

Educating a future aged-care workforce

Shaping positive attitudes and developing collaborative practice capabilities

Jade Cartwright, Brooke Sanderson, Anne Whitworth, Elizabeth Oliver, and Nigel Gribble

To deliver quality care to increasing numbers of older Australians, it is imperative that health education programs are designed to ensure graduates are equipped with the knowledge, skills, and attitudes required for employment in residential aged-care settings. An innovation is set out here that aimed to deliver a high-quality interprofessional practice placement to speech-language pathology and occupational therapy students within a residential aged-care facility, whereby students were trained to deliver a quality-of-life enrichment program, the Ashby Memory Method™, to residents on an individual basis. The findings of the study were positive, with students valuing the learning experience and demonstrating positive shifts in attitudes, confidence, and collaborative practice capabilities. Positive outcomes were also demonstrated for the organisation and its residents. The findings provide direction for future research and high-quality aged-care clinical placement models with potential to drive future workforce development.

ver one million Australians currently receive agedcare services, with that number projected to increase to over 3.5 million by 2050 (Productivity Commission, 2011). While the range of aged-care services have improved in recent decades, the quality of care remains highly variable and fundamental reform is required to better meet the needs of an older and increasingly diverse Australian population (Productivity Commission, 2011). Major challenges facing the sector have been identified, including the growing demand for services, shifts in the type of care demanded, and the need to expand the aged-care workforce (Abbey et al., 2006; Productivity Commission, 2011). There is concern among policy-makers and service providers about retaining existing staff and attracting new staff to the sector (Grealish et al., 2013; Productivity Commission, 2011).

The workforce challenge

It has been estimated that the aged-care workforce will need to quadruple by 2050 to meet the growing demand for aged-care services (Productivity Commission, 2011). Attracting health professionals to the sector is however problematic, with health graduates viewing aged care as a lower status career choice and undesirable career destination (Abbey et al., 2006; Xiao, Paterson, Henderson, & Kelton, 2008). The positive and innovative opportunities within the sector are often overlooked and the specialised skills required underappreciated (Neville, Yuginovich, & Boyes, 2008). Efforts to improve career pathways, opportunities for high-quality professional development, and wage parity are required to increase the willingness of health workers to enter the sector (Abbey et al., 2006; Productivity Commission, 2011). Furthermore, adequately preparing and inspiring students as aged-care champions is seen as a key strategy for workforce development (Grealish et al., 2013; Neville et al., 2008).

Training a future health workforce

Providing students with positive clinical learning experiences within residential aged-care facilities presents an opportunity to shape attitudes and redirect career preferences (Abbey et al., 2006; Health Workforce Australia (HWA), 2011; Robinson, Abbey, Abbey, Toye, & Barnes, 2009). However, the provision of successful clinical placements represents another challenge to the aged-care sector (Robinson, Andrews-Hall, & Fassett, 2007); they are reportably underutilised with few appropriately qualified staff to supervise students within this setting (Barnett et al., 2012; Robinson et al., 2007). As a result, students often report low levels of support and can find the experience challenging and daunting (Robinson et al., 2006). Negative placement experiences then run the risk of entrenching negative attitudes towards aged care, failing to address workforce priorities (Abbey et al., 2006).

Previous research, most notably within nursing, has explored factors that promote quality aged-care learning environments. Enablers of student satisfaction include adequate pre-clinical preparation and orientation, effective supervision and mentorship, adequate resources and infrastructure, sense of belonging, clear roles and responsibilities, opportunities for team work, and a culture of quality and person-centred care (Abbey et al., 2006; Levett-Jones, Lathlean, McMillan, & Higgins, 2007; Robinson et al., 2007; Robinson et al., 2009; Siggins Miller Consultants, 2012). Conversely, placements concerned

