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.

Rationale for Student Learning Outcome(s) *(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 in-depth 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 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 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 ___June 17, 2024_____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. ***Review of assessment cycle*** *(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 2023-2024 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. 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, a video introduction to library research, 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 session is assessed via the pre- and post-test administered in EN181 (see below).

In EN181 the librarians offer a required video on research questions that students watch prior to the two in-class instruction sessions with a librarian. During the class 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 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 for EN281 is done through the review of assessment artifacts taken from 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.**

Almost all the elements of our library instruction and assessment for AY2022-2023 were new because of the switch from the Critical Writing, Reading, and Research (CWRR – IN150 & IN151) sequence to the new Writing Practicum courses (then designated as IN180 & IN1280). For this assessment cycle we continued to modify our instructional activities. We eliminated the optional video on research questions for EN181 and extended the instruction to 100 minutes (two instruction session for Monday, Wednesday, and Friday sections and a class and a half for Tuesday and Thursday sections). For EN281 we piloted a rubric for assessing the artifacts that we developed in the previous assessment cycle.

2. ***Target for Success: what is the measurable target you expect to achieve?*** *(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. Historically this rate has been achievable, although the past few years this number has dipped. Last year 68% of the IN140/HN183 students did the tour. 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 sections

compared to the traditional sections because the honors students tend to score higher on the pre-test.

For the EN281 portfolios we don't have a baseline or a target. We are using a draft rubric to assess the artifacts that we developed last year and shared with the writing assessment coordinator.

3. ***Summary of Data Source:*** *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	17	Bicicchi, Hollendonner, Olsen, Pippitt	342	Tour Worksheet	242 (71%)	242
IN140 & HN183	17	Bicicchi, Hollendonner, Olsen, Pippitt	342	Tour Survey	131 (54% of those who completed a worksheet, 38% of total)	131

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	22	Bicicchi, Hollendonner, Olsen, Pippitt	310	Pre- & Post-Test	Pre-Test = 77 (25%), Post-Test = 70 (23%)	Pre-Test = 75, Post-Test = 69

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	19	Bicicchi, Hollendonner, Olsen, Pippitt	279	Portfolio (collected by writing faculty)	40 (61%)	6 (9% of total, 15% 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	5	Bicicchi, Hollendonner, Pippitt	67	Pre-Test	45 (67%)	43
HN151	5	Olsen, Pippitt	73	Post-Test	44 (60%)	43

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. **Assessment Data** *(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=242)	9.2
Median Score (out of 10) (n=242)	9.4

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? (n=131)		
5 - 10 minutes	12	9%
10 - 15 minutes	60	46%
15 - 20 minutes	40	31%
more than 20 minutes	19	15%
Now that you have completed the tour …		
2. do you feel more comfortable using Staley Library? (n=131)		
Yes	120	92%
No	1	1%
Not sure	10	8%
3. do you feel more confident about finding library resources? (n=131)		
Yes	118	90%
No	6	5%
Not sure	7	5%
4. do you know who to ask for help in the library? (n=130)		
Yes	127	98%
No	0	0%
Not sure	3	2%
5. How do you feel about the Dr. I.B. Smart story used in the investigation? (n=131)		
I liked it	59	45%
It was ok	59	45%
I didn't like it	7	5%
I didn't pay any attention to the story	6	5%

EN181 – Coded student responses to pre-test question 1. This question does not assess a learning outcome but gives the librarians a sense of student interest and expectations going into library instruction. The librarians often review these results before library instruction begins. All question coding was done by librarians Rachel Bicicchi 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=77)
Other – "Just an overview of the services that the university library offers."	29

