Student Learning in Library Research Instruction
for Seminar and Critical Writing, Reading and Research I & II

Assessment Report for Academic Year 2011-2012

Reported by Debbie Campbell, Instructional Services Coordinator
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Abstract

Staley Library's instruction program seeks to empower students to become information literate individuals who are confident in their information seeking abilities, able to apply critical thinking skills in the retrieval and evaluation of information, and capable of growing into life-long learners. Thus, it follows that the program is designed not only to teach information retrieval skills, but also the importance of the critical analysis and evaluation of information used in academic research and everyday life.

Integrated into the first year core sequence, the research instruction program assesses student learning through the use of a pre-test completed prior to library instruction in IN150 and post-test completed after library instruction in IN151. Results from academic year 2011-2012 show an increase in average scores from the pre- to the post-test components, as well as improvement on individual questions. Overall, the student learning in the research instruction program continues to be strong.

Goals

The research instruction program corresponds directly with CWRR learning outcome goal #3: "Conduct research to participate in academic inquiry." The purpose of research instruction for CWRR is stated in Staley Library's four CWRR learning goals:

1. The student will identify the use and purpose of the Library's resources available via its web pages, including the differentiation between Library-provided resources and Internet resources.
2. The student will recognize what constitutes plagiarism through a discussion on how to avoid it, and how to cite sources.
3. The student will demonstrate an understanding of basic concepts of information retrieval and database function by successfully outlining a search strategy that demonstrates the ability to retrieve appropriate and relevant periodical articles, books, and Internet resources.
4. The student will demonstrate the application of evaluative criteria in the selection of information, regardless of source or format, through exercises that demonstrate their ability to differentiate resources.

These goals correspond with the University-wide learning goals:
1. Millikin students will prepare for professional success.
2. Millikin students will actively engage in the responsibilities of citizenship in their communities.
3. Millikin students will discover and develop a personal life of meaning and value.

The table below shows how Staley Library's learning goals relate to University-wide learning goals:

Learning Goal	Corresponding MU Learning Goal Number(s)
The student will identify the use and purpose of the Library's resources available via its web pages, including the differentiation between Library-provided resources and Internet resources.	1, 3
The student will recognize what constitutes	1, 2

plagiarism through a discussion on a how to avoid it, and how to cite sources.	
The student will demonstrate an understanding of basic concepts of information retrieval and database function by successfully outlining a search strategy that demonstrates the ability to retrieve appropriate and relevant periodical articles, books, and Internet resources.	1, 3
The student will demonstrate the application of evaluative criteria in the selection of information, regardless of source or format, through exercises that demonstrate their ability to differentiate resources.	1, 3

Snapshot

The research and instruction librarians devote a majority of their in-class instructional activities to the first-year core courses- CWRR and University Seminar. The 2011-2012 academic year was the first year of the 2:2 instruction model- two sessions in the fall and two sessions in the spring (see last year's instruction report for more details on the development of this model). The fall sessions could be taught in either Seminar or CWRR as the respective core course professors saw fit (2 sessions per cohort); the two spring sessions are both taught in CWRR as there is no spring Seminar equivalent.

During the 2011-2012 academic year, the librarians conducted 69 sessions (43 sections) for in-sequence CWRR classes, 24 sessions (21 sections) for in-sequence Seminar classes, 6 sessions (4 sections) for the off-sequence CWRR classes, and 2 sessions (1 section) for the PACE CWRR classes.

Debbie Campbell coordinates the research instruction program, and shares in the instruction with librarians Rachel Bicicchi, Cindy Fuller (director), Denise Green, and Amanda Pippitt. The Instructional Services Coordinator, as with the other librarians, reports to the Library Director.

The Learning Story

The average Millikin student's introduction to college-level research begins in his/her first year through the first year core courses- CWRR and University Seminar. Although most first-year students are comfortable with technology, their skills as "digital natives" do not necessarily translate into well-developed information seeking skills. Anecdotal evidence shows that, like most college freshmen, those students entering Millikin display an over-reliance on the free web for information and do not critically evaluate the information that they use. The Research and Instruction Librarians play an integral part in preparing students to become information-savvy. Through hands-on sessions the librarians introduce students to the library catalog and article databases, as well as how to evaluate different sources and formats of information. By coordinating with the Seminar and CWRR cohort professors to appropriately time the library session(s) within the course content, the students are able to learn, practice, and apply these skills in a way that makes them relevant to their research needs.

Assessment Methods

Pre and Post-Test Assessment Methods

The 2011-2012 academic year was the sixth complete year of data collected via a pre- and post-test. This test has taken various forms and utilized various technologies to mediate the assessment (all as documented in prior instruction reports).

For the 2011-2012 academic year, the two part pre-test was administered via Moodle before the students met with a librarian in the fall; the post-test was administered in the spring also via Moodle, either during the second library session in IN151 or as an assignment following the session.

The twenty questions that comprise the first part of the test were based on the Project Information Literacy report entitled, "Truth Be Told: How College Students Evaluate and Use Information in the Digital Age." Students were asked to rank on a scale from 1 to 5 (with 1 being "Always Difficult" and 5 being "Never Difficult") how they felt about different stages of the research process. This first part of the assessment is designed to measure the students' confidence level with the academic research process (affective learning), instead of measuring the students' actual level of skill. All questions are assessed in the following *Pre and Post-Test Data* section.

The second portion of the assessment includes more traditional library assessment questions; they assess the students' level of proficiency with an information literacy skill or behavior. Half of the questions in the second portion are multiple choice, requiring the students to choose between a set of provided answers. However, instead of all questions being multiple choice as in assessment from years past, half of the questions in this second part of the assessment are open ended. To achieve a comparable pre and post test measurement for these open ended questions, student answers were individually assessed and scored using a rubric with ratings of 0 to 3. The simple rubric is as follows: 0 = stated explanation "I don't know" or similar reply, 1 = answer completely wrong, 2 = answer partially correct. 3 = answer completely correct. Once each student's answer was scored with this rating of 0 to 3, the average was taken. Data from the second portion of the assessment is assessed in the following *Pre and Post-Test Data* section below. Note: The average is calculated from those who submitted an answer; the variables for why the question was left blank are too numerable to calculate, and so if the question was left blank by the student, it does not figure into the calculations.

