

# Scaffolding patient counselling skills in Australian University Pharmacy programs

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This paper presents the results of an appraisal of the extent of, and approaches to, scaffolding for development of counseling skills of pharmacy students across Australian universities. There were two stages in the work. The first involved mapping of university pharmacy program and examination of placement handbooks from all but two of the fourteen universities offering pharmacy programs in Australia. The second involved a series of consultations and interviews with key representatives of various pharmacy stakeholder groups and individuals at a national level and in each state and territory of Australia. University academics and preceptors described significant roles in supporting students to build these skills especially within the pre-placement and during placement phases. Across Australian pharmacy schools, scaffolding for development of counseling skills through a range of approaches is evident. There appears to be support for this approach from both students and preceptors. The results of this research will have relevance both for other health professional programs and other programs which include experiential workplace learning with respect to the preparation of students for workplace activities. (*Asia-Pacific Journal of Cooperative Education*, 2010, 11(2), 29-37)

**KEYWORDS:** competencies, counseling, experiential placements, pharmacy students, scaffolding.

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## INTRODUCTION

University programs provide formal learning opportunities, which traditionally include lectures, practicals and tutorials, but may also include experiential placements where much of the learning 'just happens' within many and varied situations. Australian accreditation requirements for pharmacy programs stipulate that structured clinical placements should be a significant component of the third and/or fourth years of a Bachelors program (Standards, 2009). Experiential placements promote acquisition of professional knowledge, skills and attitudes and provide an opportunity to apply and develop classroom learning and theory in real work settings with actual clients (Waters, 2001; Orrell, 2004).

Placements differ from the formally structured university context in that the focus is on experiential learning, with the experiences of each student varying and dependent on the particular site and supervisor knowledge and skills. While informal learning within experiential placements is very important, Vygotsky's notion of the Zone of Proximal Development (ZPD) emphasizes that learning can be accelerated through a structured and scaffolded program (Vygotsky, 1978). Although scaffolding is a term which may refer to a number of different supports, we have adopted a definition of scaffolding which goes beyond merely providing supports which help students to carry out a task (Verenikina, 2008). Scaffolding necessitates students being enabled to carry out a task which they would not have been able to carry out on their own, with the guided steps eventually enabling them to complete the task as evidenced by learner achievement (Verenikina, 2008). We have identified the need for comprehensive planning and scaffolding for pharmacy experiential placements at a number of time points – pre-placement, during-placement and post-placement (Stupans & Owen, 2009). Approaches which have been observed in Australian pharmacy program experiential learning placements include action planning, setting objectives, observational checklists, learning

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contracts, designing criteria for judging outcomes, peer appraisal, self assessment, structured debriefing and diaries (Stupans & Owen, 2009).

In the context of experiential placements in professional programs other than pharmacy, scaffolding can be identified. For example, in law education, student reflective writing skills were improved through undertaking weekly writing tasks and provision of detailed written feedback within tutorial groups. Tutor sessions also examined models of reflective writing, included problem solving tasks and discussed assessment criteria (Owen & Davis, 2009).

For registration as a pharmacist in Australia, graduation from an accredited university program, a year-long internship program and evidence of meeting specified profession-determined competency standards are requirements. This evidence includes assessment of skills, knowledge and attitudes within the workplace. Key aspects of the eight functional areas of competence outlined in the *Competency Standards for Pharmacists in Australia* (2003) include being professional and ethical, dispensing and counseling, preparation of pharmaceutical products, provision of primary health care, and organization and management.

Patient counseling is the term employed by the pharmacy profession to describe verbal client interactional communication. The goals of counseling are to achieve the safe and appropriate use of medicines and therapeutic devices and adherence to the prescribed or recommended treatment regimen, thus optimizing therapeutic outcomes. The goals of counseling are, therefore, pivotal for competency. Practice Standards, produced by the Pharmaceutical Society of Australia, include the following definition for counseling *"refers to the dissemination or exchange of information ...by the pharmacist to the consumer. The goal of the information exchange is to achieve the safe and appropriate use of medicines and therapeutic devices.... to optimise therapeutic outcomes"* (Australia, 2006). This definition is therefore consistent with the view that patient counseling may range from *"simply stating the dosage of a drug as it is handed over to the client, through counter prescribing for common ailments, to giving advice with regard to lifestyle and health promotion issues..... clients will be equipped with the resources to use any medications more safely and effectively"* (Pilnick, 2003). Key client interactional communication skills in the counseling process include building rapport, explaining, questioning and listening (Hargie, Morrow, & Woodman, 2000). Counseling "real patients" or clients for students essentially only occurs during experiential placements. Scaffolding students around this activity is critical in ensuring placement outcome success.

