



# Learning clinical skills in the simulation suite: the lived experiences of student nurses involved in peer teaching and peer assessment



Dianne Ramm\*, Anna Thomson<sup>1</sup>, Andrew Jackson

School of Health and Social Care, University of Lincoln, Brayford Campus, Lincoln LN6 7TS, United Kingdom

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## SUMMARY

*Background:* The benefits of peer teaching and assessment are well documented within nurse education literature. However, research to date has predominantly focused on the advantages and disadvantages for the inexperienced learner, with a dearth of knowledge relating to the perceptions of senior nursing students involved in teaching their peers.

*Aim:* This study sought to investigate the student experience of taking part in a peer teaching and assessment initiative to include the perceptions of both first year nursing students and second/third year participants.

*Method:* Data were collected via open-ended questionnaires and analysed with qualitative 'Framework' analysis. *Findings:* This initiative received a generally positive response both from students being taught and also from those acting as facilitators. Perceived benefits included the social learning experience, development of teaching skills, self-awareness and the opportunity to communicate both good and bad news. Suggestions for improvement included additional time working in small groups, specific supplementary learning materials and the introduction of peer teaching and assessment into other areas of the Adult Nursing Programme.

*Conclusions:* Peer teaching and assessment principles represent valuable strategies which can be utilised in nurse education to develop clinical skills and prepare nurses for real-life scenarios. Further research needs to investigate how to enhance the student learning experience and to fully exploit the potential for simulated experience to prepare students for their future role as registered nurses in clinical practice.

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## Introduction

The ability to effectively teach and educate others is an important skill which is explicitly recognised within the professional standards underpinning contemporaneous nursing practice (NMC, 2008). However, the extent to which nurses feel sufficiently prepared to teach others once qualified, is debatable. Whilst pre-registration courses would seem to represent the perfect platform to equip nursing students with the essential skills required of a qualified nurse, research has highlighted the failure of such courses to perform this essential function in some areas (e.g. Bradshaw and Merriman, 2008; Glen, 2009). Indeed, qualified mentors in clinical practice have reported a general lack of training and experience with regard to this aspect of their nursing role (Hurley and Snowden, 2008; O'Driscoll et al., 2009). It is suggested that nurse education should therefore incorporate elements of teacher training at an early stage of students' professional development, in order to build confidence and provide preparation for the important role of mentorship within clinical practice. This paper investigates a novel approach

to the teaching of specific, practical nursing skills via the introduction of peer teaching and assessment strategies into the simulated clinical learning environment. Clinical simulation is becoming increasingly important in nurse education in order to develop the complex clinical and critical thinking skills required within the contemporary health and social care arena (Rush et al., 2012).

## Literature

Peer teaching methodology produces reciprocal benefits in terms of academic performance whilst also enhancing the learning experience of those being taught (Bryer, 2012; Higgins, 2004; Owens and Walden, 2001). In addition, the use of peer teaching can foster the development of effective teaching skills (Brannagan et al., 2013; McKellend et al., 2013; McKenna and French, 2011). Although it has been suggested that those who teach benefit the most from peer teaching initiatives (Ross and Cameron, 2007), research investigating this area is limited and has predominantly focused on the advantages of peer teaching for the learner (Secomb, 2008). This emphasis might be explained by the inherent difficulty in assessing the teaching and mentorship ability of nurses (Willis Commission, 2012). In lieu of research specifically measuring such teaching abilities, the best proxy indicators may be derived from the outcomes of those being taught, including an appropriate

\* Corresponding author. Tel.: +44 1522 837497.

E-mail addresses: [dramm@lincoln.ac.uk](mailto:dramm@lincoln.ac.uk) (D. Ramm), [athomson@lincoln.ac.uk](mailto:athomson@lincoln.ac.uk) (A. Thomson), [A.Jackson1@uni.bsms.ac.uk](mailto:A.Jackson1@uni.bsms.ac.uk) (A. Jackson).

