacted post-practicum interventions

The employability intervention undertaken was evidence-based and was constructed on the key research findings of Reddan (2012) in which gaining experience in being interviewed; developing job application writing skills; gaining insight into professional work; the enhancement of research and/or practical skills; and improved development of a career path were the employability skills ranked as having the highest perceived importance. [4] Additionally, a recent survey of students from the health discipline regarding their preferences for employability activities indicated that 43.6% of students would prefer access to employability interventions after every practicum experience with the activities included relating to: feedback regarding workplace experiences (46.2%), identification on how the experiences result in the student being more employable (44.6%), promoting informed decision making regarding career, work options or specialisations (44.6%) and learning more about their preferred occupation (44.6%).[5]

The employability intervention was conducted during 5 x 3 hour modules separated by a 6 week period. The modules included in the employability intervention were as follows:

- Module 1: Pre-practicum briefing session including information regarding the successful completion of practicum and accreditation as an Clinical Exercise Physiologist; clinical reasoning and reflective writing skills and an introductory module relating to the resources available to maximise securing graduate employment. Introduction of these activities prior to practicum will allow participants to: a) map their current skills and experiences and identify curricular and extra-curricular opportunities/ required areas for further career/ skill development; b) continue to develop their resumes while engaging in practicum activities; and c) identify key practice areas of interest and tailor their documentation and extra-curricular learning towards this area.
- Module 2: Clinical Practice Presentations including modules relating to key areas of clinical practice including insurance and duty of care requirements, business models and marketing, and superannuation. The purpose of this module is to encourage participants to think beyond graduation to their first year as a practicing clinician.
- Module 3: Employment Essentials Workshop including information relating to resume writing, answering selection criteria, participating in interviews, undertaking professional networking and developing an e-Portfolio.
- Module 4: Establishing communities of practice through the presentation of case studies of interest in order to improve the high-order learning outcomes of the participants by facilitating problem-based learning. Additionally, sharing the case studies provides participants with a community of support regarding their developing clinical practice.
- Module 5: Professional panel of practicing exercise physiologists in order to discuss their career paths including professional development undertaken and lessons learnt, their process for selecting employees, criteria for excellent practitioners, common mistakes made in job applications, their perceptions of the future of clinical practice, advice for first year practitioners etc. The purpose of this module was to provide professional context for the participants' academic and practical skills.

Participants were also provided with a series of online videos depicting interviews conducted with practicum supervisors discussing the expectations for students undertaking clinical practicum and also the requirements to transition to an entry level practitioner. It was proposed that these interviews will allow students to identify skills achievable through curricular and extra-curricular means and hence begin to contemplate participating in extra-curricular activities tailored towards their chosen field.

Data gathered and analysed

The efficacy of the employability intervention was evaluated from the participants' perspective using a variety of outcome measures:

- Measure of Guidance Impact Scale [6] with subscales including self-awareness, opportunity awareness, improved decision making, and transitional learning;
- Work Readiness Scale [7] with subscales including commencement readiness, collaboration, informed decision making, life-long learning, professional practice and standards, and integrating theory and practice;

- A custom-designed survey consisting of ten Likert-scale questions on the perceived intervention efficacy and four open-ended questions on the effectiveness of post practicum debriefs to assist in career development, the most beneficial activities, perceptions of how the activities improved their employability and suggested workshops ideas for improved employability; and
- A custom-designed survey using open-ended questions designed to evaluate the participants' engagement in self-initiated extra-curricular employability activities.

All outcome measures were administrated prior to and immediately after participating in the employability intervention except those relating to the participants' perception of the employability intervention and participation in extra-curricular employability activities.

Analyses were conducted on an intention-to-treat basis, with missing follow-up data (for 2 participants) inputted using the last observation carried forward method. Wilcoxon signed-ranked tests were used to evaluate the differences pre- and post- intervention. An α level of .05 was set. Descriptive content analysis was used to determine key themes from open-ended questions.

Key Findings

Participant Characteristics:

Twenty (9 male, 11 female); age 25.3 ± 4.0 years; full-time domestic students enrolled in the Graduate Diploma of Exercise Science at Griffith University participated in the study. 75% of participants (n=15) enrolled in this program of study immediately following their undergraduate Exercise Science degree. Prior to participating in the intervention, 10 (50%) participants had engaged in career development services, with 70% of this engagement being a mandatory component of their undergraduate degree. Prior to enrolling in the Graduate Diploma of Exercise Science, 10 (50%) participants had undertaken paid work experience in the field of Health, Fitness and Exercise Science or Exercise Physiology, with 90% of this work being in the field of personal training and group fitness.

Employability Outcomes:

The overall score of the Work Readiness Scale increased significantly from baseline to post-intervention (mean change = 0.58 ± 0.54; p= .001), with significant improvements in all subscales: commencement readiness (0.69 ± 0.69; p= .001), collaboration (0.43 ± 0.53; p= .002), informed decision making (0.74 ± 0.81; p= .002), life-long learning (0.58 ± 0.48; p= .001), professional practice and standards (0.56 ± 0.57; p= .001), and integrating theory and practice (mean change= 0.58 ± 0.95; p= .020). These results indicate that the participants reported greater work readiness following the completion of the employability intervention.

The overall score of the Measure of Guidance Impact Scale increased significantly from baseline to post-intervention (mean change = 0.25 ± 0.48; p= .044), with significant improvements in subscales including decision making (mean change 0.25 ± 0.46; p= .042), transition awareness (mean change 0.63 ± 0.67; p= .001) and self-awareness (mean change 0.42 ± 0.66; p= .016) and non-significant improvements in opportunity awareness (mean change 0.13 ± 0.85; p= .657). The results of this measure indicated that the employability intervention was effective in providing valuable outcomes relating to career guidance.

Perceptions of the Interventions Importance and Efficacy:

The average rating for the effectiveness of the intervention was 4.5 ± 0.5 from a maximum of 5 (very effective), with all participants rating the intervention as either very effective or effective. Themes on the perceived importance of the employability intervention centred on:

- Value: *"I believe all of the presentations were valuable, and we were provided with a variety of information that will be beneficial for us as developing practitioners."*
- Confidence: *"I feel confident about getting a job after graduation and now have the resources to achieve this and make a solid plan."*
- Preparation: *"Effective in preparation for the "real world."*

Participants were asked to rank all intervention strategies relating to the perception that the included strategy "improved my employability" on a scale of 1 (strongly disagree) to 5 (strongly agree). All strategies included in the intervention received a mean rating of 4 or more out of a possible 5. Comments relating to the specific intervention activities included:

- Panel Discussion: *"Sharing perceptions through the panel discussion and case study presentations helped me as a student to bring me down to earth and reduce some of the anxiety when going on placement for the first time. I was able to become aware of the things that I would be expecting and it allowed me to settle in well."*
- Workshop- Employment Essentials: *"Overall, the employability program was helpful and everyone probably got different things out of different aspects of it... I do feel more prepared to enter the world of being employed as an AEP though as a result of this program!"*
- Panel Discussion: *"It was really great to hear first-hand from potential employers what they look for in candidates and how they all have slightly different business models, they essentially all want the best for the clients and how important relationships are."*
- Workshop- Legal Requirements of Professional Practice: *"It is easy to grasp and research exercise guidelines and the latter, however I found it very beneficial understanding the behind the scenes legality of what also comes with our profession."*
- Workshop- Introduction to Employability: *"Employment essentials was a good professional development presentation that provided information regarding the formalities and necessities when applying for jobs. After looking at my resume straight after this presentation I noticed my resume was rife with problems."*

Suggestions from participants relating to activities that would be perceived as being beneficial for improving employability included: information regarding commercialisation of business ideas; more detailed information regarding the requirements for starting a new business; more panel discussions with practicing exercise physiologists; role plays to increase motivation in clients; and transition career plans while waiting for accreditation.

Engagement in Employment Services:

Fifteen (94%) participants indicated having participated in activities geared towards improving their employability that were not a core component of the learning activities included in the Graduate

Diploma of Exercise Science. Fourteen (88%) participants reported that they participated in two or more extra-curricular activities, with networking (n=11; 55%), additional work experience (n=10; 50%), and engagement in educational seminars (n=8; 40%) the most frequently reported activities.

Issues Arising For Discussion

- Employability interventions can be integrated into existing curriculum utilising existing relationships in the university environment.
- Employability interventions are best integrated in the context of work-integrated learning to allow participants to apply the principles discussed to practice.
- Participants' perception of the importance and value of employability interventions are high, with activities such as practitioner panels, clinical reasoning and employment seeking workshops reported as improving employability-related skills.
- Possible future intervention activities including modules relating to: effective team building; effective communication and navigating work place structure; and developing career plans for early career practitioners (including identifying professional development opportunities) could improve the efficacy of the employability intervention delivered.
- Extracurricular activities undertaken by participants indicate that structured opportunities for networking, professional development and additional work experience may be perceived to be beneficial.

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Consolidating Interprofessional Collaborative Practice Understanding through Critical Observation during Clinical Placement

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Abstract

Interprofessional education (IPE) occurs when health professional students learn 'with, from and about each other to improve collaboration and the quality of care' (CAIPE, 2002). It aims to ensure that health professional graduates have the capabilities required for collaborative interprofessional practice (IPP), which is essential for the effective care of the complex health problems that face individuals and communities into the future.

Griffith University's programmatic approach to IPE (Teodorczuk et al., 2016) aims to assist health professional students to acquire collaborative practice capabilities through a planned sequence of activities across their learning program, utilising a three-phase pedagogy. This begins with the development of health professions literacy (an understanding of the history, philosophy and practice of each of the major health professions, including their own) before undertaking and reflecting upon carefully-crafted simulated interprofessional practice experiences. The third phase (the focus of this report) involves experiential learning in real patient or client care settings. Ideally, this would be achieved through working in an interprofessional student service team, according to the IPE model developed at the University of Linköping (Wilhelmsson et al., 2009), but this approach has been challenging to implement at scale.

We report on the implementation of a simple, individually-completed, assessment task that places senior health professional students in a critical posture in relation to an interprofessional practitioner team into which they have been placed as part of their conventional clinical placements. Candidates in medicine (149), pharmacy (61) and exercise physiology (21) were asked to recall such a team that they had the opportunity to observe closely, then provide examples of effective and less effective IPP, as well as offer suggestions on how the team might improve its IPP in the future. The text of candidates' reports was analysed using a phenomenologically-oriented thematic qualitative approach. Some learners were also interviewed subsequently to gain further insights into the learning impact of the assessment activity.

The writings of students in all three professions demonstrated rich evidence of the achievement of interprofessional learning (IPL) outcomes during their health professional programs, as well as a consolidating effect of the critical assessment exercise on their ability to apply these learnings in their evaluation of real clinical care team experiences. Analysis of the interview transcripts provided further support to these findings.

Brief description of academic area and students involved

This activity focused on placements into interprofessional practitioner teams undertaken by students in three health professions (medicine [149], exercise physiology [21] and pharmacy [61]) as part of conventional clinical placements in the senior years of their programs.

Particular purpose

Effective collaboration between practitioners in different health professions is an essential component of contemporary health and social care and health promotion. It enables the increasingly complex health issues of current times to be addressed effectively and with optimal safety for patients and clients. The IPE and IPP movement in health care began more than thirty years ago but its impact has been accelerated by reports into health care misadventure in multiple countries that detailed adverse outcomes and findings associated with poor interprofessional communication and collaborative practice. An emerging literature on the positive impacts of effective IPP also underlines the importance of effective IPE (Reeves, 2010). In 2010, the World Health Organization published a global *Framework for Action on Interprofessional Education & Collaborative Practice* and the *Sydney Interprofessional Declaration*, formulated at the fifth world All Together Better Health Conference in the same year, asserted a universal entitlement to 'fully integrated, interprofessional collaborative health and human services' (Article 1). The *Declaration* went on in Article 3 to place a responsibility on the providers of health worker education and training to provide 'significant core elements' of interprofessional education that 'include practical experiences' and are 'formally assessed' (All Together Better Health V International Conference participants 2010, p. 1).

Griffith University has developed a programmatic approach to IPE (Teodorczuk et al., 2016) that aims to assist health professional students to acquire collaborative practice capabilities through a planned and scaffolded sequence of activities across their learning programs. They first need to develop health professions literacy (an understanding of the history, philosophy and practice of each of the major health professions including their own) through 'Phase I' activities. Ideally, this would be undertaken through interactive workshops involving students from multiple professions but logistic and budgetary constraints may preclude this. In our experience, this learning can be achieved through individually-completed, online activities, provided that they are engaging and require student reflection.

The major learning under a programmatic approach is undertaken around the middle of students' learning programs through simulated IPP experiences within 'Phase II' activities, undertaken with students from multiple health professions, which have been carefully designed to achieve the desired learning outcomes and include reflection following participation. Activities in this phase need to meet the CAIPE (2002) definition of IPE, ensuring that students learn 'with, from and about' each other.

The final 'Phase III' involves learning from IPP experiences in real patient or client care settings. Ideally, Phase III would be achieved through work in an interprofessional student service team according to the model developed at the University of Linköping (Wilhelmsson et al., 2009), but this approach has been demonstrated to be difficult to implement and sustain at scale.

The activity that is the subject of this report sought to consolidate and apply the outcomes from students' experience of an IPE program, through an individually-completed critical assessment task related to activities observed during clinical placements that already formed part of their degree programs. If effective, this would represent a much more logistically feasible and sustainable approach to Phase III of an IPE program.

Enacted post-practicum interventions

We report on the implementation of a simple, individually-completed, written assessment task that placed senior health professional students in a critical posture in relation to an interprofessional practitioner team into which they have been placed as part of their conventional clinical placements. Candidates in medicine, pharmacy and exercise physiology were asked to recall such a team that they had the opportunity to observe closely whilst on placement, then provide examples of effective collaborative IPP between team members, as well as the reasons for this evaluation. They were also asked to identify and critique examples of less effective collaborations, before offering suggestions about how the team might improve its IPP into the future.

The rationale for this approach was that IPP capabilities are critical for effective professional practice in the health professions. The *Griffith University Implementation Framework for Interprofessional Learning* specifies ten threshold learning outcomes to be achieved by all health professional graduates and the three-phase pedagogy that facilitates this learning. The first two phases (acquisition of 'health professions literacy' and participation in simulated IPE activities) are already well developed for many health professional programs but implementation of Phase III (real patient or client care IPE activities) and the assessment of higher order learning in this area have proven more difficult to implement. Students in some professions (medicine in particular) undertake multiple, continuous practical placements in a wide variety of clinical settings. Consequently, large and small group activities are extremely difficult to organise across the whole cohort. This assessment approach is feasible and is partially self-evaluative. It is intended to both bring about the consolidation of the IPL described above, through placing the student in a critical posture, and also to allow assessment of the learning engendered.

Data gathered and analysed

The assessment pieces were marked (with written feedback) in the second half of 2016. In addition, group interviews with medical student volunteers who had participated in the activity were conducted after marks and feedback had been provided to the students. Summative assessment was undertaken according to the following marking schema:

- 25% - Description of examples of effective collaborative practice within the team;
- 25% - Description of examples of less effective collaborative practice within the team;
- 25% - Suggestions of measures to improve the interprofessional function of the team; and
- 25% - Degree to which the writing demonstrated understanding of the critical components of collaborative IPP.