Other forms of evaluation for the Library Instruction Program:

The scope of this report is to assess Library Instruction within the first-year core curriculum, as such, it focuses upon the pre and post test designed by the librarians. However, there are multiple methods of assessment that the Instruction Coordinator considers when evaluating the program as a whole, and planning instruction session content each year.

In addition to the formalized library instruction sessions for the first-year core curriculum courses, the new students have traditionally participated in a library self-guided tour during the first month of the fall semester. Library research literature (and a survey of some of our own students during Fall 2010) has shown that many students experience "library anxiety" when first visiting academic libraries. The purpose of the self-guided tour is to help the students become familiar with the library so that they can feel comfortable while studying, researching, relaxing, and locating resources at the library, know who they can ask for assistance, and have hands-on practice in locating the library materials they will learn of through library instruction. For Fall 2011, the self-guided tour was designed as an indoor, 5-hole miniature golf course. "Tickets" for the tour were handed out in the University Seminar classes by the librarians. The students putted for par while answering a worksheet designed to teach them about the library as a place. Each librarian paired with the first-year cohort marked and returned the completed worksheets to the Seminar professors. While the assessment of the tour was informal in that no cumulative data was compiled during 2011-2012, each librarian was able to answer questions written by students on the worksheets, make comments about student observations, and connect with the students during the first month of the school year.

As a new assessment method beginning in Fall 2011, the Instructional Services Coordinator created a Faculty Assessment of Library Instruction survey comprised of 9 questions housed in the Millikin survey system. At the end of each semester, the Instruction Coordinator sends an email with a link to the survey to every campus faculty member within whose class library instruction was conducted. The faculty can then give anonymous or signed feedback, which we will use to continually improve library instruction. To view this survey in its entirety, please email the Instruction Coordinator.

Pre and Post-Test Assessment Data

Brief Summary:

Fall Pre-Test: total avg. score= **65%**
- Part 1: avg. score on a 5 point scale, where 1 is Always Difficult and 5 is Never Difficult= 3.1 or **62%**
- Part 2: Multiple Choice: avg. percentage of students answering question correct = **68%**
   Open Ended: avg. on 3 point scale, where 1 is wrong and 3 is completely correct= 1.91 or **64%**

Spring Post-Test: total avg. score= **75%**
- Part 1: avg. score on a 5 point scale, where 1 is Always Difficult and 5 is Never Difficult= 3.23 or **65%**
- Part 2: Multiple Choice: avg. percentage of students answering question correct = **72%**
   Open Ended: avg. on 3 point scale, where 1 is wrong and 3 is completely correct = 2.61 or **87%**

The lack of participation for the post-test is a continuing problem for library assessment.
   *Out of approximately 500 first year students for the 2011-2012 year, in the Fall semester 283 students responded to Part 1 of the Pre-Test assessment, 234 students responded to Part 2.
   *For Spring Semester, 106 students responded to Part 1 of the Post-Test assessment, and 91 students responded to Part 2.
Our data cannot fully be representative of the entire class of 2015.

Analysis of Assessment Results by Library Instruction Goal:
Grouping each of the quiz questions with the corresponding Staley Library learning goal(s) allows the librarians to measure the effectiveness of instruction towards each goal. The ratings for this portion of the assessment have historically been based on the multiple choice percentages that coincided with the CWRR Artifact Performance Indicators Scale (Based on Percents): Nominal (Red-Stop) 0-52%, Adequate (Yellow—Caution) 53-74%, Excellent (Green-Go) 75-100%. However, due to the nature of this two part assessment, the Instruction Coordinator is monitoring the overall improvement of student confidence and performance on the library goals, more than a seeking a specific percentage.

The following explanation will explore the interpretation that instruction continues to be successful.

Learning Goal			
1. Library Resources	**2. Plagiarism/Citing Sources**	**3. Retrieval of Information**	**4. Evaluation of Information**
Question Numbers: P1-5 * P1-6 P1-8 PreTest Avg.= 64% PostTest Avg.= 67% P2-5 PreTest Avg.= 80% PostTest Avg.= 86%	*Question Numbers:* P1-16 P1-17 P1-18 PreTest Avg.= 60% PostTest Avg.= 65% P2-8 PreTest Avg.= 73% PostTest Avg.= 74%	*Question Numbers:* P1-2 P1-3 P1-4 PreTest Avg.= 61% PostTest Avg.= 63% P2-2 PreTest Avg.= 60% PostTest Avg.= 76%	*Question Numbers:* P1-7 P1-9 P1-10 P1-11 PreTest Avg.= 62% PostTest Avg.= 65% P2-3 P2-4 P2-6 P2-7 PreTest Avg.= 64% PostTest Avg.= 74%
Total for LG 1 PreTest Avg.= 68% PostTest Avg.= 72% Improvement= 4%	*Total for LG 2* PreTest Avg.= 64% PostTest Avg.= 68% Improvement= 4%	*Total for LG 3* PreTest Avg.= 61% PostTest Avg.= 66% Improvement= 5%	*Total for LG 4* PreTest Avg.= 63% PostTest Avg.= 70% Improvement = 7%

*P# refers to the part of the assessment, Part 1 or Part 2; the number following the dash is the question number within that part.

Analysis of Assessment Results for Part 1:

This first part of the assessment is designed to measure the students' confidence level with the academic research process (affective learning), instead of measuring the students' actual level of skill. The twenty questions that comprise Part 1 of the assessment were based on the Project Information Literacy report entitled, "Truth Be Told: How College Students Evaluate and Use Information in the Digital Age." Students were asked to rank on a scale from 1 to 5 (with 1 being "Always Difficult" and 5 being "Never Difficult") how they felt about different stages of the research process.

