# Millikin University Assessment of Student Learning Annual Assessment Update

Due on or before August 1

Please submit Department/School Reports to the appropriate Dean and Director of Academic Effectiveness. University Studies Reports should be submitted to the Director of Academic Effectiveness only.

College/School:	Staley Library
Department or Program:	Library Instruction
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Assessment is a means to review and improve, NOT prove. It is to be expected that learning goals may need to change over time, that pedagogies may or may not be successful, and that changes may take time to show effects. The Annual Assessment Update should review and report progress on learning goals over the last 1-3 years, provided extensive changes in learning outcomes or assessment practices have not occurred. It is entirely possible that one goal may be analyzed more in depth and this may change from year to year.

This Annual Update includes describing any modifications of pedagogies employed or how learning is being assessed. In addition to summarizing annual findings, if there are changes that should be employed or new learning goals examined, these should be described with the approximate timeline needed to adequately assess whether they are successful; one year will likely not be enough time to produce a verdict in support or opposition of the change.

**Student Learning Outcomes (SLO):** For historical and/or informational purposes, please list the student learning outcomes (SLO) of your program below, along with the rationale behind their development and/or change. This is information that should not need to be updated annually, unless there are changes to the SLO.

#### Student Learning Outcome(s)

Staley Library's instruction program has four learning outcomes:

- 1. Students will identify the use and purpose of potential information sources and formats.
- 2. Students will develop and implement search strategies to retrieve resources using library and non-library tools.
- 3. Students will evaluate the information that they find to determine its context, value, and to identify bias or deception.
- 4. Students will understand ethical aspects of information and information technology.

Traditionally our assessment has focused on all four learning outcomes to varying degrees. We continued that practice this year.

<u>Rationale for Student Learning Outcome(s)</u> (Explain why this/these outcome(s) is/are important to the program and/or to the institution overall.) Limit 750 words.

The mission of Staley Library's instruction program is to empower students to become information literate adults who are confident in their information seeking abilities and who can apply critical thinking skills in the discovery, evaluation, and ethical use of information. The program supports the academic curriculum of Millikin University and strives to develop students who are not only successful academically, but also who are prepared to use information critically and ethically throughout their lives.

The four learning outcomes for Staley Library's instruction program cover the entire research process and are based on the Association of College & Research Libraries' "Information Literacy Competency Standards for Higher Education." They also complement the University Writing learning goal that students will "practice all aspects of writing processes including invention, research, drafting, sharing with others, and revising," the Writing in the Disciplines learning goals that students will "conduct indepth primary and secondary research," "evaluate sources for credibility, bias, quality of evidence, and quality of reasoning," and "develop arguments rooted in research in order to enter disciplinary and cross-disciplinary conversations," and the Honors Writing Studio learning goal that students will "conduct research to participate in academic inquiry."

The library's learning outcomes also correspond to the University-wide learning goals:

- 1. Millikin students will prepare for professional success.
- 2. Millikin students will prepare for democratic citizenship in a global environment.
- 3. Millikin students will prepare for a personal life of meaning and value.

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

Library Learning Goal	Corresponding MU Learning Goal
Students will identify the use and purpose of potential information sources and formats.	1, 3
Students will develop and implement search strategies to retrieve resources using library and non-library tools.	1, 3
Students will evaluate the information that they find to determine its context, value, and to identify bias or deception.	1, 3
Students will understand ethical aspects of information and information technology.	2, 3

This section last reviewed/updated on \_\_\_July 15, 2025\_\_\_\_by \_\_Matthew Olsen\_\_.

Assessing Student Learning Outcomes (SLO): An effective plan should outline the type of data you will assess, an instrument used for data collection, and a measurable target for achieving the SLO. For some learning outcomes, assessment may require analyzing data across multiple academic years. In some years, the assessment report may need to focus upon a particular learning outcome over others (i.e., Learning Outcome 1 in year 1, Learning Outcome 2 in year 2...). This section may require 1-2 pages per Learning Outcome.

1. <u>Review of assessment cycle</u> (List the relevant year(s) for this assessment cycle, i.e. current or previous academic year, and briefly summarize the academic unit's assessment activities during this cycle. Describe any modifications to previous assessments.)

This assessment report covers the 2024-2025 academic year.

Most of the library's instruction takes place in introductory University Studies courses, which are the focus of this assessment report. Because these courses are taken by all Millikin students early in their college career, this approach allows us to provide an information literacy foundation that students can use in all their coursework. All four of the library faculty (Rachel Bicicchi, Elizabeth Hollendonner, Matthew Olsen, and Amanda Pippitt) teach in the library's instruction program. Librarians offer instructional activities in all sections of:

- IN140: University Seminar
- HN183: Honors University Seminar
- EN181: University Writing
- EN281: Writing in the Disciplines
- HN150: Honors Writing Studio I
- HN151: Honors Writing Studio II

In IN140 and HN183 the librarians provide a self-guided tour of the library and an in-class instruction session. The self-guided tour is assessed through a worksheet that students complete during the tour and a survey at the end. **The worksheet and survey assess SLOs 1 & 2**. The in-class instruction is assessed via the pre- and post-test administered in EN181 (see below).

In EN181 the librarians offer an optional video on research questions that students are encouraged to watch prior to the two in-class instruction sessions with a librarian. During the sessions students complete a worksheet on developing effective research questions and keywords. Assessment for EN181 is done through a pre- and post-test that students take in Moodle. The pre-test is taken prior to any library instruction, and the post-test is taken after the library instruction is complete. **The pre-and post-test assess SLOs 1, 2 & 3**.

In EN281 the librarians offer two optional videos, one on research in the disciplines and one on primary and secondary sources. There are two in-class library instruction sessions for each section of EN281. Assessment is done through a review of the final portfolios collected by the writing faculty. **The librarian review of the portfolios assesses SLOs 1, 3 & 4**.

In HN150 the librarians offer two library instruction sessions, and in HN151 the librarians offer one library instruction session. The instruction activities in Honors Writing Studio are assessed through a pre-test that is administered in Moodle to all HN150 students in the fall semester prior to any library instruction and a Moodle post-test in the spring semester for all HN151 students after the library instruction is complete. **The pre- and post-test assess SLOs 1, 2, 3 & 4.** 

2. <u>Target for Success: what is the measurable target you expect to achieve?</u> (If using target verbs such as "increase", "reduce", "improve", or "decrease" -- what is the baseline comparison value? e.g., 70% of students performing at mastery level on a specific assignment, an increase of 5% in number of students attaining mastery over prior year, etc. A benchmark value must be provided for comparison.)