We utilised a phenomenologically-oriented thematic qualitative methodology to look for evidence of IPL in the student writings. Additionally, we conducted post-activity interviews with a small sample of the medical students and the transcripts were also subjected to qualitative analysis. Examples of the prompt questions used by phenomenologically-trained interviewers included:

- What was it like to put yourself into a critical posture to critique the functioning of a team into which you had been placed?
- How did you draw on your IPL understanding and how effectively were you able to undertake your critical evaluation of the team in which you were placed?
- How did this assessment activity impact on your understanding of interprofessional collaboration?
- How do you think this activity will impact on your future practice?

Key findings

All but four of the 231 students (98%) demonstrated sufficient evidence that they had achieved the required IPL outcomes during their programs to achieve a passing grade or better in the assessment item according to the schema set out above. Analysis of the content of the student writings demonstrated that many learners had acquired a rich and nuanced understanding of the elements of effective IPP, particularly in relation to role understanding, interprofessional communication, respectful interaction, patient- and client-centredness and leadership, as well as the management of power and confidence imbalances within teams.

The IPP processes least cited by the students in their writings included team trust, shared decision-making, and continued self-reflection. This could indicate relative gaps in their understanding of IPP that might inform future curriculum development.

Analysis of the interview transcripts was broadly consistent with the findings from the student writings and, although some medical students still expressed doubts about the high relative importance afforded to IPL across their programs, the phenomenologically-oriented technique employed revealed that they had nonetheless acquired learnings, especially in the affective domain, that should equip them well for IPP after graduation. Both data sources also identified a consolidating effect of the critical assessment activity as a 'capstone' to the programmatic approach to IPE.

By placing students in a critical-observer posture during conventional clinical placements in health care teams, students were able to achieve consolidation of IPL outcomes in real health care settings, without the logistical challenges inherent in implementing interprofessional service learning (per the Linköping Model) for large numbers of learners. Fundamentally, this is an easily-implemented, individually-completed, critical assessment activity that appears to consolidate learning effectively in the context of a programmatic approach to IPE. This approach also enables educators to identify gaps in IPL across and within disciplines in order to facilitate further curriculum development.

Issues arising for discussion

- This activity is part of a programmatic approach to the achievement of IPL outcomes across a health program, comprising a sequence of preparative learning, simulation-based guided practice experiences supported by personal reflection and finally the application of learnings in real clinical settings. The approach is resource intensive and the necessity for all elements might be questioned.
- Is this activity a suitable substitute for an interprofessional student service team experience (as per the Linköping model)?

- The particular activity relies on a premise that all health professional students will have the opportunity to participate in, or at least observe, interprofessional practitioner teams during their routine clinical placements. Is this a fair assumption?
- The *Sydney Interprofessional Declaration* asserts that interprofessional education should be a compulsory component of the education of health professionals that is formally assessed. Is this achievable and how would messaging to students be affected by an IPL approach that was elective or not assessed?
- Even though it was evident that our IPE program had been effective, some medical students still questioned the relative importance of these capabilities to their future practice. How might we better encourage their engagement, or should we just wait for 'practice to be the teacher'?

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Exploring the use of Online Readings and Reflective Discussion Activities (ORARDA) to enhance clinical learning

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Abstract

Introduction: The Online Readings and Reflective Discussion Activities program, ORARDA, is a component of a Patient Safety and Readiness for Practice Unit at Monash University. It was first implemented in 2006 to better prepare final year medical students for work. The program runs concurrently with the students' final year clinical placements and is designed to complement students' ward-based experiences.

Aim: This project is an evaluation of the ORARDA program. The aim is to determine student perceptions of the value of the activity, describe the nature of the students' written work, and consider how the activity can be improved.

Methods: Quantitative and free text responses were collected via an online evaluation survey at the end of the academic year. Five hundred students were invited to participate in the survey and permission was sought to use their written posts for the project. The quantitative data has been analysed using descriptive statistics and the qualitative data will be analysed using thematic analysis.

Results: The survey response rate was 30% (151 surveys completed) and 73 students gave permission for their posts to be analysed. At the time of preparing this report, detailed data analysis is ongoing. Preliminary data analysis indicates: Students are divided about the utility of the ORARDA activity, with 40% expressing positive views and 29% of students expressing negative views about its utility. The majority of students agreed that the readings were interesting, the topics were relevant, the activity helped them make sense of some of their experiences and observations on the ward, the activity increased their knowledge of Patient Safety, would make them a better doctor, and helped to shape some of their attitudes to patient care. Forty-four percent of students supported the continuation of this activity, with 34% neutral, and 22% stating it should not continue. Thirty-five percent of students agreed ORADA learnings translated to ward practice. Of the various elements of the ORARDA, the students collectively rated the readings as the most influential component in helping to shape their attitudes to patient care.

Conclusion:

Student perceptions of the value of ORADA were mixed, with almost one third of students not valuing the activity. This is on a background of entrenched negative attitudes toward online learning and a high burden of online activities across the medical course. However, there are many encouraging findings, particularly in relation to the activity as a mechanism to help shape attitudes to patient care, influence practice, and also a way to enforce broad reading of valuable non-clinical material. Moreover, this evaluation has provided insight into strategies to improve engagement in the activity.

Brief description of academic area

Five hundred final year medical students from Monash University undertake the Unit in which the ORARDA sits. The Unit is on Patient Safety and Readiness for Practice (Marshall, Harrison, & Flanagan, 2008). There are three components to the Unit: immersive clinical simulation scenarios, face-to-face seminars, and ORARDA, the online component. This Unit runs in parallel with six consecutive blocks of six week clinical placements. The large cohort is widely dispersed throughout metropolitan Melbourne, rural Victoria, and Malaysia.

Particular purpose

Medical students report feeling underprepared for clinical practice (Australian Health Minsiter's Advisory Council, Wilson, & Feyer, 2015), and a sense of being overwhelmed by the steep transition from the university to the workplace. A better understanding of some of the complexities inherent in the workplace may help ease the transition to work. Such complexities include areas that are not traditionally taught at the undergraduate level. For example: managing transitions of patient care, working with uncertainty, handling mistakes, system design, doing the right thing for the right patient, the ethics of novice clinicians learning on patients, and workplace culture. These, and many other non-technical themes are manifest every day in practice. This educational activity is designed to put a spotlight on these topics and deconstruct many of the complexities, with the aim of improving students' situation awareness (Endsley, 1995) in the workplace. This hopefully translates to new graduates being better equipped to identify hazards for patients, anticipate, adapt and generally work more efficiently and safely. Helping students develop better situation awareness in the workplace is the primary motivation for ORARDA, however, there are many side goals that helped to shape the program. These are listed below.

The ORARDA activity was developed to meet the following goals:

- Introduce students to important 'non-technical' aspects of practice that are highly relevant for practice as junior doctors
- Encourage deep learning
- Integrate learning with clinical placements
- Encourage reflective practice within and beyond the activity
- Encourage students to observe the workplace with a critical eye. That is, to encourage consideration of multiple perspectives and to challenge established practices if there is evidence to suggest these practices may be improved.
- Stimulate critical thinking by comparing literature on key topics to their own experiences in the workplace.
- Encourage students to apply knowledge in practice
- Encourage knowledge, attitudes and behaviours that promote Patient Safety
- Reach a dispersed cohort of 500 students at low cost

Enacted post-practicum interventions

The ORARDA program consists of 7 topics. Each topic has 1-3 associated readings. Students are asked to think about the reading in relation to their observations and experiences on clinical placements. They also need to consider their role as students and junior doctors in relation to the topics and how they can contribute to safe patient care. A summary of their reflections are posted

on a moderated discussion board on the online learning platform 'Moodle'. They are required to read and comment on a fellow students' posts. Topics include: handover, diagnostic error, correct patient identification, the learning curve, workplace culture, hazard points for patients, when and why things go wrong.

ORARDA has been designed to complement students' learning and experiences on the wards during clinical placement. The unit requires them to reflect on their clinical experiences (reflection-on-action (Schon, 1983)) and provides insight and ideas for things to focus on and try out when back on the wards (reflection-for-action (Schon, 1987)).

Although online learning is often not popular with many students, it has a number of attributes that make it ideal for some of the content to be covered in this unit and the logistics of the cohort. In terms of logistics, online is ideal for the large number of students, 500, who are geographically dispersed and moving location every 6 weeks. Providing uniform small group face-to face sessions on these topics for this number would be a costly logistical nightmare to implement. The learning from peers and engagement may be better with a small group face-to-face session, however, having to read and reflect alone, prior to posting, ensures that all students do more of the reading and the reflecting.

The idea for ORARDA originally grew from trying to devise a way to get students to read. It seems most students only read prescribed material if they have to, so the reading needed to be linked with some kind of output. The questions that relate to the reading encourage active reflection on the written material. Using the questions to link the reading with clinical placement experiences adds relevance to the readings and helps the students make links to the clinical environment. The topics are sufficiently generic that they are relevant to all clinical placements. Finally, most topics have a final question about what the students' role is in relation to the topic and/or what can be done in practice to perform well in relation to the issue. This hopefully personalises the issue and may potentially influence practice. An example of one topic and its related questions is included below:

> ***Correct Patient Identification.***
>
> ***Reading****: Chassin et al. (2002) The Wrong Patient. Annals of Internal Medicine,136:826 – 833 (Chassin & Becher, 2002).*
>
> ***Activity 1***
>
> *In relation to the story in the article, think through all the missed opportunities that could have protected the patient from having the wrong procedure.*
>
> ***Activity 2***
>
> *In your current (or recent) clinical environment:*
>
> - *How likely is patient misidentification of the scale described in the reading?*
> - *What defences help protect the patient from this? To use the "Swiss cheese" analogy – what are the slices of cheese?*
> - *What are the potential holes in these defences?*
>
> ***Activity 3***
>
> *What is your role now and as a junior doctor in strengthening these defences? How can you help make sure things happen to the right patient and not to the wrong patient?*
> *Post a summary of your thoughts and ideas from Activity 2 and 3 on the discussion group.*
> *Aim to keep your posts brief (i.e. no more than two paragraphs)*
> *Comment on another student's post. (no more than one paragraph)*

Most of the learning is in the reading, reflecting and writing with this activity. Individual student feedback from an academic on the written work is only likely to add a little at best. However, no-one likes to submit work that doesn't get read. Posting onto a discussion board means that fellow students may read their post. It is presumed that this would help motivate students to put more effort into their work, and avoids the feeling of submitting to a void. Most posts are well written, insightful and interesting. Many have illuminating anecdotes and novel ideas. Having students comment on a fellow student's post ensures that the insights are shared amongst the students to some degree.

Each discussion group has 30 – 45 students. One moderator oversees the entire activity. (6 x 500, 200-1000 word posts). Students don't receive individual feedback on their post, however, the moderator has some presence on the discussion board; adding emphasis, asking questions, correcting misinformation and summarising. See Table 1 below for a Summary of the ORARDA program.

Table 1

Program Overview

Topics	**Teaching and Learning Approach**	**Student Activity**	**Moderator Activity**
• Correct Patient Identification • Learning Curves • Handover • When Things go Wrong • Workplace Culture • Equipment and Human Factors • Diagnostic Error	Readings and/or video including • case studies • expert commentary • scientific papers • autobiographical text • workplace documentation	• Read or view prescribed material with particular questions in mind. • Post a summary of thoughts / answers or an angle that hasn't yet been covered. • Read and comment on a fellow student's post	• Have some presence, although no need to respond to every students' post • Allow students to respond to controversy or fill in gaps before responding • Ask questions • Add emphasis • Correct misinformation • Explain relevance • Summarise

Data gathered and analysed

The following data has been collected:

1. Online survey (Likert and free text responses)
2. Student posts
3. Informal interview

A survey response of 30% was achieved, with 151 surveys completed. 73 students gave permission for their posts to be analysed.

Analysis methods will include descriptive statistics of quantitative data and thematic analysis (Miles, Huberman, & Saldana, 2014) of qualitative data.

Key findings

At the time of preparing this report, detailed data analysis is ongoing. However, some early findings from preliminary analysis can be shared.

Many students had a pre-existing negative view of online learning, with 37% of students reporting that they generally don't value online learning and 41% reporting that they don't enjoy online learning. Only 27% of students approached the activity being evaluated with a degree of enthusiasm. Only 27% of survey respondents stated that they enjoyed the ORARDA and 40% found it worthwhile. Forty-five percent did not enjoy it and 29% thought it was not worthwhile The remaining students were neutral. Despite this, the majority of students agreed or strongly agreed the readings were interesting (61%), the topics were relevant (75%), the activity helped them make sense of some of their experiences and observations on the ward (52%), the activity increased their knowledge of Patient Safety (58%), and would make them a better doctor (50%). Twice as many students thought the activity should continue rather than be discontinued (44% vs. 22%).

Thirty-five percent of students agreed they had put some of what they learned from ORARDA into practice on the wards. Common themes included a greater aware of hazards for patients, more capacity to avoid and understand errors, and increased thoroughness in patient assessment, procedures, protocols, and use of equipment. Twenty-nine percent of students reported not applying their learning from ORARDA into practice. A frequently stated reason for this was students completing the activity in the last couple of weeks of the year, so there was limited or no opportunity to do so.

Fifty-three percent of students agreed the ORARDA program helped to shape some of their attitudes to patient care. Common themes included a greater need to be careful and a more patient centred approach. Several students commented on their attitudes being reinforced by greater understanding of concepts formerly taken for granted and discovering fellow students shared similar views. Of the various elements of the ORARDA, the students collectively rated the readings as the most influential component in helping to shape their attitudes to patient care (readings (56%), questions (50%), posts (35%), reading and commenting on a peers' posts (30%), none (18%)).

The most common suggestions for improvement were to cover the same topics but in an alternate format such as a tutorial, lecture, podcast or quiz. This reflects the frequent dislike for online learning options among students in this group. Several students suggested to keep the readings and questions, but remove the requirement to post. However, it is the posting requirement that provides the momentum for students to do the reading and thinking. With the current design, the majority of students reported that they completed most of the required reading. Some students thought the readings should be more concise, perhaps with brief summary notes provided. Several students thought it would be better to finish the ORARDA earlier in the year to provide more opportunity to put learning into practice on the wards. One student would have liked to have commented briefly on multiple peers' posts, but didn't, for fear that the moderator would see one of her brief posts and deem her response post too superficial. Changing the instruction to "comment on *at least* one of your fellow students' posts" might resolve this problem for particularly conscientious students.

The next stage of analysis will use the students' posts to focus on how the learners engaged with the activity, the depth and type of responses and how they engage with their peers on the

discussion board. Are they mostly just agreeing and affirming, or are they elaborating and providing counter-arguments to their peer's views?

Issues arising for discussion

The practice of medicine requires empathy and wisdom. In this study, reading seems to have had the capacity to shape attitudes. Through reading, complexity can be unbundled, alternate perspectives explored, and there is an opportunity for deep conceptual understanding. How can reading activities or any online activity be more firmly anchored to clinical activity and learning?

Exploring in greater detail why so many students don't like online learning activities and, conversely, why an equal number of students find it valuable.

