

A student vote for alignment in experiential placements: Curriculum design to meet the challenge

Ieva Stupans

Division of Health Sciences, University of South Australia, ieva.stupans@unisa.edu.au

Susanne Owen

Division of Health Sciences, University of South Australia, susanne.owen@unisa.edu.au

There is little literature available to describe student evaluation of clinical practice and the determinants of quality experiential learning. Consultations with key stakeholders interviewed in an Australian Learning and Teaching Council (formerly Carrick Institute) grant, indicated qualitatively considerable agreement among various stakeholder groups about indicators for quality experiential placements. Quality indicators were ranked during a student workshop. Students value placement sites which provide sufficient, varied and ethical learning experiences, which involve a patient centred approach and positive working relationships. The site should offer high professional and ethical standards and value their educative role. Preceptors should be enthusiastic and welcoming and facilitate learning. They should also encourage questioning and the student's own pursuit of learning, allowing students to have a go and assign time for discussion and feedback, which should be honest and constructive. The students should have a positive, professional and ethical attitude and enthusiasm to learn from the placement situation to maximise learning. To facilitate students being able to engage in a quality placement the university needs to ensure students are well prepared for the placement. Clear placement outcomes and clear aims linked to assessment tasks were also viewed by students as essential aspects of quality placements.

Introduction

In Australia, allied health professionals, such as pharmacists, (the focus of this paper), radiation therapists, physiotherapists and occupational therapists, currently undertake rigorous university programs comprised of both theory and experiential (clinical) components. Accreditation of these university programs by the respective professional authorities is dependent on the relevant teaching unit demonstrating quality learning and teaching in both the experiential and theory components. In pharmacy programs, experiential placements provide significant opportunities within the reality of the workplace in supporting students in skill-building for the internship year. In pharmacy, an internship year must be successfully completed prior to professional registration.

University schools and the clinical practice communities develop varied collaborative arrangements for facilitation of clinical experiential learning, but the quality indicators and competencies for effective clinical learning and teaching are poorly articulated. There is little literature available to describe student evaluation of clinical practice and the determinants of quality experiential learning. While student questionnaires to seek feedback for the improvement of learning and teaching are widely used, [both nationally e.g. the Course Experience Questionnaire (CEQ) and at individual universities e.g. student evaluations of individual courses (or subjects) and of individual teacher's

teaching], many of these do not address clinical education learning and teaching. Analysis of quality indicators may provide a useful starting point for design of questionnaire tools which seek student feedback to enable teaching and learning improvement.

‘Work integrated learning’ or ‘work based learning’ is gaining momentum throughout the higher education setting in Australia and internationally. Experiential placements have been included in the curricula of the allied health disciplines for many years already and so development of frameworks is generally advanced in the health disciplines, as compared to many other disciplines. Pharmacy represents a somewhat unique model as compared to other health disciplines, such as physiotherapy and speech pathology, in that, in Australia, there is no requirement to meet specified competency prior to graduation, as registration and graduation do not occur at the same time point.

Other allied health professions, where graduation and registration are linked, are using experiential placement and assessment approaches in relation to university students, essentially based on a competency type assessment. For example, McAllister (2006) outlines an assessment tool for competency-based assessment of speech pathology students’ performance in the workplace which is based on a rating of four generic (reasoning, communication, lifelong learning, professionalism) and seven occupational competencies and behaviours against descriptors for a novice, intermediate or entry-level (competent) student. New clinical assessment processes for Australian physiotherapy placements are also currently being developed and trialled by some university physiotherapy schools, based on seven agreed domains for assessment (communication, professional behaviour, assessment, analysis, planning, intervention, evidence-based practice and risk management), with associated performance indicators (Griffith University, 2007).

