

1 **The Use and Value of Learning Technologies to Improve Academic Literacy**

2 **Skills**

3 Completing written assignments as part of an undergraduate nursing program develops
4 essential skills such as critical thinking and high-level communication (Jefferies et al., 2018).
5 However, it cannot be assumed the learners commence their course with prior experience of
6 academic writing. Previous research has reported limited confidence in nursing students' own
7 writing abilities as well as a deficit in the emphasis of academic literacy compromising
8 undergraduates' performance and retention on the program (Hillege et al., 2014; Palmer et al.,
9 2018).

10 The purpose of this project was to embed academic literacy interventions in subject
11 disciplines of a nursing degree through the use of different learning technologies. The student
12 cohort was reflective of 205 first-year students and 126 second-year students. Of these, 87.5%
13 were female and 12.5% were male with ages ranging from 19 to 45 years. The activities were
14 developed within the content and assessment framework of the modules and delivered within
15 the timetabled sessions.

16 The rapid and necessary transition towards online learning, as driven by the COVID-
17 19 pandemic, has provided an opportunity to develop innovative educational resources which
18 help to address this issue of academic literacy.

19 There were two activities introduced for the first-year students. First, an article hunt
20 activity to familiarize students with databases and search strategies. Second, an introductory
21 referencing session with an exercise where learners were asked to organize a reference list
22 according to Harvard guidelines. Moreover, the development of a referencing quiz was used to
23 help students put into practice what they have learnt. The first assessment of this module was
24 based on a reading log of a journal article with an online discussion board assignment support
25 fostering student engagement.

26 The second-year students also had two activities. The first one was a referencing
27 revision session and a more comprehensive exercise of literature searching, where students
28 shared their findings on a Padlet™ to promote collaborative learning. The second one was a
29 virtual classroom to discuss the Principles of Evidence-Based Practice, followed by a critical
30 appraisal of a journal article relevant to the themes of the module. Breakout rooms were also
31 adopted to facilitate richer learner-centered experiences.

32 Students in both years were provided with online evaluation forms for each activity that
33 permitted them to express their thoughts anonymously. The forms had closed questions to rate
34 how much they enjoyed the session and if it was helpful. Additionally, open questions were
35 made to gather information about what they have learnt. The sessions were highly rated by
36 both years and several positive responses were received, including: "The referencing session
37 was great" (year one), "now I can research the right book and journal for the assignment" and
38 "sharing the literature search via Padlet™ enabled a robust research knowledge" (year two).
39 No negative comments were noted.

40 While reviewing their formative assessments, students from both years described how
41 they were able to improve their academic writing skills from these learning strategies.

42 Embedding academic literacies through the application of learning technologies, using
43 an interactive and innovative format, promoting students' participation and engagement and
44 offered an opportunity for the learners to build these skills.

45 **References**

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