KEYWORDS

AGED CARE

EDUCATION DEMENTIA

INTER-PROFESSIONAL EDUCATION

INTER-PROFESSIONAL PRACTICE

THIS ARTICLE HAS BEEN PEER-REVIEWED







Jade Cartwright (top), Brooke Sanderson (centre) and Anne Whitworth

Table 1. Outcome measures				
Level of educational outcome (McNair et al., 2005)	Outcome measure	Description		
Level 1: Students' reaction to and satisfaction with the placement	Placement evaluation survey	SLP students completed an anonymous online placement survey at the end of the placement block. Students responded to 15 statements on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).		
Level 2: Attitudes and learning	Confidence rating scale	A confidence rating scale was developed for this study, completed by all students pre- and post- placement. Students responded to 10 statements on a 5-point Likert scale, ranging from 1 (I feel very unconfident) to 5 (I feel very confident).		
Level 3: Change in interprofessional behaviours	Interprofessional Capability Assessment Tool (ICAT; Brewer, Gribble, Robinson, Lloyd, & White, 2009)	The ICAT was completed by the clinical educator to rate students' skills at mid- and end- placement across four capability areas of communication, professionalism, collaborative practice, and client-centred service / care (Brewer & Jones, 2013). For each capability area, skills were graded as unsatisfactory, developing, at the required standard, or excellent. At the required standard equates to 'entry level' or the performance expected for graduation from an undergraduate or graduate entry masters course.		
Level 4: Change in organisational practice and benefits to residents	Focus groups and semi- structured interviews	Student focus groups and semi-structured interviews with staff and family members were completed post-placement to collect qualitative feedback about the placement and service innovation.		





Elizabeth Oliver (top) and Nigel Gribble

with mastery of "basic skills" or routine care delivery are more likely to discourage students from working with older people (Abbey et al., 2006).

Interprofessional education

Interprofessional education has been identified as one of the most promising solutions for equipping a future aged-care workforce with the knowledge, attitudes, and collaborative practice capabilities required to provide better quality care (D'Amour & Oandasan, 2005; HWA, 2011; Reeves et al., 2009; World Health Organization (WHO), 2010). Interprofessional education and interprofessional practice (IPP) placements train a new type of health worker who is ready to solve problems, move beyond routine care delivery, and look towards new ways of delivering safe and effective health services. Through developing collaborative practice capabilities students can be empowered to take on leadership roles and strengthen their sense of social responsibility to service the needs of clinical populations that have been traditionally underserved (McNair, Stone, Sims, & Curtis, 2005).

The current innovation

The current innovation sought to design, implement, and evaluate an IPP placement for speech-language pathology (SLP) and occupational therapy (OT) students that would be received positively, while enabling mastery of collaborative practice capabilities. In developing the placement model, university and organisation staff worked in partnership to design a structured experience that would add value to the organisation and its residents by addressing an identified service gap. This concerned the organisation's limited capacity to deliver interventions to residents on an individual basis. The organisation selected the Ashby Memory Method (AMM™), a quality-of-life enrichment program for people with mild to moderate dementia that could be delivered by trained students under the mentorship of organisation staff (Ashby, Buss, Firmstone, & Brand, 2008). The students were engaged as leaders and active collaborators in the innovation and the placement was strategically designed to be of mutual benefit, preparing the

future aged-care workforce, while expanding services within the participating aged-care organisation.

Methods Participants

Ten SLP and 10 OT students were allocated to the aged-care placement as part of the university fieldwork allocation process. All students were female and in the final year of their course. Ethics approval was obtained from the university Human Research Ethics Committee and all 20 students provided written consent to participate. Five organisation staff and five family members also consented to participate in the study.

Placement schedule

The placement was structured around the 22-week AMM™ intervention, consisting of two 11-week SLP placement blocks and two 7-week and one 8-week (extended to cover the AMM™ intervention sessions) OT placement blocks. Five students from each discipline attended the placement at a time. Students were supported and mentored by the organisation's senior OT and university academic staff. The senior OT was also the nominated clinical educator who completed the students' evaluations.

Student orientation and training

Students were provided with pre-placement information outlining the aims of the placement and the role that they were playing in the service innovation. Prior to commencing the placement, students completed an online training package, learning how to deliver the AMMTM intervention (Ashby et al., 2008). Students were orientated to the facility and the aims of the innovation on the first day of their placement.