Finding resources – "I would like to learn about where to find the material that I will need for my classes."	18
Library – "I hope to learn what other aspects does the library offer."	16
Books – "How to find the different genres of books"	14
Finding articles – "How to utilize the data bases for my multimodal project."	9
Evaluation of sources – "Finding the most accurate and reliable information you could use as research."	7
Citation – "How to properly cite sources"	6
Web – "what websites are good and which websites are bad"	4
Don't know – "not sure"	3
Keyword – "I would love to learn about how to use keywords effectively when searching"	1
Writing Papers – "I hope to learn better writing techniques."	1

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=71)	Post-Test Question 1.2 – "What do you wish that you would have learned?"	Number of Student Responses (n=62)
Finding articles – "The most useful thing I learned was how to use the different data bases and what specifics each one covers."	40	**Nothing** – "There is nothing I wish I would have learned."	22
Finding resources – "I learned how to find correct sources based off my information."	14	**Library** – "I would have appreciated more info on the library itself"	9
Library – "how to use the library system"	11	**Finding resources** – "I wish i would have learned how to narrow down my selection even more than i was taught."	7
Books – "I can talk to a librarian to find books."	7	**Finding articles** – "I wish I learned more about JSTOR."	5
Evaluation of sources – "find more credible sources for my papers"	6	**Books** – "I wish they would have gone more into finding actual books to research your essay."	5
Keywords – "how to search keywords on ebsco"	4	**Citation** – "I wish I learned how to format certain citations depending on the format, and what format to use depending on which field of study one is in."	5

Other – "The most useful thing that I learned was the value of learning."	3	**Other** – "I wish we would have a list of everything the library can do."	5
Research Questions – "The most useful thing I learned is to develop good research questions."	3	**Evaluation of sources** – "I wish he would've gone more in depth about the credibility of sources and how to differentiate good sources from bad ones."	4
Citation – "how to apply them to my citations within papers"	2	**Web** – "More about other websites"	4
Topics – "I enjoyed learning to make my topics more specific also."	2	**Keywords** – "Better ways in finding sources in conjunction with using terms."	2
Interlibrary loan – "Illiad and library loans."	1	**Don't know** – "I don't really know."	1
Writing Papers – "find more credible sources for my papers"	1	**Interlibrary loan** – "how to request journals/ sources that aren't available."	1
		Writing papers – "I wish we learned a little bit more about utilizing academic sources."	1

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

Multiple-Choice Question	Pre-Test (n=77)	Post-Test (n=70)	Percent Change
2. Keywords	48%	48%	0%
4. Database	78%	90%	15%
6. Research Questions	34%	54%	61%
Average	**53%**	**64%**	**20%**

EN181 – Comparison of student scores pre- and post-test for question 3. Questions 3 & 5 were scored by Rachel Bicicchi 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=75)	Post-Test (n=70)	Point Change	Percent Change
Average (out of 3)	**1.46 (49%)**	**1.30 (43%)**	**-0.16**	**-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=74)	Post-Test (n=66)	Point Change	Percent Change
Average (out of 3)	**1.52 (51%)**	**1.91 (64%)**	**0.39**	**25%**

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=77)	Percent of Student Responses
Understanding the strengths and weaknesses of different information sources	58	75%
Using library databases (Gale, EbscoHost, etc.)	30	39%
Using a library catalog	24	31%
Developing keywords to use in your searches	31	40%
Evaluating websites	47	61%
Creating MLA, APA, Chicago, etc. style citations	42	55%

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 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=70)	Percent of Student Responses
Paper books	21	30%

E-books	44	63%
Encyclopedias or dictionaries	12	17%
Scholarly journals	58	83%
Newspapers or magazines	25	36%
Websites	61	87%

EN181 – Student scores by learning outcome.

