



Learning nursing through simulation: Towards an expansive model of learning

Liz Berragan

Department of Nursing and Midwifery, University of the West of England, Alexandra Warehouse,

Background

Simulation has become an established pedagogy for teaching the fundamental skills of nursing, providing the learner with opportunity to acquire essential skills in an environment closely representing reality.

Whilst the concept of simulation is not new, there has been an increase in its use in nurse education both nationally and internationally (Jeffries, 2007; Kaakinen and Arwood, 2009; Warland, 2011; Lasater, 2012).

The Nursing and Midwifery Council have identified standards for the safe use of simulation and its inclusion as a contributory part to practice learning (NMC, 2007).

There is still a need for robust evidence in relation to the role of simulation as a teaching and learning approach.

Gloucester Docks, GL1 2LG Elizabeth.Berragan@uwe.ac.uk



Methods and Conceptual Approach

Conducted as a small-scale narrative case study, this study explores experiences of learning through simulation of a small number of undergraduate nursing students (n=9), nurse mentors (n=4) and nurse educators (n=4).

Data was collected through semi-structured interviews supported by student reflections and observation of student OSCEs. Data analysis was achieved through thematic analysis and progressive focusing (Parlett and Hamilton, 1972).

The conceptual frameworks used for this study draw upon the work of Benner and Sutphen (2007) and Engeström (1994). Benner and Sutphen's work highlights the complex nature of situated knowledge in practice disciplines such as nursing. They suggest that knowledge is integrated within the curriculum through pedagogies of formation, interpretation, contextualisation and performance.

Aims

This aim of this study was to explore the impact of simulation on learning for first year undergraduate nursing students and focus upon:

The evolution of simulation in nurse education.

- The student experience of participating in simulation.
- Mentor and educator views of simulation.
- Theoretical underpinning of simulation learning.

Engeström's work on activity theory and expansive learning, recognises the links between learning and the environment of work and highlights the possibilities for learning to inspire change, innovation and the creation of new ideas. His notion of expansive learning offers nurse education a way of reconceptualising the learning that occurs during simulation.







Figure1: The interdependent activity systems of the university and healthcare settings

Discussion

Results

Participants suggested that simulation had the potential to offer an environment in which the students could begin to practise the performance of nursing and bear witness to human events (performance) and acquire the skills of 'practical reasoning'.

They suggested that it offered the opportunity to consider the context of care (contextualisation), interpret nursing information (interpretation) and learn to develop their identities as nurses (formation). Students who demonstrated development in each of these pedagogies were successfully learning to become nurses.

Mentors and educators suggested that simulation may also offer an opportunity to support 'reflective transfer' and enable students to explore the contradictions between the activity systems of the university and healthcare settings as they learned and developed their nursing practice. Results from the study support the contribution of this pedagogical model towards elucidation of an effective and expansive approach to learning in nurse education. They also help to illustrate the different activity systems to which student nurses are exposed, and the expansive learning process that can occur between these systems, and is experienced by students as they learn to be nurses (See Figure 1).

An expansive approach to learning through simulation may offer an environment where students can be supported to explore and examine the role of the student nurse and the responsibilities incumbent upon them in that role to deliver safe, evidence-based nursing care.

Clearly, if the aim of simulation is to enable students to learn and begin to develop their identities as nurses in an environment that authentically mimics the clinical nursing environment, then learning must be adequately theorised, supported and evaluated. Simulation offers potential for learning nursing. In order to be effective, however, such activity needs to have a solid theoretical foundation. Taking a root and branch approach, the pedagogies of formation, interpretation, contextualisation and performance, could helpfully revise and refresh present approaches to simulation learning.

Conclusion

The opportunity to use simulation to explore patient care supported by these pedagogies offers an expansive approach to learning and a contrast to the linear task orientated approaches of the past. This might offer a more liberating experience for nurse educators and an integrative experience for nurse mentors and students.

Having a greater understanding of the learning that occurs through simulation experiences may enable educators and practitioners to harness the potential of simulation for the development of a competent, confident and caring nursing workforce.

References: Benner, P. and Sutphen, M. (2007) Learning across the professions: the clergy a case in point. *Journal of Nursing Education.* 46, 3, 103-108. Engeström, Y. (1994) Training for change: new approach to instruction and learning in working life Geneva: International Labour Office. Jeffries, P.R. (2007) Simulation in nursing education. New York: National League for Nursing. Kaakinen, J. and Arwood, E. (2009) Systematic review of nursing simulation literature for use of learning theory. International Journal of Nursing Education Scholarship. 6, 1, Article 16, 1-20. Lasater, K. (2012) Controversies in simulation. Personal communication. Fringe Event NETNEP 2012 Nurse Educators Conference, Baltimore, Maryland. Nursing and Midwifery Council, (2007) Simulation and Practice Learning Project: Outcome of a pilot study to test the principles for auditing simulated practice learning environments in the pre-registration nursing programme (Final report). London: NMC. Parlett, M. and Hamilton, D. (1972) Evaluation as illumination: A new approach to the study of innovatory programmes. Occasional Paper No. 9, Centre for Research in the Educational Sciences University of Edinburgh. Reprinted in G. V. Glass, (Editor) (1976) Evaluation Studies Review Annual, Beverly Hills, SAGE Publications. 140-157. Warland, J. (2011) Using simulation to promote nursing students' learning of work organization and people management skills: A case study. Nurse Education in Practice. 11, 3, 186-191.