Intervention schedule and clinical learning activities

Each student was partnered with two residents who were recruited to a separate arm of the study evaluating resident outcomes that will be reported in a future paper. Students worked with residents twice weekly for 45–60 minutes. Each resident received a total of 22 weeks of AMMTM

Statement	% Agreemen
Satisfaction with overall fieldwork experience	
Sufficient details were provided by the agency prior to the placement commencing	90%
I was orientated to the staff and agency and was made to feel welcome	100%
The roles of the student and the clinical educator were negotiated so both parties had a clear understanding of their needs and expectations	
The student and clinical educator discussed the student's specific learning goals for the placement	
The student and the clinical educator were clearly aware of the University's requirements for the placement	
The clinical educator and the student were able to access quality support from other staff, students and the University when appropriate	
There were sufficient clinical learning opportunities for the student	70%
Satisfaction with support provided by clinical educator	
My clinical educator encouraged me to apply my theoretical knowledge	100%
My clinical educator was sensitive and responsive to my needs	
Balanced feedback which was timely, useful and accurate was provided	
Feedback was based on data collected from a sufficient range of clinical activities / performance indicators	
An effective and non-threatening teaching relationship was established which was collegial and respectful of both student and clinical educator	
The clinical educator encouraged the student to extend their applied theoretical knowledge, clinical, and professional communication skills	
Self-evaluation by the student was an integral and valued component of supervision	
Supervision was compatible with the student's need for independence and support	90%

intervention, with students handing over to a new student at the end of each placement block. Students worked collaboratively to plan sessions and complete reflection tasks. Additional learning opportunities were provided (e.g., education sessions, planning additional group activities).

Outcome measurement

Outcome measures are described in Table 1 with reference to an adapted version of Kirkpatrick's (1967) evaluation framework (McNair et al., 2005). Only SLP students completed the placement evaluation survey and Interprofessional Capability Assessment Tool (ICAT). Student focus groups and semi-structured interviews with staff and family were conducted by members of the research team and were recorded and transcribed verbatim.

Data analysis

The study employed a descriptive and qualitative analysis. Where pre- and post- scores were available (i.e., students' confidence ratings), Wilcoxon Signed Ranks Tests were used to evaluate change. Qualitative data were analysed thematically drawing on the principles of Braun and Clarke (2006). Nvivo9 was used for data management and coding. Agreement was reached on the themes through review and discussion by the research team.

Results

Outcome level 1

Of the 10 SLP students who completed the placement evaluation, 9 rated the overall learning experience as positive, while 1 student rated the experience as outstanding. The satisfaction ratings are presented in Table 2 with the proportion of students that either agreed or strongly agreed with each statement. Thirteen of the 15 statements achieved agreement of 90–100%.

Outcome level 2

The students' confidence ratings increased from pre- to post- placement, with the mode and range for each statement provided in Table 3. The total number of statements students rated as *confident* or *very confident* increased from 129 pre-placement (64.5%) to 192 post-placement (96%). Wilcoxon Signed Ranks Tests revealed that students' confidence working in the aged-care setting increased significantly as a result of the placement across both knowledge (z = 3.92, p < .001) and practical skills (z = 3.95, p < .001).

Outcome level 3

ICAT data was available for 9/10 SLP students. At the end of the placement, all students demonstrated entry level

Statement	Pre-mode (Range) $n = 20$	Post-mode (Range) $n = 20$
Confidence in knowledge and understanding		
I have a sound understanding of the model of care in the aged care sector	3 (1–3)	4 (4-4)
I have a sound understanding of challenges faced by the aged care sector in the delivery of health care services	3 (1–4)	4 (4–5)
I have a sound knowledge of the speech pathologists role in working with people with cognitive difficulties	4 (1-4)	4 (4–5)
I have a sound knowledge of the occupational therapists role in working with people with cognitive difficulties	4 (1-4)	4 (3–5)
I have a sound understanding of the key competencies required for effective interprofessional practice	4 (2-4)	4 (4–5)
I have a sound knowledge of the cognitive difficulties experienced by adults	4 (2-4)	4 (3–5)
I understand the impact of cognitive difficulties on communication outcomes	4 (2-4)	4 (3–5)
I understand evidence based approaches to facilitate the cognitive, communication and quality-of-life outcomes for adults with cognitive difficulties	3 (2–4)	4 (3–5)
Confidence in practical skills		
I am able to apply practice strategies to make a valuable contribution to the interprofessional practice team	4 (2-4)	4 (3–5)
I am able to apply practical strategies to facilitate the cognitive, communication and quality-of- life outcomes for adults with cognitive difficulties	3 (2-4)	4 (4–5)
Note. Rating on a 5-point Likert scale, 1 = I feel very unconfident, 5 = I feel very confident.		

