



*Evidence Summary*

**Undergraduate Library Instruction in the Humanities Increases the Use of Books Over Journals**

**A Review of:**

Cooke, R. & Rosenthal, D. (2011). Students use more books after library instruction: An analysis of undergraduate paper citations. *College & Research Libraries*, 72(4), 334-343.

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**Abstract**

**Objective** – To assess the impact of in-class library instruction sessions on the quantity, quality, and format of resources cited by undergraduate students.

**Design** – Citation analysis and literature review.

**Setting** – A public university in the United States with approximately 9,000 undergraduate students.

**Subjects** – Undergraduates in eight first-year Composition I classes and five upper-level Humanities classes at Florida Gulf Coast University (FGCU).

**Methods** – This study consisted of three components. In the first, first-year students with little to no academic library experience from eight classes of first-year Composition I were divided into two groups: those who received library instruction and those who did not. The instruction sessions were all taught by the same librarian, were one-hour hands-on classes held in a computer lab, and focused on basic library information, searching the catalogue, as well as searching journal databases. Later in the term, the citation pages from papers submitted by the students as a class assignment were analyzed by the authors who looked at the average number of citations employed in each paper, the frequency of scholarly citations, and the frequency of source/format type (e.g., book, article, website, etc.). SPSS was used for data recording,

storage, and to calculate statistics (although it should be noted that the authors do not include any of the descriptive statistics that can be generated by SPSS). In the second component, which attempted to discern if there were any differences in the citations used by students from the different disciplines, the same form of citation analyses was performed on bibliographies from upper-level students enrolled in five History, Art History, Art, and English classes who had participated in a library instruction session in the past. The results of the two citation analyses (Composition I versus upper-level students) were then compared. The third component compared the results of the citation analyses to data extracted from five similar studies in order to determine if the FGCU findings were typical of undergraduate students or deviated from the norm.

**Main Results** – The comparison of citations from the Composition I students showed that students who received a library instruction session had more average citations per paper (5.3 to 3.2); used slightly more scholarly sources (51.7% to 49.4%); were much more likely to use books (25.6% vs. 6.3%) or magazines and newspapers (18.5% vs. 9.6%) as a source; and were less likely to cite journal articles (16.3% vs. 27.3%) than their counterparts who received no library instruction. Students who had not received instruction were more likely to use videos (5.4% vs. 2.8%) or course texts and handouts (11.7% vs. 0%). Both groups exhibited a preference for material that could be accessed online, and web sites were the most frequently cited source, accounting for nearly one-third of all citations.

When the results from the Composition I students who received library instruction were compared to upper-level students who had received instruction in the past, it was found that the average number of citations increased as the course level got higher (i.e., fourth year students used more citations than third year, who used more than second year, etc.). In general, the number of scholarly sources also increased as the course level did. The analysis also showed a strong preference for books over

journal articles throughout all classes and course level. Preference for other formats (e.g., web sites, reference sources) varied a great deal and in many cases could be attributed to the nature of the assignments.

In order to determine whether the FGCU findings were typical of the undergraduate experience, the citation analyses were compared to five other institutions across the U.S. Results show that the FGCU findings were similar in some aspects; two other institutions also displayed a preference for books, but usage of journal articles in upper-level courses was either the same or lower at FGCU compared to other institutions.

**Conclusion** – For many academic liaison librarians, instruction is an important and time-consuming part of their job. The nature of many library instruction sessions – frequently one-time classes at the beginning of a semester – means instruction is often given without much attention to the impact of the session on the quality of students' work. This study addresses this issue in order to determine whether library instructions sessions should continue at FGCU in their present format. The findings broadly indicate that library instruction has a large impact on the number of books used and the overall number of resources cited, and a very small impact on the number of scholarly sources cited. It appears that the increased reliance on books by students comes at the expense of journal articles, which were much more frequently used by students who had not received instruction. The study also found that as students progress in their studies, they cite more material and use more scholarly material. This finding is seen in a number of other citation analysis studies located through a literature search. Ultimately, the authors believe that this study demonstrates the usefulness of the library sessions to students, as it causes them to cite more sources, to cite a wider variety of sources, and to cite more books. It is possible that some of the negative findings of the study, specifically related to low journal usage, may be used to alter the structure or content of future library sessions offered by FGCU librarians.

## **Commentary**

This study provides insight into the nature of resource use by undergraduates but there are areas of concern, such as a lack of clarity on the study design and variables unaccounted for during the results and comparison, which could have a large impact on the resulting conclusions.

Aspects of this study would be useful for librarians involved in planning library instruction sessions. The nature of library instruction means that sessions often leave out the important evaluative component. It is hoped, however, that this article will encourage librarians involved in teaching to carry out more evaluations on the impact of instruction on the quality of students' work. The article raises interesting points on how content covered in class can lead to specific resource uptake (e.g., if instructors spend more time teaching about how books can be found in the catalogue and used in research, more students will cite books) and on the nature of resource use in general by undergraduates (e.g., heavy reliance on websites).

However, there are a number of unanswered questions regarding study design that must be raised. Specifically, how was student confidentiality ensured or how it was determined if a student has been in an instruction classes or not? For the comparison with upper-level students, how did the authors determine if these students had received instruction? Furthermore, for the 400 level classes (roughly equivalent to a senior or fourth-year class) it could have been several years since they had received instruction, and therefore, the content could have been very different, or the class could include transfer students who had not received instruction at all. Past sessions may not have taken place in a computer lab, been taught by a different librarian, or had an entirely different focus than what the Composition I students received. However the authors draw conclusions from the comparison between the two groups without discussion of this issue.

All these questions could have been easily addressed in a more detailed Methods section. The authors also consistently use terminology that indicates a lack of understanding about their study design. For example, they call the instructed group their experimental group and the non-instructed group their control group. However, true experimental studies must include certain elements, including an attempt to truly randomize the groups and to make the two groups as equivalent as possible in order to minimize potential confounding variables, which the authors do not seem to have done.

The main topic not addressed in significant detail involves the exact requirements of the assignments. When comparing the citations of students who had received library instruction with those that had not, it is mentioned that the papers required only a few sources (anywhere from one to around five). This variable (i.e., which Composition I professors required one source versus those who required more), however, is never discussed as playing a potential role in how many resources students were citing. It is entirely possible that students in the non-library instruction group were being instructed by professors who required minimal citations, which would likely result in students including fewer citations. The authors could have dealt with this issue by examining the exact assignment requirements for both groups of students to determine whether this could have impacted the final analyses.

It also appears that the authors have chosen to focus on some findings as areas of strength while downgrading the importance of others. For example, the fact that instructed students used more books is touted, but no explanation is given for why they also used more magazines and newspapers. It was not discussed whether these sources were focused on heavily in the session, nor were possible reasons explaining this trend provided.

Finally, it seems worthwhile to point out while the authors believe that a heavy reliance on books and less reliance on journal articles is a positive thing, this is usually only the case in Humanities classes. Most Social Sciences and

Life Sciences classes would likely want to see the reverse in terms of books and journals cited. While the article seems to discuss all undergraduates, it is really only discussing

students in the Humanities. It would be interesting to know whether FGCU library sessions for non-Humanities students are structured any differently.