

Research learning in nursing education: exploring the scope of troublesomeness

Linda Martindale, Durham University / University of Dundee, Prof **Ray Land**, Durham University; Dr. **Julie Rattray**, Durham University; Dr. **Lorraine Anderson**, University of Dundee, UK

Research skills and methods are an integral part of the undergraduate nursing curriculum, underpinning the use of research evidence in practice. Understanding the research process and research methods are thresholds which students need to pass through to support their development into evidence-based practitioners. However research evidence suggests that undergraduate nursing students find research skills and methods troublesome and this is a significant barrier to learning.

Troublesome research knowledge can be readily aligned with existing understanding of troublesome knowledge, as identified by Perkins (1999). For example Ax and Kincade (2001) identified counter-intuitive knowledge in the term "research" because of the everyday usage of research as being simply to find out about something. In the threshold concepts literature, aspects of research learning have been found to be troublesome in other disciplines, e.g. Taylor and Meyer's (2010) work on hypothesis development in biology and Kiley and Wisker's (2009) study of research learning in doctoral students.

A narrative research study was undertaken to investigate research learning in undergraduate nursing education using threshold concepts as a framework. Seventeen nursing students were interviewed in depth about their experiences of learning about research. Learning narratives were gathered and these were analysed using a thematic narrative analysis, specifically focusing on difficulties encountered by students.

The analysis identified troublesome knowledge through the way in which students conceptualised the terms research and evidence based practice, as well as how they used (or avoided) specific research terms and concepts. However other troublesome elements were also apparent: the learning environments; the perceptions about what research means to a nursing student; and the anticipation of research learning being difficult.

The learning environments were found to be a source of troublesomeness, particularly due to an apparent tension between the classroom environment and practice environment. The classroom message of the value of research was often challenged in the practice environment where research utilisation was not visible or was poorly regarded. This area of difficulty for students was compounded by a perception that research is not part of being a nurse, so learning about research is not always seen as integral to the nursing curriculum and this seemed to make research learning troublesome. Students also appeared to anticipate a range of difficulties in learning about research, including the discourse of research, the time required for study, the requirement to critically appraise research and the nature of the assignment work.

These findings point to troublesome areas in threshold concepts which are not necessarily intrinsic to the subject or concept itself, but which are linked to the culture and environments in which the students are learning and to their perceptions of the topic. In nursing this seems to be particularly problematic because of the need to learn within a higher education institution as well as in a range of healthcare settings.

Understanding the range of factors which may make a threshold concept troublesome can help to explain students' challenges in learning. This understanding has the potential to influence curriculum design to address these problems more overtly.

References

- Ax, S., & Kincade, E. (2001). Nursing students' perceptions of research: usefulness, implementation and training. *Journal of Advanced Nursing*, 35(2), 161-170.
- Kiley, M. & Wisker, G. (2009) Threshold concepts in research education and evidence of threshold crossing. *Higher Education Research & Development*, 28 (4), 431-441.
- Perkins, D. (1999). The many faces of constructivism. *Educational Leadership*, 57, 6-11.
- Taylor, C.E. & Meyer J. H. F. (2010). *The Testable Hypothesis as a Threshold Concept for Biology Students* in: *Threshold Concepts and Transformational Learning*, Land, R., Meyer, J.H.F. & Baillie, C. (eds), Sense Publishers; Rotterdam, pp. 179-192.