

# Comparing student and tutor perceptions regarding feedback

THERÉSE KAIRUZ<sup>1\*</sup>, BRADLEY LAWRENCE<sup>2</sup>, JACQUELINE BOND<sup>2</sup>

<sup>1</sup>Pharmacy, School of Medicine & Dentistry, James Cook University, Queensland, Australia

<sup>2</sup>School of Pharmacy, The University of Queensland, Queensland, Australia

## Abstract

**Background:** Feedback is information provided by another person regarding a skill, understanding or performance. Although there is substantial evidence that feedback is a critical influence on student learning there is little research on feedback in pharmacy education.

**Aim:** To increase awareness of the complexity of feedback by comparing and contrasting the perceptions of teachers and students regarding feedback in pharmacy practice workshops.

**Methods:** Focus groups were conducted among final-year pharmacy students and tutors who taught into the third year of a four-year BPharm program.

**Results:** Mutually identified influences on feedback were: student-student and tutor-student interactions, student confidence or anxiety, assessment, group size and teaching skills. Only tutors identified academic preparedness and layout of the learning space as influencing feedback, while group composition emerged from student data. An underlying desire for engagement suggests that there is a social process associated with feedback.

**Conclusion:** There was a degree of consensus between tutors and students regarding influences on feedback. Modifiable influences, including group size and tutor training, could enhance feedback.

**Keywords:** *Feedback, Informal, Peer, Qualitative, Student, Teacher*

## Introduction

There is substantial evidence that feedback is a critical influence on student learning (Hattie & Timperley, 2007; Shute, 2008). Feedback may be constructive (positive) and/or destructive (negative) depending on context and the perceptions of giver and receiver. According to Price *et al.*, (2010) feedback is associated with multiple meanings and it serves a variety of functions, including allowing learners to reflect on their performance (Weaver 2006). In this paper, feedback is based on the definition by Hattie and Timperley (2007) and is conceptualised as information that is provided by another person (*e.g.* teacher or peer) regarding a skill (*e.g.* communication) or understanding (*e.g.* problem-solving). Feedback is commonly understood to be 'by tutors, given to students' and the role of teachers in providing feedback has received attention in the higher education literature (Slavin, 1980; Steinert, 2004; Topping, 2005; Carless, 2006; Shankar *et al.*, 2011); however, there is little research about feedback in pharmacy education. There is also growing interest in feedback among peers during learning activities, that is, from student to student (Topping, 2005).

Research should "...qualitatively... investigate how feedback works in the classroom" (Hattie & Timperley, 2007); however, the frequency of feedback in 'traditional classrooms' is low (Weaver, 2006; Hattie & Timperley,

2007; Pokorny & Pickford, 2010; Price *et al.*, 2010). Dall'Alba and Sandberg (1996) found that learning activities delivered in a workshop-style format were effective for competency development in professional programs and it is plausible that the success of workshops is partly due to the learning activities which facilitate feedback between teachers and students. It is important to acknowledge that feedback which is delivered badly may be damaging to the recipient and workshops may provide an appropriate context in which to explore feedback. In this paper feedback includes 'informal feedback' which is considered to be the verbal and nonverbal feedback which arises spontaneously during interactions and exchanges.

The study occurred in Australia where the most common pathway to becoming a pharmacist is completion of a four-year Bachelor of Pharmacy (BPharm) degree followed by 48 weeks of supervised practice (the 'internship') and the successful completion of competency assessments (Pharmaceutical Society of Australia, 2010). The context was pharmacy practice workshops in a BPharm program at a university in the state of Queensland which offers eight compulsory undergraduate pharmacy practice courses (subjects) over the duration of the BPharm. 'Pharmacy practice' includes patient education, medication counselling, and proprietary and non-proprietary dispensing (Pilnick, 2003).