Learning Outcome	Questions	Pre-Test	Post-Test	Percent Change
1. Information Sources	4 & 5	64%	77%	19%
2. Search Strategies	2 & 6	41%	51%	25%
3. Evaluation of Information	3	49%	43%	-11%
Average				**11%**

EN281 – Rachel Bicicchi and Matthew Olsen read through six student portfolios and wrote paragraph summaries of their observations. They focused on the students' reflections, quality of the sources in the annotated bibliography and research paper, the quality of the citations, and how the research was incorporated into the students' writing. Overall, they found that the quality of the six portfolios ranged from quite good to rather poor. Some used sources that were current and appropriate to the topic and some students seemed to use sources without regard for their relevance to their topic or how well they supported their argument. While all the portfolios had some problems with their citations, a few of them had serious issues with the elements of the citation, e.g., not identifying the title of the journal correctly. Likewise, a few of the students used sources consistently throughout their writing to support their position or for analysis while others made unsupported claims or failed to use their sources.

HN150 – Coded student responses to pre-test question 1. This question does not assess a learning outcome but gives the librarians a sense of student interest 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 Rachel Bicicchi and Matthew Olsen.

Pre-Test Question 1 – "What do you hope to learn from the library sessions?"	Number of Student Responses (n=43)
Finding resources – "I hope to learn how find research materials efficiently."	21
Library – "I hope to learn more about the Stanley library and what tools and resources we have there."	15
Evaluation of sources – "I hope to learn how to identify if a source is credible or not"	8
Finding articles – "How to work the database?"	7
Books – "Ways of memorizing the different book sections and where they are."	6
Citation – "What format to use when citing sources and writing (APA, MLA, etc.)"	5

Other – "I hope to learn how to conduct scholarly research properly especially with papers, presentations, etc."	5
Writing papers – "how to implement my findings into projects"	3
Don't know – "I can't think of more but I know that there are probably more things"	1
Interlibrary loan – "What options I have to check out sources from other places."	1
Topics – "I hope to learn how to find a good research topic"	1
Web – "How to find sources easier 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=43)	Post-Test Question 1.2 – "What do you wish that you would have learned?"	Number of Student Responses (n=41)
Finding articles – "How to utilize the academic search database that Millikin offers to students"	24	**Nothing** – "I don't really have any additional topics I wish were covered."	12
Keyword – "The most useful thing that I have learned was what areas to look for different key words."	12	**Citation** – "How to create a works cited page more efficiently"	9
Finding resources – "The most useful thing that I learned was how to access the abundant resources that I have through the Library."	7	**Finding resources** – "I wish I would have learned a bit more about finding strong, credible sources."	7
Citation – "the possibility of using apps like Zotero to keep track of my sources"	6	**Library** – "I wish I learned to use the archives documents that Staley Library has it"	3
Library – "Probably all of the resources available to me and how the librarians can help me with my research."	2	**Other** – "How to parse through an article and quickly filter out the information that you need."	3
Other – "when to trust their work"	2	**Finding articles** – "I wish I would have learned a little bit more about different databases aside from EBSCOhost"	2
Don't know – "I'm afraid I don't quite remember when that was or what exactly they talked about."	1	**Books** – "I wish I could have learned how to navigate the actual stacks or the inventory of Staley library so I could have used sources from published books."	2

Evaluation of sources – "The most useful things I learned were the differences between types of sources"	1	**Evaluation of sources** – "While I am able to find reliable sources online, it would have been helpful to have learned even more about finding sources that are not directly from a scholarly database."	2
Interlibrary loan – "How to use the Iliad interlibrary loan system."	1	**Topics** – "I wish I would've learned an easier way of narrowing a broad, initial topic idea."	2
Nothing – "I really don't feel like I learned a ton of new material"	1	**Don't know** – "I'm not sure what I would have wanted to learn."	1
		Keyword – "I wish I learned more about how to pick out certain keywords when researching"	1
		Writing papers – "One thing that I wish I would have learned is how a thesis might look different for various types of papers."	1
		Web – "I wish I had learned more about how to find sources that are credible on the regular internet."	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=45)	Post-Test (n=44)	Point Change	Percent Change
1. Defining a topic for the assignment	2.96	3.39	0.43	14.6%
2. Narrowing my topic	2.87	2.80	-0.07	-2.5%
3. Selecting search terms	3.20	3.75	0.55	17.2%
4. Finding articles in the research databases on the Library's website (EBSCO, JSTOR, ProQuest, etc.)	2.58	3.18	0.60	23.4%
5. Finding sources to use "out on the web" (example - Google, Wikipedia, websites)	4.04	4.09	0.05	1.1%
6. Determining whether a website is credible or not	3.53	3.75	0.22	6.1%

