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Graduate information literacy in online education using the embedded librarian model

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Keywords

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Introduction

Information literacy (IL) – the ability to effectively retrieve, critically evaluate and appropriately apply information – is necessary for successful completion of graduate degree requirements including theses and dissertations, yet rarely addressed explicitly in college and university curriculums. Distance learners are especially disadvantaged given their inability to attend formal campus workshops and seminars.

The growth of online programmes at campus-based institutions is redefining how IL training is delivered for bricks and mortar institutions. College and university IL initiatives have a primary goal of the integration of information and research literacy into postsecondary curriculums, with historical roots in the bibliographic instruction movement within the library community (Gibson 2008). Academic libraries have responded to the information challenges of the digital age with increased faculty-librarian partnerships, supporting an embedded librarian in residential, blended and online classes (Campbell 2012; Chisholm and Lamond 2012; Edwards and Black 2012; Filgo 2011; Knight and Loftis 2012; Kumar and Edwards 2013). As described by Carlson and Kneale (2011), ‘...an embedded librarian works in an “on-site” setting or situation that allows him/her to collaborate and coordinate with teaching faculty or researchers’ (p. 3). For the purpose of this case study project, the ‘on-site’ setting represents an online course for off-campus students.

Project description

Using an embedded librarian support model, student development in research, writing and IL skills was fostered and monitored using pre- and post-tests, synchronous web conferencing sessions and weblogs at a land-grant research institution in the United States. Specifically, this project represents collaboration between a programme faculty member and an academic librarian in an autumn 2012 online course of 13 off-campus learners enrolled in a higher education administration Master’s programme.

Challenges for the programme administrators included incoming student diversity with respect to undergraduate major area, technology competencies, professional work experience and research and writing skills. The purpose of the collaboration was to embed IL modules and librarian support into a first semester graduate core class requirement in order to achieve a

consistent skill level across the incoming cohort group for the remainder of their programme of study.

The aim of the IL initiative was to foster IL knowledge acquisition and application within the online classroom using a multi-pronged approach. Specifically, the objectives of the initiative were to: 1) scaffold learners' introduction to key IL concepts with progressively more complex weekly assignments, 2) incorporate authentic IL tasks as part of a semester writing assignment, 3) foster student reflection on the research and writing process, and 4) create reusable learning objects for future course offerings.

The Association of College and Research Libraries (ACRL) Information Literacy Competency Standards for higher education formed the basis for the design and assessment of this information literacy initiative. The five standards and associated performance indicators (American Library Association 2000) were aligned to student assignments and course activities. There were a total of ten IL units that occurred early in the semester. These units were designed sequentially, reinforced by weekly assignments linked to the development of a semester research paper. The unit topics were library classification systems, library resources, search strategies, citation methods, plagiarism, academic writing, content organisation (Parts I and II), term paper peer review, and research and writing reflections. The citation methods unit included bibliographic management software training.

Similar to the Kumar and Edwards (2013) study, a dynamic teaching and learning environment was created by the programme's faculty and academic librarian partnership, where students participated and engaged in developmental learning within a multimodal context. Six of the ten units were supplemented with class web conferences, facilitated by the faculty member. Each live web conference began with a review of the agenda and the sharing of a pre-test web link for assessment of existing IL competencies. The librarian played a central role via lecture, group discussion and demo-practice via desktop sharing. Other course activities included asynchronous discussions on primary course subject materials and student journaling of their research and writing process via weblogs. A comprehensive post-test was administered at the end of the semester. Unlike the Kumar and Edwards (2013) study, student attendance was not optional, and pre- and post-tests assessed actual IL ability, not perceived ability, confidence, anxiety or self-efficacy.

Formative and summative course assessments consisted of the analysis of pre- and post-tests, weekly deliverables, student weblog postings, peer faculty class audit, semester research paper drafts, course reflection papers and course evaluations.