\*Correspondence: Dr Therése Kairuz, Pharmacy, College of Medicine & Dentistry, James Cook University, Townsville, 4811, Queensland, Australia. Tel: +61 7 47813222; Fax: +61 7 47815356. Email: therese.kairuz@jcu.edu.au

### **Teaching and Learning context: Pharmacy Practice Workshops**

Weekly classes in pharmacy practice subjects involved two to three hours of lectures by faculty members ('lecturers') in a large auditorium, and a two-hour workshop facilitated by tutors in smaller venues (30 students/tutor). The student:staff ratio provided the impetus for this study as it was considered important to understand more about feedback to maximise the learning experience. Tutors responsible for facilitating the workshops were practicing pharmacists who were employed on a part-time basis at the university as teacher-practitioners. Newly-appointed tutors either participated in tutor-training sessions conducted by the university staff development department or developed their teaching style and techniques 'on the job' following initial shadowing of an experienced pharmacy tutor. In some pharmacy practice subjects a group of students remained with the same tutor throughout the semester while in others, tutors rotated among the groups.

In pharmacy practice subjects there was a written examination and an oral counselling exam; in the second year subject there was also a summative dispensing assessment. Learning activities included review of case-based scenarios, information gathering and critique using web-based and printed reference materials, and communication exercises such as pharmacist-patient and pharmacist-doctor role-plays. Workshops were designed to promote interaction and enhance opportunities for informal feedback exchanges and were conducted in two types of purpose-built venues: during 'dispensing workshops' students were seated at individual computers in large 'dispensing laboratories' and were expected to retrieve relevant information and dispense mock prescriptions that would meet legal, ethical and therapeutic standards; during 'counselling workshops' students were seated in groups of five or six around circular tables in smaller 'counselling rooms' with one computer per table. Each of these venues had access to two small adjoining 'mock pharmacies' containing audio- and video-recording equipment; role-plays were often broadcast from the mock pharmacies to the adjacent counselling rooms and were used to initiate discussion. Despite the many opportunities for interaction in dispensing and counselling workshops not all students appeared to participate in informal exchanges with their tutor and/or peers.

Steinert (2004) found that small group learning allowed students to engage with teachers and peers, and recommended further research into perceptions about feedback from teaching staff and from students. Research into feedback in pharmacy education is relatively sparse (Poulos & Mahoney, 2008; Hall *et al.*, 2012; Hanna *et al.*, 2012) and despite the central role it is believed to play in learning, feedback remains "comparatively under-researched" (Hall *et al.*, 2012). The aim of this study was to increase awareness of the complexity of feedback by comparing and contrasting the perceptions of teachers and students regarding feedback in pharmacy practice workshops.

## **Methods**

### **Study Design**

The choice of qualitative research methods was supported by the paucity of research exploring feedback from the perspective of pharmacy undergraduates (Hanna *et al.*, 2012). Focus groups were conducted as they promote interaction between participants and provide an environment that facilitates the exchange of ideas (Frasier, 1997). Data collection and analysis followed rigorous procedures for qualitative research as described by Mays and Pope (1995) and ethical approval was obtained from the university where the study was conducted (Ethical approval ref no. 2012/13).

The research team comprised three members; two were experienced pharmacy faculty and the third was a final-year pharmacy 'honours' student. A student was included in the research team to provide insight into students' "experiences of the world" (Hoepfl, 1997) as this perspective may not have been accessible if the team were comprised only of faculty members (Hall *et al.*, 2012). Approximately 10% of the pharmacy undergraduate cohort completed an elective 'on-course honours' course in addition to the compulsory BPharm subjects; the course included a research project and entry into BPharm (Hons) was competitive.

### **Data Collection**

To avoid potential issues of power, authority and bias the faculty members of the research team were not directly involved with data collection as undergraduate students are considered to be a vulnerable population (Bournet-Trites & Belanger, 2005). The tutor group discussion was facilitated by the student researcher and a pharmacist who had interviewing experience but was not associated with the BPharm program facilitated the student focus groups. All discussions were digitally recorded and transcribed verbatim.

Tutor perceptions were gathered using a purposive sample of tutors with at least two years' experience of facilitating pharmacy practice workshops at the third year level of the four-year program. This year level was selected as tutors were required to assist students to apply skills and integrate knowledge gained in previous years. An exclusion criterion for tutors was their involvement in teaching or examining in the fourth year of the program, as the student member of the research team was a fourth-year student. Eligible tutors were contacted by email with an invitation to participate. An interview guide was developed to facilitate discussion and was adapted for tutors and students respectively (Appendix A).

