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Impact of a learning circle intervention across academic and service contexts on developing a learning culture

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Summary

Partnerships between university schools of nursing and health services lead to successful learning experiences for students and staff. A purposive sample of academics and students from a university school of nursing and clinicians from three health institutions involved in clinical learning (n = 73) actively participated in a learning circles intervention conducted over 5 months in south east Queensland. Learning circle discussions resulted in enhanced communication and shared understanding regarding: (1) staff attitudes towards students, expectations and student assessment; (2) strategies enhancing preparation of students, mechanisms for greater support of and recognition of clinicians; (3) challenges faced by staff in the complex processes of leadership in clinical nursing education; (4) construction of learning, ideas for improving communication, networking and sharing; and (5) questioning routine practices that may not enhance student learning. Pre–post surveys of hospital staff (n = 310) revealed significant differences across three sub-scales of 'accomplishment' ($t = -3.98$, $p < .001$), 'recognition' ($t = -2.22$, $p < .027$) and 'influence' ($t = -11.82$, $p < .001$) but not 'affiliation'. Learning circles can positively enhance organisational learning culture. The intervention enabled participants to recognise mutual goals. Further investigation around staff perception of their influence on their workplace is required.

Keywords

Leadership, Learning culture, Nursing education, Student nurse, Clinicians

Introduction

The preparation of nursing students for the real world of practice is a significant contemporary issue for health care and education institutions globally. Effective clinical learning experiences are strategic in assisting students to apply knowledge and skills learnt in the academic context. It is recognised that effective partnerships between university schools of nursing and health services lead to successful learning experiences for students and staff (Clare et al., 2003, Henderson et al., 2007, Department of Education Science and Training, 2001). These partnerships are crucial in the promotion of practice communities that enable student engagement in learning about professional behaviour, attitudes and practice (Lave and Wenger, 1991). Clinicians contribute directly to the development of students' clinical competency by creating learning opportunities (Kell and Jones, 2007), and while they are best positioned to facilitate student learning they may not be knowledgeable about students' learning needs and how to address them (Yonge et al., 2007). Previous research identified that registered nurses can be poorly prepared about what is expected of

them and of students (Brammer, 2006, Dickson et al., 2006, Walker et al., 2008), resulting in the perception of students as a burden (Clarke and Henderson, 2005). The paper outlines the results of a learning circle intervention designed to build partnerships between university and health service staff to better understand the issues that both parties face when organising and supporting student learning in clinical practice. The intent of the study was to demonstrate an effective partnership could formulate solutions to effect positive change in clinical learning cultures.

Literature review

Inclusive behaviours by the clinical team can assist students to achieve their learning goals and assimilate into the ward culture (Levett-Jones and Lathlean, 2007, Twentyman et al., 2006). Positive connections between staff and students facilitate sharing of knowledge, critical thinking about practice and professional values (Henderson et al., 2006). Encouraging staff awareness and abilities when interacting with students are essential elements of a positive learning environment (Eraut, 2003). However, there is often a tacit assumption that the practicing clinician is willing, able, and can teach students of their discipline (Brammer, 2006).

Attitudes of staff can determine whether the environment is friendly or hostile (Clarke et al., 2003, Papp et al., 2003). Characteristics of clinicians who support student learning include: providing explanations and giving feedback (Dolmans et al., 2008); being an interactive communicator, showing interest in the student, sharing, and being supportive and collegial (Brammer, 2006). Students value partnering with clinicians when the relationship is characterised by mutual respect, trust, positive attitudes and constructive feedback (Saarikoski et al., 2009).

Academic staff and clinical facilitators employed by the university sector can contribute to the interactions between clinical staff and students during the clinical practicum. Academic staff and clinical facilitators can influence the learning climate in the workplace and foster effective links between the educational institution and clinical setting (Andrews et al., 2006). While many behaviours that facilitate teaching and learning can easily be adopted by clinicians it is often the climate established by the team that is a key determinant in student learning opportunities. There is increasing recognition that learning does not rest with designated ‘mentors’ or enthusiastic partners, rather, learning cultures are premised on team approaches (Barnett et al., 2008, Henderson et al., 2010, McNamara, 2007). Instead of promoting stand-alone staff development sessions as a mechanism to bring about changes in the quality of clinical learning, this paper outlines results of a learning circle intervention that aimed to foster partnership approaches across both academic and clinical settings to promote communication amongst staff, development of a shared understanding, and effect change on the clinical learning culture.