Reflection is such a key capability for the developing practitioner (Sandars, 2009). How can we help students develop the habit of reflection? Is this sort of activity, ORARDA, part of the answer? How could we build the complexity of this type of task to sustain students' interest over time?

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Learning from practice…vicariously: Learning circles for final year medical students on clinical placement

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Abstract

Introduction: This report describes the use of "Learning Circles", a group-based reflective activity, for final year medical students on clinical placement. The aim of the Learning Circles is to bolster the educational value of the clinical placement by students sharing new knowledge and experiences with peers. This report outlines the design of this low-cost educational approach, and discusses the preliminary results of a study exploring student and teacher perceptions of the educational intervention.
Aim/Objectives: To determine staff and student perceptions of the value of Learning Circles, the nature of the information students share in the sessions, and how the activity might be improved.
Methods: In this mixed methods study, data were collected from a number of sources: end of placement written survey (n=74), student notes from each Learning Circle session, facilitator notes, and focus groups (3 x 1 hour sessions, each comprised of 4 or 5 students). Analysis methods included descriptive statistics of quantitative data and thematic analysis of qualitative data.

Results: Preliminary analysis suggests that the vast majority of students perceived the Learning Circles activity to be enjoyable, interesting, and facilitated the development of new knowledge. More than half of the students reported having incorporated this new knowledge into their clinical practice, and agreed that the activity should continue for future students. Despite this, students rated the utility of the learning circles lower than their other educational activities such as ward time, student presentations and lectures. Students appreciated the social element of the Learning Circles activity. A significant proportion of students also reported positive changes in their learning behaviours as a consequence of the sessions. The most frequent criticisms of the activity included the lack of structure, difficulty thinking of subjects to explore, and lack of engagement of peers. Students' most preferred topics included hearing about other's mistakes, interesting cases, how other clinical units function and practical clinical tips.
Conclusion: The learning circles activity has both social and educational value, with potential to positively influence work-based learning approaches, and clinical practice. The activity requires few resources, and may be applicable to students on placement from other craft groups. There is scope to further improve the activity, particularly in the learners' orientation to the purpose of the activity, and more exemplars relating to the mechanics of reflective discussion, and potential topics for discussion.

Brief description of academic area

The setting for the project was a large community hospital in Melbourne where up to 35 final year medical students are dispersed on a variety of six week clinical placements at one time. These placement settings include General Surgical units, Vascular Surgery, Plastics, Orthopaedics, General Medical units, Cardiology, Endocrinology, Intensive Care, Aged Care, Rehabilitation, and the Emergency Department. The students are expected to be active members of the teams they are

attached to, with a focus on learning, preparing for work as a junior doctor and contributing to patient care.

The project spanned 18 weeks; three six week blocks. A total of 105 students had the opportunity to participate in up to 3 learning circle sessions. Attendance at the teaching sessions was encouraged, but not enforced, because students often had valid competing educational opportunities. On average, each learning circle session was attended by 25 students. Nine Learning Circle sessions were conducted, with three groups of 35 potential students.

Particular purpose

Clinical placements offer a rich learning environment for senior medical students. They are the ideal primer for work as a junior doctor (Brennan et al., 2010). However, clinical placements are costly, both in dollar terms and clinician time spent supervising and teaching students "on the run". Teaching at the bedside in the setting of clinical care is considered highly valuable and relevant to work (Benjamin, 2015), but could also be viewed as inefficient because the ratio of supervisor to student is often just one to one. Reflective Learning Circles (Hiebert, 1996) are a simple way to harness the "teachable moments" experienced by one student and make them available to a larger group for their consideration.

This educational activity was designed de novo and aligns with established pedagogical approaches to group learning, which manifest in a variety of forms and across numerous fields (Dyck, 2012; Hiebert, 1996). MacGregor described a Learning Circle as "…an informal, cooperative way of learning that is based on natural patterns of human interaction"(MacGregor, 1993). Specific features of the Learning Circles activity in this project setting were: multiple concurrent circles held in the one large room to accommodate a large number of students, small groups that are peer-led with no direct facilitation, and discussion topics that are open-ended.

There is very minimal literature regarding learning circles for medical students. A study by Sackin found that students, besides clinical cases also wanted to talk about issues relating to interactions with colleagues and the clinical environment. The study identified the importance of a trained facilitator to keep students focussed on the task (Sackin, 1994).

The term "Learning Circles" is more prevalent in the nursing education literature than in the medical education literature. Two relevant studies describe Learning Circles activities (Hiebert, 1996; Newton, 2011). Both studies ran one group at a time, used a facilitator and focused on critical incidents and/or ethical issues. Students initiated the topics of discussion based on their recent experiences on the ward. The aims were: to help bridge the gap between theory and practice; and to develop critical thinking skills and/or professionalism. The Learning Circles activities were considered to be valuable (Hiebert, 1996; Newton, 2011).

Initial literature review shows no published studies looking at Learning Circles for students without direct facilitation or the running of concurrent learning circles to accommodate larger groups. These elements of the activity being studied may not represent ideal practice, but are relevant to the reality of clinical education. They warrant closer examination because they enable the learning circle to be delivered in a cost-efficient manner for a large group.

In relation to this project, the medical students come together once a week for an afternoon of face-to-face teaching. Traditionally, this time consisted of lectures and student case presentations. The Learning Circle activity was introduced to enhance the weekly afternoon teaching

session and was devised to: encourage all students to be active participants of the session; link the session with clinical placement experiences, add a sense of community and collegiality among the students; cover relevant content for final year students, and harness some of the learning highlights experienced by individuals immersed in practice. The need for each of these design requirements is justified in more detail below in Table 1.

Table 1

Problems and Design Solutions of the Learning Circle Activity

Problem to be addressed	**Educational Goals of the Learning Circles**
Most students were passive learners for the entire two hour didactic teaching session. Students reported 'just sitting and listening' to senior colleagues and/or peers present topics and cases.	Increase the amount of active learning/engagement in the session. Provide an opportunity for all students to contribute an element of their experience on the wards.
The didactic teaching session was the only time each week the students gathered together for education while on placement. Apart from the case presentations, there was no link between the students' immediate ward based experiences and the teaching. Creating linkages was a challenge because the students were having such varied experiences on a wide range of clinical units.	To link the educational session with students' recent experiences on clinical placement. To provide an opportunity for reflection and integration of learning.
With over 500 students in the year level, many students did not know their peers. They were often the only student on their unit and may have had limited opportunities to interact with their student peers while on placement. The clinical placements can be challenging and students may feel isolated from their peers (Bearman, Molloy, Ajjawi, & Keating, 2013; Kilminster & Jolly, 2000)	Provide an opportunity for students to interact with each other. Add a sense of community and collegiality among the students.
There is no designated curriculum to be covered during the two hour teaching session. Students rotate from hospital to hospital every six weeks, with no coordination between hospitals about what (if anything) is to be taught beyond what students learn while attached to their units.	Identify relevant content for final year students. Having the students generate their own learning needs based on their placement experiences is one way of ensuring relevance and engagement
All students were gaining unique and important knowledge and experience while on placement, but usually only one student would benefit from a given educational situation at a time. Often this learning would occur at the bedside with a more senior clinician (Benjamin, 2015). This is an excellent way for students to learn, but it is resource intensive when considering there is a cohort of 500 students. Students only have six placements per year so will have a limited breadth of experience. E.g. most students only do one surgical based placement. If they are assigned orthopaedics, they will miss out on many other common types of surgical issues involving organs and tissue other than bone.	Harness some of the learning highlights experienced by individuals and share them with a larger group.

Enacted post-practicum interventions

The Learning Circle was a 30-40-minute activity in which students were divided into groups of five and given half an hour to share an experience and/or a particular learning point from the previous couple of weeks. After this, time permitting, one or two groups would share an item from their small group with the whole group of 25, with some commentary from the clinical educator. This arrangement was devised as a way to address the problems and educational goals outlined in Table 1.

There are two unique features of this activity worth highlighting. The first is the absence of a facilitator for the small groups of five students. There was however a facilitator overseeing the room/session which usually had five or six groups of five students. The decision not to provide a facilitator was influenced by resource limitations, the maturity of the students, and the potential for some educational benefit. The students in the project are in the final year and have had considerable experience with small group learning and peer learning (Tai, Haines, Canny, & Molloy, 2014), they are also relatively mature and motivated to learn by this stage of their course. Furthermore, students may feel more relaxed and speak more candidly when amongst peers only. Not having the small groups facilitated by a tutor is a low cost option which greatly adds to the feasibility of this method.

The second unique feature is the open-ended nature of the items for discussion. This approach was in part chosen to discover what it is that students choose to talk about with each other. They were instructed to share an experience or something they had learned in recent weeks. The content for discussion could be clinical/technical (reflection on a procedure observed or undertaken) or it could be more emotional or process-based (experience of death of a patient in the ICU). They were not steered one way or the other. They were given a list of ideas to help stimulate thoughts for an item to share (see table 2).

Table 2

Student Prompts

Ideas for items to share with your group
A case
Something you were taught
A mistake you (or someone else) made and what you would do differently next time if you had the chance
Your observations of the work your unit does
Something that surprised, pleased or disappointed you
A brief summary of a common clinical problem on your unit
A description of doing something for the first time. What was it? How did it go? What did you learn?
A challenging situation

Data gathered and analysed

The data sources are as follows:

1. Learning Circle evaluation form (Likert and open ended questions)
2. Clinical placement evaluation form
3. Focus groups x 3
4. Facilitators notes

5. Student notes regarding topics raised

A total of 74 students completed the evaluation surveys. Only students present at the end of the final face-to-face teaching session were asked to complete the surveys, of those present, 100% completed the survey. Fourteen students participated in one of three focus groups.

Analysis methods included descriptive statistics of quantitative data and thematic analysis of qualitative data (Miles et al 2014).

Key findings

At the time of preparing this report, data analysis is ongoing. However, some early findings from preliminary analysis will be shared.

Compared with other educational activities during placement, overall students rated the Learning Circles activity as less useful than the student presentations, the lecture series, and time on the ward. Sixty-four percent of students strongly agreed (SA) or agreed (A) that the Learning Circles were useful, compared with 94%, 86% and 93% respectively. 27% of students were unsure or neutral about the utility of the Learning Circles, and 6% of students disagreed that the sessions were useful. Despite this, 85% of students SA or A that the learning circles activity was enjoyable, 86% SA or A that the learning circles activity was interesting, 81% said they learned new things, 56% had incorporated learning from the sessions into their clinical practice and the majority of students thought the activity should be continued for future groups of students. Only 3% thought it should be discontinued.

Survey and focus group data revealed that students' most preferred topics included hearing about each other's mistakes and concerns, so as to avoid making them themselves (and to reassure them that they were not alone in their own fears and imperfect practices), interesting cases, the practices and priorities of other clinical units, and clinical "tips", "pearls" and "gems" that are not typically found in books (e.g. what information is important when referring a patient to a particular clinical unit).

Many students commented that the Learning Circle activity impacted positively on aspects of their learning behaviours. Themes included actively seeking out learning opportunities on the ward to share, more time spent reflecting on learning on the ward, and more time spent looking things up.

Frequently reported valued aspects of the session included the opportunity to meet and talk with peers and normalisation of the student experience through self-disclosure. The most frequent criticisms of the activity included difficulty thinking of subjects to explore, lack of engagement of peers, and the lack of structure. However, there was a diversity of opinion about the degree of structure, with some students suggesting a clinical facilitator and more steps to follow in the sessions would help, and others identifying the open structure as a key strength. The majority of students thought the learning circles shouldn't be facilitated (54%). A fifth thought nominating a student to chair would be beneficial (21%) and a quarter would have preferred a clinician educator to facilitate the small groups (25%).

A key theme to emerge was that students were characteristically ***suspicious of reflection*** in their curriculum. One student was so bold to mention they had a 'visceral reaction' to the term 'reflection' or 'reflective essay', and it was therefore not surprising that participants in the focus

groups suggested that a name change away from Learning Circles might better serve future cohorts. They valued being ***close to the action*** and reported that in terms of learning experiences, they most valued being on the wards (doing or observing) and receiving advice or teaching from experienced clinicians. One student praised the facilitator for spending time with learners before the activity to provide the rationale for why these group activities were important, and that the style of learning was one that would be replicated in their ongoing jobs as doctors (e.g. case discussions, journal clubs).

Facilitator reflective notes were classified into the following themes:

Learner engagement

Students appeared to have no trouble starting to talk. Mostly, the body language was encouraging, with laughter, smiles, and leaning in. It was often difficult to stop the groups from talking. Students asked each other questions and several students often contributed to a given topic in an organic way.

Seating seems to matter

If students were not arranged in a tight circle there was an increased chance of the discussion petering out quickly. Although unsure about cause and effect with this observation, the facilitator actively improved the positions of students if they didn't form a tight circle on their own.

It only takes one

The facilitator surmised that if one student was reluctant to participate, this could easily dampen the enthusiasm of the rest of the group, so she worked hard to gain "buy-in" and made an effort to create a non-judgemental, relaxed learning environment. The facilitator did this by sharing some of her own recent clinical situations, not hiding or being apologetic about her own clinical knowledge gaps, and avoiding putting individual students on the spot.

The facilitator decided ideal small group size was five. A few groups of three drifted off topic and groups of seven had a tendency to form side conversations.

Issues arising for discussion

Reflection on experience is a key strategy for effective learning in the workplace, both during experiences (reflection-in-action), and after experiences (reflection-on-action) (Schon, 1983). This study formalised the reflection-on-action process through establishing a series of group-based Learning Circles. The aim of encouraging reflection is an ambitious one, as in this setting, by the time students reach final year, they groan at the mention of the word "reflection". Something is happening in the earlier years of the course that is turning students off this vital activity. Apart from not mentioning the word "reflection" (i.e. reflection by stealth), we need to further research on what can be done to promote positive participation in reflective activities. What strategies could be incorporated into the Learning Circle activity to encourage reflection-for-action (Schon, 1987)?

This study demonstrates that despite students feeling initially suspicious about an activity called Learning Circles, they reported appreciating learning from others' mistakes and concerns in clinical practice. More research needs to explore what learning environment is required for students to feel comfortable to share their mistakes with peers? How can they be supported, and what benefits could this style of education have on the culture in medicine? In large and competitive

cohorts the utility of such an approach to lower the threshold to reveal academic or other vulnerabilities could have far reaching benefits for well-being of the whole cohort.

Carol Dweck's work reveals the value of a growth mind-set (Dweck, 2017). This includes not being afraid to fail or make mistakes, learning from experiences, both good and bad, acknowledging gaps in one's capability and working towards improvement, as opposed to protecting one's ego and clinging to a positive self-concept at the expense of taking risks. The data suggests that formalised work-place activities such as Learning Circles may help to encourage a growth mind-set for students on placement.

This study suggests that the educational intervention had a positive impact on learning behaviours beyond the session (e.g. students thinking about what they could learn and/or have learned on the ward, following up on learning needs and looking up pathologies or other gaps in knowledge). Peer learning via group conversation, in the form of Journal Club, is a common form of ongoing education for specialist doctors. Specialists make time for this activity in their hectic schedules, presumably because it is useful. Further research questions to pursue include: At what stage of training are students ready for this? What are the requirements for readiness? How might formal time-tabling of such an activity in the undergraduate curriculum benefit students, versus informal discussions in the lunch room? Importantly, research is needed to better understand the extent to which these reflective capacities extend to workplace practice beyond graduation.