Student perceptions were gathered from final (fourth) year BPharm undergraduates who were invited to participate in the study via email. This cohort was targeted as they had experienced eight semesters of pharmacy practice workshops and learning activities in the purpose-built dispensing and counselling 'teaching and learning spaces', and a diversity of tutoring styles. The student researcher was present during the focus

groups and made field notes for triangulation purposes and to contribute to credibility (Lincoln & Guba, 1985). Both discussions were transcribed by the facilitator and verified by the student researcher to enhance confirmability (Lincoln & Guba, 1985). Data from the two student focus groups were pooled to become the 'student dataset' while data from the tutor focus group comprised the 'tutor dataset'.

### Data Analysis

The student researcher conducted preliminary content analysis of the raw data. During the initial process of coding, quotes describing issues of potential interest were identified as 'meaning units'. These were subsequently refined into condensed meaning units which reflected his interpretation of the experiences that had been described by the participants (Sandelowski, 2000; Graneheim & Lundman, 2004). After reviewing the meaning units and condensed meaning units, patterns began to emerge and these were interpreted by abstraction into categories, sub-themes and finally into overarching themes. The processes were undertaken separately for the student and the tutor data. To ensure confirmability the first author verified the coding; subsequent discussions included all authors until consensus was reached through an iterative process of revisions (Lincoln & Guba, 1985; Mays & Pope, 1995; Graneheim & Lundman, 2004). Findings from the tutor and student datasets were then compared and contrasted.

### Results

Five tutors participated in the tutor focus group and thirteen fourth-year undergraduates volunteered to contribute to the study. Two student focus groups were conducted with six and seven students respectively, as a small number of participants (five to eight) is recommended to encourage discussion (Frasier *et al.*, 1997). Each focus group lasted approximately one hour to enable sufficient discussion and was concluded when it became apparent that participants were no longer engaged. Analysis of the two datasets generated a hierarchy of codes and two interdependent themes associated with feedback emerged: People and Curriculum. Emergence of similar subthemes in both datasets was considered to be data saturation; the few differences that emerged between students and tutors are the focus of this study. The term 'curriculum' is used in a broad sense in this paper and includes course design such as pedagogical approaches and assessment, and course administration (contact hours, workshop size, and allocation of tutors and students to workshop groups); curriculum is therefore not limited to content or syllabus.

Influences on feedback emerged from student and tutor data. Influences associated with the People theme included interactions ('exchanges') which occurred between student peers and also between student(s) and tutor (Table I). Students felt that feedback interactions involving peers could be positive if they had

approachable classmates and negative if their peers were condescending. Confidence/anxiety emerged as an influence from students and tutors. The latter felt that confidence/anxiety affected student engagement in activities, particularly role plays when these had to be performed and critiqued in front of the class while some students felt the experience was "intimidating". From the student dataset, tutor teaching skills emerged as an influence on feedback; skills included the appropriate allocation of time to learning activities, the effective management of student behaviour, facilitation of interactions between students, how tutors encouraged students to participate, and the manner in which they provided feedback to students. Only tutors perceived that the academic preparedness of students influenced feedback, and they felt that students who put more effort into preparing for workshops demonstrated a higher degree of participation in learning activities and were more likely to seek and engage with feedback.

The influences on feedback associated with the Curriculum theme included assessment and group factors (Table II). Assessment during workshops emerged from both datasets. Students perceived that assessment during workshops reduced the opportunity for feedback, and that summative assessment shifted the focus away from learning. However, they felt that formative activities with clear links to subsequent summative assessment, such as practice for the oral exam, motivated them to seek feedback. Tutors also perceived that assessment during workshops shifted attention away from learning. Assessment reduced the time available for feedback interactions which impacted on the potential for synthesising new knowledge, although tutors also believed that students devoted more effort to summative assessment activities than to activities that involved formative assessment, especially peer-assessment.

The influence of group size emerged from student and tutor data. Students perceived group size to play a significant role in workshop dynamics and interactions and thus significantly influenced informal feedback exchanges; tutors felt it was not possible to deliver individualised feedback to a group of 30 students during a two-hour workshop. Group composition as an influence on feedback emerged from student data only; they perceived that group composition played a role in group dynamics and hence, on the giving and receiving of feedback. Most students were not in favour of being allocated to groups and they preferred to select a timetabled workshop session so as to be with friends; however, some considered a balance between friends and other students to be necessary for effective learning.