For the self-guided library tour, we are targeting a 70% participation rate. The worksheet that students complete during the tour is intended more as a knowledge check, so we are targeting an average 9.0 score (out of 10). The survey that students complete at the end of the tour measures students' comfort using the library and their knowledge of how to locate resources and people in the library. We are targeting 85% positive responses to those questions.

For the EN181 pre- and post-test we are targeting a 20% average increase in correct responses across all the questions and all the assessed learning outcomes. For the HWS pre- and post-test we are targeting a 10% increase in research confidence and information literacy skills from the pre-test to the post-test. In the past we have seen smaller increases in the scores in the honors courses because the honors students tend to score higher on the pre-test.

For the EN281 portfolios we are setting a target score of a 2 or above for each of the five categories in the rubric. This would place students in the "developing" heading towards "proficient" designation.

3. <u>Summary of Data Source</u>: In what course(s) did the assessment occur? What instruments/assignments were used? How many students participated in the assessment? Complete the table below. Copy and complete for each SLO assessed.

If tests were administered or a rubric was used, please provide a copy in an appendix at the end of your report.

Learning Outcomes 1 & 2:

Course Assessed	# of sections	Instructor	# of students enrolled	What artifact was collected (paper, exam, etc)?	How many artifacts collected?	How many artifacts assessed?
IN140 & HN183	16	Hollendonner, Olsen, Pippitt	345	Tour Worksheet	260 (75%)	260
IN140 & HN183	16	Hollendonner, Olsen, Pippitt	345	Tour Survey	164 (63% of those who completed a worksheet, 48% of total)	164

## Learning Outcomes 1, 2 & 3:

Course Assessed	# of sections	Instructor	# of students enrolled	What artifact was collected (paper, exam, etc)?	How many artifacts collected?	How many artifacts assessed?
EN181	23	Bicicchi, Hollendonner, Olsen, Pippitt	332	Pre- & Post- Test	Pre-Test = 156 (47%), Post-Test = 104 (31%)	Pre-Test = 156, Post- Test = 104

## Learning Outcomes 1, 3 & 4:

Course Assessed	# of sections	Instructor	# of students enrolled	What artifact was collected (paper, exam, etc)?	How many artifacts collected?	How many artifacts assessed?
EN281	18	Bicicchi, Hollendonner, Olsen	266	Portfolio (collected by writing faculty)	16 (6%)	14 (5% of total, 88% of those collected)

## Learning Outcomes 1, 2, 3 & 4:

Course Assessed	# of sections	Instructor	# of students enrolled	What artifact was collected (paper, exam, etc)?	How many artifacts collected?	How many artifacts assessed?
HN150	4	Bicicchi, Pippitt	50	Pre-Test	35 (70%)	35
HN151	4	Bicicchi, Pippitt	53	Post-Test	52 (98%)	52

**Assessment Data:** Provide a summary of data/results from the assessment measures utilized. This may include quantitative and/or qualitative data. Do not attach actual student artifacts. This section should be 1-2 pages per Learning Outcome.

4. <u>Assessment Data</u> (Be as specific as possible; include numbers/percentages of students who were determined to meet the specified SLO. Compare results to prior years if applicable. May be included as a table or graph if beneficial.)

IN140/HN183 – Student scores on the self-guided tour worksheet. Scores provided by the librarian paired with the course section.

Average Score (out of 10) (n=260)	8.9
Median Score (out of 10) (n=260)	9.3

IN140/HN183 – Self-guided tour survey results. Questions 2, 3 & 4 address learning outcomes 1 & 2. Question 1 helps judge how long the tour takes students; the target is less than 20 minutes. Question 5 asks the students to rate the narrative element of the tour.

	Number of Student Responses	Percentage of Student Responses
1. How long did it take you to complete your investigation	on? (n=163)	
5 - 10 minutes	28	17%
10 - 15 minutes	57	35%
15 - 20 minutes	49	30%
more than 20 minutes	29	18%
Now that you have completed the tour		
2. do you feel more comfortable using Staley Library?	(n=164)	
Yes	148	90%
No	3	2%
Not sure	13	8%
3. do you feel more confident about finding library res	sources? (n=164)	
Yes	153	93%
No	5	3%
Not sure	6	4%
4. do you know who to ask for help in the library? (n=	164)	
Yes	161	98%
No	0	0%
Not sure	3	2%
5. How do you feel about the Dr. I.B. Smart story used in	n the investigation?	(n=164)
I liked it	81	49%
It was ok	69	42%
I didn't like it	4	2%
I didn't pay any attention to the story	10	6%

EN181 – Coded student responses to pre-test question 1. This question does not assess a learning outcome but gives the librarians a sense of students' interests and expectations going into library instruction. The librarians often review these results before library instruction begins. All question coding was done by librarians Elizabeth Hollendonner and Matthew Olsen. Each response was coded into up to three categories. There are 15 possible categories. The chart also includes representative student responses.

Pre-Test Question 1 – "What do you hope to learn from the library sessions?"	Number of Student Responses (n=158)
Finding resources – "I hope to learn how to effectively find reliable and scholarly sources."	67
Other – "I hope to learn about local history tools and IT help, and many more"	48
Library – "I want to learn what people actually use out of the library amenities."	41
Finding books – "How to get access to online books"	25
Finding articles – "How to effectively use the databases."	19
Evaluation of sources – "how to discern those from sources that are considered unreliable"	19
Writing Papers – "I hope to learn how to improve my writting"	7
Web – "What websites are best used for research papers"	7
Citation – "I want to learn how to cite my work and sources."	5
Keywords – "what keywords to use when using a database"	2
Research questions – "I hope to learn how to develop a good research question that not only is good to research about but that is interesting to me to research."	2
Topics – "how to find a topic."	2

EN181 – Coded student responses to post-test question 1. This question does not assess a learning outcome but gives the librarians a sense of what students found useful/important in the library instruction and what they would like to learn more about.

