

MATCH MADE IN HEAVEN: BLACKBOARD VISTA, INFORMATION LITERACY, AND COLLEGE FRESHMEN

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“Isn’t Wikipedia a good source?”

“My instructor said I had to use library resources for my paper. Where do I find those?”

“My professor says NO Internet sources, so this ebook won’t work. I have to have a real book!”

How many of you hear similar comments and questions from students? The librarians at Northeast Lakeview College, located in San Antonio, Texas, certainly hear them. And, like many of you, we feel hindered by our ability to provide relevant information to our students in a typical “one-shot” instruction environment.

INTRODUCTION

Northeast Lakeview College (NLC), one of the Alamo Colleges, was established in 2007 and currently serves more than 6000 students in the greater San Antonio area. Our diverse student body includes many “first generation” college students; additionally, the majority of students receive federal financial aid. 75% of our students attend part-time and 65% are under the age of 25.

Our library employs 3 full-time librarians - a Technical Services librarian and two Reference/Instruction librarians. Additionally, our staff includes 3 part-time (19-hours per week) adjunct librarians.

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The majority of our library instruction is the typical “one-shot” session of either 50 or 75 minutes, providing a limited amount of time in which to adequately cover needed information. We spent time reviewing the course assignment and covering basic information literacy skills. We wanted to do more! Our student population was growing; our instruction program was also growing. In fall 2009, we provided 142 instruction sessions; in fall 2010 that number increased to 162. However, the number of librarians was not growing! Faced with this increased instruction demand but limited by available personnel, NLC librarians began to brainstorm methods to provide our students a different path to information literacy.

BACKGROUND

Providing instruction via the learning management system, Blackboard Vista (BBV), immediately came to mind. One librarian on staff had extensive experience working with this system. Using BBV to deliver library instruction allows for 24/7 access for students as well as the ability for librarians to create assessments to measure the effectiveness of this instruction. Further, gathering statistical data in BBV is relatively easy. Again, faced with limited personnel, we decided to create self-paced, online tutorials, using BBV as a delivery method. The tutorials were designed to supplement our face-to-face instruction, not to replace it, and were developed to extend our instruction opportunities.

While information literacy instruction is important for all subject disciplines, we felt that initially partnering with one subject discipline would be most beneficial. The natural partner was our “best customer”, the English and Reading Department. More than 50% of our library instruction is requested by faculty in this department. Further, English 1301, the first semester English composition course, is the number one class in which

Alamo Colleges students enroll, with the second-semester English composition class, ENGL 1302, close behind at number five. In addition, the department's student learning outcomes were well matched to ACRL's (2000) *Information Literacy Competency Standards for Higher Education*.

Being highly ambitious, we decided that although we were just beginning this process in July, we would launch our new instruction methodology in the fall semester – just six weeks away! Faced with this tight deadline, we quickly abandoned the original idea of creating module content from scratch. Instead, we began to explore content already available via the Internet. Three tutorials were considered – Research 101 from the University of Washington, TIP (Tutorial for Information Power) from the University of Wyoming, and SearchPath from Western Michigan University. With permission, these tutorials are available for use by other institutions. After reviewing the three choices, the decision was made to model our own tutorials after the University of Washington's Research 101 tutorial. As requested by the creators, we obtained permission to use, with credit, the framework of their tutorial. Work began to take those html, flash, and Word files and adapt them for Blackboard Vista.

READY OR NOT, OFF WE GO

It literally was a race against time to get the module content completed and into a Blackboard Vista delivery mode. Thus, only minor changes were made to the original content. Subsequently, we took time to change module content to ensure relevancy for NLC students. For instance, one module – Information Cycles – follows one potential research topic through a variety of information sources. The University of Washington used the topic of the World Trade Organization protests in Seattle. However, college freshmen in San Antonio need a slightly different approach. Thus, we changed the topic to water conservation. Especially after the south Texas drought of summer 2009, this topic resonated with our students. In addition, we also created links within the modules to specific NLC resources. The Research 101 Information Cycles module page on journals, for instance, provides links to journal articles on water conservation from a variety of NLC databases. And finally, we developed a pre- and post- assessment, allowing us to evaluate student progress across the tutorials.

