

**Millikin University Assessment of Student Learning
Annual Assessment Update**

Due on or before September 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 ___August 2, 2023___ 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 2022-2023 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
- IN180: University Writing
- IN280: 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 IN180 (see below).

In IN180 the librarians offer one required and one optional video on research questions that students watch prior to an in-class instruction session with a librarian. During the class students complete a worksheet on developing effective research questions and keywords. Assessment for IN180 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 IN280 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 IN280. Assessment for IN280 is done through the review of assessment artifacts taken from the final portfolios collected by the University 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 to all HN151 students after the library instruction is complete. **The pre- and post-test assess SLOs 1, 2, 3 & 4.**

Many elements of our library instruction and the associated assessments were new for AY2022-2023 due to the switch from the Critical Writing, Reading, and Research (CWRR – IN150 & IN151) sequence to the new Writing Practicum courses (IN180 & IN1280). While the self-guided tour worksheet and survey for IN140 and HN183 and the pre- and post-test for Honors Writing Studio (HWS) are carryovers from past assessment cycles, the pre- and post-test for IN180 is almost completely new and targets only information literacy skills, not the research confidence that had been assessed in IN150 and IN151. This assessment is also administered over one semester because IN180 is a single semester course, not a two-semester sequence as it was in CWRR. IN280 is a completely new course and our assessment of the student portfolios, which typically consist of a reflection, an annotated bibliography, a research paper, and a multimodal assignment, is new as well. For AY2022-2023, two librarians reviewed the artifacts and wrote brief narratives on each one. The goal is to use this experience to develop an assessment rubric that will be applied in subsequent years.

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 due to Covid-19 this number has dipped. Last year 67% 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). Last year the average score was 8.8 (median 8.9). 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. Last year it was 88%.

For the IN180 pre- and post-test we do not have a baseline since this is a new assessment. However, based on the pre- and post-test administered in CWRR, a 20% average increase in correct responses across all the questions and all the assessed learning outcomes seems reasonable. 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. Last year the increase in confidence was 12% and in correct responses to the skills portion was 5%. Historically 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 IN280 portfolios we don't have a baseline or a target. We treated this year as experimental and are working towards developing a rubric for assessment. The University Writing faculty also went into AY2022-2023 with a spirit of experimentation. Only 5 sections of IN280 were offered and the students who took IN280 were mostly transfer students because non-transfer Millikin students were either taking IN180 or had been grandfathered in under the CWRR system.

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	379	Tour Worksheet	257 (68%)	257
IN140 & HN183	17	Bicicchi, Hollendonner, Olsen, Pippitt	379	Tour Survey	143 (56% of those who completed a worksheet, 38% of total)	143

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?
IN180	28	Bicicchi, Hollendonner, Olsen, Pippitt	392	Pre- & Post-Test	Pre-Test = 114 (29%), Post-Test = 97 (25%)	Pre-Test = 114, Post-Test = 97

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?
IN280	5	Hollendonner, Olsen	66	Portfolio (collected by University 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	4	Bicicchi, Pippitt	62	Pre-Test	32 (52%)	32
HN151	5	Bicicchi, Hollendonner, Olsen	65	Post-Test	21 (32%)	21

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=257)	9.2
Median Score (out of 10) (n=257)	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=143)		
5 - 10 minutes	18	13%
10 - 15 minutes	41	29%
15 - 20 minutes	50	35%
more than 20 minutes	34	24%
Now that you have completed the tour ...		
2. do you feel more comfortable using Staley Library? (n=143)		
Yes	118	83%
No	5	3%
Not sure	20	14%
3. do you feel more confident about finding library resources? (n=142)		
Yes	113	80%
No	7	5%
Not sure	22	15%
4. do you know who to ask for help in the library? (n=143)		
Yes	138	97%
No	1	1%
Not sure	4	3%
5. How do you feel about the Dr. I.B. Smart story used in the investigation? (n=143)		
I liked it	55	38%
It was ok	74	52%
I didn't like it	9	6%
I didn't pay any attention to the story	5	3%

