Australian nursing student's digital information literacy skills and E-learning

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- Learner objectives;
  - To understand
    - How student results were derived from the study
    - Possible implications for undergraduate nursing education
- No conflict of interest
- No sponsorship or financial support has been provided to author

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Australian national study

To determine the issues involving E-learning and its associated technology for undergraduate nursing students in Australia.

To determine the issues involving E-learning and its associated technology for nurse academics teaching in undergraduate programs in Australia.

Student findings will be presented.

Mixed method research

- Two phase sequential study
- Qualitative focus groups (n= 27/5 groups)
- Quantitative survey developed from Phase 1 findings and the literature (n= 466)
- 13 universities
- Data collected 2012 still relevant
- Pragmatism according to John Dewey

Qualitative content analysis

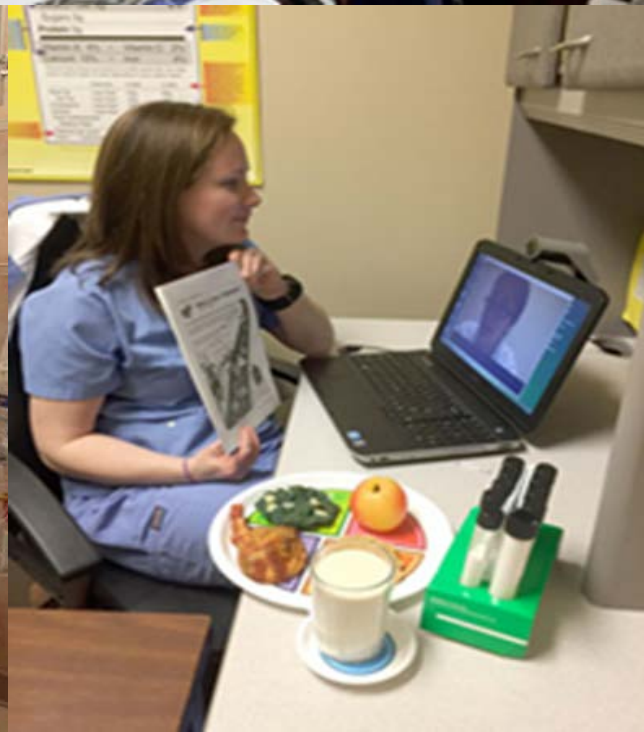
Category	*Total Frequency n= number of responses (%)*
1 Negative about E-learning	113 (15)
Sub category	
1A Don’t like E-learning	60
1B Online is isolating	19
1C Lack of motivation when studying online	15
1D Frustrated with E-learning	11
1E Want paper not computer	8

Phase 1 student findings

Students (n=27), total number of narrative quotes (n=44)

Students were negative about E-learning	*Total n= 27*	*61.3 %*
Low CIL skills	8	18.1
Fear when using computers	6	13.6
Frustration	5	11.3
Accessing library resources	5	11.3
Online enrolment process	3	6.8
Students were positive about E-learning	*Total n=17*	*38.6%*
Connected to other students	4	9
Learning	8	18.1
Less travel	3	6.8
Flexibility	2	4.5

Where will nursing graduates work?



Phase 2 student qualitised data

The Student Perceptions of E-learning Scale (SPEL)
n=466 respondents

Median (IQR)	Max. score	Factor name
12 (8-15)	21	F1 Database searching difficult.
15 (12-22)	49	F2 E-learning adds value
12 (9-14)	14	F3 ICT Difficult and causes anxiety.

Open response results

- Phase 2 survey – open response: What enhances and what challenges your use of E-learning?
- Qualitative content analysis
- There were 748 responses from 260 of the 466 students
- 16 categories were identified
- 8 will be presented

Qualitative content analysis

Category	*Total Frequency* *n= number of responses (%)*
2 Students want more face-to-face teaching	70 (9.4)
3 Students want to learn more about database searching	64 (8.6)
4 Wanted assistance with assignment writing	64 (8.6)
5 Students experienced ICT problems with the online site	61 (8.2)
6 Experienced difficulty with study/work/life balance	60 (8)
7 Students want to learn more ICT skills	45 (6)
8 Positive about E-learning	42 (5.8)
Sub category	
8A Increased Flexibility	17
8B Online resource availability	25

Integrated findings

- Students had difficulty with database searching & wanted to learn the skills
- Few students were positive about E-learning
- Students had low computer literacy skills but wanted to learn ICT skills
- Students experienced frustration & anxiety using computers.

Australian national study

- E-learning is now an accepted component of higher education worldwide. (Adams Becker, Cummins et al. 2017).
- Australian study findings are contrary to popular opinion
- Many nursing students do not want to use more E-learning
- More face-to-face interaction with nurse academics and their peers.