<sup>1</sup> Tel.: +44 1522 886729.

consideration of both student opinion and academic attainment (Cooper et al., 2013; Lin et al., 2010). On occasion, studies have revealed disadvantages such as resentment around the time commitments involved and variations in the quality of peer teaching (McKenna and French, 2011; Loke and Chow, 2007). However, students have identified specific aspects of peer teaching as being particularly useful, including the use of simulated clinical scenarios facilitated by peer tutors and/or academic staff (Szlachta, 2013). Generally, there is a consensus in favour of peer teaching within the literature, with the majority of participants in research studies highly favouring this approach, perceiving it to be an effective method of meeting their learning needs (Brannagan et al., 2013; Cooper et al., 2013; McKenna and French, 2011; Lin et al., 2010; Loke and Chow, 2007; Goldsmith et al., 2006).

The value of peer assessment is also recognised within contemporary literature. Reported advantages include the potential to improve the quality of learning and empower students (Cassey et al., 2011), develop the ability to make judgements (Morris, 2001) and improve communication and interaction skills (Welsh, 2007). Potential disadvantages have included marking bias and friction between peers (Papinczak et al., 2007; Vu and Dall'Alba, 2007), discomfort with evaluating peers' work and the feeling of being inadequately trained for the role of assessor (Welsh, 2007; Sluijmans et al., 2001). Additional concerns cited are unclear assessment criteria and insufficient confidentiality within the assessment process (Hanrahan and Isaacs, 2001). Whilst peer assessment is therefore not without its challenges it has been successfully implemented and used within nurse education previously (Cassey et al., 2011; Mehrdad et al., 2012; Hunt and Hutchings, 2014). There is however limited knowledge regarding nursing students' perceptions of peer assessment (Shiu et al., 2012), with further research needed in order to further examine students' experiences.

There is also a dearth of studies which focus on the role of student nurses in supporting their peers through the process of learning practical skills. This current qualitative study represents an investigation into the experiences of first year nursing students learning to perform a simple dressing change using aseptic technique. These teaching and learning activities were performed in a simulated clinical setting within the university, having the advantage of providing a safe environment in which learners could practise their skills without risk of harm to patients or clients (Haidar, 2009; Lewis and Ciak, 2011). This study also involved second and third year nursing students and sought their opinions as peer teachers and peer assessors within this two-way learning process.

## Method

The context for this study was a peer teaching and assessment initiative involving first, second and third year adult nursing students which aimed to (a) explore the experiences and perceptions of first year student nurses in relation to the preparation they received for taking their practical assessment and (b) explore the experiences of the second and third year student nurse volunteers regarding their role in peer teaching and assessment. The purposes of the study were to examine the student experience of this peer teaching and learning initiative, and to draw some tentative conclusions about the potential advantages and disadvantages of this approach.

### Data Collection and Analysis

This research study was designed to elicit qualitative data by exploring views and perceptions of students via an anonymised open-ended questionnaire. All first year student nurses were invited to participate via an explanatory announcement on the University's Virtual Learning Environment. The invitation was posted following the completion of summative assessments including resits, to ensure that all students were given equal opportunity to take part. Interested students were required to click on the appropriate on-line 'Survey Monkey' link,

which provided additional information for participants. The link remained open for a three month period, during which students were reminded at monthly intervals about the opportunity to participate in the research via additional announcements. Thirteen responses were received from the first year cohort of 48 students, representing a response rate of 27%.

The second and third year nursing students were given hard copy questionnaires in order to gain feedback from the final year students prior to their graduation. These students were given a copy of the explanatory notes, a letter of invitation and a copy of the survey on their final day of participation. Anonymity was assured via the inclusion of a pre-addressed envelope to enable responses to be posted via the internal mail. Six responses from a total of eleven second and third year participants who assisted in the peer teaching and learning initiative were received, representing a response rate of 55%.

Data retrieved via "Survey Monkey" and in hard copy were analysed using the 'Framework' method (Ritchie and Spencer, 1994).

## Findings

Results are presented with reference to the main themes which emerged from each dataset, following completion of the processes of indexing, charting and mapping inherent in the 'Framework' method of qualitative analysis (Ritchie and Spencer, 1994).