An influence that emerged from tutor data only was the design of the teaching and learning spaces. Layout of the venue affected personal exchanges and in the larger dispensing venues tutors experienced challenges due to the distance that needed to be covered to have a one-on-one conversation in response to a question from a student, and issues with audibility.

**Table I: The coding process for student and tutor perceptions: *People Theme***

Quote (Meaning unit)	Condensed meaning unit	Category	Sub-theme
<b>Student perceptions</b>			
'...some people can make you feel really relaxed' [FG2S12]	Approachable classmates	Peer interactions	
'...people can be quite condescending...' [FG2S12]	Condescending classmates		
'...we had to actually go into the rooms and we had to counsel and we were filmed...I really hated it at the time... so, it's just awkward...' [FG1S4]	Emotion	Confidence / anxiety	Student factors
'You're not afraid to like speak out because you don't feel like you're going to be made to feel stupid' [FG2S10]			
'...then you can get a one on one relationship with them... it's not like they are making the orders at you but it's sort of like a collaboration...' [FG1S3]	Desire for connection	Tutor-student interactions	
'...trade tutorial groups just because they know of particular tutors or the way the particular tute is run would be better for them...' [FG2S12]	Preference - Tutor		
'Because [s/he] was very good at explaining, going through it with every student step-by-step making sure that you understand...' [FG1S6]	Teaching for understanding	Teaching skills	Tutor factors
<b>Tutor perceptions</b>			
'...I think ideally students giving each other feedback is [a] really, umm, productive thing and they seem to value it quite a lot' [FG3T4]	Value of peer feedback	Peer interactions	
'...the students actually struggle a lot giving feedback to each other in that sense' [FG3T4]	Peer feedback as a skill		
'...they would like to be nice to their friends...' [FG3T5]	Participation	Confidence / anxiety	Student factors
'...Because you find that people are very reluctant to put their hand up and say things, so you don't know who understands and who doesn't...I said: well, the person who does it, the more you practice, the more -the better - you'll be at this' [FG3T1]			
'Even if they haven't looked at all the material, they can at least know where to find it' [FG3T5]	Participation	Preparedness	
'...there's usually an element of tutor feedback with the class just to ensure everyone's on the same page...' [FG3T5]	Feedback for learning	Tutor-student interactions	Tutor factors

FG = focus group, S = student, T = tutor

**Table II: The coding process for student and tutor perceptions: *Curriculum Theme***

Quote (Meaning unit)	Condensed meaning unit	Category	Sub-theme
<b>Student perceptions</b>			
'...everyone was just concentrating on doing the assessment rather than the tute...' [FG1S2]	Summative assessment distracting from learning	Assessment during workshops	
'It's just the most nerve-wracking thing and I think if you get that sort of practice and that sort of feedback, and you get your process kind of sorted in your head and you have good feedback, then that's going to kind of be best for further life in general' [FG1S5]	Motivation for seeking feedback	Oral exams	Assessment factors
'If you are in a group of friends you are more and more likely to go in and be happy, and participate as well' [FG1S6]	Preference for friends	Group composition	
'I don't like it when we're forced to be in groups with people that we don't have a connection with' [FG1S5]			
'...I think you need a balance of people that you're familiar with... to bring the whole different view or set of different experiences to the situation' [FG2S10]	Preference for peers and friends		Group factors
'...you don't want to have too many people in the tutorial cause that kind of takes the emphasis away from, you know, small learning groups' [FG2S9]	Preference for small group learning	Group Size	
<b>Tutor perceptions</b>			
'...they ended up focusing totally on those questions...it took the total focus away from counselling' [FG3T4]	Summative assessment distracting from learning	Assessment during workshops	Assessment factors
'...they're not checking their mate's work properly or one is not checking their work properly anyway' [FG3T3]	Formative peer assessment		
'...going into the counselling room with a group of five or six students... didn't feel as threatened by your feedback cause it was not the whole class listening' [FG3T4]	Preference for small group learning	Group size	Group factors
'Dispensing needs to be one on five for you to be able to check everything' [FG3T5]			
'Particularly in the dispensing rooms when you've got students spread out over a vast area and there's only one of you to try and make sure all those, you know, really important points come across to all those individual students...it depends on the room you are located in to hold that tutorial' [FG3T2]	Learning space		