Question Scale 1 - 5 1 = very difficult | 5 = very easy	Pre-Test (n=45)	Post-Test (n=44)	Point Change	Percent Change
7. Figuring out where to find sources in different parts of the library	2.84	2.93	0.09	3.1%
8. Finding up-to-date materials	2.93	3.36	0.43	14.7%
9. Having to sort through all the irrelevant results I get to find what I need	3.09	2.93	-0.16	-5.1%
10. Evaluating the sources that I've found	3.40	3.32	-0.08	-2.4%
11. Reading and understanding the material	3.78	3.45	-0.32	-8.6%
12. Integrating different sources from my research into my assignment	3.53	3.60	0.07	2.0%
13. Knowing when I should cite a source	3.71	3.73	0.02	0.4%
14. Knowing how to cite a source in the right format	3.38	3.28	-0.10	-2.9%
15. Knowing whether or not my use of a source, in certain circumstances, constitutes plagiarism	3.44	3.73	0.28	8.2%
16. Knowing whether or not I've done a good job on the assignment	2.80	2.93	0.13	4.7%
Average	**3.26**	**3.39**	**0.13**	**4.1%**

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

Rating	Pre-Test (n=45)	Post-Test (n=44)	Percent Change
1 – This is very difficult	3%	2%	-32%
2 – This is difficult	23%	19%	-20%
3 – This is neutral	32%	31%	-5%
4 – This is easy	31%	38%	22%
5 – This is very easy	11%	12%	1%

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

Multiple-Choice Question	Pre-Test (n=43)	Post-Test (n=43)	Percent Change

2. Keywords	77%	84%	9%
4. Database	98%	98%	0%
6. Narrowing	91%	88%	-3%
7. Sources	84%	95%	14%
8. Citations	84%	95%	14%
Average	**87%**	**92%**	**7%**

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=43)	Post-Test (n=43)	Point Change	Percent Change
Average (out of 3)	**1.50 (50%)**	**1.56 (52%)**	**0.06**	**4%**

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 (n=43)	Post-Test (n=43)	Point Change	Percent Change
Average (out of 3)	**2.09 (70%)**	**2.58 (86%)**	**0.49**	**23%**

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=43)	Percent of Student Responses
Understanding the strengths and weaknesses of different information sources	33	77%
Using library databases (Gale, EbscoHost, etc.)	20	47%
Using a library catalog	8	19%
Developing keywords to use in your searches	25	58%
Evaluating websites	34	79%
Creating MLA, APA, Chicago, etc. style citations	39	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 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=43)	Percent of Student Responses
Paper books	10	23%
E-books	30	70%
Encyclopedias or dictionaries	12	28%
Scholarly journals	42	98%
Newspapers or magazines	24	56%
Websites	43	100%

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. = 2.89 Post-Test Avg. = 3.15 Improvement = 9% **Part 2** **Questions 4 & 5** Pre-Test Avg. = 84% Post-Test Avg. = 92% Improvement = 10% **Total for SLO 1** Improvement = 9%	**Part 1** **Questions 1, 2, 3, 4 & 5** Pre-Test Avg. = 3.13 Post-Test Avg. = 3.44 Improvement =10% **Part 2** **Question 2 & 6** Pre-Test Avg. = 84% Post-Test Avg. = 86% Improvement = 3% **Total for SLO 2** Improvement = 7%	**Part 1** **Questions 6, 9 & 10** Pre-Test Avg. = 3.34 Post-Test Avg. = 3.33 Improvement = 0% **Part 2** **Questions 3 & 7** Pre-Test Avg. = 67% Post-Test Avg. = 74% Improvement = 10% **Total for SLO 3** Improvement = 5%	**Part 1** **Questions 13, 14 & 15** Pre-Test Avg. = 3.51 Post-Test Avg. = 3.58 Improvement = 2% **Part 2** **Question 8** Pre-Test Avg.= 84% Post-Test Avg.= 95% Improvement = 14% **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. ***To what extent did you achieve the target specified above?*** *(e.g., completely, partially, did not achieve)*