IN180 – 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 Bicchichi and Matthew Olsen. Each response was coded into up to three categories. There are 14 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=112)
Other – "I hope to learn how to research interesting topics more effectively"	46

Finding resources – "How to search for adequate sources that can be used for class assignments."	29
Finding books – "How to find the right book I need. for a class"	22
Library – "I hope to learn where each section of books are in the library."	18
Finding articles – "How to work the databases."	17
Citation – "I hope to learn how to do citations without having to use a website"	12
Evaluation of sources – "how to determine what sources are creditable and not"	7
Writing papers – "I hope to learn how to write a successful research paper"	7
Topics – "how to come up with a good research topic"	6
Keyword – "I would to learn the proper way to search information without adding to much wording."	2
Web – "I hope to learn what are good tips to finding reliable websites for my research."	2

IN180 – 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=97)	Post-Test Question 1.2 – "What do you wish that you would have learned?"	Number of Student Responses (n=86)
Finding articles – "How to use the Staley Library data bases and all the sources they have available."	51	Nothing – "I don't think there is anything I wish I would have learned"	28
Finding resources – "I learned where to find the things I needed for papers."	18	Other – "I wish I would've learned more about PowerPoints and things"	12
Keyword – "I learned about using different keywords for searches on one particular topic."	10	Finding articles – "I wish I would've learned more about how to use the database search engine, ebsco"	9
Other – "How to research a question"	10	Finding books – "I think what types of books are in the library. Like is it more studying books or something I can lick up and read."	9
Library – "The most useful thing I learned was how to navigate the library"	7	Citation – "I wish that I learned that there was a cite feature on the app"	8
Finding books – "How and where to find the books I would need."	6	Library – " I wish I would have learned more about the physical library."	6

Evaluation of sources – "How to determine which is correct information and which misinformation."	6	Finding resources – "I wish I would've learned a few more ways to find sources that are not just in the millikin databases."	6
Citation – "How to site a sources."	5	Evaluation of sources – " I wish I would have learned more about the different pieces of writing that we looked through when guessing which was which."	5
Interlibrary loan – "One main thing that I learned was when an article does not have a PDF on it, you can request to get the article."	3	Interlibrary loan – "How to access texts that aren't already fully available."	4
Writing papers – "I learned how to better plan out my essay before I write it."	2	Web – "Certain websites or companies to avoid."	3
Topics – "What I learned was to keep your topic and thesis as specific as possible to help narrow down a broad topic."	1	Keyword – "I wish I would've learned how different key words and phrases can effect the sources that come up."	2
		Writing papers – "I wish I could have known how to draw out sources in the papers better or find a method that would make the process a bit easier."	2
		Topics – "I wish I would learn more about having a more detailed thesis because I had a hard time finding a source on a broad topic."	1

IN180 – Percentage of correct student scores on the pre- and post-test multiple choice questions.

Multiple-Choice Question	Pre-Test (n=114)	Post-Test (n=97)	Percent Change
2. Keywords	56%	70%	25%
4. Database	82%	87%	6%
6. Research Questions	41%	60%	45%
Average	60%	72%	21%

IN180 – Comparison of student scores pre- and post-test for question 3. Questions 3 & 5 were scored by Rachel Bicchichi 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=110)	Post-Test (n=96)	Point Change	Percent Change
Average (out of 3)	1.80 (60%)	1.79 (60%)	-0.01	-1%

IN180 – 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=109)	Post-Test (n=96)	Point Change	Percent Change
Average (out of 3)	2.18 (73%)	2.39 (80%)	0.22	10%

IN180 – 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 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=114)	Percent of Student Responses
Understanding the strengths and weaknesses of different information sources	75	66%
Using library databases (Gale, EbscoHost, etc.)	49	43%
Using a library catalog	33	29%
Developing keywords to use in your searches	75	66%
Evaluating websites	62	54%
Creating MLA, APA, Chicago, etc. style citations	88	77%

IN180 – 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 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=98)	Percent of Student Responses
Paper books	34	35%

E-books	50	51%
Encyclopedias or dictionaries	26	2%
Scholarly journals	78	80%
Newspapers or magazines	49	50%
Websites	86	88%

IN180 – Student scores by learning outcome.

