

Dental Hygiene Students' Views on a Service-Learning Residential Aged Care Placement Program

Janet P. Wallace, Dip DT, BOH, Grad Cert PTT, PhD; Fiona A. Blinkhorn, BDS, MDS, PhD; Anthony S. Blinkhorn, BDS, MDS, PhD, OBE

Introduction

The roots of service-learning can be traced back to the early part of the twentieth century, with one important part of the social reform and educational movements promoted by Dewey and colleagues from the University of Chicago.¹ They changed the concept of learning from an authoritarian method to a more experiential process whereby students are encouraged to learn through experimentation and practice.² The focus was on reflection to assist in problem solving and using experience to understand key learning objectives. Dewey's early work was developed and refined by Lewin's^{3,4} model of action research and Kolb and Fry,⁵ who gave even more of a role to experience in the learning. Kolb⁶ later developed a Learning Style Inventory based on 4 components of the experiential learning model which included reflection on a concrete experience, thoughtful observation, abstract conceptualization and active experimentation. A model developed by Grundy⁷ in the 1980s proposed that the reflective process should be considered within the experiential learning of a group. Learners need to have the freedom of choice and a level of autonomy without the influence of the teacher for self-reflection to occur. The key concept is that equal power relationships must occur within the experiential framework to enable students to achieve autonomy in learning. This concept has influenced the subsequent framework of most service-learning models of education.

Service-learning is a teaching strategy which provides students with opportunities to learn both in the classroom and in the wider world. The philosophy is one of service and learning that occurs in experiences, reflection and civic engagement within a collaborative relationship involving com-

Abstract

Purpose: To record the views of final year dental hygiene students from the University of Newcastle, Australia about a placement in 17 residential aged care facilities, on the NSW Central Coast.

Methods: Final year dental hygiene students undertook a 12 week placement, 1 day per week, in 1 of 17 residential aged care facilities. They were asked to participate in focus group discussions after the placement to determine their ability to transition from the classroom to the real-life experience of the residential aged care facility placement.

Results: Students felt ill-equipped for the aged care placement program even though they had attended a pre-placement orientation. Students expressed feelings of being overwhelmed by the residential aged care environment, particularly by the smells and unexpected sights of the aged, fragile and cognitively impaired residents, and the difficulties in providing them with oral hygiene care.

Conclusion: To enable students to transition from the classroom to the aged care environment in a more effective manner, a more realistic pre-placement orientation program is necessary.

Keywords: service-learning, residential aged care, dental hygiene students, oral hygiene care, experiential education

This study supports the NDHRA priority area, **Health Promotion/Disease Prevention:** Assess strategies for effective communication between the dental hygienist and client.

munity stakeholders. Students engage in activities that address both individual and community needs together with structured opportunities designed to promote student learning and development.⁸

Service-learning is different from volunteer experiences because of its direct links with course objectives and community interaction to meet specific educational needs. It can also be distinguished from internships because of its civic engagement and the reflection element.⁹ Service-learning engages faculty, students and community partners in a structured program to meet academic learning objectives and potentially creates an apparatus by which dental hygiene students can gain skills that enable them to become more competent to work with different populations and individuals with special needs. It

also enables students to meet objectives outlined in educational accreditation standards while also addressing the core competencies for entry into the dental hygiene profession.⁹⁻¹⁴

Participation in service-learning schemes enables educational institutions to reach out to different communities to foster partnerships.¹⁵ Yoder noted service-learning has become an important component of higher education, and integrating service-learning into dental hygiene curricula should deliver graduates who are better prepared to work effectively among diverse populations with the ability to function dynamically in the health policy arena.¹⁶

Application of service-learning in Australian dental hygiene education is a new concept along with the employment of dental hygienists in Australian residential aged care facilities. In order for students to benefit from service-learning, the University of Newcastle, Australia, implemented an innovative service-learning residential aged care facility placement program for final year dental hygiene students in 2009. Since then, students have attended placements each year as part of their undergraduate studies. The placement program was based on an experiential education model in which students engaged in activities that addressed community needs together with structured opportunities designed to promote student learning with a clear connection between placement activities and course learning objectives.¹⁷⁻¹⁹ Although based on an experiential model, the development and structure of the residential aged care facility placement program was an original concept for dental hygiene education in Australia.