FG = focus group, S = student, T = tutor

## Discussion

This discussion is placed within the broader higher education as well as pharmacy education literature. It is anticipated that the findings will be of value to faculty involved in designing workshop-based learning activities in other pharmacy programs; therefore, we have used ‘thick descriptions’ (Lincoln & Guba, 1985) where appropriate to facilitate transferability to other contexts (Kuper *et al.*, 2008).

Although many studies report on feedback regarding performance that is provided by faculty teaching staff (Weaver, 2006; Price *et al.*, 2010; Adcroft, 2011; Hall *et al.*, 2012; Hanna *et al.*, 2012;), the current study explored feedback from the perspective of students and teaching staff (tutors). Both tutors and students identified people-related influences on feedback, including students’ confidence/anxiety during workshop activities and their relationships with their peers and their tutors, as well as curriculum-related influences such as the effect of assessment during workshops and the size of student groups. Curriculum influences, including pedagogical approaches, may be modifiable; hence, feedback and learning could be enhanced through appropriate changes that facilitate the giving and receiving of feedback. It was interesting that only students identified group composition as an influence on feedback, while only tutors identified students’ academic preparedness and the layout of learning spaces.

### *Feedback as a social process*

Generally, it has been reported that students are dissatisfied with feedback (Price *et al.*, 2010) yet students in this study expressed a desire to not only receive quality explanations from their tutors, but also to form ‘human connections’. In this study, preferences associated with feedback emerged; for example, students’ desire to select their tutor, connect with their tutor and exercise some control over the composition of their peer group, and tutors preferred smaller venues as they felt that the layout and design of the learning space impacted on interactions and exchanges. These preferences suggest there might be a latent need to engage in a learning relationship and actively participate in the two-way communication that informal feedback represents. Perhaps surprisingly, tutors did not specifically mention teaching skills as an influence in the feedback process although they may have subconsciously encouraged situations that were conducive to providing and receiving feedback. Tutors were motivated to interact with students in order to enhance understanding; indeed, ‘tutors’ emerged from the both datasets as a factor that affected feedback.

In most cases interactions and exchanges were an implicit component of participants’ perceptions about feedback which suggests that two-way communication is necessary. The need for feedback to evolve from a “one-way transmission process” to an ongoing “dialogue” has only emerged recently in the higher education literature (Pokorny & Pickford, 2010). The quality of learning relationships (student-student and student-tutor) impacts

on both themes emerging in this study and there appears to be a dynamic interplay between People and Curriculum. The findings support the recent shift towards understanding feedback as a social rather than technical process (Higgins *et al.*, 2001; Pokorny & Pickford, 2010). If one considers that dialogue, communication and ongoing relationships are central to the effectiveness of feedback, it is understandable that summative assessment would disrupt the processes and dynamics required for learning (Weaver, 2006; Cartney, 2010). Perhaps it is not surprising then, that tutors and students felt that any form of summative assessment during workshops shifted students’ attention away from learning and reduced the time available for learning activities.

Feedback should minimise social embarrassment (Topping, 1998) and perceived threat to the self (Hattie & Timperley, 2007). In the current study, students’ anxiety about being observed and critiqued and their reluctance to engage in feedback exchanges - even with friends - may indicate that they did not perceive the learning environment to be safe. It is possible that students wanted to form learning relationships with their tutor and peers to mitigate any potentially negative feedback experiences and tutors need to develop a classroom climate that fosters positive, constructive peer- and self-assessment (Hattie & Timperley, 2007). Tutors need to be aware of the affective as well as the cognitive aspects of group learning (Pokorny & Pickford, 2010).