Method

A quasi-experimental design was used to assess the impact of the learning circle intervention on the clinical learning environment. Ethical approval was gained from the participating university and hospitals' ethics committees prior to the commencement of the study.

Participants

Learning circles were conducted with representative groups of academic staff and undergraduate students from a university school of nursing and clinical staff from three public hospitals in south east Queensland, Australia (*n* = 73). The intent was that students would influence discussions during the learning circles and staff representatives would subsequently influence their workplace and foster changes to the organisational culture.

The learning circle intervention

Learning or 'quality' circles were originally developed by Kaoru Ishikawa (1982) in the 1960s and gradually spread to business and education (Scriven, 1984, Wade and Hammick, 1999). Learning circles foster equality amongst participants, encourage open discussion of ideas, and formation of shared visions (Lovett and Gilmore, 2003), and more recently are credited as successful in promoting educational partnerships between a university and work integrated learning settings (Nobel et al., 2005). A learning circle approach was thus implemented to assist in critical reflection of problematic issues arising from clinical education practice, identify new insights, and develop plans for action to ultimately improve learning environments for students. Full day workshops were scheduled where academic leaders, nurse clinicians and students participated in learning circles at the participating university school of nursing between June and November 2007, to consider the clinical experience as a core component of nursing student learning. These sessions were facilitated by both academic and senior clinical staff members. Sessions involved systematic dialogue between a purposive sample of course convenors, nursing managers, clinical facilitators and pre-registration nursing students. Circle membership was inclusive of all levels of nursing staff as learning is the responsibility of the clinical team.

The conceptual framework for the intervention was based on a process of 'interest-based negotiation' to explore sensitive and embedded issues. Five learning circles were conducted over a 5-month period. Discussions were guided by Nobel et al. (2005) four-step framework (to deconstruct, confront, theorise, and 'think otherwise'), that encouraged participants to think abstractly about, and critically reflect upon, identified issues.

The learning circle processes that promoted solution focused negotiation were characterised by exploration of the working interface between the tertiary (higher education including universities) and health (hospitals and health service districts) sectors that have traditionally operated under separate cultural norms and practice realities (Greenwood and n'ha Winifreyda, 1995, Hewison and Wildman, 1996). Learning circle discussion aimed to cultivate proactive partnerships through exploring commonalities of desired goals of both academic and health sector partners (namely, development of competent beginning practitioners), as well as improve reciprocal and co-operative communication through facilitated and guided group interaction.

Procedure

Directors of nursing and campus heads of the nursing school were approached to call for expressions of interest for participants in the learning circles. Academic staff and undergraduate students were invited to participate via internal email and nursing staff were nominated based on staffing availability. Participants needed to be drawn from the various levels of each organisational group to ensure a representative group. Hospitals were reimbursed to release clinical staff to attend the program.

Grouping of learning circle participants

As staff from various levels of the academic and health sectors have differing priorities it was appropriate to conduct learning circles with membership reflecting arguably parallel interests across the institutions. For example, the first group (frontline layer) comprised representatives of the clinical/practicum placement triad of student, academic/clinical facilitator and clinician and was primarily concerned with conversations around issues of *individual patient care*, *decision-making and quality care*, *establishing a supportive learning environment*, *mutuality of learning*, and *learning/teaching process*es.

The second group (gate keepers) comprised course convenors, nurse unit managers, and clinical coordinators. The project team identified this group as being of key significance as their managerial roles required that they act as gatekeepers between the culture of pragmatic predominantly instruction-based learning that characterises clinical practice and more reflective problem-based learning promoted at university (Brammer, 2006, Murray and Williamson, 2009). Conversations were around *leading change*, *nurturing culture*, *structures and processes for supportive learning environments*, *implementing quality and improvement strategies*, *and patient and nurse safety outcomes.*

It was envisaged that a selection of frontline participants who could influence local practices and all of the nurse unit managers (recognised gatekeepers) were the key groups to effect change on the nature of the clinical learning environment. These groups operate in an environment where strategic agreements (memorandums of understanding, deeds of agreements and clinical schedules) have been established and maintained through formal meetings at the level of the Dean and Executive Director of Nursing Services. Each group met in the initial phase, then in later phases, joined with other groups to share their concerns and issues.