To prepare students for the residential aged care facility program, a pre-placement orientation workshop was designed to provide them with an overview of the medical and dental issues common to older people living in residential aged care facilities. The structure of the orientation workshop consisted of a number of guest specialist presenters who discussed Dementia and Alzheimers disease, the effects of co-morbidities and poly pharmacy on oral and general health, the lack of existing dental and oral hygiene care in residential aged care facilities, and the challenging behaviors directly linked to residents with reduced cognitive function.

Students were allocated to 17 residential aged care facilities for 1 session a week during the first semester of their final year. Students worked in pairs to provide dental education and oral hygiene care to residents and oral health education information sessions for residential aged care facility staff, with the aim of enabling them to provide oral hygiene care

for residents. Students were also required to complete formative and summative assessment tasks and make entries into their reflective journals after each placement. Initially the placement caused some problems for students and in the early weeks students reported that they were not adequately prepared for the residential aged care facility environment.

A number of evaluations of the Newcastle placement program have been undertaken including an analysis of student ability, willingness and knowledge gained after attending the placement.²⁰⁻²² This study is linked to those earlier student and program evaluation research strategies and finally examines the process of student transition from the clinical classroom to the residential aged care facility environment.

Methods and Materials

All final year dental hygiene students (n=35) who volunteered for the residential aged care facility student placement program were asked to participate in a qualitative research study. Focus groups and interviews were conducted gathering data to identify student transition from the classroom to the residential aged care facility environment.

The placement was offered for 12 weeks, with students being required to attend their residential aged care facilities 1 day each week for a period of 4 hours. Students worked in pairs and were allocated to the residential aged care facility nurse educator with whom they could interact while working in a predominantly autonomous capacity. At a faculty level, students had access to the course co-ordinator at all times by email or phone. During the placement students completed formative and summative assessment tasks and make entries into their reflective folios after each placement session. In addition, they were required to provide dental education and oral hygiene care to residents and dental education sessions to residential aged care facility staff.

During the focus groups, students were asked to concentrate their discussions on 3 main research questions:

- What did you find most difficult about the transition from the classroom orientation workshop to the real-life residential aged care facility student placement program?
- In retrospect what would have helped you to transition is a more positive way?
- Is there anything specific you would like to tell us about your residential aged care facility experience?

The focus groups took place in a supportive and friendly atmosphere over a period of 1 hour. The researcher encouraged interaction between students asking them to focus on the main topics during group discussions. However, the students were permitted to deviate from the themes where valuable information pertaining to the placement program was revealed. All focus group discussions were transcribed and annotated with concurrent field notes. All transcripts were read by 2 researchers and coded into themes using the constant comparative method.²³ Each item within the data was compared with the rest of the data to establish the themes. Consensus of final key themes was achieved through discussion and re-reading of the transcripts. A final text was prepared by the researchers and individual identifying statements were removed in the final report. The results were presented to the participating students to gain agreement on content and accuracy. The study was approved by the University of Newcastle, NSW, Australia, Ethics Committee.

Results

Of the 35 students, 22 attended the 3 focus group sessions and 6 to 8 students were present at each. The 22 students who participated in the focus groups were all females between the ages of 20 to 47. The 2012 cohort was predominately female with only 2 male students. All students were actively involved contributing to focus group dialogues.

Discussions throughout the focus group established that students were confronted by the workings of the residential aged care facility environment, by images of older frail people and by the challenging behaviors of people with cognitive disorders. Students discussed their feelings of inadequacy in their ability to communicate with residents who had dementia and Alzheimers disease and felt they did not have the necessary knowledge or skills to communicate effectively with these residential aged care facility residents. Students reported that the first few weeks of the placement were particularly difficult because they were unsure of how to manage the resident's oral hygiene care and unsure of how to provide oral hygiene information to people who seemed unable to understand or follow instructions.