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One week and sixty seconds of community learning: what is learnt?

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Abstract

Frequently graduate entry and final undergraduate nursing students have articulated in their teaching/evaluation projects due to the intense nature of their programs that they constantly feel under pressure. It was anticipated that making a 60-second video on completion of a community health practicum might be an appealing interaction and provide a platform, given many students are now of the millennium or Y generation and hence 'techno-savvy', for them to engage in learning about the diversity in community health. This project was initially planned with two phases. A third phase, at the time of this report, has recently been added.

Phase 1: Entailed gathering a base understanding of students' experiences of learning, written in a portfolio, from their one week of community placement experience. Content analysis of on a portfolio question: '*Reflecting on your personal objectives for the week what is the key learning that you are taking away with you*?' Findings illustrated the students' focus was predominantly on skill acquisition, enhanced appreciation of the continuity of care between acute and chronic.

Phase 2: A Moodle site was created: Critical reflection in Community Practice. Participating students created and uploaded a reflective video of key learning from their community placement. The videos created were all longer than 60 seconds! The time varied from 1 minute 43 seconds to 6 minutes/video. Analysis revealed an enhanced understanding of the variety roles of community nurses, a sharing of the importance of the intersection between community and acute care in client lives, and how the community experience would influence their future practice.

Brief description of academic area

The project was undertaken in the School of Nursing and Midwifery. The phase 1 participants (*n*=6) were graduate entry Master of Nursing Practice students who had completed their clinical unit that incorporated one week of a community placement experience. These participants were all located at the Clayton campus. In phase 2, three graduate entry nursing students from the Clayton campus, were recruited. Three, final semester Bachelor of Nursing students also were recruited. They were across the then three locations of the School. This later group of students undertook a two week community placement experience.

Particular purpose

Previous research has clearly identified that student nurses spend their first week assimilating into a new clinical setting and it is only in subsequent weeks that they are able to focus on their learning needs. To compound the situation the community facilities students attend are quite varied in what they might offer in terms of opportunities and engagement. The placements might entail going out with a district nurse to being placed in a palliative care service. Within the MNP program, this particular community health component has been problematic since the inception of the course in mid-2009. Indeed at the time of this project students completed their community placement either prior to a mental health placement or immediately after the mental health placement. The MNP students do not return to being on campus in class till the subsequent semester. The Bachelor of

Nursing students undertake a two week community health placement during their final semester. The teaching content in the BN program is front-loaded at the beginning of the students' final semester and so similarly these students do not return to campus, so there is no ability to maximise on the post-practicum experiences and shared learning that might occur.

Additionally for the Master of Nursing Practice, at the time of this project, was a truncated graduate program (18 months) and hence it was important to utilise the most pragmatic means for developing the students' skills in reflection on their learning. The registering board requires that nurses are competent reflective practitioners (NMBA, 2016). Yet, participation in a clinical practicum does not necessarily provide opportunities for students to develop their reflection skills (Nagle, 2009). Students need to be provided with opportunities to purposefully facilitate the development of these skills.

Prior experience in teaching into the MNP program, identified that the students seem to engage with material that was interactive and not too onerous. The MNP students had articulated in other teaching/evaluation projects due to the intense nature of their program that they constantly feel under pressure. In teacher education, video has been used extensively to capture the complexities of learning to teach to assist teacher education students to develop and notice what is occurring in the classroom. An essential component of the use video has been to assist teacher students to develop their critical reflective skills.

The goal of this project was to provide an alternative approach for developing students' critical reflection on their learning by creating an on-line forum where they could learn from each other. It was anticipated that having students make a 60-second video on completion of their community health practicum would offer an engaging interaction and facilitate knowledge development.

Enacted post-practicum interventions

Students were requested to make a 60 second video reflecting on their community placement and upload their video to a Moodle site. Students were provided with guidelines that directed them to remember their video was about their critical reflections, what did they learn? How might their video assist a peer in understanding something about the particular community setting they had undertaken their placement in. Three reflective questions were placed on the Moodle site:

- *Reflecting on your personal objectives for your community placement what is the key learning that you are taking away with you*?
- *How will this community experience influence your future practice?*
- *What would be the three critical moments of learning for you?*

An analysis of written clinical portfolio responses of a different cohort of MNP students, guided the formation of the reflective questions. Previous research on developing students' critical reflection (Newton, 2011) found that students require a specific focus to assist with their reflections. Students who participated in creating a video were also encouraged to review each other video and there was a discussion forum on the Moodle site to facilitate this.

In 2013, Monash University launched their Better Teaching, Better Learning Agenda. Within this agenda staff were encouraged to be more creative in their approaches to student learning. This sense of creativity partially stems for the explosion of new technologies with an emphasis on greater skill development alongside the willingness to challenge the learning journey provided to students.

The current generation have grown up in a digital world. Hence it was considered that in providing an activity, reflective video, which could draw upon the skills of our digital techno savvy students would appeal to them and offer an innovative way in which to capture and share their practicum learning experiences.

Data gathered and analysed

Six written clinical portfolio responses to the question: *Reflecting on your personal objectives for the week what is the ley learning that you are taking away,* were collected. Content analysis was undertaken of these responses.

At the time of this report four students self -reflection videos have been uploaded onto the Moodle site. A fifth is still an activity in process. Analysis was undertaken of the videos by two team members independently, and then a discussion was undertaken to determine consistency of the analysis. In doing the analysis, notes were taken of the time, any images utilised, tone of voice, and content.

Key findings

My focus in this section is predominantly on the presentation of one participant, Bozena a 3rd year BN student. The rationale behind this 'case presentation' is that she demonstrated the essence of being fully engaged with the concept of this post-practicum learning activity. In her participation she demonstrated an enthusiasm that was resonated in an email she sent me: *Thank you for this opportunity. I had a lot of fun creating my video for your project."*

From a pedagogic regard, the creation of her video illustrates that the making of a reflective video is an activity that can be undertaken with relative ease and within a short time frame. Bozena sent an email late one afternoon, indicating she would be interested in participating in the project; in response to a forum post on the Bachelor of Nursing Moodle site for the community unit that she was undertaking. Within an hour she had sent back her consent form and sought some further clarification on what was required. The following evening Bozena sent an email regarding having issues with trying to access some music for her video. A flurry of emails, occurred as she worked through trying to access some music, which she eventually did. Just over 48 hours from her original email, her completed video had been uploaded onto the Moodle site along with the permission form, for the registered nurse consenting for her image to be used, in brief video clip.

In viewing Bozena's video there was a sense of professionalism to her video. What really was apparent from the detail of the images she had in her video (e.g. festive, decorated, multiple group photos on walls, implies fun and friendly place to work, well supported environment) she had made a strong effort to contextualise what her community placement service entailed. This section of her video would be informative for other students who are going out on the same or similar placement setting. Instructing students prior to making a reflective video of a placement experience, being able to contextualise the setting is an important aspect, in setting the scene.

Being clear on what the purpose is of the reflective video. If one is expecting a level of critical reflectivity from students and not merely a descriptive commentary, then the provision key questions is imperative to assist with reflections. This is particularly important given the short time frame that was suggested in this project for the length of the videos. In Bozena's video aspects of her key learning did not appear till one minute and twenty seconds into her video, which given the

entire length of her video was just under two minutes in length leaves little space for reflection. In contrast one of the MPN students, Anita whose video was over four minutes, spent more time reflecting on her critical moments of learning, sharing how her placement experience would influence her ongoing practice throughout her future nursing. She articulated more insight into a deeper understanding of the significant role of the community nurses. However, Anita's video was just a film of herself talking into her computer camera. This raises the consideration as to what will appeal to students, in either making or viewing videos created by their peers to augment their learning. Whilst, Bozena's video possibly lacks somewhat in critical reflectivity, what really stands out is that she produced something in a relatively short space of time, and there was a real sense willingness and engagement with this as a learning activity. Her video does capture one's attention. Listening to someone just speaking into a camera does not quite hold one's attention as readily.

In establishing an activity, such as the one attempted in this project it would be worthwhile ascertaining the ability and confidence of the cohort of students in making a video. It was very apparent that became an issue for one of the participants. She indicated via an email with an apology that she had not forgotten about the video, that she was not happy with her first attempt and would be re-doing it shortly. The final video, lasted more than the required 60 seconds, again as with Anita, this MNP student had only spoken in front of her phone camera, and there was an added distraction that it was obvious she was reading off some prepared notes. Hence, preparation of the students before embarking on such an endeavour, is a further pedagogical consideration. Does one incorporate an optional teaching session with multi-media staff to provide strategies and tips in producing a video for those students who require such guidance?

The final phase of this project is about to commence, which will be returning to the participants to invite them to participate in an interview to explore their experiences of making their video. A key question that will be asked focuses on seeking to gain some understanding about their background prior to commencing their nursing studies. The rationale behind this is to elicit, if they had previously had some exposure to multi-media through high school or during prior work experience. Certainly, Bozena's video seems to demonstrate a prior knowledge/skill in this area.

Finally, 60 seconds for a video, is probably not quite enough time given the points that have been identified above. It is well known that to capture students' attention, videos need to be between two-four minutes in length. The average length of the videos in this project was three and a half minutes. Setting boundaries on the length is not only important to ensure the viewer's attention is held, there is also the pragmatic issue of file size when uploading. One BN participant withdrew from the project after making her video, as she was struggling with getting her file uploaded, and despite an approach to her to call the Faculty multi-media team, she opted to withdraw. As an innovative approach to augmenting post-practicum experiences, this project has been challenging to implement and created significant learning around pedagogic considerations.

Issues arising for discussion

- An emphasis needs to be placed on ensuring that the videos are not required to be 'Oscar quality'
- Facilitation of an online discussion forum, how to get students engaged in doing this particularly if they are not on campus.
- Timing of the post-practicum learning experience, how does one maximise the potential if the placement is at the end of a semester.

- Letting go, what can be exchanged for or replaced if successfully enact post-practicum experience.

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Enhancing learning through reflective practice for midwifery continuity of care experiences

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Abstract

This project aimed to understand how best to augment the educational worth of Continuity of Care experiences through enhancing the reflective capacities of midwifery students. Reflective practice is an integral component of one's personal and professional development as a health professional. Being a reflective practitioner is a core competence for midwifery practice in Australia, and indeed in most countries globally. Reflection supports the development of critical thinking and integration of theory and practice. The Continuity of Care Experience program in midwifery programs requires students attend to women during the antenatal, intrapartum and postnatal periods and is a mandated workplace based experience in Australia. This higher education pedagogy requires the students' own agency and self-management, as it is not facilitated in the same manner as the traditional block placement model. The capacity to reflect on practice through these continuity experiences is a vital component to augment their educational worth. Whilst there are numerous authors espousing the virtues of reflection, and approaches to teach and learn reflection, a model of reflection incorporating a structured guided process appropriate for midwives was required. Griffith University has successfully developed and implemented the Model of Holistic Reflection and associated marking rubrics. This new model of reflective practice and guidelines for reflective writing were implemented across all midwifery students at Flinders University. We assessed the reflective capacity evident in the students' reflective writing pieces before and after implementation of the new reflection model. Furthermore, we explored students' perceptions and experiences across the two universities as to how they develop their reflective capacities, and in particular, how they reflect on the Continuity of Care Experiences. It was evident that the quality of reflective writing prior to the structured model was poor, and this improved following the intervention.

Brief description of academic area and students involved

This project incorporated midwifery students across all three years of Bachelor of Midwifery programs at two Australian universities. The Bachelor of Midwifery Preregistration at Flinders University has two pathways; 1) Registered Nurse (RN) entry and 2) direct entry for individuals without nursing or midwifery experience. During the study period, there were 52 students in the RN pathway and 171 in the direct entry pathway. All students were included in the stage one process, and were invited to volunteer for the stage two process, with 11 volunteering. At Griffith University, students across all three years of the Bachelor of Midwifery program were invited to participate in stage two, with 19 volunteering.

Particular purpose

A midwife is a responsible and accountable professional who works in partnership with women to give the necessary support, care and advice during pregnancy, labour and the postpartum period, to

conduct births on their own responsibility and to provide care for the newborn and the infant [1]. In Australia, midwifery education incorporates equal portions of theory and workplace based learning to develop the requisite conceptual, dispositional and procedural knowledge for professional practice [2]. A significant portion, approximately one third of the workplace based learning occurs through the Continuity of Care Experience (COCE) program [3]. The COCE affords an ongoing relationship for learning between a midwifery student and a childbearing woman, from initial contact in the early antenatal period, through pregnancy, birth and postnatal period. It is intended to give midwifery students the opportunity to provide continuity of care in partnership with women through their pregnancy and childbirth, thus imitating a midwifery model of continuity of care and continuity of carer [4]. The COCE commence in first year and afford students regular and sustained engagement with the world of midwifery work, providing experiences for them to reflect on, to understand about, and to develop their individual capacity for the profession.

The COCE pedagogic model sees students partnering with women, rather than the more traditional model of the student being partnered with a clinician, and has resulted in changed relationships and practices with clinical supervisors and learning support [2, 3]. This may result in absent supervision, unplanned supervision, or brief and intermittent episodes of supervision, all of which impact on the student and clinician's ability to develop an effective learning relationship [5]. Research into the learning outcomes of the COCE model has shown that students reflective writing is predominantly at a descriptive level and has the potential for great improvement [6]. It has been posited that access to authentic supported learning, formative feedback, clinical reasoning and reflection skills would augment student learning from the COCE [2, 4, 7]. This project sought to enhance the students' capacity for reflection and reflexivity as a mean to augment their learning through the COCE program.

Reflective practice is a self-development process of making sense of what is experienced in the clinical setting, reflecting on it and uncovering new knowledge [6]. Reflective practice is a conscious thoughtful process whereby one thinks about their practice, analyses assumptions, decisions and outcomes, and draws on various forms of knowledge to achieve deeper meaning and understanding [8]. The work of Schön places an emphasis on learning from experience and identifies the process of becoming a reflective practitioner who reflects both in the moment (reflection-in action) and after the event (reflection-on-action) [9]. Reflective practice has the potential to transform practice, and is consistently advocated for health professionals who require the capacity to think in action [8]. However, reflective practice is not an innate skill in all people, and requires development to achieve the level of thinking expected of a competent health professional. There is a plethora of literature on the process of reflection and how to teach and learn reflective skills. There are numerous models for teaching reflective practices, and midwifery has drawn from models of reflection from nursing and education to guide the development of reflective practice. However, as discussed above, research has shown that much of the students' reflective writing of their workplace learning experiences remained at a descriptive level. This project sought to enhance students' capacity for reflective practice through the instructional processes of teaching reflective practice, and reconsidering the expectations of the reflective write-ups for the COCE program.

Enacted post-practicum interventions

Review of the existing teaching instructions for reflective practice development at Flinders University identified a dearth of explicit guidance for student learning in the first-year curriculum, with the

introduction of a very simple 4-step published reflective model in second-year, and an assumption of reflective capacity in third year. Given the COCE commence in first-year and continue throughout the entire three-year program, it was evident that change was required throughout the entire curriculum. A multi-facetted approach was implemented for the post-practicum interventions to address this problem.