skills across all collaborative practice capabilities. The overall capability rating was at the required standard for 60% of students and rated as excellent for 40% of students

Outcome level 4

Qualitative feedback from staff identified that the placement was positively received and successful in building capacity for one-to-one interventions without placing undue burden on the organisation: "I think we had six hundred hours of intervention time by having those students. It's just phenomenal" (staff member). Family members were positive about the clinical placement and service innovation, appreciating the personal attention and care that their loved one received. Staff enjoyed working collaboratively with the students and valued their "creativity" and "fresh ideas". Organisation staff also learnt more about the role of SLP in aged care and the importance of communication.

Students, staff, and family members perceived a range of positive benefits for residents. The most prominent theme related to the enjoyment residents gained from spending time with the students: "It was evident that positive relationships were quickly formed between the residents and the students and that the residents looked forward to the visits" (staff member). The innovation also provided a sense of purpose and self-worth for the residents, enjoying the opportunity to "teach the students" and "help with their careers". Students reported perceived benefits for the residents' memory, confidence, self-esteem, and mood, for example, one student commented: "I noticed especially with one of my clients just the confidence because when you're delivering AMM it's all about that positive engagement and praise and building that confidence".

Qualitative analysis of the student experience

The student reflections following the placement provided rich data regarding the student experience. Identified themes capture the valued aspects of the placement.

Clinical placements in the aged-care setting are rewarding

The students gained reward from giving to the residents, seeing improvements in the residents' memory, confidence, and well-being, and having the opportunity to build genuine relationships and rapport. Students described the placement as "wonderful", "fun", "uplifting", and "motivating". They valued the unique opportunity to spend quality time with individual residents. Students reported increased interest in dementia and more positive attitudes towards aged care as a future career destination. Students were unanimous that they would recommend the placement to others and valued being part of the service innovation.

Supportive clinical learning environment

Students expressed positive views on the learning experience, its structure and content, and the quality of clinical education provided. They described their clinical educator as "welcoming", "knowledgeable", "flexible", "passionate", and "inspiring". Students valued the opportunity for leadership and to work independently with residents: "Being able to, I suppose, have that one-on-one time where you can kind of experiment a little bit". Students noted "ample learning opportunities" to "self-reflect", "develop clinical and interprofessional skills", and "extend

knowledge"; however, some recommended inclusion of more discipline-specific learning opportunities. The students valued receiving AMM™ training and developing competency in a specific intervention. Students identified that a dedicated student room and internet access would have further enhanced the learning environment.

Positive shifts in collaborative practice capabilities and clinical skills

Students valued the opportunities for interprofessional learning and teamwork, perceiving positive shifts in their collaborative practice capabilities and clinical skills. Students consistently reported enhanced confidence in their rapport-building and communication skills as a result of the quality time spent with the residents. One student commented directly that while she was initially anxious about communicating with and relating to older adults, including those with dementia, this was not the case at the end of the placement. Another commented: "It's nice to spend that quality time with someone as well because it really facilitated other skills in us like developing rapport ... which really helped us and again you feel more competent with those skills".

Positive shifts in interprofessional socialisation and values were evident, with students reporting an increased understanding of their respective roles. Students valued the opportunity to build teamwork capabilities through collaborative problem-solving, reflection, and session planning.

Discussion

This innovative project aimed to provide SLP and OT students with positive exposure to aged care through a high-quality IPP placement experience. A secondary aim was to increase capacity for the organisation to provide one-to-one interventions to residents, with the placement supporting a service innovation of mutual benefit to students, residents, and the organisation. Positive outcomes were achieved across all four levels of the adapted Kirkpatrick evaluation framework, providing valuable insights into the design of a high-quality clinical experience within a residential aged-care setting.

