B Evidence Based Library and Information Practice

Evidence Summary

Plagiarism Curricula May Reduce Need for Punitive Plagiarism Education

A Review of:

George, S., Costigan, A., & O'Hara, M. (2013). Placing the library at the heart of plagiarism prevention: The University of Bradford experience. *New Review of Academic Librarianship*, *19*(2), 141-160. doi:10.1080/13614533.2013.800756

Reviewed by:

Robin E. Miller Assistant Professor and Research & Instruction Librarian McIntyre Library University of Wisconsin-Eau Claire Eau Claire, Wisconsin, United States of America Email: <u>millerob@uwec.edu</u>

Received: 2 Dec. 2013

Accepted: 21 Jan. 2014

© 2014 Miller. This is an Open Access article distributed under the terms of the Creative Commons-Attribution-Noncommercial-Share Alike License 2.5 Canada (<u>http://creativecommons.org/licenses/by-nc-sa/2.5/ca/</u>), 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 describe the development and implementation of two courses designed to help university students avoid plagiarism.

Design – Quantitative and qualitative analysis.

Setting – A university in the United Kingdom.

Subjects – An unknown number of university students who took a Plagiarism Awareness Program (PAP) course between 2008 and 2011, and approximately 3,000 university students enrolled in a Plagiarism Avoidance for New Students (PANS) course delivered via a virtual learning environment (VLE) between October and December 2012. The authors attempted to collect rates of continued plagiarism among students who had taken plagiarism education courses. The authors also surveyed 702 university students about plagiarism in 2011.

Methods – Data collected from PAP participants informed revision of the authors' approach to plagiarism education and led to development of the second course, PANS. At the end of the course, students completed a test of their knowledge about plagiarism. Authors compared scores from students who took a course supervised by a librarian to the scores from students who took the course independently.

Main Results – Students reported that many aspects of citation and attribution are

challenging (p. 149). The authors discovered that 93% of students who completed the PANS course facilitated by a librarian in-person passed the final exam with a grade of 70% or higher, while 85% of students who took the same course independently, without a librarian instructor, in an online VLE scored 70% or higher (p. 155). The authors report that referrals of students who plagiarized declined significantly (*p*-value < 0.001) since the implementation of a plagiarism avoidance curriculum.

Conclusion – As reported by the authors, firstyear university students require more extensive education about plagiarism avoidance. A university plagiarism avoidance program instructed by librarians reduces the total number of students caught plagiarizing and mitigates the need for punitive plagiarism education programs. In discussing the challenges and implementation of plagiarism awareness curricula, the authors contribute to the dialogue about effective approaches to addressing this critical issue in higher education.

Commentary

Though concerns about academic integrity simmer at institutions of higher education, few universities have perfected plagiarism education programs. The authors situate their research in the context of higher education's effort to detect, categorize, and punish students for acts of plagiarism. The authors also outline development of the University of Bradford's (UK) approach to plagiarism education, unfolding through two courses.

The first course (PAP) was aimed at students caught plagiarizing, and students enrolled in the course reported positive feelings about the course experience. While this commentary assumes that the selection method included all students enrolled in the PAP course, the authors do not report the number of subjects. The second course (PANS) was designed to train all first-year university students to avoid plagiarism. This program development was informed by a survey of 703 students, though the authors do not provide a survey response rate. Survey responses indicate that students are concerned about plagiarism and that they misunderstand basic concepts. The authors did not append the survey instrument, limiting opportunities for validation or replication.

The most significant findings of this research result from a 3-month period in 2012, when the authors collected data from 3,000 first-year students enrolled in the plagiarism course. The authors report that 93% of students enrolled in the PANS course led by a librarian scored 70% or higher on the course test, while 85% of students enrolled in an asynchronous PANS course without a librarian instructor achieved a score of 70% or higher. The authors do not comment about whether this difference is significant enough to warrant expansion of librarian-led courses, though the difference in achievement is only 8%. Beyond final test scores, the authors do not report data about student performance in the final, online iteration of the course. Since the PANS course was administered in a virtual environment, and therefore the authors had ample opportunity to collect student achievement data from specific learning objects and activities, the lack of reporting on said data is a significant oversight. By failing to evaluate areas of the course material where students performed better or worse than expected, the authors leave the reader with little knowledge of the learning outcomes or specific skills developed by students in the course.

The authors argue that data collected annually from 2008 to 2012 suggest that the number of students caught and referred for plagiarizing declined significantly following the implementation and growth of PANS, especially in the 2011-2012 academic year. This claim is supported with a footnote reporting "significance is Chi-squared 46.7182 p-value 0.000" (p. 156). Although this *p*-value is significant, the authors should not have reported it as they did. As explained in the Statistics Tutorial at University of Glasgow: "Never report that p=0, this is a side effect of the limited accuracy of some software. If p is less than 0.001, then report p<0.001 rather than the exact p value" (P-values section).

All first-year students took the course in 2012, but the authors do not report the number of students enrolled in the years spanning 2008 to 2011, or what percentage of the student body took the course prior to 2012. A minimally labeled bar graph may also support the claim that 2011-2012 outcomes were better than any previous year (p. 155), but this decline only indicates that students were less likely to plagiarize in that academic year and does not project likelihood of future plagiarism.

The validity of this research is significantly limited by its design and by the data reported or omitted by the authors. Data were collected through multiple phases of the program's four year development. However, the authors inconsistently reported number of subjects or characteristics for all phases of the multi-year study. The authors utilized different methods of data collection and analysis, and no method is compared to other inquiries or research in the field. While the authors report notable findings for the final year of the study, these derive from data collected from a large subject pool over a brief period, preventing the authors from drawing a clear link between the intervention and long-term outcomes. For academic library practitioners, this research serves as one example of how to develop a large-scale plagiarism avoidance curriculum for all students at a university. As exploratory research, this work may justify continued development of the anti-plagiarism program at the University of Bradford. The researchers must clarify their methods, report data more clearly, and collect longitudinal quantitative data about student achievement as a result of the plagiarism interventions described. Future research should control for additional variables and the authors should attempt to clearly compare the performance of their subjects over time.

Reference

Statistics Tutorial: P-Values and T-Tables. (n.d.). In University of Glasgow Statistical Understanding Made Simple. Retrieved 11 Feb. 2014 from <u>http://www.gla.ac.uk/sums/users/jdb</u> <u>mcdonald/PrePost_TTest/pandt1.html</u>