A review of existing reflective practice processes within midwifery raised our awareness of the Holistic Reflection Model, which had been successfully used throughout the three-year Bachelor of Midwifery at Griffith University. A partnership was established, and agreements made, to share their reflective practice development processes and resources for the purpose if this project. This involved the sharing of the model, and resources for staff and students, including marking rubrics and background readings. An expert academic from Griffith attended Flinders University campus, presenting development sessions with academic staff including classroom tutors and clinical facilitators, to achieve an adequate level of understanding to support the model and promote reflective conversations in class, and to have consistent message from the staff. During this site visit, the Griffith academic also presented to midwifery students in each year group of the three-year degree, to enable them to understand the educational intent and process of reflection, and the new model they were being asked to use. Recorded voice-over-PowerPoint presentations, as well as examples of completed reflective writing pieces were also made, and uploaded to the online resource repository for the COCE program. New reflective writing instructions and template was agreed upon between the teaching and research teams, and students were encouraged to use the new approach for the remainder of the year. The use of reflective conversations with students was encouraged amongst the midwifery teaching team.

Data gathered and analysed

Two components of data collection and analysis were used for this project.

Stage one involved the reflective writing artefacts produced by students across all three years of the Flinders University program, as well as the marking outcomes of the written reflective pieces from midwifery students of Griffith University. The written reflective pieces of the students' COCE were collected before and after the implementation of the new reflective model at Flinders University. Marking moderation, to promote consistent application of the rubric was undertaken between the expert academic from Griffith university and the research assistant academic at Flinders University. Following marking moderation and agreement in terms and interpretation, each piece collected was marked using the Holistic Reflection Model rubric. This process is ongoing as the final reflective writing pieces are still being submitted. The marking outcomes will be compared pre-and post the intervention, across year groups, and across sites. Analysis seeks to ascertain any change in depth and quality of reflective writing following the introduction of the new model, as well as increased developmental evidence across the three-year program. Preliminary findings are presented here.

Stage two involved a series of focus group discussions with students at both universities. The aims of the focus groups were to discuss ways in which students perceived that they developed their reflective capacity, and to discuss the utility of the reflective model for learning. All focus group discussions were audio recorded, and transcribed verbatim by a professional secretariat service. A thematic analysis [10] is currently being undertaken. Preliminary findings are presented here.

Key findings

Stage One: reflective writing.

Currently we have over 300 COCE written reflection pieces of writing from Flinders University, of which 93 have been assessed to date. These are shown in Table 1. It is evident that following the intervention, the scores across all 6 domains, as well as the total scores increased substantially for all four of the student groupings. It is interesting to note that the lowest pre-intervention score was achieved by the third-year students, followed then by the RN entry students. This is an interesting interim finding given that both groups are those with assumed reflective writing skills, and some of their submissions where their final written reflections. It is however evident from Table 2 that both groups made substantial improvements following application of the new model and template, although the sample size is low. This is a finding that warrants much further exploration. As only about 1/3 of the data has been assessed, this analysis should be reviewed with caution. Table 1 also shows that students at Griffith University improve the quality of their reflective writing over time, with the third-year students having the highest scores and first years improving from semester one to semester two as they develop their skills.

There are several limitations that must be considered when interpreting these findings. Firstly the sample sizes are currently small. The pre-intervention reflective writing was undertaken with the previous instructions and marking expectations which were not rubric based. As such, the writing was not undertaken to address the criteria of the rubric used. Furthermore, the reflective writing activities undertaken at Flinders University are different to those from Griffith University. The rubric used addresses the components of reflective writing as opposed to direct content and is why the comparisons have still been made.

Table 1

Student COCE written reflection marking outcomes

Venue	Time	Student group	N=	Self-Awareness & Insight 10%	Evidence of Midwifery Knowledge, Philosophy& Cultural Safety 20%	Reflection & Reflexivity 30%	Evidence Informed Practice 10%	Critical Thinking 20%	Style, Language & Academic integrity 10%	**Total score**
Flinders University	Pre-Intervention	RN	15	4.4	10.7	14.4	4.2	8.4	6.0	**48.1**
		Yr1	10	6.2	11.9	18.3	5.5	9.6	6.9	**58.4**
		Yr2	14	5.0	10.9	15.1	5.3	8.7	6.6	**51.6**
		Yr3	37	3.8	7.7	11.7	3.3	5.7	5.8	**38.0**
	Post-Intervention	RN	1	8.0	18.0	26.0	8.0	17.0	8.0	**85.0**
		Yr1	10	7.6	14.4	23.8	6.9	13.9	8.1	**74.7**
		Yr2	2	7.5	17.0	24.0	7.0	15.0	9.0	**79.5**
		Yr3	4	6.5	12.5	20.8	6.2	9.0	7.3	**62.3**
Griffith University	Semester 1	Yr1	14	6.5	14	20	6.5	10	7	**64**
		Yr2	7	7	14.5	21	7	14.5	7	**71**
		Yr3	10	8.5	18	26	9	17.5	8	**87.5**
	Semester 2	Yr1	14	7.5	16	22	7.5	14	7	**74**
		Yr2	7	7.5	14.5	20	7.5	13.5	7	**70**

Table 2

Percentage increase in Student COCE written reflection marking outcomes

Student level	Pre-Intervention	Post-Intervention	% variation
RN	48.1	85.0	+77%
Yr1	58.4	74.7	+28%
Yr2	51.6	79.5	+54%
Yr3	38.0	62.3	+64%

Stage Two: Focus Group Discussions.

A total of 30 midwifery students (11 at Flinders University & 19 at Griffith University) participated in 8 focus group discussions during October 2016. The focus group discussions lasted between 39 and 98 minutes (average of 74 minutes). Each discussion was recorded and transcribed and is being subjected to a thematic analysis. The following is an interim presentation of this analysis.

Most participants had no prior experience with formal reflective practices, although they associated workplace quality assurance processes and practice reviews forms of reflection. A few students were avid personal journal writers and reflected through this practice. Students recognised and understood the purpose of learning reflective practice and knew this was embedded in the midwifery curriculum. They saw it as a conscious and intentional process to enhance learning.

Reflection on practice was described as being undertaken in private and in both verbal and written forms with/for others. Many students spoke of thinking about their experiences privately whilst driving home on the day, a few students wrote detailed personal journals, and all wrote reflective pieces, required for their study program. All students spoke of the benefit of having opportunities for verbal reflection. These were enacted in various contexts, and believed to be more valuable than written reflection for most participants. Students spoke of how when you verbalise your experiences, knowledge and thinking, it opens awareness of what you do and do not know. There was a range of people and contexts in which the verbal reflective discussions took place; ranging from pillow talk with partners, phone calls with students/peers/mentors, corridor conversations with staff, study groups, formal appointments with academic staff, to facilitated group conversations in the classroom. A popular approach among participants was the use of a small group of respected and trusted peers, as they understood the experience of being a midwifery student, empathised with one another, and were “travelling the same journey”. These conversations would generally occur as phone conversations after significant events, or in depth discussions in study groups. Participants spoke of the value of in class debriefs and reflective conversations facilitated by the lecturers. Whilst in general these were deemed valuable, there was examples presented where they were perceived to be not useful. The frequency of the class discussions, the size of the groups and the cohesiveness of the groups all influenced the outcomes for learning. Participants spoke of the value in selecting their own group in which to have deep, meaningful and safe reflective discussions. They found when they created a peer study group, that they did learn to challenge one another, seek clarification on knowledge and assumptions, and explored the experiences of each other, learning together.

Written reflections we seen as the product of the reflective thinking and conversations. It was a means to write about the reflective outcome, as opposed to the process itself. There was a

fear that their written reflections would be judged, and that influenced the content of their reflective writing. Indeed, some students spoke of one lecturer who focused their feedback on content correctness more than the reflective process and outcomes for learning. This experience de-motivated deep reflective thinking and promoted a more surface level factual presentation and description.

Students at Flinders University, particularly the third-year students, expressed concern at the increased expectations placed upon them with the new reflective writing model. Given the third-year students were so close to finishing they were reluctant to change the writing process they had established, despite the potential benefits for learning. Whereas, the first and second year students found the new model helpful to better understand the reflective process, and gave them improved structure to transfer their thinking to written work. There was however, suggestion that the template was too restrictive of structure and one that allowed more flexibility would be helpful. There was a consensus that using the model helped students to think differently about their COCE and to become more aware of the woman's (and other care providers) feelings and experience. The reflective writing process enabled students to develop an appreciation of the perspective of others which influenced the students' identity and practice of midwifery.

Issues arising for discussion

- Students require an opportunity to debrief, ideally with a more knowledgeable other e.g. with a midwife, doctor or peers at the time of clinical experiences.
  - To unpack experiences, including emotional content, and enable sense making and identification of learning
- Focused conversations need to challenge learning and not just be descriptive of experience
  - The role and performance of the facilitator is vital to effective reflective conversations
- What are the best fora for students to learn to reflect on practice?
  - Who and how should these be supported?
- Structured guidance and examples improved the quality and depth of reflective writing
  - Implementing a rubric improved the quality and depth of reflective writing

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Learning circles to develop inter-subjectivity

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Abstract

Nurses work in a range of clinical settings, with a variety of individuals from culturally and linguistically diverse backgrounds. Nurses do much of this work in relationships with others, and this requires them to develop intersubjectivity, the "shared understanding of meaning by two or more persons, either directly in a relationship over distance or time through language" (Cody, 1995). Learning circles are a pedagogic method to promote intersubjective communication skills required to develop shared meanings (Hiebert, 1996). This project aims to evaluate a structured learning circle approach to develop nursing students' capacities required in teamwork (i.e. intersubjectivity).

An action research approach was adopted. Data collection included: (1) photographs of students' concept maps – describing a recent clinical case - drawn before and after learning circle discussion; (2) students' feedback on the learning circle experience; and (3) clinical facilitator interviews regarding their experience of the learning circle. Consistent with action research methodology, findings from the data analysis were used to continually develop the learning circle processes.

Four learning circles have been conducted to date. Students' understanding of their clinical cases was generally enriched by the discussion. Students' feedback on the learning circle experience indicates that the process enhanced learning and confidence to discuss clinical topics with others. Clinical facilitators' early experience of the learning circles indicates that they valued the opportunity to observe the students engaging with each other in student-led discussion.

These early findings indicate that there is value in the learning circle as a pedagogical method to support student learning through discussion with others. Students generally begin the discussion focused on factual or empirical forms of knowing but the post-discussion concept maps reveal further consideration of socio-political (policy or context) and sometimes ethical knowing, suggesting that understanding is enriched through intersubjective communication activities that they lead.

Brief description of academic area and students involved

The academic area is nursing, drawing upon the five patterns of knowing in nursing (White, 1995). The project is focused on how students make meaning from, or conceptualise, their practice. By conceptualising practice, students are able to generate hypotheses and actions for further testing and evaluation. The learning circles have involved groups of nursing students from Griffith University and University of Southern Cross who are undertaking a clinical placement at the Gold Coast Health. The students within each group have diverse histories associated with life experience (age) and cultural backgrounds.

Particular purpose

The relationships that nurses experience in the workplace, with colleagues, patients, and families, are essentially intersubjective processes as they seek to make sense of, and identify, the interests of these interlocutors (Pierson, 1999). Intersubjective processes can enrich understanding of practice by revealing other perspectives, elements, and actors intertwined in clinical practice. Billett (2014) suggests that the development of intersubjectivity can be promoted when learners articulate, share, appraise and elaborate shared disciplinary and personal-professional positions, values and procedures. These skills can be developed through specific pedagogic interventions in practice settings (Billett, 2014). Students can learn the skills to enact the shared understanding and practices that emerge in multiple relationships (intersubjectivity), and that are required to ***do*** nursing, through dialogical discussions with other students that is facilitated by an expert clinician.

In the Collaborative Clusters Educational Model (CCEM), nursing students are integrated into clinical work units, as members of the interprofessional team. Preceptors allocate a patient load for students, based upon their specific learning objectives, year level, and the opportunities afforded by the workplace. The Clinical Facilitator (CF) provides support for student learning across several clinical units. While the CCEM provides affordances for student engagement in practice, the opportunities to reflect on practice individually or in groups has focused more on students' experiences of fitting into the workplace, rather than on improving nursing care delivery. The larger groups of students, and the distribution of students across many geographical ward areas and different work shifts have, not surprisingly, challenged CFs to reconsider previous facilitation practices.

This project aimed to establish an evidence-based pedagogy, learning circles, within the CCEM at Gold Coast Health, to support student development of intersubjectivity and provide the CFs with an opportunity to both augment and assess students' understanding of practice. The learning circle aims to develop students': 1) group process skills and reflection that are necessary for teamwork; and 2) knowledge about practice. We hypothesise that students' knowledge about practice develops by analysing specific practice experiences using knowledge learnt in their university-based courses as well as that revealed through the group's discussion. The learning circle is a pedagogic device for developing students' knowledge of nursing through checking, aligning, and comparing experiences, feelings, and conceptual understanding (Hiebert, 1996). The group process skills that can be developed in learning circles, including shared understanding and purpose, critical reflection, innovation, and leadership, are considered to be important skills for teamworking (Sims et al., 2015), and therefore are salient for employability.

Post-practicum interventions and justification

The post-practicum intervention enacted in this project is the structured learning circle. The learning circle is an evidence-based pedagogic method used in work-based learning (Hiebert, 1996; Sims, Hewitt & Harris, 2015; Walker, Cooke, Henderson & Creedy, 2013). Its value lies in its ability to promote the value of, and accommodate, a diversity of participants (Hiebert, 1996), through recognising the diversity of nursing and other professional student populations, in terms of age, work experience, and personal socio-cultural histories. The model for the learning circle is consistent with usual 'debriefing' sessions in terms of small group discussion held on the health service site, over one to 1.5 hours during early afternoon. As such, it is feasible to implement in terms of releasing students from the wards.

The learning circle is structured, following four steps of critical reflection found to be successful in creating effective learning communities in nursing (Walker et al., 2013):

1. Deconstruct a particular practice or topic to develop questions;
2. Confront difficult or 'untouchable' topics that the questions raise;
3. Explore the possibilities, including how practice could be done differently, what information is still required; and
4. Generate alternatives for consideration and further investigation.

In the learning circle, students lead the discussion, with the facilitator providing information, support and coaching on team communication skills as required.

Data gathered and analysed

There were three data sets. The first was student feedback on the learning circle experience, using three open-ended questions focused on what was helpful, how this outcome was important to work as a nurse, and what would they still like to learn. The student summaries of the learning circles were subjected to content analysis undertaken by two members of the research team.

The second data set included interviews with CFs. These were scheduled to occur following the first learning circle and then two months later. The CFs were invited to describe the benefits of the learning circle for them and the students, the limitations of the learning circle, and suggestions on improvements. Interviews were recorded and transcribed. The data was then subjected to content analysis undertaken by two members of the research team.

The third and final data set was student concept maps, drawn during each learning circle, pre and post-discussion. The initial map was recorded in black or blue ink and the additions were in red ink. The maps were photographed and analysed by two members of the research team. The maps were reviewed for three elements: (1) coherence, including relevance and appropriateness for the identified situation, (2) comprehensiveness of concepts judged by the number of concepts and linkages (propositions), and (3) hierarchy of propositions showing relationship between specific and general concepts.