Post-Test Question 1.1 – "What was the most useful thing that you learned from the library sessions?"	Number of Student Responses (n=102)	Post-Test Question 1.2 – "What do you wish that you would have learned?"	Number of Student Responses (n=92)
Finding articles – "I think the most useful thing was learning how to use the library database."	45	Nothing – "Nothing I learned everything that I needed to learn from them."	22
Finding resources – "being able to find things to help you research was by far the most useful thing I learned from the library instruction."	27	Library – "I wish I would have learned how to checkout books and such."	17

Keywords – "Learned how to focus on keywords in order to find the best information for my research."	16	Don't know – "I cant really think about what I wish i would've learned."	10
Library – "How to use the library website to get focused results."	16	Writing papers – "I wish I could have learned some more tips to lengthen my papers."	10
Evaluation of sources – "The differences between scholarly journals, newspapers, magazines, etc."	10	Finding resources – "I wish i would have learned better ways to find sources."	9
Other – "I learned how to research things easier."	7	Finding articles – "I wish I would have learned more about different databases and how to use them instead of just one or two."	7
Finding books – "I learned how to find certain books"	4	Other – "did wish that there was a more one-on-one aprocach to aiding in in-depth reaserch especially on complex subjects"	7
Interlibrary loan – "I learned that we can borrow sources from other schools!"	3	Finding books – "I feel like I would've liked to learn more about how to find books in the physical library"	5
Topics – "how to pick a specific topic"	3	Evaluation of sources – "More in depth about how to tell the validity of a source."	5
Citation – "The most useful thing I learned was how to cite my sources so that I can get full credit."	2	Topics – "How to pick topics on what to research."	4
Writing Papers – "getting a decent idea of what you want to write about"	2	Citation – "I wish I had learned a little bit more about APA formatting rules."	3
Research questions – "The most useful thing I got from the library instruction was when answering or asking research questions you need to be focused on, what do you already know, what do you need/want to know and what does my audience need to know."	2	Keywords – "A bit more clarification on keyword searches since the second question still kind of confuses me"	3
		Research questions – "How make a better worded question."	2

EN181 – Percentage of correct student scores on the pre- and post-test multiple choice questions.

Multiple-Choice Question	Pre-Test (n=158)	Post-Test (n=105)	Percent Change
2. Keywords	44%	60%	37%
4. Database	82%	91%	12%
6. Research Questions	36%	49%	35%
Average	54%	67%	24%

EN181 – Comparison of student scores pre- and post-test for question 3. Questions 3 & 5 were scored by Elizabeth Hollendonner and Matthew Olsen independently and their scores were averaged.

Question 3 – "Describe a strategy for evaluating an online source (website, social media post, etc.) for credibility."	Pre-Test (n=157)	Post-Test (n=104)	Point Change	Percent Change
Average (out of 3)	1.77 (59%)	1.57 (52%)	-0.20	-11%

EN181 – Comparison of student scores pre- and post-test for question 5.

Question 5 – "List and describe three ways that scholarly journal articles differ from magazine articles or newspaper articles."	Pre-Test (n=153)	Post-Test (n=102)	Point Change	Percent Change
Average (out of 3)	1.97 (66%)	2.31 (77%)	0.35	18%

EN181 – Student responses to pre-test question 7. This question does not assess a learning outcome but helps the librarians understand students' prior knowledge.

Pre-Test Question 7 – "Prior to coming to Millikin University did you receive instruction in any of the following areas? (check all that apply)"	Number of Student Responses (n=155)	Percent of Student Responses
Understanding the strengths and weaknesses of different information sources	114	74%
Using library databases (Gale, EbscoHost, etc.)	70	45%
Using a library catalog	41	26%
Developing keywords to use in your searches	94	61%
Evaluating websites	99	64%
Creating MLA, APA, Chicago, etc. style citations	124	80%

EN181 – Student responses to post-test question 7. This question does not assess a learning outcome but helps the librarians understand the types of sources that Millikin students are commonly using in their research.

Post-Test Question 7 – "Which of the following information sources have you used for assignments in any of your classes during this semester at Millikin University? (check all that apply)"	Number of Student Responses (n=105)	Percent of Student Responses
Paper books	38	36%
E-books	70	67%
Encyclopedias or dictionaries	27	26%
Scholarly journals	90	86%
Newspapers or magazines	45	43%
Websites	100	95%

EN181 – Student scores by learning outcome.

Learning Outcome	Questions	Pre-Test	Post-Test	Percent Change
1. Information Sources	4 & 5	74%	84%	14%
2. Search Strategies	2 & 6	40%	54%	36%
3. Evaluation of Information	3	59%	52%	-11%
Average				13%

EN281 – After jointly assessing a norming artifact, Elizabeth Hollendonner and Matthew Olsen each read through eight student portfolios. The portfolios typically contained a reflection, a disciplinary research memo, a discourse community project, an annotated bibliography, a research project, and a multimodal project. The librarians identified if the reflection mentioned research and the library specifically and then scored the portfolio based on the relevance of the sources, the mix of primary and secondary sources, the credibility and currency of the sources, the use of sources to support a thesis in the research paper, and the correctness of the citations. The annotated bibliography and research paper were the primary sources for the assessment. The artifacts were scored as Proficient (3), Developing (2), Emerging (1), or Unacceptable (0). Two of the sixteen portfolios did not contain enough materials for the librarians to assess them.

(n=14)	Source Relevance	Source Type	Credible Sources	Sources Support Thesis	Citations	Overall
Average	1.86	1.50	1.85	1.55	1.43	1.64
Median	2	1.50	2	2	2	1.90

HN150 – Coded student responses to pre-test question 1. This question does not assess a learning outcome but gives the librarians a sense of students' interests and expectations going into library instruction. The librarians often review these results before library instruction begins. Like with EN181, all coding and scoring were done by Elizabeth Hollendonner and Matthew Olsen.