Student scores (confidence) on Part 1 increased for 17 out of 20 questions as seen in the following Table 2. This data is presented graphically in Chart 2 for easier comprehension.

As we are looking at the students' responses in aggregate as opposed to tracking each student individually, we are unable to provide certain contextualization for why scores on three questions decreased from pre to post-test. As the pre-test was taken during the first month at college, the assumption could be made that the reading, note-taking, and motivation needed for college level work is more difficult than students had initially expected, thus with that realization, their belief in their ability to do these activities easily has decreased.

All questions reflected in the library instruction goals show improvement in student comfort from pre test to post test with the most significant improvement in Question 5 "Finding articles through research databases". Students also are more comfortable with knowing whether a website is credible (Q. 7), evaluating sources (Q.11), and topic narrowing (Q. 3). Many of the other skills included as part of this assessment are believed by the librarians to be taught by CWRR faculty, including Q. 17, knowing how to cite a source in the correct format.

The data derived from averaging together all of the questions is presented below in Table 1 and the corresponding Graph 1. Due to the inconsistent assessment completion rates, it is difficult to compare the *total number of students* who answer at each rating level, but analysis of the *percentage of students* answering with each rating level allows for comparisons. At the end of the first year, more students overall ranked these necessary research skills as "5- Not Difficult," and Graph 1 displays the upward shift in the percentage of students reporting at each level.

Table 1- Average of student rankings for pre-test and post test.

Fall Pre-Test: Rating given on scale of 1 to 5	Percent of students answering with rating	Total number of students answering with rating	Spring Post-Test: Rating given on scale of 1 to 5	Percent of students answering with rating	Total number of students answering with rating
Not difficult 5	8.05%	22.85	Not difficult 5	14.30%	15.3
4	27.20%	77.25	4	25.33%	27.1
3	38.10%	108.2	3	36.40%	38.95
2	20.26%	57.55	2	17.01%	18.2
Always Difficult 1	6.39%	18.15	Always Difficult 1	6.96%	7.45

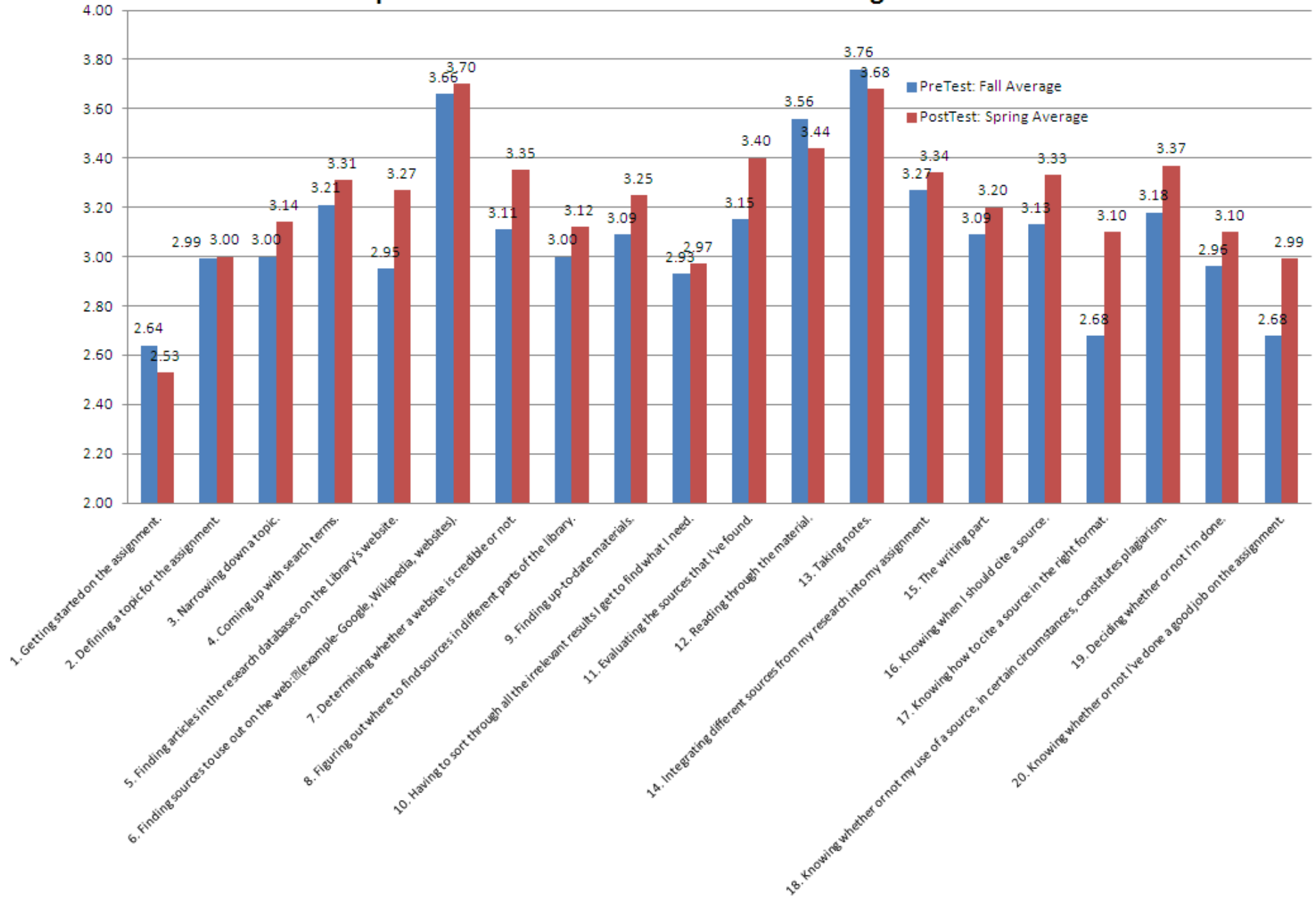**Graph 1- Average of student rankings for pre-test and post test.**
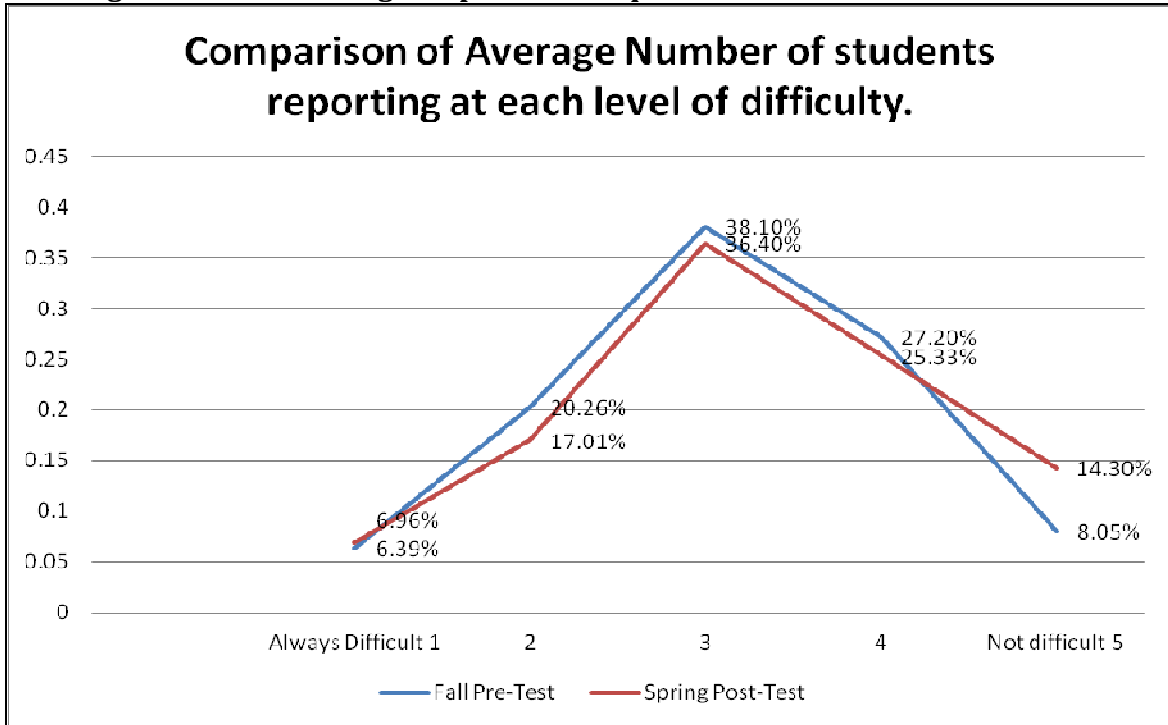
To read more about how the results of this portion of the assessment will affect library instruction, read the Improvements section of this report.