Key findings

Early key findings are focused on feasibility of the learning circle, the student and CF experience and student learning.

Feasibility

Early findings indicate that the learning circle activity is structurally feasible for students and clinical facilitators but there are challenges in organising a suitable space in a busy teaching hospital for this activity. One member of the research team was required to book a meeting space once per week for CFs to share. The CF training includes one 2.5 hours seminar and follow-up with a research team member attending the first two learning circles and providing feedback to CF. To date, four CFs have received training. The CFs purposively selected students for the learning circle, focusing on diversity in the population. This is consistent with the aim of the learning circle method, to have people from diverse backgrounds discussing one issue.

Student & CF experience

Thirty-seven students who participated in the first four learning circles provided responses to three open-ended questions. Students valued the learning circle activity, with learning enhanced through active learning in collaboration with other students, safety in peer-assisted environment, opportunity to analyse difficult concepts, and getting feedback from others' perspectives. Through the learning circles, students could identify the skills that they were developing, naming 'outside the box' thinking, advancing critical thinking skills and gaining new strategies in teamwork. From the conversations to date, students learned more about the importance of health care systems, including policies and procedures and the importance of the nursing assessment process. By working in the group, some students also valued the opportunity to compare and share their learning experiences in a safe environment with their peers. The ability to write down their experiences increased their self-investment in the process and became a source of reference material for them.

Three CFs have been interviewed following learning circle experiences. The CFs valued the student-led nature of discussion and felt they were able to assess individual students' performance by their engagement in the discussion. The CFs also identified that those students who had been exposed to concept mapping previously often led the discussion, with the rest of the student group participating as they became more familiar with this concept. The learning circles were noted as a way to support reflection on practice and that students valued this type of reflection process. The CFs highlighted that the learning circle process required them to shift their focus from guiding students to supporting them to lead and progress the discussions – something new to both the CFs and student groups. Understanding concept mapping was also a new skill for some CFs and they required coaching on how to support students in the development of their own concept map.

Learning

The concept map analysis process used to determine learning through participation in the learning circle process has been challenging. Initially, there was variability between map reviewers. This was addressed through appointing two research team members to review the maps (consistency) and moderation sessions to review those where there was significant difference. It was agreed to add a qualitative analysis of the maps, describing coherence, comprehensiveness and hierarchy of propositions in words. Preliminary results from the first four learning circles suggest that many students demonstrate deeper learning of concepts following the intersubjective discussion. Further analysis is underway.

Issues arising for discussion

At this stage, the student-led learning circle design is recommended as an educational strategy to support the development of intersubjectivity while on clinical placement. It is expected that the learning circle activity will be introduced across nursing student placements in Gold Coast Health in 2017.

Areas for further development and investigation will include the use of A3 size paper for concept mapping (data collection) as some students expressed feeling constrained by the use of A4 size paper in the learning circles; and consider introducing the idea of concept mapping as an exercise to conceptualise theory to practice as part of the curriculum. While intended as a data collection strategy, the use of the maps as a trigger for discussion has been noted by the CFs. The role of the map (object) in the learning circle process bears further consideration.

One final area for discussion is how to introduce different ways of learning within undergraduate education. Both concept mapping and learning circles were new concepts for many participants. Adequate support for innovative teaching strategies needs to be established and monitored.

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Consolidating Clinical Learning through Post-Rotation Small Group Activities

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Abstract

University of Notre Dame Australia medical students complete the final two years of their four year postgraduate course in clinical placements. This 'clinical apprenticeship' model has the capacity to provide rich, experiential experiences for students, however effective learning outcomes are dependent on many variables. Notre Dame Interns have reported feeling under-prepared for the clinical workplace.

To address this perceived lack of preparation, six Clinical Debriefing Tutorials CDT - facilitated by practicing clinicians - were rolled out to final year medical students (n=112) to maximise learning during their clinical rotations, and to help students draw links between placement experiences and the realities of the clinical setting. An evaluation survey was administered to determine the efficacy of the CDT in achieving these educational goals. Responses were analysed using Survey Monkey.

Thirty-eight students completed the survey (response rate = 34%). Most students (72%) thought CDTs were useful to their learning and were satisfied that; listening to other students' experiences enhanced their understanding of what it means to be an effective clinician (79%); receiving feedback from their tutor about placement experiences consolidated their understanding of clinical work (79%); CDTs also provided an opportunity to explore the relationship between coursework and clinical practice (66%). Students agreed that CDTs helped them develop collegiate relationships with their peers through processing, understanding and reflecting on their experiences in the clinical setting.74% of students developed strategies to deal with critical incidents after CDT discussions. The strategies (n=87) aligned with CanMEDS competency roles: Medical Expert (15%), Communicator (21%), Collaborator (11%), Professional (28%) and Scholar (25%). Students also identified professional qualities that associated with CanMEDS competency roles.

Clinical Debriefing Tutorials support practicum learning through enabling students to reflect on their workplace experiences, identify strategies to deal with critical incidents, develop collegial support networks and recognise competencies required for real-life clinical practice.

Brief description of academic area

Six clinical debriefing tutorials (12 groups of approx. 10 students, n=112 students) were delivered to final year medical students at The University of Notre Dame Australia to support and enhance practicum learning experiences. The main aim of the clinical debriefing tutorials (CDT) was to maximise learning that took place during clinical rotations, and to enable students better prepare themselves for the realities of the clinical workplace. The small group tutorials were facilitated by a practicing clinician and approximately two hours in duration. The tutorial session time was

determined by each group independently and occurred generally on weekday evenings after 5.30pm.

Particular purpose

Notre Dame medical students commencing their internships have reported feeling under-prepared for the clinical workplace. To address this perceived lack of preparedness, an educational intervention was introduced to the final year curriculum with the aim of supporting and consolidating learning during clinical rotations. This educational intervention took the shape of clinical debriefing tutorials that provided students with a) an opportunity to link theory learned during coursework with clinical practice in the work setting and b) to encourage students to identify strategies for adapting to the realities of the clinical workplace.

Workplace based learning varies across different clinical sites and can be inconsistent. Time poor expert clinical practitioners can have a patient-focussed viewpoint and teach 'on the run' rather than adopting a student-focussed learning approach. This type of learning can be confronting for students entering the clinical environment from university where there is a student-centred learning approach in the pre-clinical years. While the clinical apprenticeship model of learning is underpinned by contemporary theories of learning (Steketee & Bower, 2007), the extent to which it promotes effective learning is dependent on the degree to which students are actively engaged in the learning process, rather than passively shadowing expert clinicians. The more involved students can be in their learning, where they set goals and trial different types of learning strategies; where they share concerns and successes with peers, and where they obtain feedback from more experienced clinicians about patient encounters, the more likely they will be prepared for the realities of internship upon graduation. As such, to bridge the gap between the clinical rotations and internship, rotations are augmented with clinical debriefing tutorials (CDT). The objective of the CDTs is to promote the development of a collegial support network amongst medical students where they feel comfortable to share and make sense of clinical learning experiences.

The format of the CDT was refined and adjusted after a pre practicum survey of the students in October 2015. They were asked to nominate an educational intervention that would be valuable in supplementing the clinical rotations. The students requested that the educational intervention was led by clinicians active in the field in a relaxed small group environment. Thus, six CDTs were provided in 2016 for final year medical students and comprised a structured framework of case presentations on troubling or thought provoking critical incidents experienced by students on rotation. The tutorial discussion then explored the incident led by the presenting students with input from the clinician tutor.

An evaluation survey was developed to determine the effectiveness of the CDT as a learning enhancement tool post clinical rotation. The evaluation survey was administered to students on line and in hard copy format in September 2016 at the end of their last CDT. Qualitative comments were also invited from the tutors on the threads of group discussions following the survey roll out.

Enacted post-practicum interventions

Small group CDTs were implemented in the final year of the course. This format was identified by the same cohort of students in 2015 in a survey rolled out at the end of their final exams. The majority of the students wanted small group tutorials in a relaxed atmosphere facilitated by an active clinician whereby they were given the opportunity to discuss patient cases, critical incidents

and other issues of interest related to their rotations. While the CDTs have been in place in the curriculum since 2011, the structure was modified in 2016 such that students were given a greater opportunity to use these tutorials as a means of making sense of learning that occurred whilst on rotation. CDT tutors were trained accordingly.

Six CDTs were held at the completion of each rotation throughout 2016. Each CDT was 2 hours in duration and was facilitated by a practicing clinician. The groups were comprised of approximately 10 students randomly chosen. The structure of each CDT included formal and informal components. The formal component included case presentations of a difficult or troubling professional issue with students undertaking a literature review to ensure that all students could develop management strategies for their clinical practice. The informal component allowed students to share their experiences in a less structured way, but helps to promote collegial support and a greater understanding of the hidden curriculum of a difficult or troubling clinical experience.

An evaluation survey was developed in 2016 in collaboration with the coordinator of the CDT program to determine the effectiveness of the clinical debriefing tutorials as a learning enhancement tool post clinical rotation. The survey questions were individually designed to evaluate student learning post practicum. Questions aimed to determine whether the CDT:

- was useful to student learning
- consolidated experiential learning during the rotations
- assisted students in developing collegial support networks
- encouraged students to identify strategies to help them navigate and make sense of difficult experiences in the clinical setting
- Facilitated the development of the medical student as a professional practitioner
- Facilitated reflective practice

Data gathered and analysed

A 13-item evaluation survey was designed to evaluate the effectiveness of the CDT as an educational intervention to support and enhance practicum learning. It was administered to final year medical students online in August 2016, two months before their final exams. 21/112 students submitted online responses and 17 students submitted hard copy responses. All 38 responses were entered into survey monkey and analysed accordingly. In addition, two tutors provided comments by email. The tutor comments are discussed separately.

Students were asked to indicate on a sliding scale from 0% to 100% the extent to which they agreed with each item. A response was determined positive if a student awarded 50% or more on the sliding scale. The figure on the sliding scale was not made visible to the student. A responses was also determined as positive if a student ticked the '50% or above' score in the grid box which ran from 10% in increments of 10 to 100%. A response was considered negative if a student awarded less than 50% on the sliding scale or ticked the 40% or lower box in the grid. Qualitative data analysis was categorised into themes according to the seven competency roles described in the 2015 CanMEDS Physician Competency Framework. http://canmeds.royalcollege.ca/en/framework.: Medical Expert, Communicator, Collaborator, Leader, Health advocate, Scholar and Professional.

Key findings

The clinical apprenticeship model whereby medical students shadow experienced clinicians as they attend to their patients is a powerful approach to learning when implemented effectively. The theory underpinning the clinical apprenticeship model promotes the construction of meaningful learning in the context of real-life clinical settings. At the heart of this approach is the facilitation of learning by expert clinicians who are able to tailor experiences according to students' levels of readiness. However, findings of an evaluation study conducted in 2007 (Steketee & Bower, 2007) suggest that the benefits of the clinical apprenticeship model are not guaranteed. This evaluation study found that teaching and learning opportunities appeared to be somewhat random. Teaching moments tended to favour clinicians' available time rather than what students needed to learn. In many instances, there was no routine that students and clinicians could use to guide the practicum experience. Students commented on a lack of structure to the curriculum which resulted in ad-hoc teaching and learning experiences across all rotation disciplines.

The CDT, therefore, was designed to support and augment student learning that occurred during the clinical rotations. They provide opportunities for students to enter into dialogue with peers and practitioners about their practicum experiences and reflect on cases that they found confronting, inspiring and anywhere in between. The tutor provides them with a template for reflection which will hopefully become an ingrained practice as they move into their professional careers. These tutorials appear to supplement the 'opportunistic' and random nature of learning in the clinical setting.

38 students completed the survey and two tutors provided comments, thus feedback was received from all groups. Most students 72% (26/36) thought the CD Tutorials were useful to their learning (score >50% on sliding scale). They found it a good opportunity to meet, discuss ethical issues, debrief and reflect with an experienced clinician. Students thought their learning in CDT was enhanced by listening to other students' experiences, and receiving feedback from their tutor on their placement experiences consolidated their understanding of clinical work. 66% of students thought CDTs were an opportunity to explore the relationship between what they learned on campus and what they did on rotation. The majority of students enjoyed the CDT environment and thought the collegial support through engagement with their peers helped them to process, understand and reflect on their experiences in the clinical setting. 28/38 students thought collegial support helped them manage future experiences in the clinical setting.

Many students thought the opportunity to discuss critical incidents was important for their professional growth as a clinician. Over half the students changed their behaviour after CDT discussions and 74% of students developed strategies to deal with critical incidents after CDT. Strategies aligned with five CanMEDS competencies (n=87 strategies): Medical Expert (13/87), Communicator (18/87), Collaborator (10/87), Professional (24/87) and Scholar (22/87). 73% of students felt CDT helped them consolidate their understanding of the qualities for a good doctor and identified qualities that associated with CanMEDS competencies (n=126): Professional (27/126), Communicator 38/126, Medical Export 34/126, Collaborator 8/126, Advocate 4/126, Scholar 3/126 and Leader 2/126. Most students thought their understanding of their personal development as a clinician became clearer in CDT specifically: ability to reflect, work with a team, develop respect for patients and professional behaviour.

In summary, final year medical students appreciated the tutorials as an opportunity to meet with their peer group to: discuss issues, debrief and reflect on their clinical experiences on rotation. They perceived that the structure of the CDT enhanced their learning post practicum as it helped them to develop collegial support networks, identify strategies to deal with incidents in the clinical setting, recognise the qualities they would require and need to develop as professional doctors in the clinical setting. Thus, the discussions in the CDT enable students to be better prepared for the clinical work place and thus more "work ready".

Issues arising for discussion

The tutor and the school of Medicine need to ensure that students understand the specific value of the CDT as an educational intervention. This means that those students who feel time-poor do value the CDT as an integral part of the curriculum which helps to consolidate their learning from practicum. Equally, those students who do not identify with some members of their individual groups need to consider that developing the ability to work professionally with all colleagues in the workplace is essential, and this is a component of becoming workplace ready.

Comments received from two tutors also draw attention to the need for the CDT group to work cohesively for learning to be most effective. Tutors also note that expectations should be clearly defined within the group by the tutor and students. Tutors also detail their need to draw on their own leadership skills, clinical practice expertise and experience for the CDT to function effectively.

Meeting with students in groups may be considered inefficient and costly compared with faster or easier online communication. However this does not take into account the benefits of student/student and student/tutor interaction. It was specifically noted from comments in the survey and student responses that the collegial element of the CDT is strongly valued.