Pre-Test Question 1 – "What do you hope to learn from the library sessions?"				
Finding resources – "I hope that I can learn more about my resources"	13			
<b>Library</b> – "How we should be getting research from the library and ways to look up documents online for the library."	13			
Finding articles – "I hope to learn how to more easily use the databases and how to find them and how to search for something specific."	10			
Citation – "I would like to learn more about citing sources"	8			
Evaluation of sources – "Learn how to find which sites are credible."	6			
Other – "Ummmmm stuff about my major I guess."	6			
Finding books – "I hope to learn more about how to find books in the Library"	3			
Writing papers – "I hope to learn about writing techniques to make my sentences flow better and learning to eliminate phrases I don't need."	3			
Nothing – "There is nothing I hope to learn in the field of scholarly research. I (hopefully) learned everything I needed in my English 101 and 102 classes last year."	1			
Web - "I hope to learn more about how to find sources both online"	1			

HN151 – Coded student responses to post-test question 1. This question does not assess a learning outcome but gives the librarians a sense of what students found useful/important in the library instruction and what they would like to learn more about.

Post-Test Question 1.1 – "What was the most useful thing that you learned from the library sessions?"	Number of Student Responses (n=51)	Post-Test Question 1.2 – "What do you wish that you would have learned?"	Number of Student Responses (n=50)
Finding articles – "I learned how to properly use databases and find the search results I'm looking for. "	26	Nothing – "There was not much more I wished I learned."	11
Keywords – "The most useful thing I learned from the instruction was how to narrow down key words and how to pick keywords when looking for a certain thing."	8	Citation – "I wish I have learned to cite a little better."	9
Finding resources – "How to navigate and successfully use the Staley Resources."	8	Evaluation of sources – "How to tell the difference between a peer-reviewed article and one that is not peer-reviewed"	5

Citation – "The most useful thing that I learned from the library instruction was the introduction of the app Zotero."	6	Finding articles – "I wish I would have learned how to find other databases for a wider search"	4
Library – "The most useful thing for me was learning how to easily find sources with the Millikin online library."	6	6 Other – "I wish I would have learned more about the process as I was going along instead of all at once."	
Evaluation of sources – "The most useful thing I learned from the library instruction was most definitely the ability to find credible, peer reviewed sources."	4	Writing papers – "How to annotate long research papers, how to get the main ideas/ important quotes."	4
Finding books – "how to request books"	1	Finding resources – "I wish I learned how to find up to date sources on niche topics."	4
Interlibrary loan – "how to request books"	1	Library – "I wish I learned how to navigate the physical library and had instructions on how it is organized."	3
Nothing – "I already was taught everything they told me in high school, I didn't really learn anything new from it."	1	Web – "Potential online sources that were not extensive books/journals."	3
		Finding books – "How to use the physical encyclopedias."	2
		Keyword – "Certain topics are harder to find keywords for or some aren't sure where to start with the keyword."	2
		Topics – "I wish I would have learned how to expand my topic to find new sources that could have offered different information."	2
		Don't know – "I'm not sure."	1

HWS – Comparison of student ratings pre- and post-test by question for Part 1 (confidence in the research process).

Question Scale 1 - 5 1 = very difficult   5 = very easy	Pre-Test (n=35)	Post-Test (n=52)	Point Change	Percent Change
1. Defining a topic for the				
assignment	3.11	3.38	0.27	8.7%

2. Narrowing my topic	3.17	3.06	-0.11	-3.6%
3. Selecting search terms	3.06	3.44	0.39	12.6%
4. Finding articles in the research databases on the Library's website (EBSCO, JSTOR, ProQuest, etc.)	2.60	3.42	0.82	31.7%
5. Finding sources to use "out on the web" (example - Google,	0.74	0.07	0.40	0.004
Wikipedia, websites)	3.74	3.87	0.12	3.3%
6. Determining whether a website is credible or not	3.51	3.69	0.18	5.1%
7. Figuring out where to find sources in different parts of the				
library	2.57	3.08	0.51	19.7%
8. Finding up-to-date materials	2.97	3.40	0.43	14.6%
9. Having to sort through all the irrelevant results I get to find what I need	2.96	2 17	0.22	44.40/
10. Evaluating the sources that I've	2.86	3.17	0.32	11.1%
found	3.23	3.50	0.27	8.4%
11. Reading and understanding the material	3.49	3.75	0.26	7.6%
12. Integrating different sources from my research into my				
assignment	3.46	3.85	0.39	11.3%
13. Knowing when I should cite a source	3.83	3.81	-0.02	-0.5%
14. Knowing how to cite a source in the right format	2.91	3.46	0.55	18.8%
15. Knowing whether or not my use of a source, in certain circumstances, constitutes				
plagiarism	3.20	3.62	0.42	13.0%
16. Knowing whether or not I've done a good job on the assignment	2.71	3.15	0.44	16.2%
Average	3.15	3.48	0.33	10.4%

HWS – Percentage of responses at each level of difficulty for all questions in Part 1 (confidence in the research process).

Rating	Pre-Test (n=35)	Post-Test (n=52)	Percent Change
1 – This is very difficult	3%	2%	-15%
2 – This is difficult	23%	14%	-38%
3 – This is neutral	38%	29%	-23%

4 – This is easy	31%	43%	39%
5 – This is very easy	6%	12%	96%

HWS – Percentage of correct student scores on the pre- and post-test multiple choice questions.

Multiple-Choice Question	Pre-Test (n=34)	Post-Test (n=52)	Percent Change
2. Keywords	82%	87%	5%
4. Database	79%	96%	22%
6. Narrowing	85%	88%	4%
7. Sources	91%	98%	8%
8. Citations	88%	94%	7%
Average	85%	93%	9%

HWS – Comparison of student scores pre- and post-test for question 3.

Question 3 – "Describe a strategy for evaluating an online source (website, social media post, etc.) for credibility."	Pre-Test (n=34)	Post-Test (n=52)	Point Change	Percent Change
Average (out of 3)	1.59 (53%)	2.05 (68%)	0.46	29%

HWS – Comparison of student scores pre- and post-test for question 5.

Question 5 – "List and describe three ways that scholarly journal articles differ from magazine articles or newspaper articles."	Pre-Test	Post-Test	Point	Percent
	(n=34)	(n=52)	Change	Change
Average (out of 3)	2.13 (71%)	2.55 (85%)	0.42	20%

HWS – Student responses to pre-test question 9. This question does not assess a learning outcome but helps the librarians understand students' prior knowledge.