Student outcomes

Students were highly satisfied with the placement, valuing the learning experience and demonstrating positive shifts in attitudes, confidence, and collaborative practice capabilities. This is consistent with previous research, supporting a strong relationship between students' perception of satisfaction within a clinical placement and their overall success within that placement (Abbey et al., 2006). Unlike previous studies (Robinson et al., 2007; Abbey et al., 2006), the students' attitudes towards the aged-care setting were consistently positive. While a number of students acknowledged being apprehensive coming into the placement, the quality time spent with residents and supportive learning environment increased their level of comfort and interest in the setting. Furthermore, the students valued the opportunity to be trained in and develop competency delivering the $\mathsf{AMM}^{\scriptscriptstyle\mathsf{TM}}$ intervention, which facilitated enhanced communication and rapport-building skills. Students contributed actively to the service innovation, adopting leadership roles and recognising the additional value to the organisation and its residents. Providing such intrinsic rewards and the opportunity for both professional and personal growth were identified as key enablers of the placement's success.

Organisation and resident outcomes

The successful outcomes achieved at the organisational level demonstrate that structured and strategically designed placement models can successfully build capacity for service innovation within the aged-care sector. A significant increase in the provision of one-to-one intervention was achieved, which resulted in perceived benefits for the residents' cognitive function, social relationships, confidence, and well-being. This is in contrast to previous research where student placements have increased strain on organisation staff (Robinson et al., 2007). The organisation viewed the students as adding value and innovation to their services, thus contributing to the organisation winning a 2014 Better Practice Award (Australian Aged Care Quality Agency) in the resident lifestyle category. This positive outcome highlights the potential benefits of universities establishing strong collaborative partnerships with aged-care organisations to support the design and delivery of effective clinical placement models.

Limitations and future directions

The current study has a number of limitations that should be addressed in future research, most notably, the small sample size and the lack of a control group. The clinical placement model should be replicated in other aged-care facilities to further test its effectiveness. A future study may also compare the delivery of the AMMTM intervention to student visits alone, to determine whether it was the social relationships formed or more specific components of the AMMTM intervention that facilitated positive outcomes for both students and residents. Future expansion of the clinical placement model should explore ways to incorporate more discipline-specific supervision and learning opportunities. The outcomes for residents should also be examined in more detail and will be the focus of a separate paper.

A positive finding to emerge from the study concerns the organisation's increased appreciation of the role of SLP in aged care. The CEO of the organisation stated the placement "broadened our perspectives on the role of the speech pathologist with relation to older adults, particularly with regard to communication intervention". Future studies should build on this finding, using similar innovations as an opportunity to raise the profile of the profession, while simultaneously attracting graduates to the sector. This may have influential secondary outcomes, supporting the creation of new positions and increased funding allocation to communication and other SLP services.

Conclusion

The current study demonstrated the viability of high-quality clinical learning experiences in a residential aged-care setting. The placement was well received by students, residents, and organisation staff, allowing students to increase confidence and develop entry-level collaborative practice capabilities. The clinical placement model was also successful in increasing organisational capacity for service quality and innovation, ensuring continuation of the placement in subsequent years which has included expansion of services provided by SLP and OT students within the organisation. The findings provide direction for replication of the clinical placement model within other facilities and a strong platform for future research. The findings also demonstrate the important role that the tertiary sector plays in aged-care reform and workforce development innovation.

References

Abbey, J., Abbey, B., Bridges, P., Elder, R., Lemcke, P., Liddle, J., & Thornton, R. (2006). Clinical placements in residential aged care facilities: The impact on nursing students' perception of aged care and the effect on career plans. *Australian Journal of Advanced Nursing*, 23(4), 14–19.

Ashby, J., Buss, J., Firmstone, D., & Brand, S. (2008). Efficacy of a cognitive intervention for the therapeutic treatment of mild to moderate Alzheimer's disease. Retrieved 11 Feb. 2015, from, http://www.alzheimersinnovation.com/pdf/Efficacy_of_a_Cognitive_Intervention_for_the_Therapeutic_Treatment_of_AD.pdf

Barnett, T., Walker, L. E., Jacob, E., Missen, K., Cross, M. D., & Shahwan-Akl, L. (2012). Expanding the clinical placement capacity of rural hospitals in Australia: Displacing Peta to place Paul? *Nurse Education Today*, *32*(5), 485–489.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101.

Brewer, M., Gribble, N., Robinson, P., Lloyd, A., & White, S. (2009). Assessment of interprofessional competencies for health professional students in fieldwork education placements. Paper presented to the ATN Assessment Conference, RMIT University, 19–20 November 2009.

