Evidence Summary

Collaborative and Interactive Teaching Approaches have a Positive Impact on Information Literacy Instruction Supporting Evidence Based Practice in Work Placements

A Review of:

Kolstad, A. (2017). Students' learning outcomes from cross-collaborative supervision in information seeking processes during work placements. *Nordic Journal of Information Literacy in Higher Education*, 9(1), 2-20. <https://doi.org/10.15845/noril.v9i1.231>

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Abstract

Objective – To analyze the effect of collaborative interdisciplinary teaching and supervision using physical and digital tools on students' information literacy (IL) and evidence based practice (EBP) abilities.

Design – Qualitative and quantitative text analysis.

Setting – Learning Centre at Oslo University College and student work placements in Oslo, Norway.

Subjects – Approximately 400 students enrolled in the undergraduate nursing degree programme.

Methods – The author is a librarian and project manager of the Langerud project, an initiative wherein nursing students were jointly trained and supervised by nurse educators, nurse supervisors, and librarians in preparation for and during work placements over an eight-week period. In this role, the librarian author collected 36 student group assignments, 285 blog/wiki comments from students, nurse educators, nurse supervisors, and librarians, and 102 individual student logs

written during six work placements between Spring 2010 and Spring 2012, which were posted in a learning management system (LMS), as well as in an evaluation form from Spring 2010. The unstructured text is analyzed according to how the students fulfilled the learning outcome of integrating steps zero to four of the seven-step EBP model: (1) Cultivate a spirit of inquiry; (2) Ask clinical questions in the PICO format; (3) Search for the best evidence; (4) Critically appraise the evidence; and (5) Integrate the evidence with clinical expertise and patient preferences and values. The logs are also analyzed quantitatively to measure if and how many students combined the three aspects of EBP - defined as being the practitioner's individual expertise, best research evidence, and client values and expectations. Lastly, the author seeks to evaluate the role of the LMS as a mediating tool.

Main Results – The author found that the majority (83%) of students successfully met the learning outcome, particularly for steps 1, 2, and 5. For step three, the author observed that some students did not apply PICO in the information-seeking process and were thus not sufficiently thorough in their searching. For step four, the author found that most students failed to demonstrate critical appraisal of the evidence and that many struggled to find up-to-date research findings. The author noted that the results for both steps three and four could be attributed to the students finding international databases and English-language research articles too challenging, given the language barrier. The author's analysis of the logs reveals that two-thirds of the students combined the 3 aspects of EBP and that 39% described 1 or 2 aspects, of which most described user-based knowledge and experience-based knowledge. One department produced twice as many log entries as the other seven departments; in this department, students were able to choose what aspect of EBP to focus on and the librarian had a co-teaching role in that learning group. Overall, 60% of all students described research-based knowledge, which increased over time from 46% in Spring 2011, to 60% in Autumn 2011, and 83% in Spring 2012. On the evaluation

form from Spring 2010, most students rated the supervision by and satisfaction with the nurse educator, nurse supervisor, and librarian as good, very good, or excellent, and many commented that the LMS was a useful learning platform.

Conclusion – The author concludes that the project had a positive impact on students' preparedness for work placements and that the early educational intervention improved IL and EBP competencies. Furthermore, the working relationship between the Nursing Department and Library was strengthened. After the Langerud project ended, the curriculum was revised to add more searching for research-based information in written assignments. Additionally, a lecture on EBP was developed based on real-life experiences from the project and delivered collaboratively by the project's manager, a nurse educator, and a librarian.

Commentary

The study contributes to research supporting collaborative efforts to integrate IL into nursing education and professional development (Plaice, Lloyd, & Shaw, 2017; Beck, Blake-Campbell, & McKay, 2012). Although recent literature does discuss the information needs of healthcare students on work placements (Plaice, Lloyd, & Shaw, 2017) and the importance of workplace IL (Lloyd, 2013), this study addresses the lack of research on the combination of these elements in the context of library instruction for nursing students.

The study was evaluated using Koufogiannakis, Booth, and Brett's (2006) ReLIANT instrument. While the objective, context, results, and relevance are well-explained and discernable to the reader, there are several flaws in the study design, results, and educational context.

The most notable flaw in the study design is the absence of appendices in relation to the research instruments, such as the evaluation form and assignment questions. Although described in the results, the inclusion of these

would allow explicit mapping of learning outcomes to teaching methods and assessments. As such, it is difficult to precisely determine if and how the latter were effective interventions for addressing the author's research question - examining the development of students' IL abilities and understanding. In addition, the author uses data from an evaluation form distributed in one session, Spring 2010, but does not explain why this form was not used to collect data from subsequent sessions. Lastly, as acknowledged within the paper, there is risk of bias in the study due to the author's role as both researcher and practitioner.

In terms of educational context, the author provides a clear overview of the value of a collaborative approach for the delivery of IL instruction. However, the study would benefit from a more explicit exploration of the modes of assessment used to build students' IL skills and abilities, particularly regarding the use of reflective thinking and writing as described in the results. This aspect of the study provides useful evidence to practitioners in the domain of affective learning, as the author traces the development of positive attitudes and behaviours toward IL in the data.

Although the study focused primarily on nursing students, it is relevant for all educators involved in IL instruction intended to be relevant to workplace contexts and support evidence based practice. As mentioned above, it supports collaborative teaching approaches and the use of constructivist, interactive, and metacognitive teaching philosophies. This is consistent with a recent review recommending interactive and clinically integrated strategies, as well as collaboration with librarians for teaching evidence based practice (Horntvedt, Nordsteien, Fermann, & Severinsson, 2018). In concrete terms, the study provides evidence demonstrating that librarians should collaborate with other stakeholders when delivering IL instruction, and that meaningful, interactive guidance is effective for improving IL skills and abilities, particularly in the affective domain.

References

- Beck, S., Blake-Campbell, B., & McKay, D. (2012). Partnership for the advancement of information literacy in a nursing program. *Community & Junior College Libraries*, 18(1), 3–11. <https://doi.org/10.1080/02763915.2012.651957>
- Horntvedt, M. T., Nordsteien, A., Fermann, T., & Severinsson, E. (2018). Strategies for teaching evidence-based practice in nursing education: A thematic literature review. *BMC Medical Education*, 18(172), 1–11. <https://doi.org/10.1186/s12909-018-1278-z>
- Koufogiannakis, D., Booth, A., & Brett, A. (2006). ReLIANT: Reader's guide to the literature on interventions addressing the need for education and training. *Library & Information Research*, 30(94), 44–51. <https://doi.org/10.29173/lirg271>
- Lloyd, A. (2013). Building information resilient workers: The critical ground of workplace information literacy. What have we learnt? In S. Kurbanoglu, E. Grassian, D. Mizrahi, R. Catts, & S. Špiranec (Eds.), *Worldwide commonalities and challenges in information literacy research and practice: European Conference on Information Literacy, ECIL 2013, Istanbul, Turkey* (pp. 219–228). Heidelberg, Germany: Springer. https://doi.org/10.1007/978-3-319-03919-0_28
- Plaice, C., Lloyd, J., & Shaw, P. (2017). Supporting the library and information needs of UWE health and social care students on placement. *Health Information & Libraries Journal*, 34(1), 32–44. <https://doi.org/10.1111/hir.12171>