To support pharmacists in their counseling roles, the Pharmaceutical Society of Australia and Australian Pharmacy Guild have produced counseling guidelines 'CAREER protocol for providing *Pharmacy Medicines* and *Pharmacist Only Medicines*' (Australia, n. d.). These guidelines are written with respect to non-prescription medications; however, they provide a generally applicable counseling protocol. The steps outlined in this protocol - check, assess, respond, explain and record - align with the steps proposed in early work regarding service-oriented skills in pharmacy (Hepler & Strand, 1990).

Changes occurring in community pharmacy practice as the profession attempts the transition from a product to a service orientation (Hepler & Strand, 1990; Roberts, Benrimoj, Chen, Williams & Aslani, 2005) are supported by changes to approaches to pharmacy education, internationally (Ryan, Bissell, Anderson, Traulsen, & Sleath, 2007) and in Australia (Owen & Stupans, 2007). There are a number of developments which have been reported in the literature around support for pharmacy students with respect to communication skills and particularly counseling skill development. Purposeful curriculum design to provide support for students is illustrated by a concept map template (Hill & Talluto, 2006) which prompts students to consider a patient's needs for, and ability to comprehend and act on, information, and barriers to interactional communication with the patient. An integrated communication skills development system which includes goal setting by students, oral presentation, standardized patient actors, peer feedback, web-based assessments with multiple users accessing the web environment has also been described (Planas & Er, 2008). A lecture-laboratory course with standardized patients has been reported to have had a significant impact on student interactional communication skill development as well as being well received by students (Rickle, Tieu, Myers, Galal, & Chung, 2009).

Recently we have undertaken a project to develop a competency graduated descriptors tool. The aim is to improve feedback and support for university students and their preceptors through use of standardized graduated developmental descriptors for Australian Pharmacy competencies. The descriptors have been developed collaboratively across Australian Pharmacy schools and are applicable to students at the early placement and advanced placement phases of their undergraduate courses. This paper briefly outlines processes that were used in

developing the graduated descriptors competency tool, including the consultation process used in its development, and feedback data from individuals and focus groups. Data gathered in the course of these consultations is presented within a framework of scaffolding counseling skills for Pharmacy students.

As discussed above, previous work has identified a consensus view that students need support with application of communication skills, particularly counseling skills, within their university studies (Owen & Stupans, 2007). This paper also outlines curriculum approaches in Australian pharmacy programs, thus informing future learning design for development of students' counseling skills. The work has relevance both for other health professional programs and other programs which include experiential workplace learning with respect to the preparation of students for workplace activities.

## METHODS

As outlined above, the data presented in this paper have been gathered in a two stage project.

### *Stage 1: Overview of Australian pharmacy program experiential learning opportunities.*

The methodology of this stage has been described previously (Owen & Stupans, 2009). Briefly, the key research approaches were a literature review, mapping of university pharmacy programs, interviews and focus group consultations with universities, registration authorities, professional organizations, preceptors and community and hospital pharmacists. Data from consultancy work were aligned with the *Competency Standards for Pharmacists in Australia* (2003), and graduate attributes. Placement handbooks from all but two of the fourteen universities offering pharmacy programs in Australia at that time were examined. Manual collation of information for each university and each year level was undertaken, including analyzing materials within a curriculum planning framework regarding links to the stated objectives, assessment, clear criteria and feedback to students.

### *Stage 2: Development of graduated descriptors.*

The project methodology included literature review regarding comparable developments in other health professions, workshops with key national student and other reference groups. This was then followed by progressive refining of graduated descriptors materials through consultations and interviews with key representatives of various stakeholder groups and individuals at a national level and in each state and territory of Australia.

Consultations occurred with 201 participants within 35 stakeholder groups and 12 individual interviews including students, academics, preceptors and professional/registration body representatives using a semi-structured interview format. Participants in focus groups were grouped according to their stakeholder category. Some participants were unable to attend sessions at nominated focus group times so individual interviews were arranged. A preliminary paper was forwarded to consultation participants outlining background information. At the consultation sessions, following introductory comments and clarification of any issues by the researcher, the eight functional areas of the competencies of the profession (*Competency Standards for Pharmacists in Australia*, 2003) were outlined prior to more detailed discussion about learning processes for students in attaining the competencies.