Evaluation measures

The most salient outcomes of the learning circle process were (1) the content of the discussions and (2) the impact on the learning culture. The content of the learning circle focus group discussions were derived through the records collected at the time of the learning circles, namely, hand-written notes, audio-taped segments and post-workshop evaluations. The impact of the learning circles was measured using a pre and post learning circle survey of nursing staff in the wards and units that hosted students from the participating university school of nursing, the Clinical Learning Organisational Culture Survey (CLOCS) (results previously validated, see Henderson et al., 2010). The results of both these measures are reported.

Results

Learning circle participants

Learning circle participants were a purposive sample of registered nurses, clinical facilitators and educators from across the three health organisations, as well as academic staff and students from the university (see Table 1).

Table 1. Learning circle participants.

Learning circles	**No. of attendees**	**Category of group**
First learning circle	19	Gatekeepers comprising course convenors, nurse unit managers, clinical coordinators
Second learning circle	11	Frontline comprising undergraduate nursing students, clinical facilitators, nursing staff
Third learning circle	25	Combined gatekeepers and frontline

Learning circles	No. of attendees	Category of group
Fourth learning circle	10	Frontline
Fifth learning circle	8	Gatekeepers
Total	*n* = 73	

Content from learning circle discussions

The *first* learning circle comprised the gatekeepers and discussed staff attitudes towards, and perceptions of students, expectations and student assessment. Assessment criteria for student performance were of interest to the nurse unit managers (NUMs), as many of them believed that university expectation of students was lenient. This was of particular concern for the NUMs because upon graduation students need to fully function in the 'real world'. Disharmony prevailed at the commencement of these discussions as NUMs had higher expectations of students performance; however, when lecturers discussed with NUMs that their aims were similar, namely to prepare students to draw on their knowledge to understand clinical situations and appraise practice situations, then both parties started to work together to address the common gaps observed in student behaviour and attitudes. Discussion subsequently focused on behaviours that would better assist students to draw on their knowledge and apply it to practice. Participants explored strategies/practices that could better assist in achieving these shared mutual goals.

The *second* learning circle comprised the frontline group and discussions between students, nursing staff and clinical facilitator participants. Similar to the first learning circle clinical staff were keen to vent frustrations to the university sector about limited time that students were placed in clinical areas and therefore how much could be expected of them. However with effective facilitation, the learning circle discussion was manoeuvred to focus on the importance of maximising the time available for learning during the clinical practicum. Of particular interest were strategies to enhance the preparation of students, mechanisms for greater support of clinicians through improved understanding of role responsibilities, and greater recognition. Nurses from both academic and clinical settings and students explored how nurses and students could better engage with each other while performing their clinical work.

The *third* learning circle combined the frontline and gate keeper levels for shared discussion. Discussion was facilitated with presentations from the project team about leadership and evidence pertaining to clinical education. Small group work not only enabled participants to 'theorise' the surface issues (Nobel et al., 2005, p. viii), but also informed academic and clinical partners of the respective challenges faced by all levels of staff, and other stakeholders involved in the complex process of leadership within undergraduate clinical nursing education. Participants gained a 'big picture', from micro to macro issues of the difficulties of effectively situating students in clinical contexts to ensure maximal learning. Appreciation of the issues started discussion about possibilities to resolve the difficulties.

The *fourth* learning circle comprised the frontline layer. In this circle participants were challenged to 'think otherwise' via the use of a scenario to enable deeper engagement within an educational space where construction rather than reproduction of knowledge would occur (Nobel et al., 2005). The scenario described a typical day for a registered nurse involved in a clinical placement. It attempted to represent the multitude of attitudes, beliefs and perspectives within the context of undergraduate nursing clinical education so as to stimulate an alternative or deeper understanding of its complexities. Once again the four-step process of critical reflection was reviewed at the beginning of the session (Nobel et al., 2005).