Curricular trends over the past two decades have been towards pedagogical models, which are student centred. In a student centred model, it is suggested that learners actively construct their own knowledge and understanding. Within this model, teaching is about the provision of a context that facilitates desired learning outcomes. In this model, also described as constructivist, there is emphasis on the alignment of assessment with these learning outcomes. Biggs (2002) refers to assessment tasks that ‘enable students to demonstrate learning in particular contexts. The nature and level of learning is consistent with the verbs that define the curriculum objectives (or learning outcomes)’ (Biggs, 2002). A constructivist learning environment has also been described as appropriate outside the formal classroom setting (Walsh, 2007).

In December 2006, an Australian Learning and Teaching Council (formerly Carrick Institute) grant was awarded, for the purpose of identifying and documenting current practice for experiential learning and placements in university pharmacy school programs in Australia. The purpose of this research was to map experiential placements, including learning objectives, teaching and learning activities and assessment processes across pharmacy schools in Australia. Additionally, highlighting of successful practices and identifying areas for improvement, as well as beginning work on the development of quality indicators for experiential Pharmacy placements occurred.

Research methods included a literature review, contact with other professions, such as the health professions of physiotherapy and speech pathology and non health professions such as engineering and interviews with university pharmacy schools in Australia to map experiential learning placements

at various year levels of pharmacy programs. Stakeholder involvement in the project was sought at the outset. Preliminary workshops occurred at a university/professional organisations session in December 2006 and at a National Association Pharmacy Students of Australia (NAPSA) student workshop in January 2007. The national student workshop within the annual NAPSA conference introduced the Carrick grant and future consultation process, also seeking preliminary information about experiential learning within various pharmacy courses and issues. At the project's conclusion, further workshops were held. Of relevance to this paper was a student workshop held in January 2008, again in the context of the annual NAPSA conference. Participants of the NAPSA student forums were all student elected office bearers of each of the individual Pharmacy schools.

It should be noted that although the quality indicators are the focus of this paper, other aspects of the research project included analysis of experiential placement handbooks; consultations in focus groups for professional and registration organisations, preceptors and students in each state and territory and interviews with national professional groups. Almost 250 participants from metropolitan and rural locations, including hospital and community pharmacists, aged care and profession situations participated in the consultation sessions

Consultations with key stakeholders indicated qualitatively considerable agreement among various stakeholder groups about indicators for quality experiential placements. There was also consistency with United States research (O'Sullivan et al., 2005) about quality indicators in terms of the pharmacy site, preceptors, university, students and the overall environment. The student perspective is fundamental to developing a multi-dimensional understanding of the educational process and to driving effective and relevant change within the Higher Education sector. This paper presents preliminary quantitative data regarding the student view of quality indicators for experiential learning, with particular reference to the preferred student approach towards assessment of experiential placements.

Research Methodology

At the NAPSA student workshop which was held in January 2008, one of the activities conducted was based on a discussion paper describing the quality indicators which had been identified by various stakeholder groups. The workshop participants were asked to rank the quality indicators within several descriptor groupings (quality indicators are displayed in Table 1). These included the pharmacy site, preceptors, the university and the student themselves, with ranking used indicating the most important to least important, with respect to students being able to engage in a quality placement. Nineteen students, representing all but one Australian pharmacy school, completed the paper-based survey. The survey was collected from the students at the session, data collated and ranking of indicators calculated.

Results and Discussion

Rankings of indicators, collated for all students completing the survey, within each descriptor group - the pharmacy site, preceptors, university and students are displayed in Table 1. These ranking results indicate that there are several quality indicators that students regard as being most critical to students being able to engage in a quality placement.

The data presented in Table 1 indicates that students value placement sites which provide sufficient, varied and ethical learning experiences, which involve a patient centred approach and positive working relationships. The site should offer high professional and ethical standards and value their educative role. Preceptors should be enthusiastic and welcoming and facilitate learning. They should also encourage questioning and the student's own pursuit of learning, allowing students to have a go and assign time for discussion and feedback, which should be honest and constructive. The students should have a positive, professional and ethical attitude and enthusiasm to learn from the placement situation to maximise learning.

