**FAU LIBRARIES**

**SLS 1503 INFORMATION LITERACY ASSESSMENT STUDY REPORT**

**Prepared by:**

**Dr. Darlene Parrish, Malka Schyndel, and Lyn LaVigne**

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**Introduction**

In the Florida Atlantic University (FAU) Libraries Strategic Plan, “Goal III: Instruction”emphasizes the promotion of “scholarly inquiry and lifelong learning through the FAU Libraries’ Information Literacy Program with an emphasis on evaluation of students’ needs, curriculum integration and immersion, and the development of collaborations.” “Objective III.A” of this goal is to “evaluate what students know about information literacy and how effectively they use the library when searching for information.”

The SLS 1503 information literacy study has partially fulfilled “Objective III.A” of “Goal III: Instruction” of the FAU Libraries Strategic Plan by examining the library skills of incoming freshmen students in twenty-two Strategies for Learning Success (SLS 1503) classes before and after an information literacy session to see if there was any improvement. By assessing the learning outcomes of students, this SLS study was an initial attempt to evaluate students’ needs and the quality of the Library’s information literacy sessions in order to enhance the information literacy environment across the curriculum at the University. However, due to a major problem in test administration this study has only partially fulfilled “Objective III.A” and another study will need to be conducted.

In the past, the only method used to assess in any way the information literacy program at FAU was a brief student satisfaction survey that was administered after a library session. For the first time, an attempt was made to find out if information literacy sessions have a lasting impact on student research by assessing students’ learning outcomes and creating a baseline for students’ competency in information literacy skills. Additionally, an effort was made to develop a model that could be used as a method of continuous assessment of learning outcomes and improvement of the library instruction curriculum.

**Methodology**

A committee of reference/instruction librarians developed a 15-item multiple choice survey (see Appendix 1) to measure what specific library research skills first semester freshman students enrolled in an SLS 1503 class have prior to library instruction, and if there is any improvement after library instruction. A pretest-post-test study design was used without a control group, so it was a pre-experiment with an exploratory approach. The pretest was administered at the beginning of the fall semester and prior to library instruction during a 50-minute on site scheduled library instructional session. The library instruction was a one-time session, and it was left up to the individual librarian to decide how to teach and what to cover. The post-test, which was identical to the pretest, was administered at the end of the semester in the students’ regularly scheduled class location.

Each SLS 1503 instructor was contacted prior to the study and given a memo explaining the purpose and administration of the study and requesting permission for their class to participate. A total of twenty-two SLS classes (about 40% of all SLS classes taught in fall 2009 semester) were asked to participate in the study, and all twenty-two classes did participate, but not every student was willing to take the survey, since it was voluntary. The sample size was more than 300 students. Students under the age of 18 were not allowed to participate in the study. Additionally, different reference/instruction librarians taught the information literacy sessions to the SLS classes, and not just the investigators in the study.

Since there was a question about this study being basic research rather than just program improvement a protocol application was submitted to the FAU Institutional Review Board (IRB) for approval. Lyn LaVigne, principal investigator, Ken Frankel, co-investigator, and Kristy Padron, co-investigator, were all required to successfully complete CITI training, as a requirement for IRB approval. On September 22, 2008, this research protocol was approved by IRB, and an amendment was approved on November 3, 2009, to add Dr. Darlene Parrish as a co-investigator to the study, who had successfully completed the CITI training.

The surveys were administered by the investigators who had received IRB approval and responses were anonymous and confidentiality was assured. Surveys were collected in manila envelopes and the instructor’s name, librarian’s name, date of survey, and the number of student participants was recorded on the front of each envelope. Each individual survey (both pretest and post-test) was graded and the total number of correct answers was recorded at the top of the survey. Correct and incorrect responses for each question were entered into an Excel spreadsheet for each participant, which was organized by classes under the instructor’s/librarian’s name and whether it was a pretest or post-test. The mean and median for correct responses were calculated in Excel, along with the minimum and maximum number.