And since we really were ambitious, we decided at the same time to begin a new instruction approach with our second semester freshmen English composition course, ENGL 1302, as well. NLC librarians view ENGL 1301 and ENGL 1302 as one entity and wanted to follow student progress across both courses. Our instruction approach with this course was also the typical one-shot session. We discussed with our English faculty the possibility of taking that "one-shot" content and dividing it into two instruction sessions, one to be held in the first 3-4 weeks of the semester followed by a second session, held closer to the due date for the research paper. Further, we developed a seven question in-class assessment. A pre-assessment is done in the first instruction session with the post-assessment delivered at the conclusion of the second instruction session. This ENGL

1302 assessment provided us with immediate feedback on the effectiveness of our instruction for these classes. However, we also wanted to determine if our Research 101 tutorials would have a long term effect on student retention of information literacy skills, carried forward to this second semester English composition course. Assessing students in English 1301 through the BBV tutorials and assessing them again in English 1302 with the in-class assessment allows us to do just that.

ROADBLOCKS

A number of unanticipated problems arose when the BBV tutorials were first available for students. Some of these problems were technology based while others involved the human element. Problems included:

- Student self-enrollment in Research 101
- Student unfamiliarity with using Blackboard Vista
- JAVA compatibility
- Browser compatibility
- Faculty comfort with Blackboard Vista
- Student buy-in

Initially, Research 101 resided on the district's training server and students were required to self-enroll in the course after the semester began. However, in fall 2010 Research 101 became a listed class in the course catalog – LIBR 0001 – with registration linked to ENGL 1301, requiring students to co-enroll. Often, students were unfamiliar with using BBV so we created Camtasia tutorials and handouts, which were initially housed on a wiki available through the library homepage and later were embedded directly into the course in a Begin Here module. Information about course technology requirements, such as Java, was also placed there. In fall 2010, we began providing short in-class "getting started in Research 101" demonstrations for all ENGL 1301 classes, as well. While some of our English faculty were comfortable using BBV, others were not. We provided orientation sessions but also tried to ease their workload by having assessment grades emailed directly to the instructor.

Our biggest concern involved student buy-in. Freshmen, in particular, don't yet recognize the intrinsic value of learning. For them, a paramount question is "Do I get a grade for this?" Faculty buy-in is essential for students to take Research 101 seriously. The importance that the English faculty place on the modules, in particular making the post-assessment a graded event in ENGL 1301, plays a large factor for students. Our discussions with the English faculty emphasized the parallels between ACRL information literacy standards and department student learning objectives. In addition, we stressed that the 24/7 availability of BBV meant that completing the modules did not use class time. An anonymous survey conducted at the end of each of the first two semesters indicated that the majority of

faculty incorporated the post-assessment score into ENGL 1301 as a quiz grade.

MEASURES AND RESULTS

Research 101 includes a pre-test, six content modules each ending with a short quiz, a post-test, and an anonymous end of course student survey. The pre- and post-tests are identical – each includes the same 20 questions. Before beginning the modules, students take a pre-test. They do not receive a grade or feedback on their answers. This assessment provides a baseline of the skill set students begin with and once compared to the end of course post-assessment, provides an apples-to-apples comparison, allowing us to assess both the overall effectiveness of the tutorial and the individual assessment questions. Students come to us with a varying background of exposure to information literacy concepts and to library research. By completing Research 101 before a face-to-face library instruction session, we are able to assume a consistent knowledge base for all students.

Assessment of the tutorials allows us to determine the value of both the tutorials and information literacy instruction in general. At the conclusion of each semester, an in-depth question by question analysis allows us to ascertain not only the percentage of students who correctly answer a question, but also which answers are most frequently chosen. This analysis allows us to locate and correct problematic questions and to determine when tutorial content needs to be changed to adequately address information literacy concepts.