To facilitate students being able to engage in a quality placement, the university needs to ensure students are well prepared for the placement. Clear placement outcomes and clear aims linked to assessment tasks were also viewed by students as essential aspects of quality placements.

The Aligned Learning Environment

The quality indicators for experiential learning selected by the small group of students in the study reported in this paper are very similar to those identified in other work, which focused on university-based learning experiences. For example, other research about tertiary student learning has highlighted student and contextual factors, self management, motivational needs, understanding, support needs and course organisation/resources/facilities, assessment, as well as learning activities and teaching respectively (Drew, 2001). A much simpler analysis has presented the concept, that the potential for work-based learning i.e. quality placement correlates with active engagement in, and the openness of, workplace culture and the learner's existing competence (Reeders, 2000). For the pharmacy experiential setting, students indicated the importance of preparation at the university prior to experiential placements to provide clear aims, structures and scaffolded questions and they identified their preference for clear placement outcomes linked to assessment tasks.

Designing the Curriculum: Outcomes and Assessment

Consideration of both Kolb (1984) and Vygotsky's (1978) concepts is useful in the context of experiential placements for pharmacy students. In accordance with the principles of experiential education, the placements provide significant opportunities for student pharmacists to actively engage in learning within the clinical environment in an informal manner on a daily basis, much of it as a part of wider learning, the 'hidden' curriculum (Dewey, 1938).

While some early placement experiences for pharmacy students may be highly experiential and informal in terms of any specific learning outcomes, placements also provide the opportunity for structured and explicit learning:

to create authentic and meaningful learning experiences that enable the learner to acquire the knowledge, skills and attitudes required in professional practice
...the preceptor is responsible for planning for the experience, increasing the learner's awareness of the experience and providing feedback regarding the learner's performance (Littlefield et al., 2004).

Aside from a competency model for assessment of experiential learning, as with the allied health professions such as speech pathology, a number of models have been proposed – the attendance model, the work history model, the broad abilities model and the negotiated curriculum model (Toohey & Ryan, 1996). In the attendance model, as the name suggests, students simply satisfy an

attendance requirement; in the work history model, students are encouraged to keep a log book or reflective journal; the broad abilities model involves assessment of the ability to evaluate and make judgements, whilst the negotiated curriculum involves student negotiation of learning outcomes (Toohey & Ryan, 1996).

The Carrick research referred to above, found that there was considerable comparability in the learning tasks and types of assessments required in Australian pharmacy programs. Frequently there was a mix of the experiential placement assessment models described above (attendance, work history, broad abilities model, negotiated curriculum) as suggested with ‘clear advantages’ (Toohey & Ryan, 1996). There was a widespread use of reflection as a learning and assessment task, within the context of one of the profession’s competencies focused on lifelong learning.

Bloom’s taxonomy has also been incorporated into a framework for experiential placement learning objectives and student demonstration of learning outcomes for engineering students (Boles, Beck, & Hargreaves, 2005). The learning tasks and types of assessments identified in this project may also be aligned within such a framework. A workplace log book which records day to day activities aligns with lower cognitive levels of observation; authentic tasks such as undertaking a medication review or an audit of practice align with higher levels of synthesis and evaluation.

One of the best practice examples of assessment from one school included students developing their own learning objectives and checklists of possible tasks regarding dispensing and counselling and developing written reflective case studies based on a previously practised reflective questions outline. Preceptor overall occupational skills assessments or preceptor assessments of specific competencies aligned to particular tasks were also provided (Owen & Stupans, 2007). In another example, outcomes focused on skills in patient counselling were clearly stated and linked to the professional competencies and university-specific graduate attributes, including communication, problem-solving and working autonomously while also promoting rational drug use (Owen & Stupans, 2007). Reflecting a planned curriculum approach and alignment between the university classroom-based program and experiential placement practical workplace context, a counselling skills protocol was learned and practised in the classroom using role play prior to the placements. The placement handbook for preceptors and students documented the protocol and outlined the counselling task for the placements. As further evidence of scaffolding, a breakdown of marks against specific assessment criteria was provided. Criteria included ‘clarifying questions are asked as necessary’, ‘provides opportunity for patients to ask questions’, ‘jargon free language’, ‘the interaction was carried out in a conversational manner’. There was further follow-up at the post-placement phase, with student preparing a report which reflected on their patient counselling efforts.

