



Evidence Summary

Information Literacy Skills Are Positively Correlated with Writing Grade and Overall Course Performance

A Review of:

Shao, X., & Purpur, G. (2016). Effects of information literacy skills on student writing and course performance. *The Journal of Academic Librarianship*, 42(6), 670-678.
<http://dx.doi.org/10.1016/j.acalib.2016.08.006>

Reviewed by:

Rachel E. Scott
Integrated Library Systems Librarian
University Libraries
University of Memphis
Memphis, Tennessee, United States of America
Email: rescott3@memphis.edu

Received: 3 Mar. 2017

Accepted: 7 Apr. 2017

© 2017 Scott. This is an Open Access article distributed under the terms of the Creative Commons-Attribution-Noncommercial-Share Alike License 4.0 International (<http://creativecommons.org/licenses/by-nc-sa/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly attributed, not used for commercial purposes, and, if transformed, the resulting work is redistributed under the same or similar license to this one.

Abstract

Objective – To measure the correlation of tested information literacy skills with individual writing scores and overall course grade.

Design – Online, multiple-choice survey.

Setting – Public research university in North Carolina, United States of America.

Subjects – Freshmen students enrolled in either first-year seminar (UCO1200) or basic English writing course (ENG1000).

Methods – A 25-question, forced-choice test was piloted with 30 students and measured for

internal consistency using Cronbach's Alphas. The survey instrument was slightly revised before being administered online via SelectSurvey, to 398 students in 19 different sections of either UCO1200 or ENG1000, during class sessions. The test measured students' information literacy skills in four areas: research strategies, resource types, scholarly vs. popular, and evaluating websites. The preliminary questions asked for each student's name, major (by category), number of library instruction sessions attended, and the names of library services utilized. The students' information literacy scores were compared to their writing scores and overall course grades, both of which were obtained from course instructors. The information literacy scores were also analyzed for

correlation to the number of library instruction sessions attended or the types of library services utilized.

Main Results – Information literacy skills positively correlated with writing scores (n=344, $r=-.153$, $p=0.004$) and final course grades (n=345, $r=0.112$, $p=0.037$). Pearson's Correlation Coefficients results demonstrated relationships between writing scores and the information literacy test section "Scholarly versus Popular Sources" (n=344, $r=0.145$, $p=0.007$), and final grade and information literacy test sections "Types of Sources" (n=345, $r=0.124$, $p=0.021$) and "Website Evaluation" (n=345, $r=0.117$, $p=0.029$). The impact of using other library services or of attending multiple information literacy sessions was not statistically significant.

Conclusion – Students' mastery of tested information literacy skills directly correlates to their writing and final course grades. The study confirms the need for faculty and library collaboration to create well-integrated library instruction and services, and advocates for librarians to become integral to campus initiatives for student learning and success.

Commentary

There is a growing body of literature linking academic libraries to various measures of student success. Megan Oakleaf has published extensively on assessing the academic library's contributions; a 2016 article by her focuses on librarian involvement in institutional-level initiatives. Rockman's 2002 paper shows that institutions have long collaborated across departments and campuses to integrate information literacy into the general education curriculum to support institutional goals. By investigating the correlation of information literacy skills instruction with writing scores and overall class grades, the authors of the study at hand provide a unique and compelling contribution to these areas of the literature.

The "Reader's Guide to the Literature on Interventions Addressing the Need for Education and Training" facilitates the

evaluation of a study's design, educational context, results, and relevance (Koufogiannakis, Booth, & Brettle, 2006). The objective of the study was clearly articulated. The first three research questions, analyzing the correlation of information literacy skills to both writing skills and course grade and identifying the key information literacy skills for both, were clearly stated and investigated. The fourth research question, assessing the effect of library uses on student performance, is too broad and cannot be systematically addressed. The relevant survey question: "Library services you have used in order to complete your writing assignments (choose all that apply)" asks students not to apply skills, as in the rest of the test questions, but to understand or remember library jargon (e.g., "RAP session," "online tutorials," "library service desks") (p. 675).

The teaching method, mode of delivery, instruction topics and amount of instructional contact time were not detailed. UCO1200 and ENG1000 sections were required to meet specific assignment criteria to qualify for study participation. It was unclear if and how these heightened requirements created a different educational intervention. Name, academic class level, and major were the only demographic information collected through the instrument, and it is unknown if the subjects were representative of the university's undergraduate population.

The study's results are clearly explained, but some details are missing. The authors did not mention an IRB (Institutional Review Board) or a consent process. They also did not account for the differences between the number of students completing the information literacy skills test (p=398) and the number with available writing scores (p=344) or final grades (p=345); presumably these students dropped the course. The relevant data is presented and analyzed using SPSS statistical software.

This article's positive contribution to the literature is the validation of its premise, namely that information literacy skills can be learned through instruction and use of library resources and services. The study makes a

compelling argument for the continued integration of tailored library instruction in the general education curriculum; targeting first-year students can have a timely impact on academic success.

References

- Koufogiannakis, D., Booth, A., & Brettle, 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. Retrieved from <http://www.lirjournal.org.uk/lir/ojs/index.php/lir/article/view/271/318>
- Oakleaf, M. (2016). Getting ready & getting started: Academic librarian involvement in institutional learning analytics initiatives. *The Journal of Academic Librarianship*, 42(4), 472-475. <http://dx.doi.org/10.1016/j.acalib.2016.05.013>
- Rockman, I. F. (2002). Strengthening connections between information literacy, general education, and assessment efforts. *Library Trends*, 51(2), 185-198. Retrieved from <http://hdl.handle.net/2142/8465>