Pre-Test Question 9 – "Prior to coming to Millikin University did you receive instruction in any of the following areas? (check all that apply)"	Number of Student Responses (n=34)	Percent of Student Responses
Understanding the strengths and weaknesses of different information sources	32	94%
Using library databases (Gale, EbscoHost, etc.)	20	59%
Using a library catalog	8	24%

Developing keywords to use in your searches	21	62%
Evaluating websites	26	76%
Creating MLA, APA, Chicago, etc. style citations	31	91%

HWS – Student responses to post-test question 9. This question does not assess a learning outcome but helps the librarians understand the types of sources that Millikin students are commonly using in their research.

Post-Test Question 9 – "Which of the following information sources have you used for assignments in any of your classes during this semester at Millikin University? (check all that apply)"	Number of Student Responses (n=52)	Percent of Student Responses
Paper books	12	23%
E-books	39	75%
Encyclopedias or dictionaries	21	40%
Scholarly journals	52	100%
Newspapers or magazines	27	52%
Websites	48	92%

HWS - Student scores by learning outcome.

1. Information Sources	2. Search Strategies	3. Evaluation of Information	4. Ethical Aspects of Information
Part 1 Questions 7 & 8 Pre-Test Avg. = 2.77 Post-Test Avg. = 3.24 Improvement = 17%	Part 1 Questions 1, 2, 3, 4 & 5 Pre-Test Avg. = 3.14 Post-Test Avg. = 3.43 Improvement = 9%	Part 1 Questions 6, 9 & 10 Pre-Test Avg. = 3.20 Post-Test Avg. = 3.46 Improvement = 8%	Part 1 Questions 13, 14 & 15 Pre-Test Avg. = 3.31 Post-Test Avg. = 3.63 Improvement = 9%
Part 2 Questions 4 & 5 Pre-Test Avg. = 75% Post-Test Avg. = 91% Improvement = 21%  Total for SLO 1 Improvement = 19%	Part 2 Question 2 & 6 Pre-Test Avg. = 84% Post-Test Avg. = 88% Improvement = 4%  Total for SLO 2 Improvement = 7%	Part 2 Questions 3 & 7 Pre-Test Avg. = 72% Post-Test Avg. = 83% Improvement = 15%  Total for SLO 3 Improvement = 12%	Part 2 Question 8 Pre-Test Avg.= 88% Post-Test Avg.= 94% Improvement = 7%  Total for SLO 4 Improvement = 8%

**Analysis:** Provide a discussion of your findings. Are the assessment methods adequate? Are you achieving the desired SLOs? Do modifications in assessment, pedagogy, or SLOs need to occur? This section should be 1-2 pages.

5. <u>To what extent did you achieve the target specified above?</u> (e.g., completely, partially, did not achieve)

For the self-guided library tour the participation rate was 75%, which exceeded our 70% target. The average score on the tour worksheet of 8.9 (9.3 median) was very slightly below our goal of 9.0. Positive responses on the learning outcome related questions on the tour survey met our goal of 85% with an 94% average.

For the EN181 pre- and post-test the average 18% increase in correct responses did not meet our target of a 20% increase from the pre-test to the post-test. The results did vary widely. For learning outcome 1 (questions 4 & 5) and outcome 2 (questions 2 & 6) the improvements from the pre-test to the post-test were 14% and 36% respectively. Learning outcome 3, which is assessed by question 3, had an 11% *decrease* in correct responses from the pre-test to the post-test.

For the EN281 portfolio assessment, the average scores of the artifacts we assessed did not meet our target for any of the five criteria. The median score met our target on four of the five criteria. Students scored highest on the relevance of their sources and the credibility of their sources. They scored lowest on the variety of source types and the quality of their citations. The overall average was 1.64 (out of 3) and the median score average was 1.9.

For Honors Writing Studio, the average on Part 1 of the assessment on research confidence increased 10% from the pre-test to the post-test, which matches our 10% target. For Part 2, which tests students' information literacy skills, the average increase from the pre-test to the post-test was 14%, which is above our 10% target. If we look by learning outcome across all parts of the pre- and post-test, outcomes 1 and 3 exceeded our target with 19% and 12% increases respectively, while outcomes 2 and 4 were below our target with 7% and 8% increases.

6. <u>Takeaway: what do the results mean?</u> (Provide a discussion of what the results mean to the program overall. Do they indicate strengths, weaknesses, opportunities, or areas that warrant additional attention? Are there any gaps or inadequacies in assessment methods that may need to be changed for future assessments?)

Based on the scores on the tour worksheet and the responses to the survey at the end of the tour, the self-guided library tour is meetings its goals of making first semester Millikin students aware of the resources and services in the library. While the tour participation rate exceeded our 70% target, it would always be nice to have more students complete the tour, especially because a fair number of students indicated on the EN181 post-test that they would like to have learned more about the library. It is impossible to know if those students participated in the tour. However, the more students who complete the self-guided tour and explore the physical library early in their college career the better.

While the results from the EN181 pre- and post-test assessment were generally positive and students showed double digit increases in their correct answers to almost all questions by the time of the post-test, question 3 which assess learning outcome 3 continued a trend of assessing very poorly. Students demonstrated an 11% decrease in correct answers, which coincidently matched the 11% decrease last year. The post-test average score of 1.57 (out of 3) or 52% was slightly better than last

year's 1.30 or 43%. This learning outcome is assessed with a single question and, as explained in last year's report, another factor is that the content and skills that this question assess is introduced in IN140 while it is assessed in EN181, which students may be taking a semester later. For learning outcome 1, while the percent improvement was only 14% and thus short of our target, the average score on the post-test was 84%, which is very high. This contrasts with outcome 2, which saw a very large percentage increase of 36%, while the average score on the post-test was relatively low at 54% correct. This indicates that our instruction is increasing students' skills for learning outcomes 1 & 2 but more work could be done to bring those skills to a higher level, especially for learning outcome 2.