The quality indicators for experiential learning selected by the small group of students also identified the critical role of preceptors in assessment with respect to facilitation of learning, encouraging questioning and providing feedback. Given the overall shortage of placement sites and preceptors (Owen & Stupans, 2007), enabling students to better direct and manage their own learning is critical, providing a clear focus for future directions.

Table 1: Rankings of Quality Indicators (expressed as percentage of students who ranked the indicator, from most to least important) within each Descriptor Group - the pharmacy site, preceptors, university, students. Nineteen students completed the survey.

Descriptor	Ranking				
	1= most	2	3	4	5 =least
Pharmacy site					
Sufficient space for students	-	-	-	26.3	73.7
Sufficient resources available - online references, computer access: having patients available and willing to interact with students, funding to support preceptors and students,	-	16.6	16.7	50.0	16.7
Sufficient time for students	21.1	10.5	52.6	10.5	5.3
Sufficient learning opportunities available - being well prepared, providing varied and ethical experiences, using patient centred approach, high professional and ethical standards, valuing education	57.9	31.6	10.5	-	-
Good working relationship - welcoming, introducing students widely to others to support questions, thorough induction, commitment to future health practitioners & placement programs, inter-professional learning, high quality professional interactions	31.5	36.8	21.1	5.3	5.3
Preceptor	1 = most %	2 %	3 %	4 = least %	
Personal attributes of preceptors – enthusiasm, making the time, being welcoming, conducting themselves professionally, committed to profession, passionate. Rapport building, clear expectations & course understanding-conveying importance of social interaction, respecting students knowledge and skills and not feeling threatened	52.7	10.6	21.0	15.7	
Orientation to workplace & broader community - Supportive learning context - up-to-date and being able to structure practical experiences and use scenarios linked to placement objectives, feeling included, accommodating different student learning styles, cultural sensitivity, willing to teach and giving detailed explanations to questions, nurturing improvement and application of student knowledge, two way learning	31.5	5.3	36.9	26.3	
Organised & structured training plan - fully informed of university requirements	10.5	10.5	31.6	47.4	
Facilitated learning, encouragement to question & pursue own learning- allowing students to have a go, sense of contribution, room for self-directed learning. Assigned time for discussion & feedback - providing honest and constructive feedback	42.1	52.6	5.3	-	
University	1= most %	2 %	3 %	4= least %	
Regular preceptor training/education: Verbal/written communication including seminars, info sessions	-	47.4	21.0	31.6	
Preceptor workbooks: Clear curriculum and assessment information	15.8	10.5	31.6	42.1	

Clear aims linked to assessment tasks: structuring experiential learning clearly for preceptors and students, clear outcomes evident so processes can be varied as relevant to the placement situation	42.1	42.1	10.5	5.3	
Placement preparation & support for students and preceptors - students well prepared to undertake explicit placement tasks, point of contact to answer questions and deal with difficult situations, regular contact with students during placement, approachable uni supervisor and support staff, adequate staff	68.4	21.0	5.3	5.3	
Students	1= most %	2 %	3 %	4= least %	
Personal: positive and professional/ethical attitude, dedication, enthusiasm to learn from placement situation to maximise learning, taking initiative, good work ethic	73.7	15.8	10.5	-	
Learning approach: asking questions, being flexible, doing boring jobs sometimes, self reflection and awareness of strengths/weaknesses	36.9	21.0	26.3	15.8	
Social: willingly interacting with patients/customers, effective communication (oral and written), responsive to feedback, team member	26.3	31.7	21.0	21.0	
Preparation: clarity regarding expectations, sound knowledge base and ability to demonstrate practical skills and application of knowledge, good technology	47.3	5.2	10.5	36.9	

Conclusion

The student experiential placement quality indicators identification highlights, from the student perspective, the importance of clear aims and alignment with learning and assessment tasks.