Table 2. –Comparison of Student Ratings, Pre- to Post-Test for Part 1.

Question—Scale of 1-5: 1= IS difficult 5= is NOT difficult	PreTest: Fall Average Points	PostTest: Spring Average Points	Points Change	PreTest: Fall Average Percentage	PostTest: Spring Average Percentage	Percentage Change
1. Getting started on the assignment.	2.64	2.53	-0.11	52.8%	50.6%	-2.20%
2. Defining a topic for the assignment.	2.99	3.00	0.01	59.8%	60.0%	0.20%
3. Narrowing down a topic.	3.00	3.14	0.14	60.0%	62.8%	2.80%
4. Coming up with search terms.	3.21	3.31	0.10	64.2%	66.2%	2.00%
5. Finding articles in the research databases on the Library's website. (examples include EBSCO, JSTOR, ProQuest, etc.)	2.95	3.27	0.32	59.0%	65.4%	6.40%
6. Finding sources to use out on the web: (example- Google, Wikipedia, websites).	3.66	3.70	0.04	73.2%	74.0%	0.80%
7. Determining whether a website is credible or not.	3.11	3.35	0.24	62.2%	67.0%	4.80%
8. Figuring out where to find sources in different parts of the library.	3.00	3.12	0.12	60.0%	62.4%	2.40%
9. Finding up-to-date materials.	3.09	3.25	0.16	61.8%	65.0%	3.20%
10. Having to sort through all the irrelevant results I get to find what I need.	2.93	2.97	0.04	58.6%	59.4%	0.80%
11. Evaluating the sources that I've found.	3.15	3.40	0.25	63.0%	68.0%	5.00%
12. Reading through the material.	3.56	3.44	-0.12	71.2%	68.8%	-2.40%
13. Taking notes.	3.76	3.68	-0.08	75.2%	73.6%	-1.60%
14. Integrating different sources from my research into my assignment.	3.27	3.34	0.07	65.4%	66.8%	1.40%
15. The writing part.	3.09	3.20	0.11	61.8%	64.0%	2.20%
16. Knowing when I should cite a source.	3.13	3.33	0.20	62.6%	66.6%	4.00%
17. Knowing how to cite a source in the right format.	2.68	3.10	0.42	53.6%	62.0%	8.40%
18. Knowing whether or not my use of a source, in certain circumstances, constitutes plagiarism.	3.18	3.37	0.19	62.6%	67.4%	4.80%
19. Deciding whether or not I'm done .	2.96	3.10	0.14	59.2%	62.0%	2.80%
20. Knowing whether or not I've done a good job on the assignment.	2.68	2.99	0.31	53.6%	59.8%	6.20%
Total Average:	3.102	3.2295	0.1275	62.0%	64.6%	2.60%