In analyzing the individual questions, we first consider the percentage of students who correctly answer a question and look for trends such as large drops in correct answers percentage or numbers lower than 60% correct. For example, the fall 2009 data indicated that questions 1, 2, and 3 were potentially problematic and these were flagged for further analysis [Appendix A]. We decided to consider a year's worth of data before reworking questions. During the summer of 2010, we did, in fact, change the wording on the aforementioned questions because they continued to be problematic through two semesters. However, as further demonstrated in Appendix A, even after rewording, these questions continue to be problematic, suggesting that the content of the tutorials that relates to those questions needs to be revised. Analysis will continue each semester in an effort to continually improve both the questions and the tutorial content.

To date, the average ENGL 1301 score over all semesters is 71.45% on the pre-test and 76.86% on the post-test. [Appendix B]. On average, students increase their scores from the pre-test to the post by at least one question or half a letter grade. The commitment from our English faculty to include the tutorials as an integral part of the ENGL 1301 course has led to an overall completion rate of 66%. Collaboration between librarians and classroom faculty is vital to the development of an integrated approach to information literacy instruction and our faculty see the value of Research 101 and convey that to their students [Appendix E and F].

Student perception of library instruction and information literacy is partly based on faculty attitudes towards these. We found this trend especially dramatic in the post-assessment scores in ENGL 1302. A perfect score on the ENGL 1302 post-assessment is eleven. Analyzing post-test scores from spring 2010 through fall 2010, we found considerable variation on individual class post-test averages. For example, instructor I had an average post test score of 8.57, while instructor D had an average post test score of 4.00 [Appendix C]. Currently, adjunct faculty make up more than 50% of our teaching faculty. Utilizing email, faculty LibGuides, and a new adjunct intranet, we believe that more effective communication with this particular faculty group, keeping them informed of our information literacy initiatives will lead to even higher completion rates.

One of our original goals was to determine the longitudinal effectiveness of the tutorials over both semesters of English composition – ENGL 1301 and ENGL 1302. In ENGL 1302, students have two face-to-face instruction sessions with a pre-test administered in the first session, followed by a post-test in the second. ENGL 1302 scores have significantly improved from fall 2009 to fall 2010. The average pre-test score in fall 2009 was 58% while the average in fall 2010 was 69%. The average post-test score in fall 2009 was 63% while the average in fall 2010 was 77% [Appendix D]. As this program was launched in fall 2009, we had no ENGL 1302 students who had completed Research 101 that semester. However, by fall 2010, about 41% of students in ENGL 1302 had completed Research 101 in previous semesters. Students who completed the tutorial in ENGL 1301, on average, improved their ENGL 1302 post test scores by 5.4%. Those who did not complete the tutorial in ENGL 1301 improved their ENGL 1302 score by only 3.88%.

Valid assessment takes time, effort, and the use of a variety of computer software programs. The assessment data from each section of Research 101 is downloaded from BBV into an Excel spreadsheet, making it efficient to analyze. Using programs such as JMP, Excel, or R, we create charts and look for trends. A program such as Access allows data tables to be combined. For example, Access was used to create one table combining all data from both ENGL 1301 and ENGL 1302, including student information and all assessment scores. Our statistics are definitely a “work in progress”. As this is a relatively new venture, we do not yet have a large data set. While we are very interested in the longitudinal data, the comparison between ENGL 1301 and ENGL 1302 is difficult because the two courses have a very different focus and the instruction and assessments are dissimilar. For example, the ENGL 1301 assessment is 20 questions while the ENGL 1302 assessment is only 7 questions. The focus of the English 1301 research is expository writing while the emphasis in English 1302 is primarily literary criticism. Additionally, there are factors over which we have little control, including English course grades associated with the tutorials, faculty attitudes towards information literacy, and length of time to complete tutorials. Still, we are encouraged by the initial trends and hope to build on those.