The main discussion topics are presented according to the 3 predetermined questions:

1. What did you find most difficult about the transition from the classroom orientation workshop to the real-life residential aged care facility student placement program?

Generally, students felt confronted by the residential aged care facility environment, citing smell, cognitive impairment and physical appearances of the older residents as being overwhelming (Table I). Students expressed their frustration at not feeling confident to communicate and build rapport with residents suffering from dementia and Alzheimer's disease and that often residents did not remember that they had spoken to them during the previous week's placement session. Students found that providing oral hygiene care and instruction was difficult without a designated dental clinic setup.

2. In retrospect what would have helped you to transition is a more positive way?

Students discussed the need for a pre-placement orientation workshop that included realistic scenarios depicting the residential aged care facility environment including demonstrations of students providing oral hygiene care and education to residents and staff; and specifically to residents with cognitive impairments (Table II). Students generally voiced the need to see more experienced students greeting residents and providing them with care, including a demonstration of an oral hygiene session. Some students went as far as to say that audio recordings of the noises made by some cognitively impaired residents would better prepare them for the residential aged care facility experience. Most students wanted to be shown how to develop rapport with residents, before commencing any oral hygiene instruction or care.

3. Is there anything specific you would like to tell us about your residential aged care facility experience?

Students reported that interest and support from residential aged care facility staff was at times insufficient because they were under great time pressure to provide residents with general and personal hygiene care, ensure meals were delivered and generally meet the needs of the elderly residents (Table III). After the first few placement sessions, the students came to the conclusion that there was insufficient time for staff to devote to the residents' oral hygiene needs. Students observed that residents' weekly oral health plans they had devised often needed to be changed to accommodate the residents' general mood, health or motivation on the day. Students discussed the fact that text book idealistic oral hygiene practices were difficult to achieve for many residents. Students reported that although initially the placement was overwhelming, after a settling in period the majority started to enjoy the experience, were able to

Table I: Focus Group Discussions Relating to Difficulties Transitioning From the Classroom to the Residential Aged Care Facility Environment

Students comments during the focus group	Number of students reporting the same theme
I was really unprepared for what I saw and smelled at the residential aged care facility	20
The residential aged care facility was very confronting, it was worse than I had expected	15
I was not fully prepared in regards to approaching residents and the reality of what we were expected to achieve during the residential aged care facility placement	18
I thought I would be able to provide oral hygiene care easily, the reality was I had to build a relationship with the residents before I could get anywhere near their mouths	21
I was nervous and not sure how to deal with the elderly people	14
I found the first few weeks of the placement really difficult, it took me weeks to get used to the residential aged care facility	9

Table II: Focus Group Discussions about What Would Improve the Transition from Classroom to Residential Aged Care Facility Environment

Students comments during the focus group	Number of students reporting the same theme
It would be helpful to see images showing the residential aged care facility environment and the residents	12
Watching role plays on the interactions between students providing residents with oral hygiene care would help us in the early stages of the placement	15
I would like to see 'real life' scenarios of what to expect when I get to the placement	17
It would be good to visually prepare us of what to expect before the placement	8
Watching re-enactments of students communicating with cognitively impaired residents would be helpful	17
Talking with students who have already done the placement would be a good idea	4
I would like to see a demonstration of students talking to residents and helping them care for their teeth	14

develop management strategies for residents' oral hygiene care and reported that they had learned from the placement.

Discussion

Focus groups have been used in qualitative research for decades, and they have 1 feature which inevitably distinguishes them from other 1 to 1 interviews or questionnaires, specifically the interaction between the research participants.²⁴ In qualitative research the potential for bias is always present. In this study, students had completed the unit of work associated with the residential aged care fa-

cility placement and had received their final mark before participating in the focus groups, thereby reducing the possibility of bias from students giving positive statements just to please the researcher. Those students participating in the focus group did so with honesty and enthusiasm. They were pleased to have the opportunity to comment on the residential aged care facility program and appeared to be relaxed during discussions.