Graph 2

Comparision of Pre and Post Test value ratings for Part 1

Legend:
- PreTest: Fall Average
- PostTest: Spring Average

Category	PreTest: Fall Average	PostTest: Spring Average
1. Getting started on the assignment.	2.64	2.53
2. Defining a topic for the assignment.	2.99	3.00
3. Narrowing down a topic.	3.00	3.14
4. Coming up with search terms.	3.21	3.31
5. Finding articles in the research databases on the Library's website.	2.95	3.27
6. Finding sources to use out on the web. (example- Google, Wikipedia, websites).	3.66	3.70
7. Determining whether a website is credible or not.	3.11	3.35
8. Figuring out where to find sources in different parts of the library.	3.00	3.12
9. Finding up-to-date materials.	3.09	3.25
10. Having to sort through all the irrelevant results I get to find what I need.	2.93	2.97
11. Evaluating the sources that I've found.	3.15	3.40
12. Reading through the material.	3.56	3.44
13. Taking notes.	3.76	3.68
14. Integrating different sources from my research into my assignment.	3.27	3.34
15. The writing part.	3.09	3.20
16. Knowing when I should cite a source.	3.13	3.33
17. Knowing how to cite a source in the right format.	2.68	3.10
18. Knowing whether or not my use of a source, in certain circumstances, constitutes plagiarism.	3.18	3.37
19. Deciding whether or not I'm done.	2.95	3.10
20. Knowing whether or not I've done a good job on the assignment.	2.68	2.99

Analysis of Assessment Results for Part 2:

Part 2 of the assessment includes more traditional library assessment questions; they assess the students' level of proficiency with an information literacy skill or behavior. Half of the questions in this second portion are multiple choice, requiring the students to choose between a set of provided answers, and half of the questions are short answer. The full text of all questions is in Appendix A of this report.

Multiple Choice Questions

Part of the reason that the instruction assessment was updated for the 2011-2012 year was that when the assessment is entirely multiple choice, it can be difficult to analyze student learning due to the limited insight into why they chose each answer. However, despite these difficulties, certain types of questions can be asked effectively using a multiple choice format. Compared in the following Table 3 and Graph 3, of the five multiple choice questions included in Part 2 of the assessment, student average scores increased on three of five questions, remained the same for one question, and decreased for one question.

Table 3- Pre and Post-Test comparison of percentage of students answering question correctly.

Multiple Choice Questions	Pre-Test Fall 2011	Post-Test Spring 2012	Increase or Decrease
Q.2 Keywords	60%	76%	16%
Q.4 Website	85%	85%	0%
Q.5 Database	80%	86%	6%
Q.7 Bias	42%	38%	-4%
Q.8 Citation	73%	74%	1%
Average	68%	72%	

Graph 3

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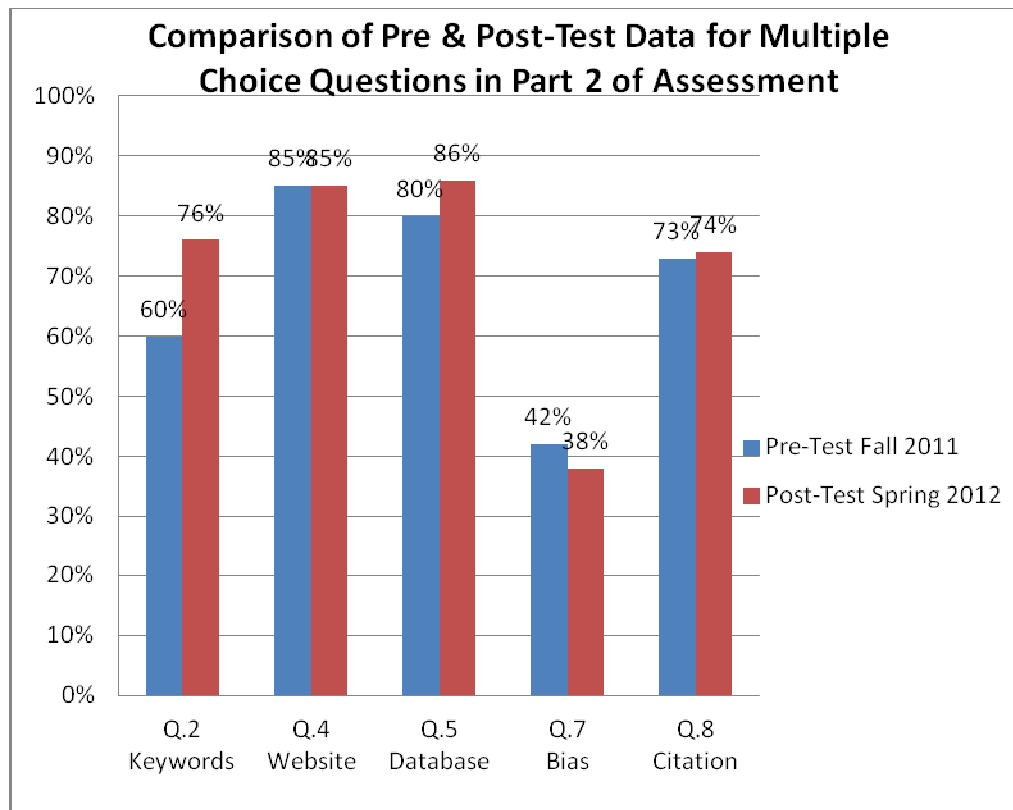
Question 2 demonstrates a marked improvement in the students' ability to determine what type of keywords will be more successful in returning the desired search results. The content of this question features heavily within the library instruction sessions, so the increased percentage is confirmation that the teaching methods have been successful.

Question 4, asking students to determine the type of sponosoring organization for a website based soely on the internet domain, showed no improvement. In pairing the data from Part 2, Q.3 and Q.4, it seems that when students are coming in to Millikin from high school, they have been taught to recognize the domains that are part of URLs. However, from the comments, it appears that many students have been taught (rather, what they remember was) that .edu and .gov websites are the best type of website, that .org is either awesome or horrible depending on what they've learned, and that all .com websites are terrible. Since using the domain of a website is just one clue in its evaluation, the librarians will need to continue to talk about why a student might want to choose each type of website, and why they should deliberately seek out specific types of sources. These skills already feature prominently in the library instruction sessions, and the results of this assessment support their continued inclusion and focus.

Question 5 displays an improvement in the students' ability to recognize the visual difference between the library's online catalog and an online article database. Looking in the right places is an important step to finding the desired sources.

Question 7, looking for bias, is a challenging skill for all researchers. As students continue to have difficulty with this question (this question has been in past assessments), the Library Instruction Coordinator will work with the librarians to develop more in-class examples of recognizing possible bias.

