

HYBRID LEARNING IN HEALTH SCIENCE PROGRAMS:

A SCOPING REVIEW

Claire Song, R.P.N., M.Sc.^{1,2}, Daniel Yorke, BA.¹

¹ Douglas College, Coquitlam, British Columbia, Canada

² University of British Columbia, Vancouver, British Columbia, Canada.

E-mail: songc5@douglascollege.ca

Introduction

- To explore nursing students' perception of hybrid learning methods
- To assess these methods' efficacy considering the characteristics of traditional face-to-face and online learning methods.

Methodology

Design: Following Arksey and O'Malley's (2007) five-stage framework, a scoping review methodology was used.

Data sources: Articles published from 2001-2021 were gathered from the following electronic databases: CINAHL, MEDLINE, EBSCOhost, PsychINFO and Google Scholar.

Search terms

online learning, e-learning, nursing, hybrid learning, blended learning, computer-assisted learning, mobile-based learning, web-based learning, nursing students and nursing skill.

Review Methods: 2129 articles were identified. After the initial screening of abstracts, 124 articles were identified by the researchers as potentially relevant; subsequently, **16 articles** were chosen to be included in the study, as determined by the inclusion criteria.

Results

Characteristic		Number (N=16)	Percentage (%)
Country	United Kingdom	4	25
	Korea	3	18.75
	Canada	2	12.5
	Hong Kong	1	6.25
	Australia	1	6.25
	Belgium	1	6.25
	Brazil	1	6.25
	Iran	1	6.25
	Italy	1	6.25
	Morocco	1	6.25
	Year	2004	1
2010		1	6.25
2012		1	6.25
2013		3	18.75
2016		3	18.75
2017		1	6.25
2018		2	12.5
2019		2	12.5
2020		1	6.25
2021		1	6.25
Design	Quantitative	10	62.5
	Randomized Control Trial	5	31.25
	Quasi-Experiment	3	18.75
	Two-Arm Parallel, Stratified Group-Randomized Trial	1	6.25
	Two-Group Post-Test Experimental Study	1	6.25
Qualitative	Qualitative	1	6.25
	Mixed-Method	5	31.25
	Quasi-Experiment	1	6.25
Traditional Mixed Method Design	Traditional Mixed Method Design	4	25
Setting	Post-secondary Institution	16	100
Sample	Nursing Students	16	100

- Generally positive perceptions, with a few notable exceptions.
- Factors across teaching situations such as *instructors' personality, design of online teaching platform, individual class dynamics, student motivation levels, and course content* are also important to consider when evaluating the success of a methodology.
- Hybrid learning is a feasible and innovative way to deliver nursing skill classes if used appropriately.
- More research is needed to elucidate which learning contexts can be ideally matched with a specific learning methodology.

Conclusion

In general, students reported their appreciation of the ease of access and flexibility of learning offered by online and hybrid learning techniques; this sentiment was shared especially by those with demanding work schedules like shift-work. Many studies found that hybrid and online methods have a positive impact on initiatives and leadership. This aspect is a definite benefit of online learning; however, it needs to be examined whether accountability and responsibility of students' learning should be highlighted and prioritized in skill-based learning.

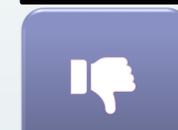
Acknowledgements

We acknowledge Douglas College Research Grant for supporting Claire Song
The authors declare no conflict of interests
Contact: Claire Song, songc5@douglascollege.ca; claire.song@ubc.ca



Positive

- superiority of hybrid learning over traditional learning on knowledge acquisition
- students can practice anytime, anywhere, and without limitations
- Satisfied- felt encouraged to take responsibility for self-learning and work on own pace



Negative

- lack of interaction with classmates and educators
- "you don't get to make friends sat in front of a computer" (Bloomfield & Jones, 2013)
- felt overwhelmed, lost and confused with online materials
- technical issues were related to accessing the online contents and submitting online assignments