Learning Outcome	Questions	Pre-Test	Post-Test	Percent Change
1. Information Sources	4 & 5	77%	83%	8%
2. Search Strategies	2 & 6	49%	65%	33%
3. Evaluation of Information	3	60%	60%	-1%
Average				14%

IN280 – 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 IN180, 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=32)
Library – "I'd like to understand the layout of the library"	13
Other – "I hope to learn how to use the library's resources correctly and wisely."	10
Finding resources – "I hope to learn about where to go to find sources for specific topics."	8
Finding articles – "I hope to learn about the library databases and the limits there are to the library."	7
Finding books – "I want to learn more about researching with physical books."	2
Citation – "I also want to know all the ins and outs of citing and specific circumstances."	2

Evaluation of sources – "I also hope to learn which websites offer more credible information and how to tell the difference between them."	1
Web – "I also hope to learn which websites offer more credible information and how to tell the difference between them."	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=21)	Post-Test Question 1.2 – "What do you wish that you would have learned?"	Number of Student Responses (n=16)
Finding articles – "The most useful thing I learned from the library visit was the databases that I could use to find academic sources."	10	Library – "I wish we could have learned a little more about actually using the physical library."	6
Keyword – "I feel the most useful part was learning what key words to use."	5	Web – "I wish I would have learned how to find better sources outside of the database just on the interweb."	3
Evaluation of sources – "The most useful thing that I learned from the library instruction was the paper we were given to detect/determine if the source we had was a reliable source."	4	Finding articles – "I wish I would've learned how to get to Millikin's data base sooner."	2
Finding resources – "How to use the Millikin online search engine."	2	Finding books – "I wish I had learned a little bit more about where exactly in the library I can search for and find physical books."	2
Interlibrary loan – "how to do an interlibrary loan"	1	Keyword – "More tips on choosing key words to search"	2
Library – "How to properly search the Staley library website for sources I could utilize in my paper"	1	Nothing – "I didn't have any complaints."	2
Other – "Use scholarly sources, it makes a stronger paper."	1	Citation – "I wish we would have briefly gone over how to cite sources, just as a reminder"	1
Topics – "examples on how to find keywords or narrow down a topic"	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=32)	Post-Test (n=21)	Point Change	Percent Change
1. Defining a topic for the assignment	3.03	3.48	0.44	15%
2. Narrowing my topic	3.13	3.05	-0.08	-3%
3. Selecting search terms	3.34	3.67	0.32	10%
4. Finding articles in the research databases on the Library's website (EBSCO, JSTOR, ProQuest, etc.)	2.44	3.29	0.85	35%
5. Finding sources to use "out on the web" (example - Google, Wikipedia, websites)	3.91	4.19	0.28	7%
6. Determining whether a website is credible or not	3.50	3.81	0.31	9%
7. Figuring out where to find sources in different parts of the library	2.59	2.95	0.36	14%
8. Finding up-to-date materials	3.19	3.24	0.05	2%
9. Having to sort through all the irrelevant results I get to find what I need	2.97	3.10	0.13	4%
10. Evaluating the sources that I've found	3.47	3.71	0.25	7%
11. Reading and understanding the material	3.50	3.62	0.12	3%
12. Integrating different sources from my research into my assignment	3.69	4.05	0.36	10%
13. Knowing when I should cite a source	3.91	4.29	0.38	10%
14. Knowing how to cite a source in the right format	3.19	4.00	0.81	26%
15. Knowing whether or not my use of a source, in certain circumstances, constitutes plagiarism	3.34	3.90	0.56	17%
16. Knowing whether or not I've done a good job on the assignment	2.81	3.81	1.00	35%
Average	3.25	3.63	0.38	12%

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

Rating	Pre-Test (n=32)	Post-Test (n=21)	Percent Change
1 – This is very difficult	4%	1%	-70%
2 – This is difficult	25%	15%	-40%
3 – This is neutral	25%	23%	-8%
4 – This is easy	35%	41%	17%
5 – This is very easy	11%	20%	75%