### First Year Student Participants

#### Reflections Around Educational Preparation

Students were initially asked to consider what they felt about the educational preparation they had received in the university, prior to their practical examination. Nine of the thirteen respondents felt positive about such preparations. One suggested:

*'It was extensive, and allowed plenty of time to learn, practise and perfect the technique.'*

Whilst many respondents volunteered that working in small groups was beneficial '*...as you got more chance to practise*', some students felt that they would have appreciated additional opportunities:

*'I feel that more sessions would be beneficial or smaller groups. There was, at times only one chance to carry out the aseptic technique in one session.'*

However, one student was particularly honest regarding the recognition of her own responsibility as an adult learner to engage with the learning opportunities available:

*'I think if I had attended more sessions than I did, I would have been more prepared.'*

#### Approaches to Learning

Students were asked what they found to be particularly helpful when learning the procedure. Whilst one student noted that they were '*...even allowed to take some dressing packs home for practise*', another commented:

*'A few students took time out and went through the procedure in a pre-booked room in the library and at home, however this was not the best way of learning.'*

This serves to illustrate the differences in personal approaches to adult learning, indicative of the willingness of some to become self-directed. This theme recurs in another response:

*'I think there were many opportunities to practise the aseptic technique before the exam both in the planned lessons and extra time with other students.'*

This concept of consolidating knowledge away from the immediacy of the simulation suite is also apparent in the account of another student who felt their performance might have been further enhanced ‘...by practising more in my head.’

#### Examination Nerves and Coping Mechanisms

The majority of students felt that the assessors (comprising both students and academics) had been as supportive as possible on the day of the examination. One stated:

*‘It was very relaxed (as could be), put at ease before exam started...[the lecturer] went through the layout of the room and explained everything.’*

Another recurrent theme within the responses relates to the concept of professionalism during the examination process:

*‘I felt it was a relaxed but professional environment which allowed you to prepare and perform to your best.’*

One particular coping mechanism for dealing with examination nerves is suggested by another student in describing her examination experience:

*‘Fantastic! I was really nervous but the examiner really put me at my ease and it became just like another practise. It was still scary but it was the best it could be.’*

#### Perceptions of Social Learning and the Role of Lecturers and Peers

Second and third year students facilitated the small group working of approximately six first year students per group, who worked together throughout the preparation period. The ‘relaxed style of learning’ and the ‘approachability of the lecturers’ was generally appreciated, with the examination itself variously described by students as ‘wonderful’ and ‘enjoyable’. One to one scenarios were deemed to be especially useful:

*‘Having a tutor to talk to...particularly being able to go into a separate room away from the larger group, with help from the tutor in a smaller setting.’*

The role of the students’ own cohort peers was also a recurrent theme:

*‘Practising in front of the other students, giving me more confidence and allowing the other students to help if I got stuck.’*

One student however, pointed out the potential implications of this for her learning and therefore potentially for the examination:

*‘There was a tendency to rely on help from friends when we were practising.’*

The role of the second/third year students in supporting their first year peers was viewed as beneficial by the majority:

*‘Having the second years come in and help practise was a good help. They put my mind at ease about the assessment as well.’*

However, not all students had a positive experience:

*‘...certain assessing students were really unhelpful and made the whole process a lot harder. They seemed to pass judgement and if I was to do my assessment again I would rather they weren’t taking part.’*

#### Suggestions for Improvements

Specific suggestions for improvement of the learning experience included the provision of a short video clip of the procedure, more

manikins, additional time in small groups, a ‘traffic light system’ (e.g. explicitly detailing when it would be safe to continue) and the use of fake exudate indicating when gloves had become visibly contaminated.