Strategies discussed in previous learning circles started to take tangible form. Examples include the establishment of workshops within the health services to prepare nursing staff to work with students, the development of a guide for a successful placement developed by student participants, prompt cards for clinical facilitators to outline their responsibilities and a communication tool in the form of a pocket-sized booklet (Creedy and Henderson, 2009). The booklet titled the *Clinical Progression Portfolio* aimed to provide students with accessible tools to prepare for clinical practice, enagage effectvely and purposely with nursing staff on a day-to-day basis during clinical placement and enable nursing staff to better understood students' scope of practice and learning needs (see Cooke, Walker, Creedy and Henderson, 2009). As the following comments indicate, participants engaged in exploring ideas and activities to improve communication and networking with academic and nursing staff to enhance student learning (Creedy and Henderson, 2009):

➢ *Feel more confident in all learning circle sessions to achieve goals relating to this. I now want to explore more avenues to enrich students/RN buddy placements.*

➢ *Have participated in the last two learning circles. They are excellent and have given me a new perspective on working with students and ideas I can now implement in my workplace.*

➢ *Know how the RN & CF expectation. I believe the learning circles can help to improve the clinical placements for student and graduate program for (fresh) graduate.*

The *fifth* learning circle comprised the gatekeeper group. Participants were challenged in the same manner as the frontline group in the fourth learning circle, to 'think otherwise' (Nobel et al., 2005). In particular, NUMs were challenged about the rationale for decisions made in relation to the undergraduate clinical practicum. Through group discussion they began to question many routines associated with the organisation of student placements and roles performed in the ward environment that may not be based on sound educational principles or strategic clinical intent. On completion of this circle NUMs felt confident to trial innovative placement and supervision models to better support students during their clinical learning experiences as the following participant comments demonstrate (Creedy and Henderson, 2009):

➢ *I am looking forward to implementing the changes and evaluating.*

➢ *Got some great ideas to try to implement in the workplace.*

➢ *Excellent opportunity to look for solutions in a positive atmosphere. Fantastic to hear others perspective and shared concerns.*

➢ *Today's learning circle was the most valuable of all. Everyone that attended shared ideas and comments that I now can and will take away for my future practice.*

Impact of learning circles on learning culture

A pre- and post-test evaluation using the Clinical Learning Organisational Culture Survey (CLOCS) was undertaken to measure the impact of the learning circle intervention on nursing staff in the wards and units that hosted the participating university school of nursing's students for clinical placement. Impact was assessed from this broader group because it was envisaged that learning circle participants became local champions in changing attitudes in their respective clinical areas. The CLOCS draws on concepts recognised as salient features in clinical learning environments, namely: 'recognition' (importance and effectiveness of reward/feedback systems operating within the organisation), 'affiliation' (need and opportunities for interaction within the organisation), 'accomplishment' (the degree of self-imposed and organisation-level performance standards), and 'influence' (the degree to which staff perceive their ideas and opinions are respected, considered and debated) (Henderson et al., 2010). Data were analysed using SPSS version 16.0. *T*-test analysis revealed statistically significant differences across three sub-scales—'accomplishment' ($t = -3.98$, $p < .001$), 'recognition' ($t = -2.22$, $p < .027$) and 'influence' ($t = -11.82$, $p < .001$) but not 'affiliation' as outlined in Table 2.

Table 2. Clinical learning organisational culture survey means and ranges (pre/post).

Sub-scale	**Mean**	**Mean**	**Range**	**Range**	**t**	**p**
	2007	**2008**	**2007**	**2008**		
	***n* = 304**	***n* = 310**	***n* = 304**	***n* = 310**		
Accomplishment—degree of self-imposed organisation level performance standards	4.09	4.26	1.00–5.00	1.00–5.00	−3.977	0.001**
Affiliation—need and opportunities for interaction within the organisation	4.10	4.15	1.00–5.00	1.00–5.00	−1.105	0.27
Recognition—importance and effectiveness of reward feedback systems operating within the organisation	3.62	3.74	1.00–5.00	1.00–5.00	−2.219	0.027*
Influence—effects of power and ability to communicate views within the organisation	2.91	3.51	1.00–5.00	1.00–5.00	−11.818	0.001**

*Significant difference between pre and post intervention data at $p < .05$.