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

Multiple-Choice Question	Pre-Test (n=32)	Post-Test (n=21)	Percent Change
2. Keywords	72%	90%	26%
4. Database	81%	90%	11%
6. Narrowing	88%	90%	3%
7. Sources	81%	100%	23%
8. Citations	75%	86%	14%
Average	79%	91%	15%

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=32)	Post-Test (n=21)	Point Change	Percent Change
Average (out of 3)	2.09 (70%)	2.38 (79%)	0.29	14%

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=32)	Post-Test (n=21)	Point Change	Percent Change
Average (out of 3)	2.61 (73%)	2.76 (80%)	0.15	6%

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=32)	Percent of Student Responses
Understanding the strengths and weaknesses of different information sources	22	69%
Using library databases (Gale, EbscoHost, etc.)	22	69%
Using a library catalog	12	38%
Developing keywords to use in your searches	17	53%
Evaluating websites	25	78%
Creating MLA, APA, Chicago, etc. style citations	30	94%

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=21)	Percent of Student Responses
Paper books	7	33%
E-books	14	67%
Encyclopedias or dictionaries	6	29%
Scholarly journals	21	100%
Newspapers or magazines	14	67%
Websites	21	100%

HWS – Student scores by learning outcome.

1. Information Sources	2. Search Strategies	3. Evaluation of Information	4. Ethical Aspects of Information
<p>Part 1 Questions 7 & 8 Pre-Test Avg. = 2.89 Post-Test Avg. = 3.10 Improvement = 7%</p>	<p>Part 1 Questions 1, 2, 3, 4 & 5 Pre-Test Avg. = 3.17 Post-Test Avg. = 3.53 Improvement = 12%</p>	<p>Part 1 Questions 6, 9 & 10 Pre-Test Avg. = 3.31 Post-Test Avg. = 3.54 Improvement = 7%</p>	<p>Part 1 Questions 13, 14 & 15 Pre-Test Avg. = 3.48 Post-Test Avg. = 4.06 Improvement = 17%</p>
<p>Part 2 Questions 4 & 5 Pre-Test Avg. = 84% Post-Test Avg. = 91% Improvement = 8%</p>	<p>Part 2 Question 2 & 6 Pre-Test Avg. = 80% Post-Test Avg. = 90% Improvement = 14%</p>	<p>Part 2 Questions 3 & 7 Pre-Test Avg. = 75% Post-Test Avg. = 90% Improvement = 19%</p>	<p>Part 2 Question 8 Pre-Test Avg.= 75% Post-Test Avg.= 86% Improvement = 14%</p>
<p>Total for SLO 1 Improvement = 8%</p>	<p>Total for SLO 2 Improvement = 13%</p>	<p>Total for SLO 3 Improvement = 13%</p>	<p>Total for SLO 4 Improvement = 16%</p>

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 68%, which is slightly below our target of 70%. However, 9 students completed a virtual equivalent of the tour. If they are included, the participation rate rises to 70%. While the virtual tour does cover the same areas in the library as the in-person tour, it obviously does not get students physically into the library space, which is an important goal of the tour. The average score on the tour worksheet of 9.2 (9.4 median) did meet our goal of 9.0. Again, 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 87% average.

For the IN180 pre- and post-test the average 14% 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) we were approaching the goal with an 8% increase. For learning outcome 2 (questions 2 & 6) the increase in correct responses far exceeded our target with a 33% increase. Learning outcome 3, which is assessed by question 3, was the outlier with a 1% decrease in correct responses.

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 12% from the pre-test to the post-test, which exceeds our target of 10%. For Part 2, which tests students' information literacy skills, the average increase from the pre-test to the post-test was 14%. This also exceeds our target of a 10% increase. If we look by learning outcome across all parts of the pre- and post-test only outcome 1 did not meet our 10% target. Outcomes 2 & 3 showed 13% increases and outcome 4 increased by 16%.