For EN281, the average scores of the artifacts reduced substantially from last year's assessment. The largest deceases were in the variety of source types and the relevance of the sources to the topic (0.71 and 0.5 points respectively). The smallest decrease was in how well students used sources to support their thesis (0.02 points). However, last year this was the lowest scoring criterion. As we did last year, we separated out those students who mentioned the library in their semester reflection and those who did not. Five of the artifacts mentioned library use, nine did not. For students who mentioned the library, the average scores were at or above 2.0 (out of 3) on four of the five criteria (variety of sources was the only criterion below with an average score of 1.8). The overall average score for students who mentioned the library was 0.4 points higher. As was noted in last year's report, it is hard to tell if this is causation or correlation, i.e., if the library instruction is leading to better performance or these are simply stronger, more diligent students. In any case, the overall results are disappointing, and the quality of the portfolios was relatively low. Students continue to have a hard time incorporating their sources into their writing in a way that supports their thesis rather than simply listing a source per paragraph and perhaps providing a quote without explaining how it supports, or challenges, their position. Students also tended to be overly reliant on certain source types like scholarly articles or websites, rather than finding a variety of sources to support various aspects of their writing. Students also struggled with citing their sources using the rules of the appropriate citation style, or they failed to choose an appropriate citation style. In-text citations were a particular challenge. One bright spot is that students did fairly well on finding credible sources, which is a major focus of our library instruction in EN281.

For the Honors Writing Studio pre- and post-test, the results are largely consistent with what we have seen in the past. The scores were high on the pre-test and increased on the post-test with an overall 10% average increase in research confidence and mostly single digit increases in scores from the pre-test to the post-test on the skills portion. The exceptions were questions 4 on databases, 3 on evaluating online sources, and 5 on source evaluation where the scores increased over 20%. All learning outcomes showed an increase from pre-test to post-test. The highest increases were learning outcomes 1 (information sources) and 3 (evaluation of information) while 2 (search strategies) and 4 (ethical aspects of information) were in the high single digits. These results show that honors students are learning important information literacy concepts and skills during their first year at Millikin even though they begin their college careers at a higher base level. By the time of the post-test, their research confidence was an average of 3.48 (out of 5), i.e., above neutral and heading towards finding research tasks easy. Their correct answers on the skills portion were all above 85%. Mirroring the EN181 students, the only exception is their response to question 3 on evaluating online sources where the average answer was 2.05 (out of 3) or 68% correct. This question has some of the same challenges in assessment that it has with the EN181 students, namely that the content is introduced in the fall semester in HN183 and is assessed in the post-test in the spring in HN151.

7. What actions will be taken based on analysis of the assessment results? (Closing the feedback loop is essential. What does your academic unit intend to do with the information it

has evaluated? Provide a <u>brief</u> explanation of how the results will be used to make any necessary <u>specific</u> changes within the program. **If no changes are planned, briefly describe how the data suggest this as an appropriate course of action.** 

Possible changes include revisions to curriculum, courses, pedagogies, assignments, assessment methods, etc. If these changes will require resources beyond what your academic unit can provide, indicate what your academic unit anticipates needing and where it will seek these resources. For example, changes may require faculty development opportunities and initiatives, or the procurement of new resources or personnel.

Based on the survey data, the self-guided library tour met its learning goals, and the participation rate was above our target. The librarians will continue to work with IN140 and HN183 faculty to encourage participation. A self-guided tour continues to be the most efficient way for us to introduce the physical library space to students, most of whom are unfamiliar with academic libraries the size of Staley Library.

In EN181, the continuing area of concern is learning outcome 3, evaluation of information, where for the second year in a row, there was a double-digit decrease in student scores from the pre-test to the post-test. As mentioned above, this learning outcome is assessed by a single question on online source evaluation and this material is covered in a different course (IN140). Therefore, the librarians will explore two methods to improve these results. First, we will look for ways to reinforce these skills and concepts in our EN181 instruction. Secondly, we will consider adding questions to the assessment that address this learning outcome. Additional questions would help to give us a better sense of the efficacy of our instruction on source evaluation. One bright spot for EN181 was the greater participation in the pre-test and post-test. This year almost 50% of the EN181 students completed the pre-test (25% last year) and 31% completed the post-test (23%) last year. Finally, for the past several years we have seen evidence of students using AI to answer the constructed-response questions on the assessment (questions 3 & 5). While the numbers are relatively small, this is an area to keep a close eye on going forward.

In last year's assessment report, we noted that it was important that the EN281 portfolios were standardized so that they all could be assessed. This was discussed with writing faculty, and this year we only had two artifacts that could not be assessed when last year there were four. While the low quality of the citations in the portfolios was also shared with the writing faculty, we did not see an improvement this year. Admittedly we continued to provide the same passive instruction through an online guide that faculty are encouraged to link in Moodle. It may be worthwhile revisiting the possibility of some form of more active instruction on citations in our meetings with the classes.

The participation rate in the assessment by the HWS students was very high this year, 70% for the pre-test and an astonishing 98% for the post-test, which provides confidence that the results are truly representative of student learning. As explained above, the honors students start with higher research confidence and skills and end their first year at Millikin even higher on both metrics. Our established instructional schedule of meeting with HN150 classes twice in the fall to introduce scholarly research at Staley Library and one meeting in the spring where we reinforce those concepts seems to be working well. The librarians typically have a very good working relationship with the honors writing faculty and especially in the spring, our instruction is tailored to match the particular needs of the students in the class.

#### **Appendix**

#### IN140/HN183 Worksheet

# **Staley Library Investigation**

Dr. I.B. Smart, a Millikin alumna, visited Staley Library this summer while working on her book, *Blue, Bluer, Bluest*, a book about the color blue and the State of Illinois. Unfortunately, she disappeared after leaving Millikin University and now her colleagues at Blue Mountain Community College are trying to find out where she might have gone. Can you help them find Dr. Smart by following her research trail through the library?

FIRST answer question #1 on this worksheet at the Library Services Desk on the main floor of the University Commons and THEN scan the QR code to find the next location. At each location answer the question on the worksheet and then scan the QR code to find the next location.

- Location #1. Dr. Smart was first seen here. What might she have been doing at the Library Services Desk?
- Location #2. Her son left a toy in this section. What did he leave?
- Location #3. How might she have saved her scan?
- Location #4. What blue thing in the window of the Millikin Makers' Studio do you think Dr. Smart printed?
- Location #5. According to the sign on the door, what do you think that she might have been looking for?
- Location #6. What kind of books have this call number in the Book Stacks?
- Location #7. What color is the call number label on this book? [Hint: Search the Library Catalog in Millikin Library Discovery to find the location of the book.]
- Location #8. Is this area of the library for "quiet/conversational study" or "silent study only"?
- Location #9. What is the title of the book that she left behind?
- Location #10. Where did Dr. Smart go after leaving Staley Library?