Some students commented on the limitations of working in the space available within the simulation suite, as both groups could not access the ‘dirty area’ at the same time. In consequence, one felt that they lacked experience in:

*‘...practising actual disposal, rather than talking through what we would do with the waste.’*

One respondent also felt that some of the teaching had been repetitive:

*‘More focus on the dressing...rather than the cleaning of the trolley, which after been (sic) shown a first time, doesn’t need to be shown again.’*

#### Second and Third Year Student Participants

##### Teaching and Mentorship Skills

The majority of second and third year student respondents mentioned the development of teaching and/or mentorship skills as a prime motivator in their volunteering for this initiative. One student explicitly recognised the potential transferability of the teaching skills learnt to clinical practice, suggesting that these skills would also allow him/her to ‘...advocate and teach patients on a day to day basis’.

The opportunity to teach also led to some new insights:

*‘I learnt how frustrating teaching can be and ways to cope and manage this to turn it into a positive and aid the students’ learning.’*

Other comments described learning ‘...how to evaluate others’ practice’ as well as ‘giving constructive criticism’.

The importance of continuity in supporting the students was also emphasised:

*‘I think taking part in both parts was very helpful because while you were teaching you were able to look out for things when you were assessing.’*

All the respondents described their learning in relation to teaching and mentoring students as positive as a result of participating in this opportunity. This was exemplified by one respondent:

*‘It gave me the invaluable opportunity to practice teaching others in a safe and supported environment.’*

##### Communication Skills and Breaking Bad News

One respondent explicitly stated that the opportunity to teach and support students had enhanced her communication skills:

*‘Sometimes it required explaining the same thing in different ways to enable all students to gain an understanding, as people learn differently.’*

Two students described their concerns in relation to giving verbal feedback to students following their practical assessment, particularly in the event that a student had been unsuccessful. One suggested:

*‘I found the delivery of pass/fail news to students difficult but relished the opportunity to be involved.’*

Another respondent explicitly stated that her improvement in skills associated with communicating bad news represented one of her main areas of learning as a result of her involvement.

##### Opportunity to Demonstrate Empathy

The more senior students described being present during the assessment process to offer a sense of ‘friendship’ and also ‘representing...

someone in the room that understands how they feel'. The word 'sharing' represents a recurring theme.

The second and third year students suggested that they might be particularly, if not uniquely, well-placed to teach and support the first year cohort. One stated that they would have:

*'...an understanding of their concerns and anxieties and have the opportunity to share my memories.'*

#### Enhanced Technical Knowledge

When asked about what they had learnt, the need to revisit their own, personal knowledge was evident in some responses:

*'It enhanced my aseptic technique as students ask questions and situations occurred which made me consider aseptic technique principles which has led to a deeper understanding of the subject.'*

Other students detailed specific learning points which they could incorporate into their own clinical practice:

*'...a new technique of applying the bag to the trolley—learning...what others do to make it easier.'*

There was also an allusion to the important concepts underpinning professional practice within one reflective account:

*'I learnt more about how important it is to ensure high standards and strict pass rates—protecting patients and service users.'*

#### Value of the Experience: Insight and Self-Awareness

The invitation to participate was deemed by the second and third years to have a particular significance. It indicated that the academic nursing team 'acknowledged the learning and development' of the senior students:

*'I am more confident to assess and teach students and this will help me dramatically in my nursing career.'*

Students generally reported an appreciation of the benefits of being involved with the process. For example:

*'This experience was massively beneficial to me. I learnt things about myself and this was not expected, but was extremely helpful. I learnt about my personal strengths and weaknesses—which was not intentional, but great for my future now qualified.'*

One respondent suggested that her experience had been transformational, having implications for professional relationships extending far beyond the immediate classroom:

*'... it has changed the views of all students of the nursing team. It has integrated the nursing team so that students and teaching staff feel a part of one team with the same aims. We are all working together to enable students to graduate as registered nurses.'*

Another student reflected on the experience and stated that they had learned '*...to always remember I was once a student nurse and be sensitive and supportive to students I may work with in future*'. The majority of the students explicitly recognised the importance of exposure to the 'other side' for their future careers, mentioning either the need to teach as part of their role, and/or suggesting that they felt this experience to be valuable in terms of their CV and for their future employability.