FUTURE

Continual analysis of the data leads to continual improvements of our tutorials and assessments. Dialogue with our English faculty and aligning our information literacy outcomes with department student learning outcomes ensures the relevancy of our instruction program. In future, we hope to continue our longitudinal assessment through analysis of the resources students use in writing their final English 1302 papers. We also anticipate expanding this instructional approach to other academic disciplines. All of this requires, of course, support of our college through additional personnel. The data we collect will strengthen our justification for more librarians at Northeast Lakeview College.

REFERENCES

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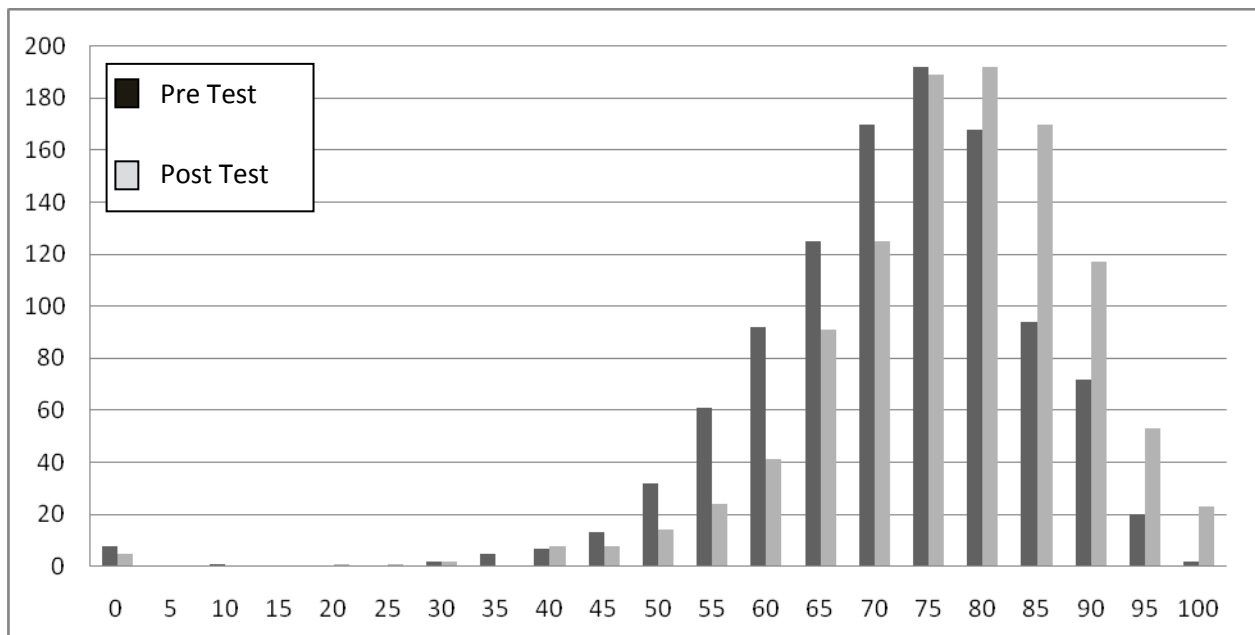
APPENDIX A

Sample ENGL 1301 Average Assessment Scores Fall 2009 and Fall 2010 by Question

Question	Fall 2009			Fall 2010		
	Pre	Post	Change	Pre	Post	Change
1	30.86	42.35	11.49	40.51	45	4.49
2	46.28	47.84	1.56	39.012	39.76	0.748
3	53.79	58.32	4.53	57.74	50.53	-7.21
4	59.54	67.52	7.98	58.9	74.56	15.66
5	58.83	68.19	9.36	53.48	79.67	26.19