Question 8, asking about when is the proper time to cite a source, seems to suffer from the students' writing processes. While on the post-test assessment 73 students marked that the proper time to cite a source is "The first time you access a source you might want to use," 20 students chose the answer "After you have finished writing the section of the paper that uses information from a source." The Instruction Coordinator will double-check that all librarians are discussing this topic at some point during the instruction sequence.

To read more about how the results of this portion of the assessment will affect library instruction, read the Improvements section of this report.

Short Answer Questions
Instead of all questions being multiple choice as in assessment from years past, half of the questions in the second part of this assessment are open ended. To achieve a comparable pre and post-test measurement for these open ended questions number Q.2-3 and Q.2-6, student answers were individually assessed and scored using a rubric with ratings of 0 to 3. The simple rubric is as follows: 0 = stated explanation "I don't know" or similar reply, 1 = answer completely wrong, 2 = answer partially correct. 3 = answer completely correct. Once each student's answer was scored with this rating of 0 to 3, the average for the entire question was calculated. Note: If the question was left blank by the student, it does not figure into the calculations- the average is calculated from those who submitted an answer.

Q.1
The "What did you learn; what do you wish you had learned" assessment question is consistently the most insightful question on the library assessment each year. It provides the ability to see where library instruction is meeting students' expectations, and what else they desire to know. As there are no right/wrong answers, Question 1 was not checked on the 0 to 3 rubric. Instead the comments from those students responding are condensed below into 9 categories.

Table 4

Q.1, Post-Test Results	
Student answers for "what do you wish you would have learned?"	**Number of students out of 91 possible**
<u>Nothing:</u> "I have been taught all I need to know." "I can think of nothing else." "I feel sufficiently prepared." Etc…	24 students
<u>Citation:</u> "I wish I would have learned how to cite." APA or MLA	16 students
<u>Library:</u> "I wish we could have gone to the library and found my books on the shelf." "I wish I understood how the library is layed out better." "Perhaps a legit tour?"	11 students
<u>Finding better resources- using databases more efficiently:</u> "I wish we could have used film or other media." "I wish I had learned more specific sites to search." "Knowing which database is best for me to search in."	11 students
<u>Developing Topic:</u> "I wish I had better tactics for determining a good topic for research." "I wish I knew how to use theatre as a topic for my paper." "I wish I knew how to write a solid thesis." Etc.	10 students
<u>Evaluation:</u> "I wish I knew how to tell better if my source is credible."	4 students
<u>Other:</u> "I wish I understood better how to incorporate my sources into my paper." "I wish we would have learned more about the fun part of research, not just the business type side." "I already knew everything."	3 students
<u>Interlibrary Loan:</u> "I wish I had learned more about that interlibrary loan system."	2 students
<u>No answer</u>	10 students

To read more about how the results of this portion of the assessment will affect library instruction, read the Improvements section of this report. If we can increase the participation in the post-test assessment, this data could also be very helpful for Seminar and CWRR professors in planning their assignments. For example, 16 out of 91 students wished that the library had taught them about citation styles. This brings up the question of whether the students are being taught MLA or APA in all CWRR/Seminar sections, or just expected to know it.

Q.3 Credibility: How do you decide if a website has the credibility it needs for you to use in your research project?

This question is the focus of one of the fall semester library sessions that can take place in either Seminar or in CWRR. From pre-test to post-test, student answer quality improved significantly- by over half a point on average. The following graph also shows the shift in scores from more 0-2s in the pre-test, to more 2-3s on the post-test. Students are expressing through this assessment that they have the

knowledge needed to evaluate and use websites and other sources effectively, whether they actively apply those skills on a daily basis is up to them.

Table 5: Pre-Test to Post-Test comparison of students answers on Q.3

| Q.3	Pre-Test Fall 2011	Post-Test Spring 2012	Increase or Decrease
Overall Average	1.93	2.49	0.56
Number of 0s	8	0	
Number of 1s	49	7	
Number of 2s	123	32	
Number of 3s.	49	51	
Percentage of 0s	3.49%	0%	
Percentage of 1s	21.40%	7.69%	
Percentage of 2s	53.71%	35.16%	
Percentage of 3s	21.40%	56.04%	
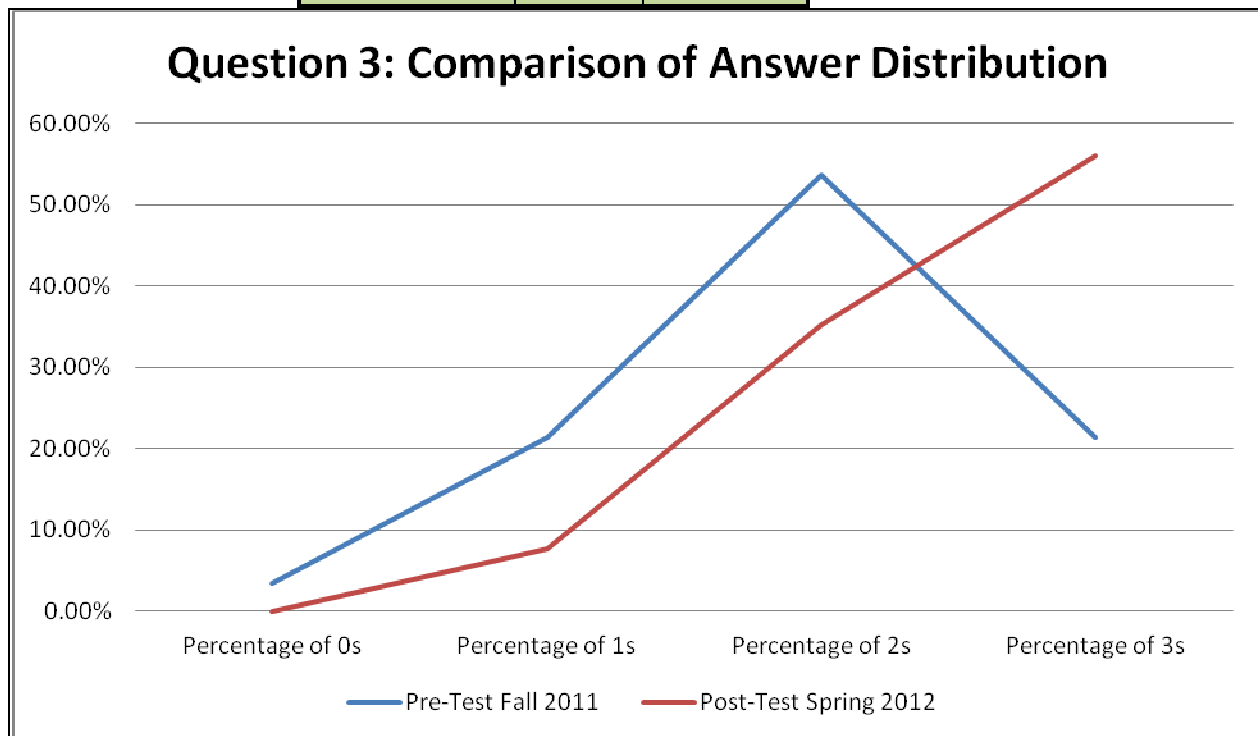
Q.6 ScholarlyArticle: Name three characteristics of a scholarly journal article.
One of the spring library sessions spends time discussing the qualities and characteristics of publication types. The results of question 6 in the assessment show an increase in from pre-test to post-test as student answer quality improved significantly- by almost a point on average. The following graph also shows the shift in scores from more 0-2s in the pre-test, to more 2-3s on the post-test. Students are expressing through this assessment that they have the skill set needed to evaluate the types of articles they are seeking for their research, whether they actively apply those skills on a daily basis or not.