**Significant difference between pre and post intervention data at $p < .001$.

Discussion

The learning circles intervention evaluated in this project contributed to perceptions of positive change in the clinical learning culture. Through shared discussion, participants from both academic

and clinical settings recognised mutual goals and developed possible solutions to address identified concerns. There are, however, several limitations associated with this study. Participation of staff was not uniform across participating organisations. Similarly, it is largely unknown the extent to which surveys were received from areas where participation in the learning circles was strong. It could be that staff in areas most involved in the learning circles completed the questions contributing to a biased view of intervention effects. The project was not able to secure involvement or change attitudes of those who did not choose to participate. It was not possible to randomly select participants. While such intervention projects are often successful in initiating change they often attract staff who want change. Staff who had no intention of becoming involved or being influenced by the initiatives discussed within the learning circles remain in their respective contexts. Therefore the extent of influence is largely beyond the control of the research team. Although nursing staff in the clinical learning environments were surveyed before and after the learning circles intervention and results were positive, we cannot claim that the observed shift in perceptions of culture were a direct result of the learning circles alone nor can we assert the shift continued over time. However the learning circles did constitute a significant part of the work of the whole team around creating culture where staff are encouraged to seek out learning opportunities and develop themselves.

The challenge for any intervention is for the activities to embed change within the practice environment. This initiative which bought academic and clinical staff together to discuss issues around student learning had immediate benefits observed during the learning circles as evidenced in participant feedback and their observed enthusiasm. From the measurement of the learning culture (using the CLOCS) these discussions may have impacted on the behaviour and attitudes of staff in the clinical areas through learning circle participants sharing their ideas with their immediate clinical teams. As indicated in Table 2, pre–post intervention surveys of hospital staff (*n* = 310) revealed significant differences across three sub-scales of 'accomplishment', 'recognition' and 'influence' suggesting the learning circles positively enhanced organisational learning culture (Henderson et al., 2010).

One of the first issues discussed were the priorities for student learning, in particular the ability of students to readily assess patients and identify immediate care needs. Delineating particular priorities for students seemed to have contributed to an increasing a sense of accomplishment in the ward culture as evidenced by survey results. Staff potentially may have felt better prepared to interact with students (Brammer, 2006). The initiative by the NUMS to better recognise the presence of students, and modify the organisation of care delivery accordingly (refer content of learning circle five) may have contributed to positive feedback and hence the improved the sense of recognition as measured by the CLOCS sub-scale (refer Table 2).

Furthermore, the ideas of participants contributed directly to the development of innovative practices. These ideas were adopted by other enthusiastic parties and may have contributed to changes observed in the learning environment. New innovative practices ranged from simple communication strategies (as reported by Cooke et al., 2009) to re-organising ward routines for the allocation of staff, students and patients (Creedy and Henderson, 2009).

The benefits of such an initiative are difficult to ascertain with any certainty. However, effective change is incremental and it is imperative that any improvements in the learning culture are a collaborative arrangement between clinicians, students and university staff. The learning circle approach promoted active engagement of all levels and sector of staff and yielded positive innovations and anecdotal outcomes.

Factors critical to the success of the learning circles intervention

There were a number of factors that were critical to the success of the learning circle intervention. These were: good co-operation and participation from key leadership teams possibly because they enjoyed the opportunity to engage in the project activities; an openness and willingness of participants to listen and appreciate other view points; a real sense that participants better understood the reality that their colleagues from the alternate sector had to deal with on a daily basis; and emergence of a shared understanding. Conversely a number of factors impeded the success of the learning circle approach. These included: key participants not being released because many of them were expert clinicians and their skills were needed on the ward (especially during winter); reliance on participants to communicate the outcomes of discussions to peers; and staff rotations to different clinical areas which may have limited capacity building and implementation of innovations. In many respects participants were motivated and wanted assistance to reform local practices. Unfortunately, the project was not able to secure involvement or change attitudes of those who did not chose to participate.

The difficulty for future work of this kind relates to the practical difficulty of getting staff from both the academic and clinical settings together. The analysis of learning circle discussion content indicated that after each group had attended about three learning circles we had reached saturation regarding issues and perspectives that needed exploration. The presentation of these findings and lessons learnt from this learning circle intervention project may reduce the number of circles required if a similar project was to be conducted in the future.

Conclusion

This study implemented and evaluated a learning circle intervention with students and staff from different levels of the participating hospitals and university. This approach recognised that learning occurs within a community of practice, and accordingly attitudes and behaviours can best be affected through a collective approach. Learning circle participants explored learning practices in their clinical contexts, the extent to which these practices met students' needs, and a shared understanding of learning.

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