Integrated finding: Student respondents had low information literacy skills and want to learn skills in database searching

Phase 1 Sub theme Frequency n=43 (%)	Narrative example	Phase 2 Finding n=466	Phase 2 open response category n=748	Integrated data finding
Low levels of CIL skills (32) Difficulty accessing library data base resources (19)				

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Phase 1 Sub theme Frequency n=43 (%)	Narrative example	Phase 2 Finding n=466	Phase 2 open response category n=748	Integrated data finding
Low levels of CIL skills (32) Difficulty accessing library data base resources (19)	Student 7: *I'm lost with that* [library website], *I just don't understand how to do it, I'm aware there are journals and articles and things but I don't know how to access them* (FGS2). Student 26: *I wish the Uni.*[library] *wouldn't even link me to those, I think it's* [database] *or something and I'm like why do you send me there if I can't access the article anyway?* (FGS5).			

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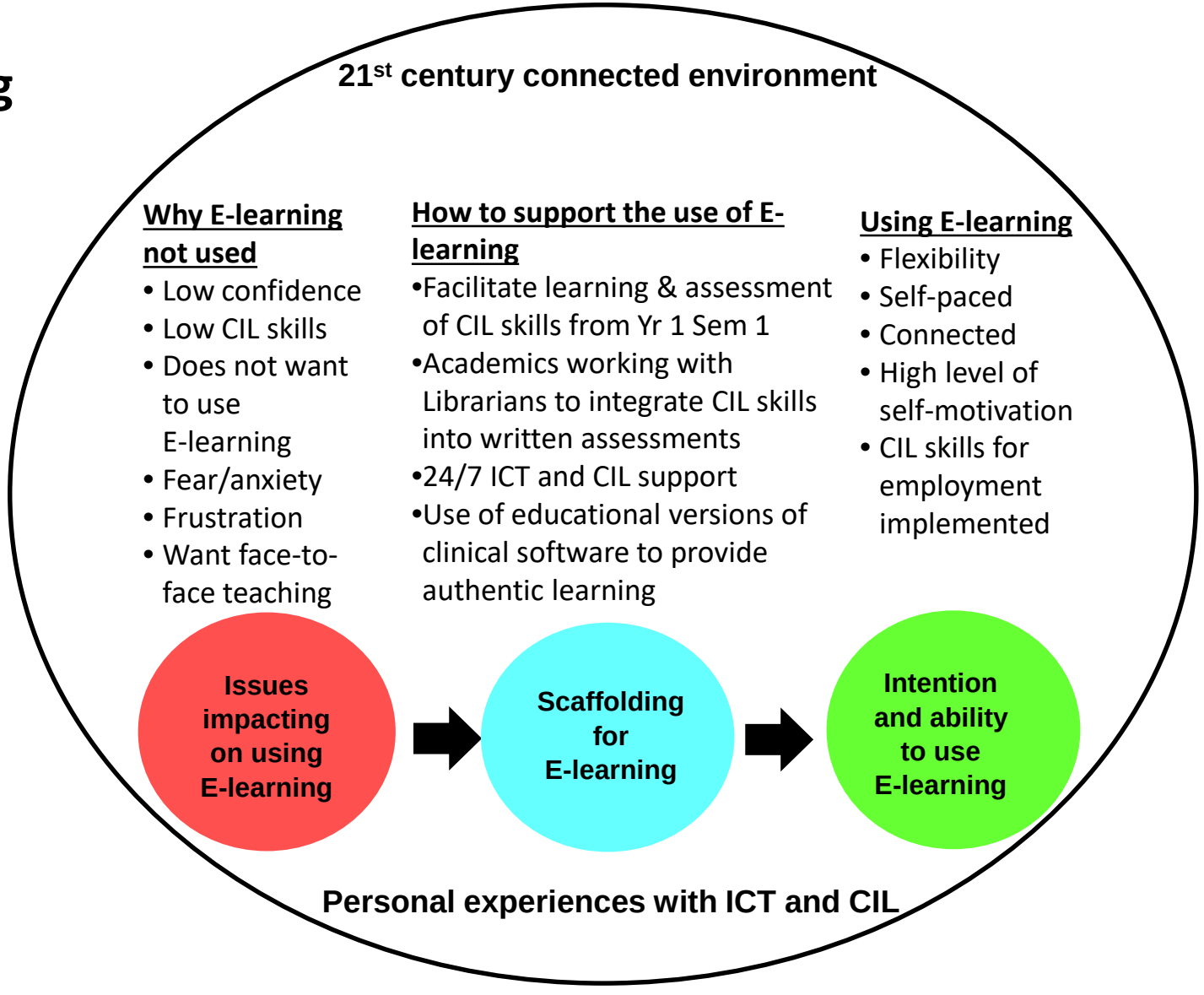
The nursing student intention to use E-learning model



Implications (so what factor)

- Students continue to have less than adequate levels of computer information literary (CIL) skills.
- Nationally accredited curricular identifying how students are learning Computer Information Literacy skills and having these skills assessed across their course.

Implications (so what factor)

- 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.
- 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).

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Thank you

Questions/Discussion

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