The format/structure of the CDT is important. From this survey and study, student feedback has shown that both the formal and informal components of the CDT help students become more "work ready" and are integral parts of the intervention

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Enhancing students' feedback literacy in the workplace: a learner-centred approach

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Abstract

Introduction: Healthcare students want more feedback from clinical supervisors, employers and peers on their placement performance. Students' role in feedback processes tends to be overlooked with most educational interventions focusing on educators' skills in 'feedback delivery'. Addressing learners' roles in feedback - as seekers, processers and users of performance information - offers opportunities to improve clinical placement experiences, and support transitions to practice.
Aim/objectives: This study aimed to evaluate an educational intervention designed to augment students' feedback engagement during and after their clinical placements at a major hospital.
Methods: The learner-centred feedback model, Feedback Mark 2 (Boud and Molloy, 2013), formed the basis of a multifaceted intervention to support students' engagement in feedback processes in the workplace. An interprofessional student group (n=105) engaged in the intervention which included an e-learning priming module, a face-to-face workshop and a series of reflective activities. Evaluation of the intervention included a series of learner surveys (immediately post workshop), reflective activities and student interviews. Qualitative data were analysed using Framework Analysis (Ritchie and Spencer, 1994) with all team members involved in initial coding and framework development. Quantitative data were analysed using descriptive statistics.
Results: Thematic analysis of survey and interview data indicated that students thought the multi-modal intervention improved their understanding of their role in feedback processes. Students reported being more actively engaged in feedback both during placement and at university after participating in the workshop. They attributed these changes in their feedback approach to being more confident in requesting feedback, both in general, and on specific aspects of their clinical practice, and in clarifying strategies to improve their clinical practice.
Conclusions: The findings suggest that supporting student engagement in feedback processes may make an important contribution to improving learning on clinical placements, and beyond. This interprofessional intervention could be applied in other work-place settings to improve learner engagement in feedback.

Brief description of academic area and students involved

For this project an educational intervention to support student engagement in feedback processes whilst on clinical placements was designed, implemented and evaluated. The intervention was enacted three times within the hospital setting. In total, 105 healthcare students participating in clinical placements at Gold Coast Health including allied health (pharmacy, physiotherapy, social work), medical and nursing students participated in the educational intervention. Of these, 29 completed the evaluation survey, 9 completed the follow up surveys and 16 participated in an in-depth interview exploring their feedback experiences during and post-practicum. (Interviews with medical students (n=29) will be complete by end of March.)

Particular purpose

This project seeks to enhance student engagement in feedback processes in the workplace. This will be achieved through the development, implementation and evaluation of an educational intervention which aims to develop students' feedback literacy. The intention is to augment effective feedback practices, using a sustainable model, thereby supporting integration of learning as students move between placement and higher education settings and ultimately, the workplace (Boud, 2000).

Effective feedback is central to student learning (Hattie and Timperley, 2007). This learning can be achieved through helping students identify their strengths and areas for improvement and promoting strategies for behavioural change (Ende, Pomerantz and Erickson, 1995, Fernando et al., 2008, Watling et al., 2012). However, there is a tendency for feedback to be viewed and enacted as a process in which the educator or supervisor provides students with information about their performance, that is, an educator-centred process (Boud and Molloy, 2013). With this approach, the student role is often passive. The risk associated with this 'educator telling' approach include students' loss of agency and missed opportunities to develop an ability to self-evaluate in collaboration with an experienced practitioner (Tai et al., 2015).

This educational intervention, underpinned by a learner centred feedback (LCF) model called "Feedback Mark 2" (Boud and Molloy, 2013), aims to support a feedback process where students are actively engaged and encouraged to seek feedback on their performance, make sense of this information and integrate feedback into their practices. Moreover, student involvement in the study will support them to evaluate the feedback process itself, making judgments about their own role within the verbal feedback encounters and plan strategies for their progress as a reflective learner and practitioner.

The initial survey findings from the broader Office of Learning and Teaching (OLT) study (2016) indicate that students want more feedback from clinical supervisors and employers on their placement performance. This finding, whilst important, is congruent with large bodies of evidence (Boud and Molloy, 2013, Hattie and Timperley, 2007, Johnson et al., 2016) indicating that students are dissatisfied with feedback processes. These findings seem to be consistent regardless of setting. For example, students want more feedback from their lecturers in educational institutions (Krause et al., 2005) and from their placement supervisors in the workplace (Smith, Ferns and Russell, 2014). These findings are disappointing for health professional educators as significant efforts have been made to augment educator feedback skills. For example, in health care settings, clinical supervisors routinely attend training courses and workshops designed to improve feedback provision.

Feedback challenges experienced by students can be explained by findings from observational studies of feedback in workplace where feedback tends to be supervisor-centric i.e. supervisor led monologue with limited opportunities for student engagement (Molloy, 2009, Fernando et al., 2008). Moreover, when receiving information about workplace performance, few students receive guidance on plans or strategies to improve performance (Molloy, 2009, Fernando et al., 2008).

Thus, opportunities exist for improving the process of feedback for placement students in the workplace. A sustainable feedback approach (Carless et al., 2011, Boud, 2000) is likely to be desirable in the practice setting, that is, a process which is not wholly dependent on an expert or supervisor to provide information to students on their performance. These considerations have

challenged researchers to reconcepualise and develop a new feedback model (Boud and Molloy, 2013). This model, Feedback Mark 2, supports a shift away from information provision to a process where learners seek and use feedback in a way that changes their subsequent performance on similar tasks.

Whilst there is considerable theory and evidence supporting Feedback Mark 2, it has not been tested empirically. Given these considerations, this study informed by Feedback Mark 2, will develop, implement and evaluate an educational intervention which aims to improve students' feedback literacy in the workplace.

Enacted post-practicum interventions

This educational intervention was designed, delivered and evaluated by work-based clinical educators and educational researchers to augment students' engagement in feedback processes during and after their clinical placements at a major hospital. Whilst separate from students' university curricular experience, the intervention was linked to their placement experiences which are arranged by the university thereby likely to be considered by students to be relevant to their placement learning experience and beyond. The overall goal was to improve student engagement in feedback processes whilst on placement and beyond.

A multi-modal intervention was designed to support student understanding and engagement with learner-centred feedback whilst on placement and post-placement. The intervention development was theoretically informed by Feedback Mark 2 (Boud and Molloy, 2013) and focused on supporting and enabling students' understanding of their role (and others) in feedback processes. Learning opportunities were sequenced to ensure that students applied their learnings as they progressed through the intervention. This goal was achieved through conceptual knowledge development about feedback processes and the creation of learning opportunities for procedural and dispositional knowledge development through workshop activities and experiences during and post-placement. Table 2 provides an overview of the multi-modal intervention, the intended learning outcomes and learning strategies employed.

Table 2

Overview of Intervention

Intervention	Time commitment	Intended Learning Outcomes	Learning strategies/approaches
e-learning module	30 -45 mins	• Introduce key concepts and principles of effective feedback • Consider student role in feedback processes • Reflect on own feedback experiences	• Information about LCF principles and concepts (PowerPoint and quiz) • Personal readings • Sharing of student experiences of feedback on placements (videos across a range of professions)

Intervention	Time commitment	Intended Learning Outcomes	Learning strategies/approaches
Workshop	Up to 3 hrs	• Support students' knowledge development of the key concepts and principles of effective LCF • Support active student engagement in the feedback process while on clinical placements and to integrate this feedback into their practices, both in clinical and university settings • Reflection on own and others' experiences of feedback • Promote understanding of learner and supervisor roles in learner-centred feedback processes	• Sharing of conceptual knowledge about LCF (aided by PowerPoint presentation) • Small and large group discussions to share feedback experiences • Role play for students to engage in both providing and receiving feedback (and observing the process as a third party- 'giving feedback on the feedback')
Reflective activities	20 to 30 mins	• Reinforce key features of effective LCF • Reflect on experiences of feedback in the workplace and university setting	• Reflective log for student to complete following feedback episodes (micro perspective) • Two online surveys delivered 1 week (micro perspective) and 4 weeks' post workshop (macro perspective)

All healthcare professional students from Griffith University were invited, via email, to participate in the learning intervention. The intervention has been conducted three times on 9th August 2016, 3rd November 2016 and 13th January 2017 with 105 students including allied health, nursing and medical students. The first two intervention cycles have been completed and the three cycle with the medical students is ongoing.

Data gathered and analysed

Data collection focussed on evaluating the intervention to: 1) determine the students' reaction to the learning intervention, 2) establish what students learnt and 3) explore how students were implementing their learnings into their practice (Guskey, 2014). To achieve these evaluation goals three data sets were collected in three phases:

- Phase 1: Post-Learning module and workshop questionnaire – This questionnaire included qualitative and quantitative data and was completed by 29 students. Students were asked to describe their key learnings from these experiences, plans for integrating new learnings about feedback into practice and impressions of these learning experiences.
- Phase 2: Reflective surveys and feedback log – The reflective surveys were delivered online in two parts and included both qualitative and quantitative data online questionnaire. Part I was completed by eight students and invited students to evaluate an episode of placement feedback. Part II, completed by one student, invited students to evaluate their feedback experiences whilst on placements including the patterns of feedback experienced during the term, how they engaged in feedback processes (e.g. opportunistic or planned) and how their feedback experiences compared to those on previous placements. Finally students were invited to complete a feedback log, however the uptake of this was poor with no students sharing their completed feedback log.

- Phase 3: Qualitative in depth interviews with student volunteers (n=16) (data collection is ongoing). The purpose of the interviews was for students to share their feedback experiences and to describe their role in the feedback encounter (e.g. how was the feedback process primed? Did they ask for specific feedback about a particular aspect of clinical practice? How effective was the feedback process from their point of view? What strategies will they use during their next placement, or on graduation, to augment feedback processes?)

The Phase 1 and 2 questionnaires were analysed using descriptive statistics for the quantitative data and thematic analysis of qualitative data. Phase 3 data analysis used the framework method approach using the following steps: 1) familiarisation, 2) identifying a thematic framework, 3) indexing, 4) charting and mapping and 5) interpretation (Ritchie and Spencer, 1994). Finally, the findings from each of the data analysis phases were compared, contrasted and synthesised to determine key themes relating to the students' evaluation of the educational intervention.

Key findings

Whilst the data collection and analysis continues, the following key findings have emerged from the preliminary data analysis and synthesis of the three data sets (described above). Broadly, students who engaged in this project described coming to clinical placements without any learning experiences focused on developing their feedback literacy. The consequence of this lack of preparation was that students often considered feedback to be something which is 'done to them' (feedback as telling) rather than a process which they can lead. In response to the educational intervention, the resultant student learnings related to four key themes:

1. Experiencing 'an awakening'
2. Establishing the student role in feedback processes
3. Addressing vulnerability
4. Improving intersubjectivity

These findings will be described in more detail below with illustrative participant quotes and/or descriptive statistics to illustrate the themes.

Experiencing 'an awakening':

All participants indicated that they had not engaged in any learning experiences, including education sessions, designed to support their understanding of and engagement in workplace feedback experiences. This meant there was a tendency for students to enter workplaces expecting that feedback will occur and it will be 'done to you'. They had limited insight into how they were meant to engage in feedback. The following interview quote illustrates this perspective:

> I just sort of expected it to be handed out to me. (Nursing student 1 - Interview)

The students' responses to their workshop experience were positive with the average rating being 8.8 on 0 to 10 scale (10=most helpful). This finding was confirmed in all interviews. The following quote illustrates that students valued this learning opportunity to learn about feedback processes:

> [The workshop] changed [my] perspective-feedback requires diagnostic strategies that are positive respectful. Engage in a 2way processes (Nursing student 2 – Workshop Evaluation)

> I must say I haven't but I thoroughly enjoyed the awakening with the workshop because it was, it was - not a light bulb moment but it was definitely an awakening to go and get it. It's yours, take it. So yes, that was invaluable for me, absolutely and I will take that on with hopefully my graduate year and

> further because I think we do need to be able to ask for it and understand it and as I say be timely with it. It makes it a heck of a lot easier. (Nursing student 3 – Interview)

The participants indicated that this educational intervention was their first in-depth experience contributing to their understanding of feedback processes. This alone, is important because despite literature indicating that students want more feedback, neither curriculum nor pedagogic approaches within higher education seem to be supporting students' understanding of their role in feedback processes. Given Feedback Mark 2 (Boud and Molloy, 2013) emphasises that feedback is a two-way process of engagement, it is logical that students' development should be supported in an iterative fashion throughout their programs. This curricular recommendation contrasts with usual practice whereby the development of educator skills in feedback provision is prioritised.

Establishing the student role in feedback processes:

Preliminary findings, from both the questionnaires and interviews, suggest the educational intervention contributed to students' understanding of their role in feedback processes. Rather than being passive in feedback processes students were beginning to understand and consider what their role might be when engaging in feedback during clinical placements. Practically this meant that students reported that: 1) they understood their role to be in collaboration with supervisors and 2) they adopted strategies such as self-evaluation, actively seeking feedback from credible sources, setting goals and reflection. Importantly, these findings suggest that when students enacted these roles during their placements, they indicated it was a positive experience and they were receiving more feedback than previous placement experiences. The following quote illustrates the student experience of seeking feedback:

> I was proactive in asking for feedback. So yes, that was very nice because otherwise I would have just waited until the end. It was received well. I basically - after we'd done something 'go how did it go?, what do you think?' Yeah, so I was able to get constructive feedback and it was more of - not necessarily just a one way conversation it was a bit more of a two way conversation which was better. Not just hearing it and going okay, going off with it. So that was better. (Nursing student 3 – Interview)

As well as establishing the student role to be one in which they are asking for feedback, findings from the interviews suggested that students were asking for direct feedback on specific tasks or aspects of practice e.g. cannulation and seeking additional opportunities to further develop their skills in relation to the feedback they received. The following quote illustrates provides an example of a nursing student actively sequencing her learning in response to feedback:

> No [normally] you just wait until the task came. Yeah, that's why I had to actually physically ask to do it, like actually looked out for the same sort of problem to deal with. (Nursing student 1 - Interview)

Finally, the evaluation findings suggest that students were highly motivated to engage in feedback processes, once they understood their role, and once they experienced the benefits of meaningful information exchanges. This motivation seemed to be linked to students' highly valuing clinical placements as these experiences are believe to make a significant contribution to their development as practitioners. In these ways, students were motivated to maximise their placement learning through enhanced engagement in feedback processes.

