Chapter 14

The Charles Darwin University vHospital®: Creating an Authentic Virtual Learning Environment for Undergraduate Nursing Students

Gylo (Julie) Hercelinskyj
Charles Darwin University, Australia

Beryl McEwan
Charles Darwin University, Australia

ABSTRACT

This chapter presents an overview of an innovative teaching approach in an undergraduate nursing degree at Charles Darwin University (CDU). The authors describe the development and initial integration into the first year clinical nursing subject of a virtual learning space using a case-based approach to address some of the issues associated with an externalised Bachelor of Nursing program. In addition, the use of the CDU vHospital® in supporting early role socialisation into nursing and professional identity of first year nursing students will be explored. The findings and outcomes of formal and informal evaluations of the resource are also presented. Lastly, the authors identify recommendations for future development and areas for potential future research.

INTRODUCTION

In an externalized nursing program, it is a challenge to facilitate an awareness of, and engagement with, the complexity and reality of tertiary education and nursing practice. This chapter describes an innovative teaching approach in an undergraduate nursing degree in Australia designed to enhance the learning opportunities and early professional engagement for students enrolled in a program by distance learning. Through the presentation of an exemplar case, the development process and initial integration of the Charles Darwin University Virtual Hospital® (CDU vHospital®) into...
the Bachelor of Nursing program as a web-based learning platform is described and the benefits and relevance for students and the program are discussed.

**Background**

Australia’s Northern Territory (NT) is located primarily above the Tropic of Capricorn and has both desert and dry tropic environments. There are five major population centres in the NT. Darwin, the capital city, is located on the northern coast and is geographically closer to Indonesia than to other Australian capital cities. Alice Springs is located in the geographical centre of Australia and is the next largest city in the NT. In between are the smaller centres of Katherine and Tennant Creek and, on the eastern side of the north coast is Nhulunbuy, a site of significant bauxite mining operations (Tourism NT, 2005-2009).

The NT has a small, culturally diverse and geographically spread population, with around 30% of the population being Indigenous Australians (Australian Bureau of Statistics, 2008). Approximately 50% of the NT population lives in the Darwin area, with the remaining 50% spread across the four regional cities or towns and in many small and remote indigenous communities (Tourism NT, 2005-2009).

The health profile of the NT population differs somewhat from the rest of Australia. There are higher rates of chronic diseases and indigenous clients are more likely to present with multiple morbidities. Specifically, health concerns of the NT population include self-harm and suicide, diabetes, renal and cardiovascular disease (Australian Institute of Health and Welfare, 2006a, 2006b).

Charles Darwin University (CDU) is located in the NT and is the Territory’s major tertiary institution with approximately 19,000 students enrolled. CDU is a dual-sector education provider that offers pathways for students from secondary school-based vocational training to advanced research degrees. The student cohort is diverse, with students coming from local, national and international backgrounds (Charles Darwin University, 2009). Challenges for the University are to meet the needs of the diverse and geographically spread population of the NT and, for health related programs in particular, to ensure that graduates are adequately prepared to meet the needs of the NT as well as the broader Australian health sector.

The nursing program at CDU commenced in 1991 after the transfer of the local hospital-based nurse training to the University sector and, in consultation with industry and the profession, the program is continuously being revised to meet the changing needs of the community and the health care sector (Charles Darwin University, 2007). The program prepares students for practice as registered nurses in Australia and, because of the availability of an external study mode, attracts students from all Australian States and Territories. It is also a regulatory requirement that graduates, at the end of their program, meet the required professional competencies and standards of practice in Australia (Nursing and Midwifery Board of the Northern Territory, 2008).

The program is available full or part time and is normally completed in three (3) years full time. Clinical skills teaching blocks (CTBs) and clinical placements occur in all three years of the program. Students enrolled in the CDU Bachelor of Nursing are primarily of mature age and many are practicing as licensed second level nurses (referred to in Australia as Enrolled or Division 2 Nurses) or as unlicensed health care workers (in Australia referred to as assistants in nursing or personal care assistants) in a diverse range of health care settings and geographical locations across Australia. In 2009, the student cohort is predominantly mixed mode, (approximately 90%) with only around 10% of students enrolled internally. Four percent (4%) are international students, mainly from the South East Asian region.

There are two-entry points into the Bachelor of Nursing program. Students can enter at the first year level, either directly from school or