

Sigma Theta Tau International's 29th International Nursing Research Congress

Australian Nursing Student's Digital Information Literacy Skills and e-Learning

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Purpose: E-learning is now an accepted component of higher education worldwide. (Adams Becker, Cummins *et al.* 2017). Contrary to popular opinion, the results from this Australian study found that many nursing student's level of digital information literacy skills is impacting on their ability to use E-learning in their studies.

Methods: This presentation will discuss the integrated student results from a two phase sequential mixed methods study guided by the philosophical underpinning of pragmatism according to John Dewey. The qualitative phase involved data collection via focus groups from students and academics. Phase 2 survey development was informed from the Phase 1 findings and the literature. Two survey instruments were developed and validated prior to being administered to undergraduate nursing students and academics who taught predominantly in undergraduate nursing programs.

Results: The four integrated findings from the national study will be presented:

1. Students had difficulty with database searching and wanted to learn database searching skills
2. Few students were positive about E-learning;
3. Students had low computer literacy skills but wanted to learn ICT skills;
4. Students experienced frustration and anxiety using computers.

The study results indicated that students continue to have less than adequate levels of digital information literacy (DIL) skills. These results dispel the myth of "digital native" put forward initially by Prensky (2001) that students are adequately equipped to commence higher education due to the year in which they were born. He surmises that year of birth as the predictor of ability in accessing a variety of Information Computer Technology (ICT). Significantly, other studies have found similar results that support the current thesis (Smith, Skrbis *et al.* 2013, Lai & Hong 2015, Parkes, Stein *et al.* 2015).

Conclusion: The implications of these student findings draws attention to current nationally accredited curricular identifying how students are learning DIL skills and having these skills assessed across their course. Recommendations are made for undergraduate nursing programs across Australia that may have implications for nursing education worldwide.

Title:

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Keywords:

E-learning, digital information literacy and undergraduate

References:

Adams Becker, S., Cummins, M., Davis, A., Freeman, A., Hall Giesinger, C. & Ananthanarayanan, V. (2017). "NMC Horizon Report: 2017 Higher Education Edition.", from <http://cdn.nmc.org/media/2017-nmc-horizon-report-he-EN.pdf>

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Parkes, M., Stein, S. & Reading, C. (2015). "Student preparedness for university e-learning environments." The Internet and Higher Education **25**(0): 1-10.

Prensky, M. (2001). "Digital natives, digital immigrants: do they really think differently?" On the Horizon **9**(6): 1-6.

Smith, J., Skrbis, Z. & Western, M. (2013). "Beneath the 'Digital Native' myth: Understanding young Australians' online time use." Journal of Sociology **49**(1): 97-118.

Abstract Summary:

Do Australian nursing students have they have the required digital information literacy skills they need to use E-learning? The results of a national study are concerning.

Content Outline:

1. Introduction

E-learning is now an accepted component of higher education worldwide.

2. Main point 1# Many nursing student's level of digital information literacy skills is impacting on their ability to use E-learning in their studies.

- Supporting point 1# National mixed methods study of undergraduate nursing students and academics.
- Supporting point 2# Students sample 466 and academic sample 203 across 19 schools across Australia.

Main point 2# The four integrated student findings from the national study will be presented

- Supporting point 1# low database searching skills
- Supporting point 2# negative about E-learning
- Supporting point 3# low digital information literacy skills
- Supporting point 4# frustration and anxiety using ICT

Main point 3# Study results discussion

- Supporting point 1# Myth of the Digital native
- Supporting point 2# student cohort characteristics

Main point 4# Implications for future nurse education programs

- Supporting point 1# Australian Nursing and Midwifery Accreditation Council (ANMAC)
- Supporting point 2# study recommendations

3. Conclusion

- Low DIL are persistent student issues that require a national approach to resolve.

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Professional Experience: PhD completed in 2017 2016-continuing Treasurer for PSI ETA Chapter 30 years nursing academic at Flinders University Adelaide Australia. 2002-continuing Reviewer for Nursing Education Today 2010-continuing Accreditor for the Australian Nursing and Midwifery Accreditation Council (ANMAC) 2000- continuing Fellow of College of Nursing Australia

Author Summary: Strong interest in building nursing student engagement in E-learning. Currently teaching in undergraduate and post graduate topics. Research is focused on how ICT including high fidelity simulation can be used in innovative ways to scaffold learning.