Results and discussion

The embedded librarian model was used to proactively address varying skills sets and IL competency levels for newly admitted Master's students. A comparison of pre- and post-test results suggests the weekly IL sessions were successful in achieving desired learning outcomes, with the exception of one out of the ten sessions which focused on content organisation – specifically manuscript structure and formatting. This is consistent with the findings of Kumar and Edwards (2013) that there is a need for IL intervention for incoming graduate students and an opportunity for increased resource awareness and skills development using the embedded librarian model.

IL components in this case study served as course highlights for some of the students based on end-of-semester evaluations and reflection papers. Sample feedback from students included the following comments:

The WordPress blog was the most beneficial IL for me, as it served to organize my notes and ideas throughout the research process, and inevitably was used to present the final piece of work.

The web conference sessions really helped to clarify and explain the use of the library tools, outline format and how to go about writing our papers.

But some students reported high workloads and fragmented course content coverage with the addition of the IL learning objectives to primary course learning objectives. Comments included:

This course almost felt like two courses in one, in both topics covered and course load.

In this course I felt I was really spread thin...

The amount of time and effort put into this course should be equivalent to at least 6 [credit] hours...At times, it seemed like an 'Intro to Research' course.

Project findings suggest the embedded librarian model is of value to distance learners with the provision of just-in-time librarian support but needs to be closely tied to primary course content. In addition, course workload in the main subject area must be reduced to accommodate the increased workload associated with new IL content. Recommendations for improvement on this model for future course offerings are:

- 1) provide a clear rationale and examples of skill applications for the IL content early in the semester
- 2) add preparatory IL tasks in advance of class web conferences
- 3) increase librarian oversight of weblogs for real-time monitoring and greater librarian-student interactions.

In conclusion, the application of the embedded librarian model in online courses for off-campus students warrants consideration by curriculum developers, instructional designers, academic librarians, faculty and administrators in their planning of IL-enriched curricula.

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References

American Library Association. 2000. *Information literacy competency standards for higher education*. Available at: <http://www.ala.org/acrl/sites/ala.org/acrl/files/content/standards/standards.pdf> [Accessed: 28 May 2014].

Campbell, N. 2012. Embedded librarians: moving beyond one-shot instruction. *Collection Management* 37(1), pp. 55-56. Available at: <http://dx.doi.org/10.1080/01462679.2012.629122>.

Carlson, J. and Kneale, R. 2011. Embedded librarianship in the research context: navigating new waters. *College & Research Libraries News* 72(3), pp. 167-170.

Chisholm, E. 2012. Information literacy development at a distance: embedded or reality? *Journal of Library & Information Services in Distance Learning* 6(3-4), pp. 224-234. Available at: <http://dx.doi.org/10.1080/1533290X.2012.705170>.

Edwards, M.E. and Black, E.W. 2012. Contemporary instructor-librarian collaboration: a case study of an online embedded librarian implementation. *Journal of Library Information Services in Distance Learning* 6(3-4), pp. 284-311. Available at: <http://dx.doi.org/10.1080/1533290X.2012.705690>.

Filgo, E. 2011. #Hashtag librarian: Embedding myself into a class via Twitter and blogs. *Computers in Libraries* 31(6), pp. 78-80.

Gibson, C. 2008. The history of information literacy. In C.N. Cox and E.B. Lindsay (Eds.), *Information Literacy Instruction Handbook*. Chicago: ACRL. pp. 10-25.

Knight, V. and Loftis, C. 2012. Moving from introverted to extraverted embedded librarian services: an example of a proactive model. *Journal of Library and Information Services in Distance Learning* 6(3-4), pp. 362-375. Available at: <http://dx.doi.org/10.1080/1533290X.2012.705165>.

Kumar, S. and Edwards, M. 2013. Information literacy skills and embedded librarianship in an online graduate programme. *Journal of Information Literacy* 7(1), pp. 3-17. Available at: <http://dx.doi.org/10.11645/7.1.1722>.