Brewer, M. L., & Jones, S. (2013). An interprofessional practice capability framework focusing on safe, high-quality, client-centred health service. *Journal of Allied Health*, *42*(2), 45–49.

D'amour, D., & Oandasan, I. (2005). Interprofessionality as the field of interprofessional practice and interprofessional education: An emerging concept. *Journal of Interprofessional Care*, 19(S1), 8–20.

Grealish, L., Lucas, N., Neill, J., McQuellin, C., Bacon, R., & Trede, F. (2013). Promoting student learning and increasing organizational capacity to host students in residential aged care: a mixed method research study. *Nurse Education Today*, 33(7), 714–719.

Health Workforce Australia (HWA). (2011). National workforce innovation and reform strategic framework for action 2011–2015. Retrieved 11 Feb. 2015, from http://www.hwa.gov.au/sites/uploads/hwa-wir-strategic-framework-for-action-201110.pdf

Kirkpatrick, D. L. (1967). Evaluation of training. In R. Craig & L. Bittel (Eds.), *Training and development handbook* (pp. 87-112). New York: McGraw Hill.

Levett-Jones, T., Lathlean, J., McMillan, M., & Higgins, I. (2007). Belongingness: A montage of nursing students' stories of their clinical placement experiences. *Contemporary Nurse*, *24*(2), 162–174.

McNair, R., Stone, N., Sims, J., & Curtis, C. (2005). Australian evidence for interprofessional education contributing to effective teamwork preparation and interest in rural practice. *Journal of Interprofessional Care*, *19*(6), 579–594

Neville, C. C., Yuginovich, T., & Boyes, J. (2008). A stocktake of existing aged care clinical placements for

undergraduate nursing students in Australia. *Australian Journal of Advanced Nursing*, 26(2), 17–26.

Productivity Commission. (2011). Caring for older australians: Overview, Report No. 53, Final Inquiry Report. Canberra: Author.

Reeves, S., Zwarenstein, M., Goldman, J., Barr, H., Freeth, D., Hammick, M., & Koppel, I. (2008). Interprofessional education: effects on professional practice and health care outcomes. *Cochrane Database Of Systematic Reviews*, 4.

Robinson, A., Abbey, J., Abbey, B., Toye, C., & Barnes, L. (2009). Getting off to a good start? A multi-site study of orienting student nurses during aged care clinical placements. *Nurse Education in Practice*, 9(1), 53–60.

Robinson, A. L., Andrews-Hall, S., & Fassett, M. (2007). Living on the edge: Issues that undermine the capacity of residential aged care providers to support student nurses on clinical placement. *Australian Health Review*, *31*(3), 368–378.

Robinson, A., Abbey, J., Toye, C., Barnes, L., Abbey, B., Saunders, R., ... & Andre, K. (2006). *Modelling connections in aged care: Development of an evidence-based best practice model to facilitate quality clinical placements in aged care*. Report based on stages 1–3. Retrieved 11 Feb. 2015, from http://www.utas.edu.au/__data/assets/pdf_file/0008/375569/wdrec_txt_Modelling-report-1-3.pdf

Siggins Miller Consultants. (2012). Promoting quality in clinical placements: Literature review and national stakeholder consultation. Adelaide: Health Workforce Australia

World Health Organization (WHO). (2010). Framework for action on interprofessional education and collaborative practice. Geneva: Author.

Xiao, L., Paterson, J., Henderson, J., & Kelton, M. (2008). Gerontological education in undergraduate nursing programs: An Australian perspective. *Educational Gerontology: An International Journal*, 34, 763–81.

Brooke Sanderson is the Deputy Director of Practice and Interprofessional Education within the Faculty of Health Sciences at Curtin University in Perth. Jade Cartwright is a lecturer at the University of Melbourne, School of Health Sciences. Anne Whitworth is Associate Professor within the School of Psychology and Speech Pathology at Curtin University. Elizabeth Oliver is a senior occupational therapist at Catholic Homes Inc. Nigel Gribble is the Director of Fieldwork in the School of Occupational Therapy and Social Work at Curtin University.

Correspondence to:

Brooke Sanderson

Deputy Director Practice and Interprofessional Education Faculty of Health Sciences, Curtin University Kent Street, Bentley, Perth, WA, 6102 phone: (08) 9266 9124 email: b.sanderson@curtin.edu.au