For the self-guided library tour the participation rate was 71%, which met our target of 70%. The average score on the tour worksheet of 9.2 (9.4 median) did meet our goal of 9.0. As explained above, the worksheet is not intended as a particularly hard test of students' knowledge of the library. Rather, it is a way for students to be more active during the tour and a means for the librarians to track students' participation. Positive responses on the learning outcome questions on the tour survey met our goal of 85% with an 93% average.

For the EN181 pre- and post-test the average 11% 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 outcomes 1 (questions 4 & 5) and outcome 2 (questions 2 & 6) the percent change from the pre-test to the post-test was 19% and 25% 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.

As mentioned above, we did not establish targets for IN280 assessment since we are still working on developing a rubric for assessing artifacts for this new course.

For Honors Writing Studio, the average on Part 1 of the assessment on research confidence increased 4% from the pre-test to the post-test, which is below our 10% target. For Part 2, which tests students' information literacy skills, the average increase from the pre-test to the post-test was 9%, which is also below our 10% target. If we look by learning outcome across all parts of the pre- and

post-test no outcome met our 10% target, although outcome 1 at 9% and outcome 4 at 8% were close.

6. ***Takeaway: what do the results mean?*** *(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 in the library and strategies for retrieving those resources. When looking more closely at the individual questions on the worksheet, the question that students missed the most was question six that asks students to find a section of graphic novels in the stacks. Some of the students provided answers that indicated they ended up in the reference collection rather than the book stacks and some described all the subjects of the books in that row. This question is arguably a bit harder than the others on the tour. While the tour participation rate exceeded our 70% target, it would be nice to have more students complete the tour, especially because some students indicated on the post-test that they would like to have learned more about the library. It is impossible to know if those students missed the tour. However, the more students who complete the self-guided tour and explore the physical library early in the college career the better.

The results from the EN181 pre- and post-test assessment were very uneven this year. The questions that assess learning outcome 2 surpassed our target with a 25% increase while learning outcome 1 fell slightly short of our target with a 19% increase. However, students scored 77% correct on those questions on the post-test, which is quite good. Outcome 3 on evaluating information, which is assessed with a single question decreased by 11% and students scored 43% (1.30 out of 3.00) on the post-test. There are a few factors to consider. One is that the material and skills that this question assesses is introduced in IN140 while the assessment is administered in EN181. It is possible that a student learns this material in September and is assessed on it in May. The scorers for this question (Bicicchi & Olsen) also made a conscious decision to apply the rubric more strictly for this assessment cycle, and that students had to explain clearly whether they were applying a checklist or using critical thinking rather than looking at the appearance of the website. Last year this question also saw a decline from the pre-test to the post-test but was only 1% and the score on the post-test was much higher at 1.79 (60%).

It is hard to tell how to interpret our findings from IN280. Not only was this a new course with very few sections in AY2022-2023, but also the course was largely populated with new transfer students who had not benefitted from any previous library instruction at Millikin University. Our informal analysis did show that students were using library resources in their research, e.g., scholarly articles or articles from the reference database Credo Reference. While a few of the papers had appropriately current sources, some of the portfolios used sources that were too old for the topic. For example, a student writing about social media cited sources from the early 2000s. It also appeared that students who had well-defined topics were able to complete their research and writing more effectively. Finally, one element that is stressed in our classroom instruction in IN280 is the need to find key authors and information sources on a topic. Several of the portfolios had reference lists with multiple sources by the same author or from the same publication, which matches this instruction goal.