Examples provided in this paper can be more widely interpreted for clinical placements for students across professions. Students, prior to placements, need to understand the expected outcomes and have knowledge of the theoretical underpinnings and opportunities for classroom-based skills practice. Scaffolded classroom experiences and explicit placement handbooks, provide students and supervisors with clear directions and criteria for further practice and assessment tasks within the workplace context, with student refining their skills with the support and feedback of practitioners during placements. Quality placements are further supported by the follow-up activities on return to the university (Owen & Stupans, 2007).

References

- Biggs, J. (2002). *Guide for Busy Academics: Constructive Alignment*, from http://www.heacademy.ac.uk/resources/detail/id156_guide_for_busy_academics_constructive_alignment [online]. URL (accessed 15/06/2008)
- Boles, W., Beck, H., & Hargreaves, D. (2005). *Deploying Bloom's Taxonomy in a Work Integrated Learning Environment*. Paper presented at the Proceedings of the 2005 ASEE/AaeE 4th Global Colloquium on Engineering Education.
- Dewey, J. (1938). *Experience and education*. New York, NY: The Macmillan Company.
- Drew, S. (2001). Student perceptions of what helps them learn and develop in Higher Education. *Teaching in Higher Education*, 6, 309-331.
- Griffith University. (2007). *Clinical Education: Policy and Procedures*. School of Physiotherapy and Exercise Science.
- Kolb, D. (1984). *Experiential Learning. Experience as the Source of Learning and Development*.: Prentice Hall, Englewood Cliffs, New Jersey.
- Littlefield, L. C., Haines, S. T., Harralson, A. F., Schwartz, A. H., Sheaffer, S. L., Zeolla, M. M., et al. (2004). AACP REPORTS Academic Pharmacy's Role in Advancing Practice and Assuring Quality in Experiential Education: Report of the 2003-2004 Professional Affairs Committee. *American Journal of Pharmaceutical Education*, 68, 1-21.
- McAllister, S. (2006). *Competency based Assessment of Speech Pathology Students' Performance in the Workplace* (2006). Postgraduate thesis. [online]. URL: <http://ses.library.usyd.edu.au/handle/2123/1130>. (Accessed 18/1/07).
- O'Sullivan, T., Hammer, D. P., Gasdek Manolakis, P., Skelton, J. B., Weber, S. S., Dawson, K. N., et al. (2005). Pharmacy Experiential Education Present and Future: Realizing the Janus Vision A Background Paper for the AACP APPI Summit to Advance Experiential Education in Pharmacy.
- Owen, S., & Stupans, I. (2007). *Experiential Placements In Pharmacy (Carrick Institute DBI final report)*. <http://www.altc.edu.au/carrick/go/home/grants/pid/343> [online]. URL (accessed 24/05/2008)
- Reeders, E. (2000). Scholarly Practice in work-based learning: fitting the glass slipper. *Higher Education Research and Development*, 19, 205-220.
- Toohey, S., & Ryan, G. (1996). Assessing the practicum. *Assessment & Evaluation in Higher Education*, 21(3), 215.
- Vygotsky, L. (1978). *Mind in Society. The Development of Higher Psychological Processes*.: Cambridge: Harvard University Press.
- Walsh, A. (2007). An exploration of Biggs' constructive alignment in the context of work-based learning. *Assessment & Evaluation in Higher Education*, 32, 79-87.