#### IN140/HN183 Survey

# **Epilogue**

Thank you for participating in the library investigation! Here's a news story that tells you how it turned out.

We also have 5 short questions for you to answer. If you would like, after completing the survey you can submit your email address to be entered in a drawing for free coffee at the Common Grounds coffee shop in the University Commons.

# Dr. I.B. Smart found near Blue Mound, Illinois

Missing Blue Mountain Community College professor I.B. Smart was found on Thursday morning after disappearing for several weeks. Dr. Smart was found just outside of Blue Mound, Illinois.

Smart is visiting central Illinois working on a book about the color blue and the State of Illinois. She had traveled to Blue Mound searching for the mounds that give the town its name. While there, she became lost in a cornfield and couldn't call for help because her Bluetooth headset stopped working.

Authorities praised the efforts of Millikin University students in finding Dr. Smart. "Smart's last known location was Staley Library at the University Commons on the Millikin University campus," explained Detective Iona Gunn. "Without the work of first-year Millikin students following her research trail through the library, we never would have known where she went next. They truly proved how important it is to understand and use Staley Library."

Smart remained undeterred by her time spent in a cornfield. After a long shower she planned to go on to Blue Island, Illinois to continue her research. "Of course I am going to finish the book," she exclaimed. "I am a Millikin graduate; I bleed blue!"

1. How long did it take you to complete your investigation?

5-10 minutes 10-15 minutes 15-20 minutes more than 20 minutes

2. Now that you have completed the investigation, do you feel more comfortable using Staley Library?

Yes No Not sure

3. Do you feel more confident about finding library resources?

Yes No Not sure 4. Do you know who to ask for help in the library?

Yes

No

Not sure

5. How do you feel about the Dr. I.B. Smart story used in the investigation?

I liked it
It was ok
I didn't like it
I didn't pay any attention to the story

#### **EN181 Pre-Test & Post-Test**

(Correct answers are indicated in italics)

- 1. (Pre-Test) This semester, a librarian will visit your University Writing class to begin talking about scholarly research. What do you hope to learn from the library instruction?
- 1. (Post-Test) This semester, a librarian visited your University Writing class to talk about scholarly research.
  - 1. What was the most useful thing that you learned from the library instruction?
  - 2. What do you wish that you would have learned?
- 2. You are asked to write a research paper addressing 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

- 3. Describe a strategy for evaluating an online source (website, social media post, etc.) for credibility.
- 4. If you are searching in the database *Academic Search Complete* as seen in the image below [a screenshot of database is included], what type of research resources should you expect to find in your results?

**Journal Articles** 

**Books** 

- 5. List and describe **three** ways that scholarly journal articles differ from magazine articles or newspaper articles.
- 6. You have been assigned to write a 5-page research paper on a current events issue and you have decided to write about privacy on the internet.

Of the following, which would be a focused research question that matches the assignment and your topic?

What is privacy?

How does Snapchat contribute to school bullying?

Does privacy exist on the internet?

Does the way Facebook uses personal data to make money lead to less privacy on the internet?

7. (Pre-Test) Prior to coming to Millikin University did you receive instruction in any of the following areas? (check all that apply)

Understanding the strengths and weaknesses of different information sources

Using library databases (Gale, EbscoHost, etc.)

Using a library catalog

Developing keywords to use in your searches

**Evaluating websites** 

Creating MLA, APA, Chicago, etc. style citations

7. (Post-Test) Which of the following information sources have you used for assignments in any of your classes during this semester at Millikin University? (check all that apply)

Paper books

E-books

Encyclopedias or dictionaries

Scholarly journals

Newspapers or magazines

Websites

### **EN281 Portfolio Rubric**

Does reflection discuss research/library resources? Yes or No, provide comments.				
	Proficient (3)	Developing (2)	Emerging (1)	Unacceptable (0)
Relevance of sources to discipline and topic <i>Program SLO #1</i>				
Mix of primary and secondary sources, limited use of tertiary sources Program SLO #1				
Use of credible, appropriately current sources <i>Program SLO #3</i>				
Use of sources to support thesis Program SLO #3				
Correctness according to style of references / bibliography / works cited page & in-text citations Program SLO #4				

#### **HWS Pre-Test & Post-Test**

#### Part 1

When you think about the ENTIRE research process—from the moment you get the assignment until you turn in your research paper—what is the level of difficulty for the following tasks? [Scale of 1 to 5: 1 = Very difficult, 2 = Difficult, 3 = Neutral, 4 = Easy, 5 = Very easy]

- 1. Defining a topic for the assignment.
- 2. Narrowing my topic.
- 3. Selecting search terms.
- 4. Finding articles in the research databases on the Library's website. (EBSCO, JSTOR, ProQuest, etc.)
- 5. Finding sources to use "out on the web" (using Google, Wikipedia, or other search sites).
- 6. Determining whether a website is credible or not.
- 7. Figuring out where to find sources in different parts of the library.
- 8. Finding up-to-date materials.
- 9. Having to sort through all the irrelevant results I get to find what I need.
- 10. Evaluating the sources that I've found.
- 11. Reading and understanding the material.
- 12. Integrating different sources from my research into my assignment.
- 13. Knowing when I should cite a source.
- 14. Knowing how to cite a source in the right format.
- 15. Knowing whether or not my use of a source, in certain circumstances, constitutes plagiarism.
- 16. Knowing whether or not I've done a good job on the assignment.

#### Part 2

(Correct answers are indicated in italics)

- 1. (Pre-Test) This year, a librarian will visit your HWS and Seminar classes to begin talking about scholarly research. What do you hope to learn from the library sessions?
- 1. (Post-Test) This year, a librarian visited your HWS and Seminar classes to begin talking about scholarly research.
  - 1. What was the most useful thing that you learned from the library instruction?
  - 2. What do you wish that you would have learned?
- 2. You are asked to write a research paper addressing 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

- 3. Describe a strategy for evaluating an online source (website, social media post, etc.) for credibility.
- 4. If you are searching in the database *Academic Search Complete* as seen in the image below [a screenshot of database is included], what type of research resources should you expect to find in your results?

Journal Articles

**Books** 

- 5. List and describe **three** ways that scholarly journal articles differ from magazine articles or newspaper articles.
- 6. You have been assigned to write a research paper on a current events issue and you have decided to write about privacy on the Internet. Your professor tells you that your topic is too general. Of the following, which is the best way to **narrow** your Internet privacy topic?