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 high single

digit increases in research confidence and scores from the pre-test to the post-test. The learning outcome with the smallest increase from pre-test to post-test was SLO 3. This learning outcome increased 10% on Part 2 but did not increase at all in Part 1, which is reflective of students' research confidence. Students were less confidence evaluating the sources that they found and were even less confident in their ability to sort through irrelevant results. Similarly to the EN181 students, the honors students did not perform well on the question that asked them about evaluating an online source. While they did show a small increase from the pre-test to the post-test (4%) their average score on the post-test at 1.56 out of 3.00 (52%) was by far the lowest. 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 spring in IN151. Nonetheless, it is a cause for concern.

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* _brief_ *explanation of how the results will be used to make any necessary* _specific_ *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.

The self-guided library tour met its learning goals and participation was above our target. It would be preferable for more students to complete the tour, and the librarians will continue to work with Seminar faculty to encourage participation. We are always looking for ways to make the tour more engaging and to have students be as active participants in the tour as possible rather than just moving quickly through the building. A self-guided tour continues to be the most efficient way for us to introduce the physical space of the library to students, most of whom are unfamiliar with academic libraries the size of Staley Library.

In EN181, while students showed improvement for two of the three assessed learning outcomes, there are a few areas of concern. A perennial concern is the participation rate, which this year was around 25% for the pre- and post-test. Students scored below 50% on the post-test on the question on keywords and, as discussed above, students performed very poorly on the question on evaluating online sources. The librarians will continue to modify our instruction to best meet the needs of the students. We have been using a "flipped" model where students watch a video on research questions prior to the class meeting. In the last assessment cycle, viewership rates for the videos were low. For the past academic year, we went down to one required video and only 8% of the fall EN181 students watched the video and 30% in the spring. We will continue to evaluate the efficacy of the flipped approach for this course. The increase in in-person instruction has afforded the librarians more time to work with the students and often the librarians provide written feedback to the students on a worksheet where students develop a research question and keywords to search for resources to answer the research question. We also need to explore ways to improve our instruction on online source evaluation. Since this material is covered in IN140/HN183 perhaps it can be reinforced in EN181.

For IN280, the review of this year's portfolios has helped us develop a draft rubric that we will use for future assessment cycles. We will focus on the relevance of sources to the discipline and topic, the quality of the sources based on their credibility, currency, and the balance of primary and secondary sources, how well the sources are used to support the author's thesis, and the correctness of the citations according to the author's selected style (e.g., APA or MLA). We will also review the reflection at the beginning of the portfolio to see if it mentions library research as part of their experience with the class.

The participation rate in the assessment by the HWS students was relatively high, above 60% for both the pre- and post-tests. The percent increase from the pre-test to the pos-test did fall short of our target but the overall scores were very high, in the 80%-90% range. Evaluating online sources is a serious cause for concern. As with the EN181 classes, the librarians need to find ways to make the instruction on this topic more effective and to connect the work that they do in HN183 with the instruction in HN150 and HN151. One the post-test several students mentioned that they liked learning about the citation manager Zotero, which Amanda Pippitt introduced in her HN151 instruction. This instruction may well be worth standardizing across the HN151 sections. It is also worth noting that while honors students do come to Millikin with higher research confidence and skills, we have consistently noticed an increase in both metrics over their first year at Millikin. This clearly indicates that library instruction is important for both non-honors and honors students.

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?

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

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

Categories for coding question 1 on the EN181 and HWS pre-test and post-test

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

O = 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.

Rubric for grading question 3 on the EN181 and HWS pre-test and post-test

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 **appearance** 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

Grading scale for grading question 5 on the EN181 and HWS pre-test and post-test

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.