APPENDIX B

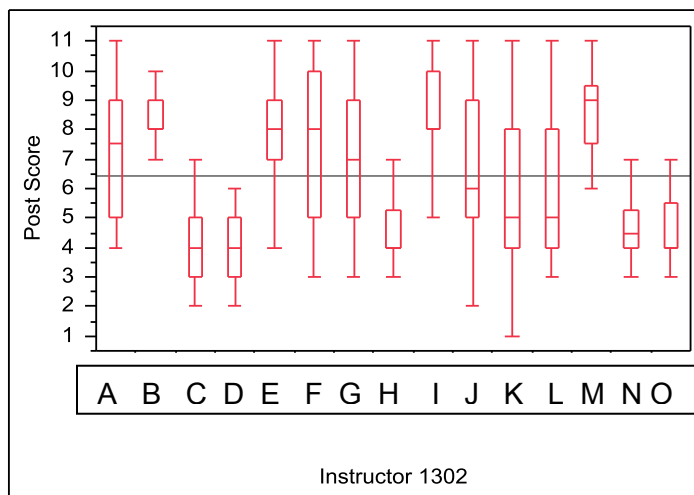
ENGL 1301 Score Frequency Chart



Average Pre Test Score: 71.45%
 Average Post Test Score: 76.86 %
 Average Change in Score: 5.41%
 Percent of Completed Students that Improved: 59%

APPENDIX C

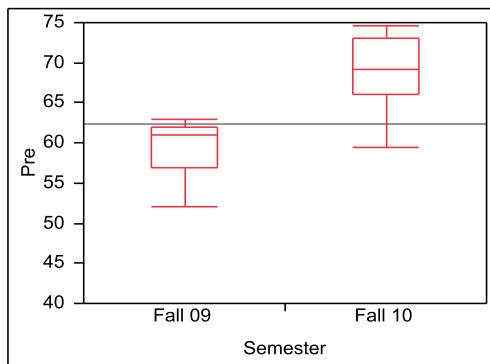
ENGL 1302 Post Test Scores by ENGL Faculty



Instructor	Minimum	Maximum	Mean
A	4	11	7.32000
B	6	11	8.52174
C	2	7	4.20000
D	2	6	4.00000
E	4	11	7.97143
F	3	11	7.50000
G	3	11	7.07692
H	2	7	4.54054
I	5	11	8.57143
J	2	11	6.49180
K	1	11	5.70909
L	3	11	6.23077
M	6	11	8.51515
N	3	7	4.64286
O	3	7	4.57143

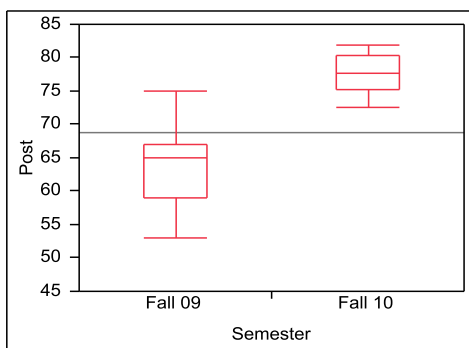
APPENDIX D

ENGL 1302 Pre Test



Semester	Minimum	Maximum	Mean
Fall 09	43	63	58.0000
Fall 10	59.39	74.55	69.0183

ENGL 1302 Post Test



Semester	Minimum	Maximum	Mean
Fall 09	46	75	63.3158
Fall 10	72.47	81.82	77.4283

APPENDIX E

Comments from Faculty

1. Makes the library visit more worthwhile
2. Students who read and followed directions benefitted from this
3. Students had fewer questions about research
4. Students who did not complete the modules had lower research grades
5. Fantastic program!

APPENDIX F

Comments from students via an anonymous end of course survey

1. I thought the course was helpful. I may need a bit of practice but I now have a decent understanding about how to access the databases.
2. The information was presented clearly. I liked how in some of the exercises, the right and wrong answers were explained.
3. It helped me a whole lot on researching for a paper or any type of essay I expect to work on the near future.
4. Very informative, will definitely help with researching.
5. The quizzes showed me what I needed to improve on and helped me to realize there is more to learn.

And in the interest of full disclosure, not every comment was positive!

1. I already knew most of this information.
2. Too many quizzes
3. Make this more interactive