Focus on the relationship of Facebook use and self-esteem.

Focus on methods that schools are using to prevent online bullying.

Focus on social media companies and how they use personal data to make money.

Focus on whether e-books affect student learning.

7. You are doing research for a speech on the potential health benefits and drawbacks of energy drinks (Monster, Red Bull, etc.). Which source is most likely to have **objective and accurate** information on this topic?

A discussion on the subreddit (Reddit forum) r/energydrinks/.

A peer-reviewed article in a nutrition journal.

A website for one of the energy drink manufacturers.

A survey conducted by the Coca-Cola Company.

8. When is the best time in the research process to make note of the details about your sources (author, title, date, etc.), so that you can cite them properly?

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 you are working on your reference list.

When the teacher asks you for proof that you did not plagiarize in the paper.

9. (Pre-Test) Prior to coming to Millikin University did you receive instruction in any of the following areas? (check all that apply)

Understanding the strengths and weaknesses of different information sources

Using library databases (Gale, EbscoHost, etc.)

Using a library catalog

Developing keywords to use in your searches

**Evaluating websites** 

Creating MLA, APA, Chicago, etc. style citations

9. (Post-Test) Which of the following information sources have you used for assignments in any of your classes during your first year at Millikin University? (check all that apply)

Paper books

E-books

Encyclopedias or dictionaries

Scholarly journals

Newspapers or magazines

Websites

### EN181 & HWS Pre-Test and Post-Test Categories for Coding Question 1

- A = Finding articles (also using databases)
- B = Finding books (and other print materials, also using the catalog)
- C = Citation (also plagiarism)
- D = Don't know
- E = Evaluation of sources
- I = Interlibrary loan
- K = Keywords (development or selection)
- L = Library navigating the physical library or website
- N = Nothing
- 0 = Other entire research process, information literacy, etc. [use for very broad answers]
- P = Writing papers, the mechanics of writing
- Q = Research question(s)
- R = Finding (re)sources [use if they don't specify format or mention the library databases]
- T = Topics defining, narrowing, etc.
- W = Web using Google, Bing, Wikipedia, etc.

#### EN181 & HWS Pre-Test and Post-Test Rubric for Grading Question 3

0	1	2	3
No strategy, "I don't know," or failure to answer the prompt, e.g., explaining a search strategy or expressing a preference for scholarly articles	Strategy based on the <b>appearance</b> of the website, e.g., - URL - Format – nicely laid out, free of obvious errors - Ads - Sources or Reference List - Date	Strategy based on a checklist that focuses on the site alone, e.g., - Currency - Relevance - Authority - Accuracy - Purpose	Strategy based on lateral reading or critical thinking, e.g., comparing different sources, assessing authority using external sources, tracing claims, evaluating claims based on logical reasoning, considering one's own biases or perspective

This rubric is based on the work of Grace Liu and her *4-Step Source Assessment*: https://sandbox.acrl.org/library-collection/4-step-source-assessment-strategy

#### EN181 & HWS Pre-Test and Post-Test Scale for Grading Question 5

#### Possible answers:

- **Purpose:** To inform, report, or make available original research. In-depth analysis of issues related to a discipline.
- **Format:** Lengthy articles with defined sections, e.g., abstracts, methods, results, conclusions, and bibliography. May be published quarterly.
- **Authors:** Written by scholars, professors, or researchers in the field, discipline, or specialty.
- **Language/Audience:** Use terminology/jargon of the discipline. Reader is assumed to have a scholarly background. Written by experts for experts.
- **Graphics:** Graphics and charts to illustrate articles, but seldom glossy pages, pictures, or advertisements.
- **Sources:** Sources cited with footnotes/endnotes and bibliographies.
- 0 = No differences correctly identified, "I don't know" or similar answer
- 1 = One difference correctly identified
- 2 = Two differences correctly identified
- 3 = Three differences correctly identified

#### **SUMMARY**

# to be completed by Academic Dean/Director (for majors/programs) or Director of Academic Effectiveness (for MPSL)

Due within 45 days of Assessment Submission Submit to Provost and Director of Academic Effectiveness

In approximately 200-300 words, summarize the Assessment Report: state the learning goal(s) measured, state the type(s) of measure(s) used, summarize the data, describe the evaluation of the data, describe what was learned from the evaluation process, and describe what the academic unit has done or plans to do with the information and insights gathered from the assessment activities of the last cycle.

Sharing the results of assessment with appropriate constituencies, including students, is a vital part of closing the assessment feedback loop. This summary will be distributed annually and posted on the Assessment website, as one component of public reporting of assessment activities and outcomes.

# TO BE COMPLETED BY DEAN/DIRECTOR and/or DIRECTOR OF ACADEMIC EFFECTIVENESS

#### Assessment Report Rubric

Please select a score for each criterion below by selecting that box and changing the fill color to light blue.

Criterion	Developing (1)	Mature (2)	Exemplary (3)
Targets/Benchmarks	No specific targets/benchmarks for success are indicated.	Specific targets/benchmarks for success are provided for most or all goals.	Specific targets/benchmarks for success are provided for all goals; rationales provided for why each target is appropriate.
Summary of Assessment Methods (what was assessed, when, what instrument used)	Incomplete and/or vague discussion of assessment methods.	Brief summary of assessment methods provided for most or all goals.	Detailed discussion of assessment methods provided for all goals. Rubric/documentation provided.
Assessment results	Incomplete and/or irrelevant data provided.	Brief summary of relevant data provided for most or all goals.	Detailed and relevant data provided for all goals; data summarized into tables and/or graphs.
Analysis of results: achievement of target and discussion of meaning.	No statement of target achievement provided.  No discussion of the meaning of the assessment results is provided.	Target achievement provided for most or all goals.  Brief reflective discussion of what the assessment results mean is provided.	Target achievement provided for all goals.  In-depth reflective discussion of what the assessment results mean is provided for all goals. Comparison of results to prior years provided.
Use of results for improvement	No changes made/planned as a result of the assessment data and/or changes made/planned are not clearly linked to assessment data.	Brief discussion of specific changes made/planned as a direct result of the assessment data is provided for most goals.	Detailed discussion of specific changes made/planned as a direct result of the assessment data provided for all goals.