In response to questions about various functional areas of competency and skill development, participants provided details about the types of support that seemed to help students to improve their skills, particularly in relation to building their interactional communication abilities around therapeutic decision making. Notes of the discussion were taken by the researcher. Themes arising were collated and analyzed through manual processes involving sorting of notes; reading through information to make general sense; recording of thoughts about the data; and organizing material into categories (Strauss & Corbin, 1998).

## RESULTS

Analysis of handbooks during Stage 1 revealed that there were many similarities between tasks set at individual universities; however, there were some tasks which were unique. One university, in the pre-placement phase, provided a protocol for patient counseling which included various aspects such as establishing initial contact, gathering information from the patient, analysis and provision of information to the person and opportunity for questions. Details are provided in Figure 1 below.

Establish the professional relationship
Identify yourself as pharmacist
Ensure you are talking to the correct patient
Gather information from the person
Find out what the person already knows and needs to know
Analyse (assess) information/select appropriate information
Bring your specialised knowledge to bear
Tailor communication to patient need
Provide information: Identify drug name, dose, and application
Inform on what to expect: Inform on side effects and what to do if experienced
Offer support and follow-up written information – CMI (Consumer medication information), Self Care cards, Offers of continuing support ('contact me if...')
Offer consumer opportunity to ask questions
Summarise information and close

FIGURE 1  
Example of pre-placement counseling protocol

In the during-placement stage, a different university's handbook, provided assessment criteria for counseling for use by the preceptor (shown in Table 1 below). A sheet providing detailed feedback about aspects of patient counseling by the student was thus provided to the student concerning whether the particular needs of the patient were considered, accuracy of information given to patients, the use of clarifying questions, language used and clarity of speech.

TABLE 1  
Example of rubric used for preceptor assessment of core behaviors and occupation specific skills based on criteria, levels -High standard (H), satisfactory (S), unsatisfactory (U) and marks.

	Standard		
	H	S	U
<b>COUNSELING</b>			
Patient asked if they have time for counseling	2	1	0
Pharmacist reviews what consumer already knows and understands and summarizes any changes after conversation with Dr (if applicable)	2-3	1	0
Clarifying questions are asked as necessary	3	1	0
The particular characteristics of the patient are considered e.g. age, hearing, sight, cultural background, existing knowledge	2	1	0

Provides appropriate accurate information on drug, dose, application, what to expect, unwanted effects	4-5	2-3	0-1
Provides appropriate and accurate information in Plain English on disease state if necessary	3	2	1
Consumer Medicines Information and other written aids, as appropriate, are provided and used interactively if available	4-5	2-3	0-1
Provides opportunity for patients to ask questions	3	2	0
Responds to patient questions appropriately	3	2	0-1
The patient's understanding of instructions and advice is checked	2	1	0
Main points summarized	2	1	0
Offer of follow-up	2	1	0
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CLARITY OF PRESENTATION			
Jargon free language	4-5	2-3	0-1
Tone of voice, professional not condescending, sarcastic, meek non-assertive; conversational not rigid	3	2	0-1
Clear pronunciation – clear and not muffled, student's accent should not interfere with patient's ability to understand student's message	4-5	2-3	0-1
Use of fillers, um, oh, minimized	2	1	0
Rate of speech – gauged to patient's ability to comprehend	2	1	0
Length of consultation appropriate	2	1	0
The episode was carried out in a conversational manner	3	2	0-1
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QUESTIONS FROM PATIENT			
Answered correctly	3	1-2	0 wrong
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TOTAL (Max mark =60)			
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In yet another university's handbook, another during-placement task outlined observation of the pharmacist undertaking patient medication counseling, discussion and then actually carrying out the counseling process with a range of patients. Pharmacist-student discussion and written reflection by the student were other aspects involved. A guide to reflection on counseling episodes (see Figure 2 below) was provided by yet another university. In this exercise, students were asked to critique five counseling episodes and reflect on aspects such as information gathering and use of consumer medication information as a counseling aid.

Many people want to know more about their medicines and how to get the best out of their medicines. Pharmacists should offer to provide this information. In this exercise you are asked to report on five episodes of patient counselling. In each case you are asked to critique your effort. In reporting your final episode, you should also reflect on how you have improved with practice and where you still need to improve. The session may be either prescription related or OTC related.