Addressing vulnerability:

During the educational intervention, students were encouraged to share narratives about their experiences of feedback especially in terms of its influence on their emotions. These narratives, also confirmed in the interviews, indicated students' experiences of feedback can be highly emotional ones and in some instances, contribute to negative outcomes. The following quote demonstrates the emotional nature of feedback processes experienced:

> I internalise it and go right, okay, I've been told off or commented on this one so I won't try and do that again, have that in your head or this was good, okay, that's brilliant, I'm going the right way. So definitely I do take it on board…[but]…Go home and cry. (Nursing student 3 - Interview)

These types of experiences meant that students often felt vulnerable when engaging in feedback on placements. Encouragingly, the interview findings suggested that by augmenting students' understanding of learner-centred feedback processes and their role, some of the emotional aspects of feedback were alleviated. Two key strategies employed by the students which contributed to improved feedback experiences were identified. Firstly, students were proactively initiating discussions on feedback and collaborating with supervisors on aspects of practice they require further guidance on (a 'front foot' identification of deficits). In these ways, the students were gaining experience in self disclosure and experiencing the benefits of honing the focus of the supervisor during observation of task performance. Secondly, students were beginning to take responsibility for self-evaluating their performance and asking supervisors to provide specific aspects of practice which they would like feedback on. The students interviewed, indicated that by engaging in feedback in this way, they had greater control over the feedback thus alleviating some of the vulnerability. The following quote illustrates this experience:

> It was, it was a positive - you know, even as I say with slight negatives in there it's positive because you've dealt with it, done and dusted, on the spot, you're not internalising, you're not sleeping on it, you're not thinking oh I don't want to work with that nurse again. You've been a grown up and gone right, how was it, right, didn't do that right, did do that right, fine, let's think about it and move on. It's almost - it's out in the open. It's not hidden. So that's great. So yeah, it really helps. (Nursing student 3 - Interview)

Improving intersubjectivity:

Students, in almost all the interviews, indicated that they had a much greater appreciation for and understanding of the supervisor perspective in feedback. Students demonstrated that enhanced feedback literacy and engagement was contributing to improved intersubjectivity, that is, shared understanding (Billett, 2014, Rogoff, 1990). This finding, whilst unique, could be attributed to the workshop role play experience where students adopted both the role of feedback provider and receiver. Additionally, the presenter in the workshop presented literature on what educators and what students find challenging about feedback in the workplace. Interestingly, the students acknowledged that providing feedback is likely to be challenging especially without active student engagement. The following quote illustrates this perspective:

> I think when also [the workshop facilitator] said that people actually appreciate that you're actively wanting to be engaged. It's a different kind of feeling. I was like actually that's right. I think people would be because if I was the one teaching someone I would want them to actually ask questions and be proactive and wanting to get better. So I could understand but it was just as a student you're like

> oh crap we're going into this whole world that - it was good. It was good. (Nursing student 3 - Interview)

These findings might be attributed to the educational intervention, in that, the roles, responsibilities and feelings of the supervisor during feedback processes were shared, role played and discussed with the students. In these ways, the discussions were likely to contribute to students' emphasising the supervisor's role in feedback and assisting the supervisors by giving them permission to be frank and open with their feedback. The following quote provides an example of a student's realisation of the supervisor perspective:

> I know it's hard because if you're the nurse or the NUM or the clinical facilitator and you're expected to give feedback, you don't know how much it will build on that person because you don't know if that's the actual feedback they're seeking (Nursing student 3 - Interview)

Pedagogic and curriculum considerations

The preliminary findings from the evaluation suggest that the intervention contributed to improved conceptual understanding of feedback and enhanced learners' procedural and dispositional knowledge. This emphasises the importance of developing students' feedback literacy and suggests curricular considerations should be made for structuring these learning opportunities. However, the intervention, whilst the alignment to transitioning into placement seemed appropriate for enabling application of learning, was a one-off and there would be further value in sequencing feedback learning throughout the undergraduate curriculum (for example from day one, year one of programs). This approach would likely improve students' engagement in feedback processes related to assessments as well.

Issues arising for discussion

The key issues arising from this intervention include:

- Intervention design problem: Only one party, students, engaged and therefore should we also be engaging the supervisors in an equivalent intervention? Also, when is the best time to enact this intervention e.g. before, during or after placements?
- Whilst findings seem very positive, more evidence is required to further understand the influence the educational intervention had on learners approaches to feedback e.g. observational work or engaging supervisors to determine if students' learning has improved.
- There was limited student engagement with the reflective activities. Can this response be improved with enhanced supervisor engagement or aligning the activities with workplace assessment?
- Broader consideration – the evaluation findings suggest a high uptake and recall of intervention learnings, despite lack of complete engagement with all aspects of the intervention; do we, as educators, tend to underestimate students' ability to integrate conceptual ideas about learning and teaching? Should we be promoting meta-cognition about learning through sequenced activities that increase in complexity throughout the curriculum? What bearing might this have on the educational skills of graduates supervising the next wave of learners in the workplace?

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Day Two processes

On Day Two (16th Feb), the activities occur in two strands: those for Class of 2016 and Class 2017.

Class of 2016 - The participants who engaged in projects in 2016 will use their experiences, data and deliberations to identify some tentative principles and practices associated with augmenting students' post-practicum experiences. Will progress across most of the day, culminating in a presentation to all participants.

Class of 2017 - The participants who will be enacting the 30 projects across 2017 will be working individually and in groups to prepare their projects. As part of that development process there will be interactions between the participants from 2016 and those embarking on their projects in 2017, so that the former can advise the latter about their plans and processes.

The day culminates in a joint session in which issues are raised, shared and collated. As part of that process, the tentative principles and practices identified by the 2016 group will be shared with all participants.

Class of 2016 activities (chaired by Stephen Billett)

Purpose: Identifying effective practices and principles (9.30 – 11.00)

Working in 3 groups (5, 5 & 4) using template provided (see next page)

Identify goals that were to be achieved

Identifying processes and what was effective and why (alignments)

Issues to be avoided/considered

Purpose: to generate a consolidated list (11.30-1.30, including lunch)

Three groups join to consolidate listing

Share three lists and then consolidate them

2 individuals nominated to present

Purpose: preparing a draft presentation of principles (1.30-2.00)

Preparation by 2 Class of 2016 presenters

Class of 2016 Work sheet 1 – Day Two:

Goals to be achieved	Processes used to achieve those goals	Success factors	Inhibiting factors
1.			
2.			
3.			
4.			

5.			
6.			

Principles for enacting effective post-practicum

Debriefings -

Feedback -

Student engagement -

Teacherly engagements -

Class of 2017 (Melissa Cain to chair)

Brief introductions (9.30 – 9.45)

Opportunities to introduce participants to 4-5 others

Institution, discipline, why you are here etc

Preparing draft proposals, using template (9.45 – 11.00)

Individual work – (60 minutes)

Develop individual proposals

Share and discuss with another person then make refinements, changes (15 minutes)

Secure feedback on draft proposal (11.30 – 1.30, including lunch)

Discuss with 5 others (i.e. group of 5)

6 X 5 groups – cognate areas??

Considering issues for implementation

Back in 6 groups – joined by 2 members of Class of 2016 –

Discuss issues of implementation

What will be the key factors that influence the implementation of your project?

Project Planner (2 pages)

Project template – this template is designed to assist you formulate a plan for your project which takes into account its educational purpose(s), participants, intended procedures, means of implementation, and gathering of data about their efficacy. Moreover, by using a standard format, this provides a basis for common understandings, and comparisons across projects.

The expectation is that for each project we will have a two-page overview based on this template which will be forwarded on or before **15th March 2017**.

Project title:

Institution:

Staff involved:

Students involved (kind, numbers, etc):

Purpose (problem being addressed – educational goal(s) to be achieved)

What is aimed to be achieved by providing post-practicum interventions for your students?

How will you know whether you have achieved this goal?

Significance

Why is this goal(s) worth addressing?

Procedures

What kind of post-practicum interventions will you probably adopt?

Why this kind of intervention?

When and how this will be enacted (i.e. what you will do, time lines)?

What data will be gathered to ascertain student processes and outcomes?

How will this data be gathered and analysed?

Plenary (all participants) (2.00 – 3.00)

Share draft findings, forum for questions (2.00 – 2.30)

Presentation of Class of 2016's principles and practices

Where to from here (all participants)

Outline the next steps/goals/processes (2.30 – 3.00)

Class of 2016 – progress

Class of 2017 – implementing projects across 2017

Appendices

Appendix One: Literature review – references

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Appendix Two: Survey instrument

Post-practicum project (student survey/focus group items)

Dear students – Staff at Griffith, Newcastle, Monash, Flinders and Notre Dame universities have recently been funded by the Commonwealth government for a teaching and learning project that aims to identify how to optimise students' experiences in work placements (e.g. practicum, clinical experiences). The project focus is on engaging with students **after** they have completed those placements so that they can discuss, share, contrast and compare their experiences with peers and their teachers. We aim to trial and evaluate a range of individual, small group and large group educational activities designed to optimise work placements with students across a range of programs. So, we would like your perspective and ideas about these activities before we trial them.

Your responses to this survey will assist the design and enactment of these activities. It will take about 10 minutes to complete this survey. Your responses will be anonymous and treated confidentially. No one who teaches you or assesses you will be able to identify you or your responses. So, your anonymity is assured.

Please note: the term practicum is used here to capture the range of students' work experiences.

1. Your host university is (please indicate):

Griffith	Notre Dame	Newcastle	Monash	Flinders

2. Please indicate your field of study (indicate two areas if you are undertaking a double major)

Field of study		Field of study			
Education		Speech pathology		Exercise physiology	
Nursing		Pharmacy		Occupational therapy	
Midwifery		Psychology		Rehabilitation	
Dietetics		Social work		Medicine	
Physiotherapy		Other (please state)			

3. What year level do you identify as a student (please indicate):

Year level	1st	2nd	3rd	4th	5th	6th

4. Are you a:

Full-time student	Part-time student

5. Are you a:

Domestic student	International student

6. Are you an:

Undergraduate student	Postgraduate student

7. Your age grouping is:

15-19	20-24	25-29	30-34	35-39	40 and over

8. Your gender is:

Female	Male	Transgender, (inter-sex)

9. How many practicums are included in your current degree program?

0	1	2	3	4	5	6	7	8	9	10 or >

10. In what format do you undertake practicum and for how many days?

Format	Duration (days)
Full-time, intensive blocks during the program	
Full-time during the latter part of the program	
Part-time, continuously throughout the duration of your program	
Part-time, one day per week….	
Other (please describe)	

Purposes

This project is about optimising the educational worth of students' practicums after their completion.

11. How interested are you in participating in post-practicum activities for the following reasons?

Educational purpose	Very interested	Some interest	Interest	Not interested	Irrelevant
discuss experiences during placement you found worthwhile/interesting/confronting					
linking what is taught at uni to practice					
learn more about your preferred occupation					
learn about other students' experiences during their practicum					
learn how your preferred occupation is practiced in across different work settings					
secure feedback on your workplace experience					
linking your work experiences with course work and assessments					
identify how these experiences can make you more employable					
make informed choices about career, work options or specialisations					
make choices about selection of subsequent courses/majors					
improve the experience for the next cohort of students undertaking practicum in that venue					
Some other purpose (please specify)					

12. Please provide 1 or 2 statements about why having the opportunity to discuss/share/compare practicum experiences is educationally important for you

1

2

OR:

If you believe that there is **no need** to discuss and consider your practicum experiences, please say why that is:-

1

2

Timing and process of engagement

13. Having opportunities to engage in structured discussions about your practicum experience would best support my learning:

Timing of interventions	Yes	No
early in the program, perhaps after your first practicum		
after having had a number of practicum experiences		
towards the end of your course		
after every practicum experience		
some other time (please state)		

14. What are your preferences for engaging in post-practicum activities with other students and/or teachers? Please respond to all items.

Intervention	High preference	Okay	Low preference	Would not participate
one-on-one with teacher				
one-on-one with a peer (another student)				
one-on-one with a more experienced student				
small self-managed groups (3 to 6 peers) across your course				
small groups (3 to 6 students) facilitated by more experienced students				
small groups (3 to 6 students) facilitated by teachers/tutors				
shared classroom-based group activities				
whole of class activities (i.e. large group processes 10-100 students)				
small groups (3 to 6 students) meeting periodically facilitated by placement supervisor				
individually completed activity with feedback from teachers				

presentations to peers				
as part of usual scheduled class activities				
a special event each semester				
something students should organise				
on-line with peers				
on-line moderated by tutor				
Other – please specify				

15. What would be important features of post-practicum experiences for you?: (please respond to all items)

Features	Essential	Very important	Important	Not very important	Irrelevant
focused on course content					
linked to assessment items					
focussed on work activities of selected occupation					
student-led and implemented					
teacher-led and implemented					
engaging as many students' perspectives as possible					
engaging with students at similar stages in the program					
engaging with students at different stages in the program					
engaging with students from other disciplines					
opportunity to share and discuss with peers					
opportunity to share and engage in structured consideration of experiences					
input from a practicing professional					

opportunity to provide feedback to the practicum site about student experiences					
development of coping skills for the workplace					

16. If you had the opportunity to organise a post-practicum experience for yourself and other students, what would it seek to achieve, what would it comprise, and when would it occur?

Purpose of activity - What would happen? - How and when would it occur? –

Thank you for your time and contributions to this survey

Stephen Billett for the project team

Appendix Three: Glossary of premises

Active or agentic learners - Being active and agentic in practicum situations, purposefully engaging with practice experiences and integrating them within their coursework, hopefully, establishes habits and practices that that support on-going development that sustains employability in the longer term.

Employability is taken as having the capacities required for employment: securing initial employment and sustaining that employment across working life.

The educational goals associated with initial occupational preparation, including smoothing the transition to employment, but also preparing graduates to be active and intentional in their personal practices that supports their learning.

Educational processes associated with employability are more than being about the teaching of content associated with an occupation. Promoting employability includes considerations about the requirements for practice and how they vary across work settings, thereby preparing students for effective transitions and also preparing them to be effective in directing and managing their learning across lengthening working lives.

Educational purposes – the reasons for and anticipated outcomes of educational processes and provisions. Educational processes and practices should be intentional in so far as they seek to achieve particular kinds of purposes. These purposes can be broad or narrow with statements of educational intent capturing those purposes in ways that guide the provision of educational experiences, assessment of students' learning and the evaluation of those provisions

Educational intents – are the intentioned outcomes of educational experiences. They are described as intentions because they can only ever be that: intended outcomes. Ultimately, students decide how and what they learn. There is usually a hierarchy of intent from aim, goals and objectives.

> Aims are usually broadly cast statements of intent (e,g. to develop and demonstrate nursing capacities of the kind that will secure quality care and high levels of patient safety). These are taken are broad statement that indicate the overall outcomes of educational experiences (e.g. – the completion of the course).
>
> Goals are more specific (e.g. to develop ad demonstrate the conceptual knowledge of human physiology, and procedures to assess human health measures and enact procedures to address injury, illness and disease.
>
> Objectives are even more detailed statements of intent (e.g. to develop and demonstrate the capacities to take pulse, temperature, and blood pressure and make diagnoses about patient health and progress.

Educational interventions – activities that see to promote learning, such as the use of particular strategies to achieve particular outcomes that might be otherwise learnt.

Interdependence – rather than viewing processes of learning being independent (individually premised) or dependent (subject to social press or circumstance), it might best be understood as being reciprocal (i.e. between the learners and the social and physical environments in which they experience and learn). That process of engagement is interdependent as the learner needs to social and physical environment from which to learn knowledge derived from it, on the one hand, yet for social processes,

practices and institutions to be enacted and progress, they required learners to engage with, remake and transform them.

Post-practicum educational processes/interventions - these are educational activities that utilise and augment students' workplace experiences after they have had those experiences and as directed towards some educational goals.

Practicum experiences – refers to the range of experiences students can have in workplaces or work settings. These are variously referred to as placements, clinical experiences, rotations, practicums, internships etc.

Occupationally-specific capacities – these comprise the particular conceptual, procedural and dispositional capacities that are required to effectively practice an occupation.

> Conceptual knowledge refers to facts, concepts, propositions and causal links and associations. Procedures are the means by which we achieve goals though thinking and/or acting. They range from specific procedures such as manual skills, through to the ability to respond strategically to occupational tasks or problems as they arise.
>
> Dispositions are the value, attitudes and intentions that individuals exercise and that shape how they go about their work activities.

Notes

Augmenting students' learning through post-practicum educational processes

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