

**Aim**

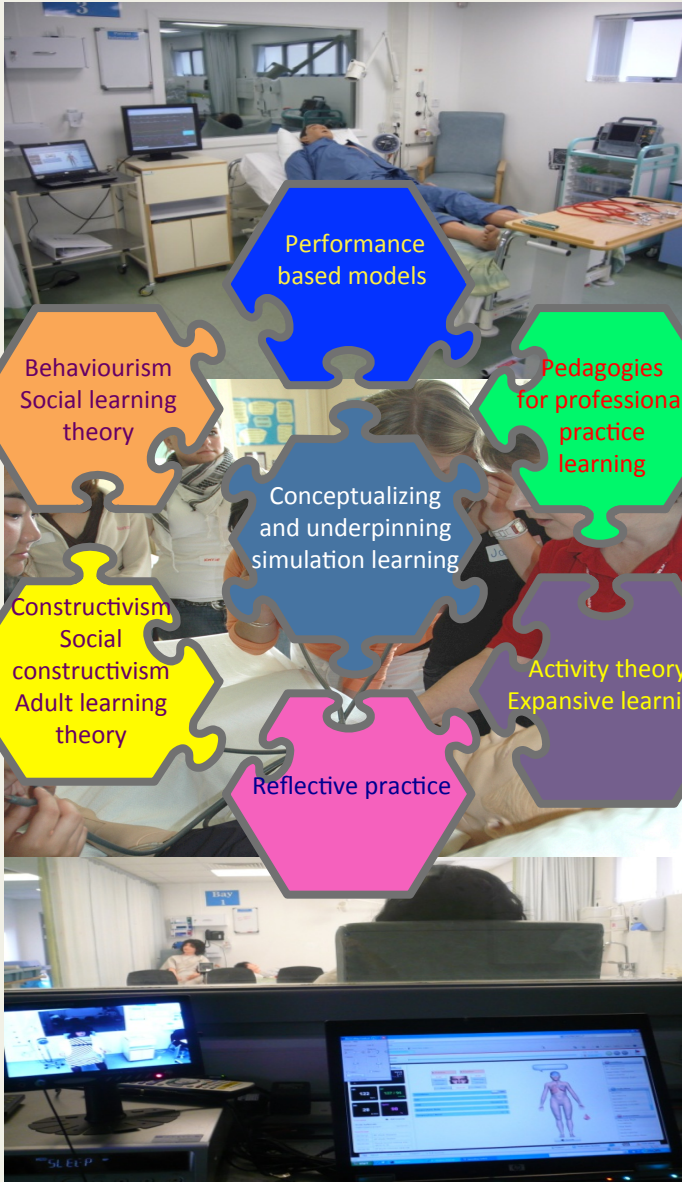
My doctoral research explores the impact of simulation upon learning for undergraduate adult nursing students. Simulation provides a variety of opportunities for students as they learn and develop their nursing skills (Berragan 2011). Literature reviews by Kaakinen and Arwood (2009), Cant and Cooper (2010) and my own literature searches demonstrate that, although nascent, there is a developing body of literature, which has as its focus simulation and learning for nurse education.

**Background**

Analysis of the literature shows that simulation is considered more in relation to teaching than learning. Many studies focus upon the acquisition of skills and view simulation as an opportunity to teach clinical nursing skills (Alinier et al., 2004; Schoening et al., 2006). Research studies by Lasater (2007) and Wong and Chung (2002) have begun to consider the cognitive perspective of learning through simulation. This is a positive step. However, there is also a need for research that studies the learning that occurs through simulation in terms of *what* students learn and *how* that learning occurs and *how* students, practitioners, and patients perceive that learning.

**Recommendations**

My analysis of the literature has shown that simulation offers different ways of conceptualizing learning. Explicit examination of theories of learning may therefore be useful for informing the development of simulation for nurse education and the focus of future research on simulation. My attention has been drawn particularly to professional practice learning and expansive learning models. These approaches highlight possibilities and raise questions, encouraging engagement with the conceptualization of learning through simulation.



**Pedagogies for professional practice learning**

The work of Patricia Benner and Molly Sutphen (2007) highlights the complex nature of situated knowledge in practice disciplines such as nursing. They emphasize that such knowledge cannot be simply divided into categories of cognitive, psychomotor and affective skills (Bloom 1968), but must be constantly integrated within the curriculum through pedagogies of interpretation, formation, contextualization and performance. These pedagogies offer a framework, which may enhance our understanding of the impact of simulation upon students who are learning to be nurses.

**Simulation: towards an expansive model of learning**

Learning for student nurses requires engagement with the activity systems (*unit of analysis*) of the university and the clinical practice environment. This may often provide a source of tension when the academic ideal of nursing taught in university conflicts with the reality of clinical practice. This illustrates another of Engstrom's (2001) principles *contradictions as sources of change and development* through which an opportunity for expansive learning is created. Similarly, constant change within health care provision which requires students to adapt and think flexibly about their professional work are representative of the principle of *historicity of activity*. The inter-professional nature of health care and the relationship between the student and their nurse mentor typifies the principle of *multi-voicedness*. Simulation experiences provide an opportunity for expansive learning, where students can be supported to consider the contradictions between the two systems leading potentially to change and development in both (Haigh 2007).

**References:** Alinier, G., Hunt, W.B. and Gordon, R. (2004) Determining the value of simulation in nurse education: study design and initial results. *Nursed Education in Practice* 4, 3, 200–207. Benner, P. and Sutphen, M. (2007) Learning across the professions: the clergy a case in point *Journal of Nursing Education* 46, 3, 103-108. Berragan, L. (2011) Simulation: An effective pedagogical approach for nursing? *Nurse Education Today* 31, 7, 660-663. Bloom, B.S. (1968) *Taxonomy of educational objectives: the classification of educational goals*. New York: David McKay. Cant, R.P. and Cooper, S.J. (2010) Simulation based learning in nurse education: systematic review *Journal of Advanced Nursing* 66, 1, 3-15. Engstrom, Y. (2001) Expansive Learning at Work: Toward an activity theoretical reconceptualization *Journal of Education and Work* 14, 1, 133-156. 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. (2007) Clinical judgment development: Using simulation to create an assessment rubric. *Journal of Nursing Education*, 46, 11, 496-503. Schoening, A.M., Setterler, B.J. and Todd, M.J. (2006) Simulated clinical experiences: nursing students perceptions and the educators role. *Nurse Educator* 31, 6, 253–258. Wong, T. and Chung, J. (2002) Diagnostic reasoning processes using patient simulation in different learning environments. *Journal of Clinical Nursing*, 11, 1, 65-72.