They were comfortable with their peers as they had shared 3 years of study and the discussions were wide ranging and unrestricted. The focus groups enabled students to expand on their expe-

Table III: Examples of Student Comments during Focus Group Discussions about Their Experiences during the Residential Aged Care Facility Placement

Students comments during focus groups	Number of students reporting the same theme
Once I became familiar it was a good experience – we were able to see regular patients and I really enjoyed the interaction with the residents	12
The placement was a very good experience, I feel I gained a lot, I learned about the needs of residents/patients that required constant care. I really enjoyed it – very satisfying	17
The placement made me realize the need for oral health care in residential aged care facilities	19
I would have like a bit more of an orientation before the placement, it would have been helpful	22
We had to restructure our plans on a week to week basis to fit in with the residents	7
It was very difficult to gather all the residential aged care facility staff to give dental health education sessions to them	15
The placement made me realize the need for oral hygiene care in residential aged care facilities	22
The first few weeks were really challenging, but I eventually settled in and learned from the placement	20
Residents really need oral hygiene and dental care on a daily basis in residential aged care facilities	22

riences of the residential aged care facilities, supporting each other’s comments. In retrospect, the participation rate might have been even greater if the focus groups had not been held at the end of the students’ clinical session when they were anxious to return home.

A common theme was established between the focus group findings and student experiences at each placement session by reading all of the students’ (n=35) reflective journals. Throughout the focus groups and in early journals entries, students reported feeling ill-prepared emotionally for the behaviors and appearances of older frail people with cognitive deficiencies. They discussed feeling emotionally unprepared for the day to day workings of the residential aged care facility environment, with its challenging and often visually disconcerting behaviors of residents with dementia and Alzheimers disease. Students reported initially having difficulties communicating with residents and felt their preparation for the placement was deficient. They discussed feeling nervous and unsure of what was expected of them. They found the noises and movements made by people with dementia and Alzheimer’s disease very distressing and confronting. The majority of students reported being very overwhelmed during the early stages of the placement, not knowing how to approach residents, not

knowing what to say, or how to provide oral hygiene care in the residential aged care facility environment. The inability to effectively communicate with residents in the early stages of the placement was a common theme with students. An assumption has been made that the inability to communicate is linked to lack of skill and experience of dealing with people who have cognitive disorders rather than a generational communication gap. This assumption is supported by the fact that there was a wide age distribution within the student cohort ranging from 20 to 47 years of age. Students discussed the need to develop a friendly relationship with the residents and to build rapport before being able to look in their mouths. Students talked about the considerable time and effort this involved and their lack of understanding of this necessity prior to the placement experience. They explained that this communication and rapport building often had to be replicated on a weekly basis as many residents had no recollection of who the students were from week to week. Some developed strategies to remind residents of their previous visits by taking photos of themselves with individual residents. Students talked about the need to restructure their plans on a week to week basis and discussed the importance of being flexible in achieving realistic goals of oral hygiene education and care rather than being able to accomplish an idealistic theoretical model of care.

Students felt that the implementation of a more real life orientation would assist them in settling into the placement sooner and would to some extent reduce the shock of the early placement sessions. It seemed that students spent a good proportion of the first few sessions recovering from the impact and astonishment of the residential aged care facility environment, before they felt comfortable and able to provide appropriate oral hygiene care for residents and complete their assessment tasks.

Although the original format of the pre-placement orientation workshop had been evaluated and amended to meet student feedback on a yearly basis, results from this study indicate that the changes had still not provided students with a sufficiently realistic orientation. To address this, an educational DVD depicting the residential aged care facility environment is currently in production.

Conclusion

Based on the results of this study, a comprehensive orientation to service-learning projects is required to assure student comfort in an alternative learning environment. This orientation should in-

clude specific visual images of the residential aged care facility placement environment depicting a real-life documentary re-enactment of students demonstrating how to communicate and provide oral hygiene education and care for the elderly residents. In this way students would be more prepared for the residential aged care facility environment and the student experience would be enhanced enabling early learning to be maximized.