Table 6:

Q.6	Pre-Test Fall 2011	Post-Test Spring 2012	Increase or Decrease
Overall Average	1.89	2.73	0.84
Number of 0s	16	2	
Number of 1s	41	1	
Number of 2s	102	17	
Number of 3s.	49	71	
Percentage of 0s	7.69%	2.20%	
Percentage of 1s	19.71%	1.10%	
Percentage of 2s	49.04%	18.68%	
Percentage of 3s	23.56%	78.02%	
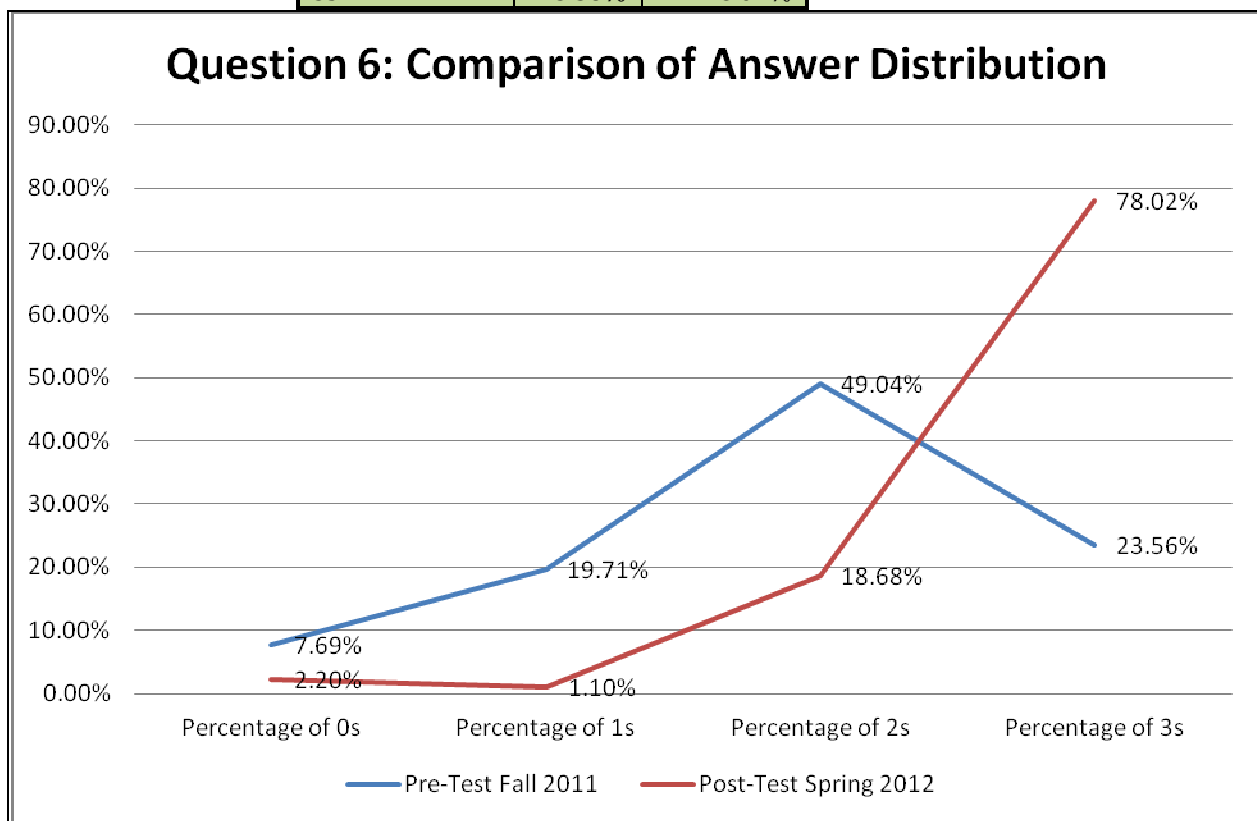
Question 6: Comparison of Answer Distribution

To read more about how the results of this portion of the assessment will affect library instruction, read the Improvements section of this report.

Improvement Plans

Though a goal for the 2011-2012 year was to begin assessment for the off-sequence and PACE CWRR sections, it was postponed for a year due to time constraints.. For the 2012-2013 year, the librarians will begin to collect data for these sections allowing comparisons of the instruction and learning to be drawn between the traditionally scheduled, off-sequence, and PACE CWRR sections, therefore giving a fuller snapshot of the learning in the CWRR program.