While it was apparent that students valued peer interactions, some tutors believed that peer feedback was not effective; they felt that students didn’t have the skills to provide and receive meaningful feedback. For feedback to be effective students must be able to actively seek out and act on the information received to further their learning (Nicol & Macfarlane-Dick, 2006) and this requires skills to engage in effective feedback exchanges. Workshops may not have adequately addressed the need to scaffold students’ development in the area of giving and receiving feedback. Recent research identified a gap between the feedback given and feedback used by students (Cartney, 2010) and bridging this gap poses a challenge. Adcroft (2011) recently argued that faculty and students have a ‘mythology’ regarding the purpose and effectiveness of feedback, and it is interesting that we found a degree of consensus between influences and themes that emerged from student and tutor data. The following quote provides insight into the value of feedback in the learning process:

*“Maybe it’s to check your understanding.... and then I guess once you sort of get feedback on it as well - it sort of goes into your head more because you thought about it more than once.”* [Student]

### *Limitations of the study*

Small numbers of participants are typical of pilot, exploratory and qualitative research in pharmacy education (Anderson, 2010; Hanna *et al.*, 2012). The study provided an opportunity for students who felt strongly about their learning experience in workshops to

voice their opinions; because participation was voluntary the findings may not be representative or generalisable.

Differences in the way that subjects were designed with respect to rotation of tutors, for example, may have impacted on individual students' perceptions of feedback, either positively or negatively, as rapport and relationships are important in effective feedback. Although workshops were designed to facilitate feedback, some students may not have known how to give feedback or may not have appreciated the feedback they received. Despite these limitations, the findings contribute to the pharmacy education literature as few studies have compared teacher (tutor) and student perceptions about feedback.

### Recommendations for future research

The findings raise a number of issues that require further research: the effect of group composition and size on the effectiveness of feedback within workshops; the design of learning activities which explicitly teach students evaluative skills such as giving peer feedback; and the emotional aspects of learning including the role of peer and tutor-student relationships in group learning. Research into teaching skills to create a safe learning environment that promotes positive feedback exchanges, builds confidence and minimises anxiety should be encouraged. Furthermore, the findings from this pilot could be used to inform a large quantitative study.

### Conclusions

There was a degree of consensus between tutors and students regarding influences on the feedback that occurs during workshops. These influences include the effect of group size and assessment during workshop activities, the nature of student-student and student-tutor interactions as well as the confidence/anxiety experienced by students. Only tutors felt that student academic preparedness played a role in feedback, while only students perceived that the composition of student groups and tutor teaching skills influenced feedback. Overall, the findings contribute to pharmacy literature on feedback and the emerging conceptualisation in higher education of feedback as a social process.

### Acknowledgments

The authors wish to thank the tutors and students who participated in the study, colleagues for their helpful comments, and the facilitator of two of the focus groups, Kim Bellamy. The authors declare no conflict of interest.

### References

- Adcroft, A. (2011). The mythology of feedback. *Higher Education Research & Development*, **30**, 405-419.
- Anderson, C. (2010). Presenting and Evaluating Qualitative Research. *American Journal of Pharmaceutical Education*, **74**, Article 141.
- Bournot-Trites, M. & Belanger, J. (2005). Ethical Dilemmas Facing Action Researchers. *Journal of Educational Thought*, **39**, 197-215.
- Carless, D. (2006). Differing perceptions in the feedback process. *Studies in Higher Education*, **31**, 219-233.
- Cartney, P. (2010). Exploring the use of peer-assessment as a vehicle for closing the gap between feedback given and feedback used. *Assessment & Evaluation in Higher Education*, **35**, 551-564.
- Dall'Alba, G. & Sandberg, J. (1996). Educating for competence in professional practice. *Instructional Science*, **24**, 411-437.
- Frasier, P.Y., Slatt, L., Kowlowitz, V., Kollisch, D.O. & Mintzer, M. (1997). Focus groups: a useful tool for curriculum evaluation. *Family Medicine Journal*, **29**, 500-507.
- Graneheim, U.H. & Lundman, B. (2004). Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, **24**, 105-112.
- Hall, M., Hanna, L.A. & Quinn, S. (2012). Pharmacy Students' Views of Faculty Feedback on Academic Performance. *American Journal of Pharmaceutical Education*, **76**, Article 5.
- Hanna, L.A., Hall, M. & Hennessey J. (2012). An exploration of feedback provision in a pharmacy degree programme from students' perspectives. *Pharmacy Education*, **12**, 10-13.
- Hattie, J. & Timperley, H. (2007). The Power of Feedback. *Review of Educational Research*, **77**, 81-112.
- Higgins, R., Hartley, P. & Skelton A. (2001). Getting the Message Across: The Problem of Communicating assessment feedback. *Teaching in Higher Education*, **6**, 269-274.
- Hoepfl, M.C. (1997). Choosing Qualitative Research: A Primer for Technology Education Researchers. *Journal of Technology Education*, **9**, 47-63.
- Kuper, A., Lingard, L. & Levinson, W. (2008). Critically appraising qualitative research. *British Medical Journal*, **337**: a1035.
- Lincoln, Y.S. & Guba, E.G. (1985). *Naturalistic Enquiry*. Beverley Hills, CA: SAGE
- Mays, N. & Pope, C. (1995). Qualitative research: Rigour and qualitative research. *British Medical Journal*, **311**, 109-12.
- Nicol, D.J. & Macfarlane-Dick, D. (2006). Formative Assessment and Self-Regulated Learning: A Model and Seven Principles of Good Feedback Practice. *Studies in Higher Education*, **31**, 199-218.
- Pharmaceutical Society of Australia. (2010). National Competency Standards Framework for Pharmacists in Australia 2010 (on-line). Available at: <http://www.psa.org.au/download/standards/competency-standards-complete.pdf>. Accessed 25<sup>th</sup> June, 2015.