Janet P. Wallace, Dip DT, BOH, Grad Cert PTT, PhD, is Faculty of Health at the School of Health Sciences, University of Newcastle. Fiona A. Blinkhorn, BDS, MDS, PhD, is at the School of Health Sciences, Faculty of Health, University of Newcastle, Ourimbah, Australia. Anthony S. Blinkhorn, BDS, MDS, PhD, OBE, is a Faculty of Dentistry, University of Sydney, Westmead, Australia.

Acknowledgments

The authors would like to acknowledge those final year dental hygiene students from the University of Newcastle, Australia who participated in this research.

References

1. Addams, J. *Twenty years at Hull House*. New York: Penguin Books. 2002.
2. Dewey J. *Experience and Education*. New York: Collier Macmillan. 1938.
3. Lewin K, ed. *Resolving social conflicts: Selected papers on group dynamics*. New York: Harper. 1948.
4. Lewin K. Action research and minority problems. *J Soc Issues*. 1946;2:34-46.
5. Kolb D, Fry R. Towards an applied theory of experiential learning. In: Cooper C, ed. *Theories of group practices*. New York; Wiley. 1975.
6. Evidence Based Learning Systems. *Evidence Based Learning Systems, Inc.* [Internet]. 2003 [cited 2014 Spetmeber 25]. Available from: <http://www.learningfromexperience.com>
7. Grundy S. Three modes of action research. *Curriculum Perspectives*. 1982;2(3):23-34.
8. Tsang AK, Walsh LJ. Oral health students' perceptions of clinical reflective learning-relevance to their development as evolving professionals. *Eur J Dent Educ*. 2010;14(2):99-105.
9. Howard J. Service-learning course design workbook. *Mich J Comm Serv*. 2001;8(suppl).
10. Jacoby B, ed. *Service-learning in higher education: Concepts and practices*. San Francisco: Josey-Bass. 1996.
11. Commission on Dental Education. *Accreditation standards for dental hygiene programs*. American Dental Association [Internet]. 2013 [cited 2014 September 25]. Available from: <http://www.ada.org/~media/CODA/Files/dh.ashx>
12. Fitch P. Cultural competence and dental hygiene care delivery: integrating cultural care into dental hygiene process of care. *J Dent Hyg*. 2004;78(1):11-21.

13. Magee KW, Darby ML, Connolly IM, Thomson E. Cultural adaptability of dental hygiene students in the United States: A pilot study. *J Dent Hyg.* 2004;78(1):22-29.
14. ADEA Competencies for entry into the allied dental professions. *J Dent Educ.* 2010;74(7):769-775.
15. Brown D. Pulling it together: A method for developing service-learning and community partnerships based on critical pedagogy. Washington DC: Corporation for National Service. 2001.
16. Yoder KM. A framework for service-learning in dental education. *J Dent Educ.* 2006;70(2):115-123.
17. Lowery D, May DL, Duchane KA, et al. A logical model of service-learning: tensions and issues for further consideration. *Mich J Comm Serv.* 2006;12:47-60.
18. Butin DW. Service-Learning as postmodern pedagogy. In: *Service-Learning higher education.* New York: Palgrave Macmillan. 2005. pp 89-104.
19. Eyler J, Giles DE jr. *Where's the learning in service-learning?* San Francisco: Jossey-Bass. 1999.
20. Wallace JP, Taylor JA, Wallace LG, Cockrell DJ. Student focused oral health promotion in Residential Aged Care Facilities. *Int J Health Promot Educ.* 2010;48(4):111-114.
21. Wallace JP, Taylor JA, Blinkhorn FA. An assessment of a service-learning placement programme in residential aged care facilities for final year dental hygiene students. *J Dis Oral Health.* 2012;13(14):163-167.
22. Wallace JP, Blinkhorn AS, Blinkhorn FA. Reflective folios for dental hygiene students: what do they tell us about a residential aged care student placement program? *Eur J Dent Educ.* 2013;17(4):236-240.
23. Glaser BG, Strauss AL. The constant comparative method of qualitative analysis. In: Glaser B, Strauss AL, ed. *The discovery of grounded theory.* Chicago: Adline. 1967.
24. Kitzinger J. The methodology of focus groups: the importance of interaction between research participants. *Sociol Health Illness.* 1994;16(1):103-121.