The level of participation varied from pretest to post-test as some students took the pretest survey but not the post‐test survey. A total of **342** students from all classes completed the pretest survey and **326** students completed the post-test survey. Because the assurance of **anonymity** was **essential**, the authors could not identify those students. Also, there were a few students who left some questions unanswered on the post‐test survey and those unanswered questions had to be marked as incorrect.

The mean for correct responses was calculated in Excel for the total number of pretests and the total number of post-tests and compared to see if there was an improvement.

**Results**

The authors compared the mean for correct answers for pretests with post-tests to see if there was an improvement. Mean score was 9.46 for pretest surveys and 10.10 for post-test surveys out of 15 possible correct answers. Thus the mean score increased by about 6% from pretests to post-tests. The maximum number of correct answers for pretests and post-tests was 14, so there was no change. The minimum number of correct answers for pretests was 2 and increased to 3 for post-tests.

Questions 12, 4, and 14, had the lowest number of correct answers for both pre- and post-tests. Questions 2, 5, and 13 had the highest number of correct answers for both pre- and post-test surveys. Some questions that were answered correctly on the pretest survey were answered incorrectly on the post-test survey. Questions 1, 2, 4, 5, 8, 11, 13, and 14 showed a decline in the number of correct answers in the post-test survey as compared to the pretest survey. This finding represents more than half of the questions (see Appendix 2).

**Findings and Conclusions**

There was a major problem with this study in the test administration. In an effort to ensure anonymity, no identifying marks were used to link the students who had taken the pretest with those who had taken the post-test. In addition, some students may have taken the pretests and post-tests, but did not attend the information literacy session. Other minor limitations in the study included the time lags between the administration of pretests and post-tests (some classes had three months while others had only three weeks), the experience or teaching skills of the librarian, and the content covered varied from one information literacy session to another. Additionally, the classroom teacher had a definite influence on how attentive or chaotic a class was when the information literacy session was being conducted and when the surveys were being administered.

The “Criterion for Success” of this study stated that “the students’ survey scores will improve by 10% in the follow-up survey” (post-tests). The mean for the total number of correct responses for all pretests was calculated and compared with the mean for the total number of correct responses for post-tests to see if there was a difference, and the percentage of difference was calculated to see if the stated “Criterion for Success” was met. The results of the SLS study show that the improvement from pretest to post-test scores is 6%, which is a 4% difference from the stated 10% improvement.

SLS students did better on the pretests than anticipated, which could be due in part to classroom instructors providing library instruction prior to the information literacy session or that incoming freshmen have prior knowledge of basic library skills. Results could also indicate that students are more motivated to learn when a library session is tied to a meaningful assignment, and that “one time” sessions, if not tied to an assignment, are less effective.

Since there was a major problem with the test administration of this study, the results cannot be used to establish a baseline, and another study will need to be conducted (see “Recommendations for Improvement”) with more of the variables controlled. However, the results of this study did reveal some of the factors that may contribute to student learning and can still be used to make some improvements. This is an initial step in establishing a baseline of student competency in information literacy skills. Additionally, if the same design and revised methodology is used to assess ENC 1102 students, rather than SLS 1503 students, then the lessons learned may help to produce a better set of results.

**Recommendations for Improvement**

The results show that there is a need to improve through instruction students’ knowledge of basic library skills and information literacy, since the percentage of improvement was not as high as expected, which could also be due to the test administration problem. Additionally, since these results are not conclusive, there is definitely a need to reassess. Therefore, the authors recommend the following improvements:

1. Establish core learning objectives for SLS 1503 and ENC 1101 and 1102 classes in accordance with the ACRL standards, and with input from classroom instructors.
2. Establish learning objectives for subject specific sessions in accordance with the ACRL standards, and with input from instructors.
3. Include learning objectives for all information literacy sessions on LibGuides.
4. Evaluate and revise the 15-item multiple choice questionnaire used in the SLS/ENC studies according to ACRL standards and predetermined core learning objectives, which can be used as a model of assessment for all information literacy classes and revised as needed.
5. Conduct another study by assessing information literacy skills of ENC 1102 students, rather than SLS 1503 students, using a pretest-post-test methodology, and making corrections in the test administration to establish a baseline of students’ competencies in information literacy skills.
6. Promote collaboration between the classroom instructor and librarian, by determining the instructor’s goals and needs for the class.
7. Assess faculty needs for library instruction by interviewing a small sample of instructors, as a future exploratory study.
8. Continue to assess the Library’s information literacy program by measuring satisfaction of students and instructors/professors with information literacy sessions.