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 meeting 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, there is no one question that students missed dramatically more than the others. Participation in the tour could be better. Prior to the pandemic well over 70% of the University Seminar students completed the tour. The pandemic hurt the participation rate and it has still not rebounded completely. It is also important to note that the survey at the end of the tour is optional and thus the responses are self-selected. Nonetheless, of those students who completed the tour and survey, they do feel very confident in knowing who to ask for help in the library. It would be preferable if they were more confident about finding library resources (question 2).

The assessment for IN180 was new this cycle. This is the first time that we have used a pre- and post-test format in the same semester and while most of the questions were carried over from past assessments, question 6 on research questions was completely new. We dropped several skills-based questions and all the research confidence questions to streamline the assessment. Looking at the results by learning outcome, the increase from the pre- to the post-test for learning outcome 2 was very good, the increase for learning outcome 1 was good although below our 20% target (although the absolute scores were quite high), but question 5, which tests learning outcome 3, showed a slight decline from the pre-test to the post-test and the average score on the post-test was only 1.79 out of 3. This is a cause for concern. This question was changed several years ago on the CWRR assessment to reflect a more sophisticated approach to evaluating online sources. When we made the change in CWRR we saw the scores decrease and they have remained low. However, when this question was asked of CWRR students last year, they showed an 18% increase from the pre-test to the post-test. One issue is that the material that this question assesses is primarily covered in University Seminar, while the other SLOs assess material covered in IN180.

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. The learning outcome with the smallest increase from pre-test to post-test was SLO 1 but this learning outcome also had the highest score on Part 2 of the pre-test and post-test assessment. In Part 1 of the assessment on research confidence, there was a 14% increase on knowing where to find things in the library, which is part of learning outcome 1. This question also had one of the lowest scores on the pre-test, and the lowest score on the post-test. The largest number of honors students also said that they wish they had learned more about the physical library on question 1 of the post-test. This seems to indicate that honors students need and want more instruction on using the physical library, although overall their skills in knowing about information sources is quite high.

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.

While the self-guided library tour did meet its learning goals and participation was close to our target, we still need to work on getting more students to take the tour. A self-guided tour is 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. We will continue to work with IN140 and HN183 faculty to encourage them to have their students complete the tour. 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.

In IN180, for an initial assessment of a new course, things seemed to go well. Participation has traditionally been a problem in our pre- and post-test assessments because the students take the assessment in Moodle outside of class. This year around 25% of the IN180 students completed the assessment. In the past, our pre-test assessment for CWRR typically had a 50% participation rate and historically the rate for the post-test was around 40%, which leaves a lot of room for improvement. As mentioned above, some of the material, particularly on evaluating online sources, is covered in IN140, so the librarians need to do more to connect student learning in University Seminar with the work they are doing in IN180. For the next academic year, library faculty are working with Writing Faculty to have more in-class time with students to work with them on developing research questions, formulating keywords, and searching effectively and efficiently. That additional instruction time may help with this issue.

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.

Our instruction and associated assessment of HWS are much more established than in IN180 and IN280. The participation rate was relatively high (52% on the pre-test and 32% on the post-test) although there is room for improvement. We also need to ensure that we meet with all sections of HWS for library instruction. There is sometimes the perception among teaching faculty that honors students don't need library and research instruction. While our assessments do show that honors students come to Millikin with more prior information literacy instruction and higher research confidence and skill, they do progress during their first year at Millikin, which indicates that library instruction is needed and is having an effect.

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?

Answer the first question 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. She looked at a magazine with “book” in the title. Which magazine do you think she looked at?

Location #3. How might she have saved her scans?

Location #4. What blue thing in the window of the New Technologies 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 are in this section of the book stacks?

Location #7. What color is the 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

IN180 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 year, a librarian visited your University Writing class 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. 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
9. (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 IN180 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
- R = Finding (credible) (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 IN180 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., <ul style="list-style-type: none"> - URL - Format – nicely laid out, free of obvious errors - Ads - Sources or Reference List 	Strategy based on a checklist that focuses on the site alone, e.g., <ul style="list-style-type: none"> - 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 IN180 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 University Studies)***

Due on or before February 15

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