Part 1- This is the first year of data to compare students' pre and post-test reflection on their confidence with research skills (difficult vs. not difficult). Of the categories in the assessment that are covered by the library's learning goals, for the 2012-2013 year, the Instruction coordinator will make sure that the concepts of narrowing a topic, choosing keywords, and sorting through irrelevant results have a consistent, prominent, hands-on focus during the library sessions. The librarians will continue to focus on locating resources, and evaluating source credibility.

Part 2- Multiple Choice:
Question 4, asking students about internet domains, will likely be removed/replaced for the upcoming assessment. Part 2 Question 3 may be a sufficient evaluation of this concept. We will continue to talk about why they might want to choose each type of website, and why they should deliberately seek out specific types of sources.
Question 7, looking for bias, is a challenging skill for all researchers. As students continue to have difficulty with this question (this question has been in past assessments), the Library Instruction Coordinator will work with the librarians to develop more in-class examples of detecting bias.
Question 8, asking about when is the proper time to cite a source, seems to suffer from the students' writing processes. The Instruction Coordinator will double-check that all librarians are discussing this topic at some point during the instruction sequence.

Part 2- Open ended questions:
The results found in Q.1 for what students wished they would have learned, is a valuable contribution to instruction assessment. With 10 students wishing they had more practice developing their topics, and seeing the small increase in the level of confidence reflected in Part 1 with this task, we will plan to spend more time for fall or spring instruction working directly with the professors on how to help students develop/narrow topics. The Instructional Coordinator will also talk with the other librarians about what seems best for the response of wishing to see the physical library as part of library instruction. This discussion will include how this task manageable given the time limits and the difficulty giving a tour. The librarians will also start conversations with the first-year professors about where citation and plagiarism are already taught within the course curriculum.

In the future, (perhaps not this summer [2012], but next [2013]), the Instruction Coordinator and fellow librarians need to evaluate the goals of the Library Instruction Program. Goal #2 focuses entirely upon preventing plagiarism, and this is a topic that has been removed as a primary aspect of our teaching. Either we need to spend more time talking with students about plagiarism, or update our goals.

For the 2012-2013 Instruction Report, the Coordinator would like to have one or two other librarians participate on an Assessment team to assist with the open-ended data evaluation. As the open ended questions must be ranked from 0 to 3, having multiple librarians score the answers then take the average of the librarian's answers would help to remove any unforeseen bias on the part of the library Instruction Coordinator.

The librarians continue to emphasize that timing the library instruction sessions to mesh with the content in the course and giving credit for session attendance both help to reinforce the importance of the skills and concepts learned during library instruction activities.

The librarians are pleased with the strong foundation of collaboration that already exists with the first-year core courses and look forward to working with their CWRR and Seminar colleagues during the 2012-2013 academic year.

Appendix A
Part 1 Questions:

Overall, when you think about the ENTIRE research process—from the moment you get the assignment until you turn in your research paper--- what is DIFFICULT for you? [Scale of 1 to 5, where 1 IS difficult and 5 is NOT difficult.]

       *Getting started on the assignment.
       *Defining a topic for the assignment.
       *Narrowing down a topic.
       *Coming up with search terms.
       *Finding articles in the research databases on the Library's website. (examples include EBSCO, JSTOR, ProQuest, etc.)
       *Finding sources to use "out on the web"(example- Google, Wikipedia, websites).
       *Determining whether a website is credible or not.
       *Figuring out where to find sources in different parts of the library.
       *Finding up-to-date materials.
       *Having to sort through all the irrelevant results I get to find what I need.
       *Evaluating the sources that I've found.
       *Reading through the material.
       *Taking notes.
       *Integrating different sources from my research into my assignment.
       *The writing part.
       *Knowing when I should cite a source.
       *Knowing how to cite a source in the right format.
       *Knowing whether or not my use of a source, in certain circumstances, constitutes plagiarism.
       *Deciding whether or not "I'm done".
       *Knowing whether or not I've done a good job on the assignment.

Part 2 Questions:
Q.1 - Pre Test: Wish to Learn:
This semester and in the spring, a librarian will be visiting your CWRR and Seminar classes to begin talking about Information Literacy.
       What do you hope to learn from the library sessions this year?

Q.1 - Post Test: Learn/Wish Had Learned:
This past year, a librarian has visited your CWRR and Seminar classes to begin talking about Information Literacy.
       1. What was the most useful thing that you learned from the library sessions this year?
       2. What do you wish that you would have learned?

Q.2 Keywords:
You are asked to write a three-page research paper on the following question: "Should colleges be allowed to restrict student speech?"
You have decided to do a Google search using two keywords.
Which two keywords will get the best results?
       College and censorship
       College and student
       College and speech
       College and restriction

Q.3 Credibility:
How do you decide if a website has the credibility it needs for you to use in your research project?

Q.4 Website:
The website www.feedthechildren.org likely belongs to a (choose one):
    Business or company
    Non-profit agency
    Education institution
    U.S. government agency

Q.5 Database:
If you are searching in the database "Academic Search Premier" as seen in the image below, what type of research resource could you expect to find in your results?
    Journal Articles
    Books

Q.6 Scholarly Article:
Name three characteristics of a scholarly journal article.
These characteristics make scholarly articles different than a magazine article or newspaper article.

Q.7 Bias:
You are writing a report on automobile tires and safety. You have found several sources.
Which would be the most trustworthy because of the likelihood of having unbiased, factual information?
    Report from an automobile manufacturer association.
    Survey from a tire company.
    Article in a consumer reporting magazine.
    Article in a sports magazine.

Q.8 Citation:
When is the best time in the research process to record the citation information for a source?
    The first time you access a source you might want to use.
    After you have finished writing the section of the paper that uses information from a source.
    When the teacher asks you for proof that you did not plagiarize the information in the paper.
    When you are getting ready to print your final draft.