#### Practical Considerations and Suggestions for Improvement

Students commented on the organisation of the learning experiences, suggesting areas that worked particularly well:

*'Having two small groups with a student supporting them and [the lecturer] helping with glove application in the separate room.'*

One respondent suggested the introduction of some additional learning materials '*...to make them research and read the theory...to help them understand it better and not see it as just a schedule of tasks governed by rules of what they are allowed or not, to do*.' The use of a mock exam was also suggested prior to the assessment, together with an annual update for all student cohorts, to ensure standards are maintained.

The importance of providing feedback immediately after the examination was perceived as important. Similarly, the second and third years felt that they too had benefitted from a debrief session afterwards:

*'I felt my whole experience went 'well', in particular the feedback and discussion sessions after the students had finished with the other mentors and I could discuss how we felt the sessions had gone''.*

One student suggested that, as this initiative was perceived to have been such a success, peer teaching and assessing could be utilised in relation to other areas of the Adult Nursing Programme.

## Discussion

Although the response rate from the first year student cohort was low, the responses to the questions about the preparation that they had received were extremely positive. All enjoyed the opportunity to work in small groups and help one another. This is consistent with Biggs' (1999) assertion that peer interaction is enjoyable and sharpens metacognitive learning, as learners closely identify with the opinions and views of colleagues and friends within their peer group. One first year student however, did not feel that the involvement of her second/third year peers had been helpful. There would have been the opportunity to pursue and clarify this issue had the data been collected within an in-depth interview format rather than via a self-administered questionnaire. However, as this research study was small in scale and completed without additional resources in terms of designated time and funding, the opportunities to pursue such avenues were consequently limited.

Several second and third year students alluded to their personal attributes, attitudes and beliefs. This increased self-awareness proved to be both powerful and extremely valuable. This is consistent with the findings of previous commentators who have described the acquisition of self-knowledge as a consequence of working within small peer groups (Biggs, 1999). Students in this study commented that their questioning had led to an examination of their own values and knowledge base and a subsequent reassertion of the importance of maintaining professional standards in their own practice. The responsibility of being involved in assessment was mentioned by one respondent, with several commenting about gaining a new and valuable perspective. This opportunity has clear potential to be transformational, with one student considering how the nursing team of students and lecturers was now 'integrated' and involved in the joint venture of preparing future nurses together.

The finding around the concept of 'breaking bad news' was particularly enlightening and potentially very important for clinical practice, appearing to be an unexpected advantage of this experience. The opportunity to gain this exposure in a relatively safe environment with appropriate support, may not always be available in the clinical setting, where the 'bad news' may relate to a patient's poor prognosis. Indeed, a systematic review of the experience and perceptions of newly qualified nurses in the UK identified that, during their transition from student to staff nurse, many experience stress, uncertainty and fear (Higgins et al., 2009). Clarke and Holmes (2007) further argue this is due to them experiencing situations not encountered previously (i.e. as a student nurse), and cite the responsibility for breaking bad news as a particular example. Therefore, the benefit of aiding communication skills should be recognised as a significant finding and should

receive prominence when offering second and third year students' participation in peer teaching and learning activities in the future.

## Conclusion

This study identified some key benefits associated with peer teaching, peer assessment and some challenges to implementation. The majority of first year students gained from the social interaction offered by working together with more experienced students, sharing tips and hints to enhance their learning and future practice. The senior students described experiencing an improvement in their communication skills, especially in relation to the important concept of breaking bad news. The supervised teaching role allowed students to gain insights into their own personal values, attributes and teaching styles. Interestingly, the implementation of this initiative by the academic teaching team was perceived by the more senior students to represent an explicit recognition of their own professional development, effectively enhancing their credibility with their peers. This in turn became a powerful motivating influence which also prompted participants to reflect on the level of responsibility inherent in the teaching role and to review their own knowledge base for accuracy. In some cases, this exposure proved transformational. Many described an increase, both in their confidence levels and in their competency to teach, as a result of their involvement in this initiative. Further research is needed in order to inform the development of learning experiences incorporating peer teaching in order to optimise the potential of this approach to prepare students more effectively for their role as teachers and clinical leaders.

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