- What information did you receive from the patient?
- The drug/device for which information was given
- The messages you sought to convey
- Any questions the patient asked you
- Your response to the questions

Critique: Reflect on your performance. In practice it is not uncommon after talking with the patient, colleague or doctor to feel that if given the opportunity to start again you could have done better. Critique your counselling. The following will give you guidance to the sorts of things you may consider. The list is by no means exhaustive. Compare your approach with the gold standard of the protocol taught to you at the Pharmacy School or that of the PSA (Pharmaceutical Society of Australia) :

- Was the patient interested in counselling? How did you raise their interest?
- Consider your style of questioning – did you use open/closed questions appropriately?
- Was the surrounding conducive to counselling?
- Did you gather the information necessary for you to provide useful information?
- Did you listen to the patient, maybe you need to explore issues of safety, effectiveness and compliance?
- Did you actively use a CMI (Consumer medication information) was it useful for you?
- Did you use other counselling aids? If so, was it useful, if not why not?
- What did you do well?
- What did you forget?
- What did you learn from this exercise?

FIGURE 2

Example of guided reflection on a counseling episode.

During consultations in Stage 2, all stakeholders emphasized that the process or journey of learning was important. In terms of the competencies, it was viewed that communication in all of its representations was one of the most difficult competencies to demonstrate, yet it was viewed as the most essential competency for fulfilling the professional role. Various types of communication were identified as important including written and oral formats such as keeping client records, writing health information sheets, report writing, individual information note records for client use, giving oral presentations to groups and communicating with other health professionals and government bodies.

With reference to counseling, a key aspect cited by all stakeholder groups was in relation to students learning patient counseling processes and successful scaffolding of this at the pre-placement, during-placement and post-placement phases: *'If you can't assess (patient needs),... you're really going to struggle'* (student comment). University academics and preceptors described significant roles in supporting students to build these skills.

At the pre-placement phase, various stakeholder groups identified that constructive scaffolding approaches by academics involved providing opportunities for the development of basic skills in therapeutic decision making. This also included the university introducing a protocol or series of steps and question areas for counseling of patients or clients, university staff role modeling the counseling process, and individual students practicing through role plays of counseling episodes. Having a patient counseling protocol received significant commendation by all groups of respondents: *'good to have a protocol but it needs to be flexible ...It's a good starting point'* (student).

The importance of sufficient practice was emphasized - to not only become automatic in carrying out the steps of a protocol but to move beyond a potentially robotic approach so that the student pharmacist adapted the protocol to their own individual style of counseling and adopting a conversational style.

Student comments highlighted the importance of obtaining information from a client in a professional and conversational manner because *'people don't respond as well when you are robotic...sense of comfort'* (is needed to reveal personal detail). Whilst ensuring the process was *'not an interrogation'*, they were concerned that sometimes for inexperienced students who lacked confidence, the patient counseling process did not provide *'enough depth of*

*questioning.*' Academics noted the importance of using a framework for counseling but being careful that the steps did not become dogma and become inflexible, with students needing to 'personalise their own framework'.

During placement, various stakeholders identified effective scaffolding approaches which preceptors were encouraged to use, with varying strategies for early phase placement students and those with more experience. The protocols for counseling were particularly emphasized as useful for the inexperienced because *'they're a guide and then the next step is, they (the students) listen to the other pharmacists as they counsel and then you step back'* (preceptor).

Support, through additional assistance, direction and instruction from the preceptor was viewed as essential, particularly during early on-site placements for students who are inexperienced in patient processes for counseling. Assistance includes discussing the counseling process used by the preceptor and other staff at that particular site, and some key medical issues relevant to that location; discussing case scenarios and having students research appropriate responses and discuss these with the pharmacist; observing the pharmacist in the patient counseling processes, and discussing the observation and various cues of the patient/client interaction. Co-counseling by the student on placement and pharmacist was another useful scaffolded approach cited. For students with more on-site experience with counseling, guidance in the form of identifying an appropriate patient/client for the counseling situation, posing questions prior to the counseling session such as *'what would you say if..'*, having prior discussion about medication for a particular person, observing while the student conducts the counseling session and then asking questions afterwards or providing prompts during the session, were cited as useful strategies. Preceptors noted that experienced students sometimes needed prompts, guidance and debriefing to ensure that information provided to patients/clients was informative without being overwhelming in detail.

The post-placement phase was only infrequently discussed as part of the scaffolding process.