Pilnick, A. (2003). "Patient counselling" by pharmacists: four approaches to the delivery of counselling sequences and their interactional reception. *Social Science & Medicine*, **56**, 835-849.

Pokorny, H. & Pickford, P. (2010). Complexity, cues and relationships: Student perceptions of feedback. *Active Learning in Higher Education*, **11**, 21-30.

Poulos, A. & Mahony, M.J. (2008). Effectiveness of Feedback: The Students' Perspective. *Assessment & Evaluation in Higher Education*, **33**, 143-54.

Price, M., Handley, K., Millar, J. & O'Donovan B. (2010). Feedback: all that effort, but what is the effect? *Assessment & Evaluation in Higher Education*, **35**, 277-289.

Sandelowski, M.(2000). Whatever happened to Qualitative Description? *Research in Nursing & Health Journal*, **23**, 334-340.

Shankar, P.R., Gurung, S.B., Jha, N., Bajracharya, O., Karki, B.M.S. & Thapa, T.P. (2011). Small group effectiveness during pharmacology learning sessions in a Nepalese medical school. *Australasian Medical Journal*, **4**, 327-331.

Shute, V.J. (2008). Focus on Formative Feedback. *Review of Educational Research*, **78**,153-189.

Slavin, R.E. (1980). Cooperative Learning. *Review of Educational Research*, **50**, 315-342.

Steinert, Y. (2004). Student perceptions of effective small group teaching. *Medical Education*, **38**, 286-293.

Topping, K. (1998). Peer Assessment between Students in Colleges and Universities. *Review of Educational Research*, **68**, 249-276.

Topping, K.J. (2005). Trends in Peer Learning. *Journal of Educational Psychology*, **25**, 631-645.

Weaver, M.R. (2010). Do students value feedback? Student perception of tutors' written responses. *Assessment & Evaluation in Higher Education*, **31**, 379-394

## **Appendix A: Interview questions**

### **1.1 Tutors**

- We are trying to find out more about the learning that takes place during tutorials, and the role of feedback in that process; how do you think tutorials influence student learning?
- What does "feedback" mean to you?
- Can you think of a time when you provided feedback that 'worked', that was especially helpful or effective for the student(s)?
- Can you think of a time when you provided ineffective feedback? What made it ineffective?
- What was the difference between the effective and the ineffective feedback?

### **1.2 Students**

- What does feedback mean to you?
- We are trying to find out more about the learning that takes place during tutorials, and the role of feedback in that process; can you tell me a bit more about how tutorials have influenced your learning?
- What kinds of feedback have you received in tutorials?
- How do you think the different kinds of feedback have affected your learning?
- How useful have you found the feedback you've received in tutorials? Why?
- Based on your experience, what would you recommend to other students about using feedback during tutorials?
- Is there anything you would like tutors or the School of Pharmacy to do differently in the future?