**Summary**

The authors believe that this study was the “first step” in evaluating student learning outcomes and will help to contribute, through lessons learned, in the development of a baseline for future assessment studies in information literacy at FAU Libraries. Additionally, the results of this study help to provide a better understanding of the factors that influence student learning and how librarians can assist instructors/professors in their understanding of the importance of the relationship between information literacy and its impact on student learning.

Lastly, it is critical that we continue to assess student learning outcomes. However, it is also important that we assess the satisfaction level of students and faculty with library sessions and determine the needs and goals of the classroom teacher for their students, as far as information literacy, to get a complete picture. This will enable us to enhance the information literacy environment in the Library and also across the curriculum of the University.

**APPENDIX 1**

**Survey Questions**

1. The following information can be found on the FAU library home page:
2. Addresses and phone numbers to FAU departments
3. Instructors’ web pages and office hours
4. Library hours and contact information
5. Course assignments and syllabi
6. Your FAU Owl Card can be used as a:
7. Student ID
8. Copy/print card
9. Library card
10. All of the Above
11. To use FAU Libraries’ electronic resources from off campus, one must first log into:
12. EBSCO Host
13. ProQuest
14. EZ Proxy
15. All of the above
16. The Library Catalog will lead you to
17. Books and other items owned by the library
18. Journal articles
19. Times and locations of first run movies
20. All of the above
21. A search in the Library Catalog can be performed by looking for a book’s
22. Title
23. Subject
24. Author
25. All of the above
26. You found a book with the call number QA76.J629 Fi 2003. What is the next step to get this book?
27. Find the QA section of the library
28. Go to the 2003 section of the library
29. Name the author of the book
30. All of the above
31. Which of the following areas is not located within the Boca Raton FAU Library?
32. Media Center
33. Government Documents
34. University Center for Excellence in Writing
35. Special Collections
36. To check out materials, take them to the
37. Reference Desk
38. Government Documents Office
39. Circulation Desk
40. Interlibrary Loan Office
41. A publication with information usually written by experts in a field is known as a
42. Journal
43. Diary
44. Newspaper
45. Web log
46. A digital or online collection of articles which can be searched by subject, title, or author is called:
47. An abstract
48. A database
49. An annotated bibliography
50. A search engine
51. What is the main difference between the information found in Google and a library database?
52. Scholarly journals and articles can be found in a database
53. Google documents can be posted by anyone and their accuracy is questionable
54. The sources are reviewed by an editor prior to publication in a database
55. All of the above
56. Your professor gives you the following citation and wants you to read the article before the next class:

McRee, Nick. (2008). Child abuse in blended households: reports from runaway and homeless youth. *Child Abuse & Neglect,* 32 (4): 449-453.

What would you search for in the catalog to see if the library has the article?

1. The title of the article
2. The author’s name
3. The title of the journal
4. All of the above
5. Plagiarism, in plain language, is defined as:
6. Allowing unauthorized people to use your Owl Card
7. Not having vaccinations and immunizations up to date
8. Misusing FAU library computers, materials or facilities
9. Copying someone else’s work and claiming it’s your own
10. *Time Magazine* is an example of a
11. Popular magazine
12. Scholarly journal
13. Trade journal
14. All of the above
15. FAU Libraries provide services such as:
16. A student medical center, pharmacy, and urgent care clinic
17. Printing, copying, study rooms, Wi-Fi, and laptop borrowing
18. Editing, proofreading, and typing assignments and papers
19. Tutoring, study skills seminars, and academic advising

**APPENDIX 2**