While responses to the use of scaffolding approaches were very positive, there were occasional issues raised. For example, students viewed role play as providing useful practice opportunities; but a key critique of students was in relation to the degree to which students who were involved in peer counseling undertook the process in a serious manner, with this view reflected in comments such as *'you don't take it seriously.'*

Students were concerned about the fact that some preceptors did not plan for, and adopt a staged approach to building students' counseling skills *'sometimes they just told you to do it and jumped in when there was a problem'* (student comment).

Despite the occasional expression of concern, scaffolding was generally supported. A comment from an intern year student captures many of the key points raised about the benefits of scaffolding to build communication skills, particularly in relation to patient counseling within the placement situation: *'communication skills grow through more contact with people and increasing confidence and needing to think on your feet, getting a feel for people, watching the preceptor and taking on their approach especially about how to approach people about different things ...seeing how different people (preceptors) approach males and females, old and young.'*

All stakeholders noted that students who had a part-time job, within any customer service role but particularly within a pharmacy, often had greater skills in all facets of communication and were more confident within patient counseling activities. However, some students with part-time pharmacy work which essentially focused on dispensing, had little opportunity to practice patient counseling and the following comment captures their goal for experiential placements: *'I want to spend the two weeks counseling.'*

## DISCUSSION

Australian University preparatory pharmacy programs provided formal learning opportunities, in which the use of protocols was encouraged for counseling practice. Class exercises such as patient counseling role plays were frequently used. Experiential placements provided opportunities for preceptor support for students' skill development, for example, assessment by preceptors was undertaken in some programs. Guided reflection by students was also encouraged in some universities.

A number of key features emerged from the consultations. Firstly there was a theme of the university program as a 'journey' of learning various types of communication approaches including counseling. In experiential placements, students began to flexibly apply their knowledge and skills, learnt through university protocols, by adapting them to the characteristics of a specific situation. Partnership between practicing pharmacists with pharmacy schools to meet students' experiential education outcomes was evident.

Both pre-placement and during-placement scaffolding were significant. At the pre-placement phase, there was strong support for initial use of a framework for counseling such as that shown in Figure 1. However, there was also a sense that students needed to move beyond the protocol and utilize a conversational approach in their counseling.

Extant practice amongst Australian pharmacy school academics appears to align with models of *novice to expert* which propose that early and middle stages in the progression involve standard routines that enable coping in a *crowded context*, whereas explicit rules are abandoned as behavior becomes more automatic at the competence stage (Dreyfus & Dreyfus, 1996). In the placement stage, the assessment rubric displayed in Table 1 continues to provide a framework which students can use as a counseling protocol.

Secondly, it was acknowledged that preceptors had an important role in mentoring and coaching students during experiential placements. Preceptors also had responsibility for assessment (Table 1). The role of preceptors in modeling counseling behaviors has been suggested to *"effectively and positively impact the communication skills of their students"* (McDonough & Bennett, 2006).

A number of gaps were identified. In addition to interacting with 'real' patients and/or customers in a service relationship, communication with pharmacists and other support staff within the site could also be explored by the student. Our work within the two stages has focused on communication within the context of counseling; however, it is noteworthy that handbook examples which focused on development of communication skills and service, relationships within the work team and conflict resolution were not identified, even though conflict may occur (McDonough & Bennett, 2006). Given the changing demographics of the Australian population, it was also interesting to note the omission of any direct reference throughout placement handbooks to the importance of cross cultural communication in counseling such as has been implemented in other countries, for example, the United States (Assemi, Cullander, & Hudmon, 2006). In view of the role of pharmacists in community health care teams, (reviewed (Bell, Rosen, Aslani, Whitehead, & Chen, 2007)) scaffolding of counseling skills with clear reference to mental health was also not evident. For registration as a pharmacist in Australia, graduation from an accredited university program and a year-long internship program is required. The question of whether development of interactional communication skills with respect to workplace communications, cultural competence and mental health need to be introduced in experiential placements of the university program is pertinent.

## CONCLUSION

Communication skills and, in particular, counseling were viewed as the most essential competency for fulfilling the professional pharmacist role. There appears to be support from both students and preceptors for the approaches used across Australian pharmacy schools of scaffolding for development of counseling skills through a range of approaches. Development of counseling skills is approached in a staged manner, with a focus on the use of protocols in the early stages and with a range of approaches being used to support further skill development in placements.

Recent emphasis in literature is on providing students 'ill-structured,' unpredictable challenges to help students rehearse for professional life. Our findings indicate that scaffolding is regarded as critical to support this transition.

The work has relevance both for other health professional programs and other programs which include experiential workplace learning with respect to the preparation of students for workplace activities.

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