**Section 1: Program Information**

Program Name (from the assessment plan): Kathryn A. Martin Library – Supplementary Course Instruction  
Program Assessment Liaison (PAL): Rachel Flynn  
PAL Email: rjflynn@d.umn.edu  
Department Head or Director: Matt Rosendahl  
Program Type (mark one):  
- X Academic Affairs Co-Curricular  
- ☐ Student Life Co-Curricular  
- ☐ CEHSP Undergraduate  
- ☐ CEHSP Graduate  
- ☐ CAHSS Undergraduate  
- ☐ CAHSS Graduate  
- ☐ SCSE Undergraduate  
- ☐ SCSE Graduate  
- ☐ LSBE Undergraduate  
- ☐ LSBE Graduate  

Website(s) where Program Learning Outcomes (PLOs) are publicly available:  
https://lib.d.umn.edu/about/assessment  
https://lib.d.umn.edu/research-collections/library-instruction  

Other materials in which the program ensures PLOs are communicated:  

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**Section 2: 2020-21 Program Learning Outcomes Reported**

*Copy and paste the box of items below (#1-6) for each PLO reported for the 2020-21 academic year.*

1A. Program Learning Outcome (PLO) - as stated on the assessment plan:
Students will develop effective search strategies in order to persist in the face of search challenges.

1B. PLO Aligned to UMD SLO/Graduate LGC: SLO 2 (insert the number; a PLO is primarily aligned to only one SLO or LGC and is stated on the assessment plan)

2A. Describe or attach what students do that is assessed for the PLO (i.e., the assessment measure(s)) – e.g., information provided on syllabi; instructions for students; sample questions; etc. Information should attest to the measure(s) being valid and not biasing any subgroups.
In Spring 2020, librarians worked with students in seven sections of Advanced Writing to gather data related to the research process:

1 Section of WRIT 3130 Advanced Writing: Engineering (23 Students)  
1 Section of WRIT 3150 Advanced Writing: Sciences (20 Students)  
2 Sections of WRIT 3160 Advanced Writing: Social Sciences (44 Students)  
3 Sections of WRIT 3140 Advanced Writing: Human Services (70 Students)  
Total: 157 Students

Librarians gathered this data using three measures: a map drawing exercise that asked students to draw the steps of their research process for a prior project; a set of reflection questions mid-way through the semester that asked students to reflect on their current research project; and a post-project reflection. The prompt for the map drawing and reflection questions are included in Appendix A.
2B. Describe how the measure is assessed and data are analyzed - e.g., rubrics or rating scales, if applicable; who conducts the assessment; data analysis; etc. Descriptions should attest to reliability and not biasing any subgroups.

The pandemic disrupted data collection, with several sections unable to complete the entirety of the reflection process. Thus, librarians gathered a sample of 30 maps to analyze, as this portion of the assessment process was the most complete. The sample breaks down as:

WRIT 3130 Advanced Writing: Engineering (5 Student Maps)
WRIT 3150 Advanced Writing: Sciences (5 Student Maps)
WRIT 3160 Advanced Writing: Social Sciences (10 Student Maps)
WRIT 3140 Advanced Writing: Human Services (10 Student Maps)

Maps were analyzed and coded by three librarians to identify themes and to find evidence of persistence or revised searches in the research process. Eleven separate themes were identified, including: Process/Strategy; Writing; Iteration; Help seeking; Keyword development; Submitting and sharing; Topic; Notes; Reading; Organizing: Outlining; and Searching & Seeking.

Demonstrating persistence or writing about revising search strategies within one or more of the themes of Process/Strategy; Iteration; Help Seeking; Keyword Development; and Searching & Seeking was considered proficient. Of these themes, students demonstrated persistence or wrote about revising search strategies as follows:

Process/Strategy: 0
Iteration: 14
Help Seeking: 0
Keyword Development: 4
Searching & Seeking: 7

3A. Results:
Total number assessed: 30
Number meeting satisfactory performance: 25

3B. Interpretations of results:
How this year’s results are interpreted by the program, including a comparison to the performance indicator(s) stated on the assessment plan:

The percentage proficient for this outcome was above our performance indicator of 75%, with 25 out of 30 maps (83%) demonstrating the ability to develop effective search strategies in order to persist in the face of search challenges within one or more of the themes coded and analyzed by librarians. Iteration was perhaps the most demonstrative of proficiency with students writing about returning to a previous step in their research process, which included additional or revised search strategies in order to fill in self-identified holes or gaps in their research. Searching & Seeking was the second most common theme where students demonstrated proficiency in developing effective search strategies: maps that included not only where students intended to search but what types of sources they would look for once there were deemed proficient. Finally, the theme of Keyword Development showed students’ understanding that not all keywords and search strategies would yield relevant results, which would require them to reconsider and try other avenues of information seeking.

While this assessment demonstrates a high level of proficiency, the library recognizes that the sample size is limited, the pandemic disrupted the data collection efforts, and the full scope of the assessment was not...
realized; the analysis of both the mid and post-project reflections would have improved our ability to assess and measure success for this learning outcome.

How has student performance changed since this PLO was previously reported? To what extent are the result changes over time attributed to programmatic changes related to this PLO? The program may address recommendations identified on the previous PLO report.

This learning outcome was previously reported on in Fall of 2016. We changed the methods for assessing this outcome, so a precise comparison is difficult; however, the results are similar in many ways. In 2016, 81% of student responses to a series of reflective questions demonstrated proficiency as compared to the 83% that demonstrated proficiency for this assessment cycle. In both cases, there were still some areas of confusion and areas for potential growth in student performance. A challenge that students identified and librarians continue to observe is an underestimation of the amount of time developing an effective search strategy takes. An emphasis on the iterative, sometimes time-consuming process of research has been discussed amongst the librarians and has been prioritized within our College Writing WRIT 1120 teaching materials. This is then reinforced in instruction at the 31XX level of Advanced Writing.

3C. Recommendations for improvement as informed by the assessment data:
The data, while limited, demonstrates a high level of proficiency for this outcome, indicating that no improvements are currently needed.

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SECTION 3: 2020-21 ASSESSMENT PROCESSES AND SUMMARY

Provide responses to these items collectively for the program’s assessment work specific to the PLO(s) described in Section 2 for the 2020-21 assessment year. Do not include information from previous years for these items.

Description of the Faculty and/or Staff Assessment Review Process for 2020-21 Assessment:
A working group of three librarians coded and analyzed the student research maps over a series of twelve meetings over the course of the 2020-2021 academic year. The results were shared and discussed at a meeting of the library’s Research & Learning Team on May 25, 2021. Results were also presented and discussed at a library all-staff meeting on August 19, 2021.

Input/Involvement of Students, Other Stakeholders, and External Sources in Assessment Activities for 2020-21 Assessment:
Librarians who worked with the seven sections of Advanced Writing shared the outcomes of their analysis with the instructors of these sections at a meeting on December 8, 2020. Assessment outcomes, measures, and results are shared and discussed with writing instructors at meetings of the College and Advanced Writing Program Committee. Learning outcomes and assessment reports are publicly available on the library website. Learning outcomes and thematic coding were based on the Association of College & Research Librarians Framework for Information Literacy for Higher Education.

Overall Assessment Summary for 2020-21 PLOs Reported and Action Plan Moving Forward (including resources and timeline as applicable):
While these results reflect an encouraging level of performance for outcome LIB 1, librarians recognize that students still have unrealistic expectations about the research process, specifically its iterative nature. When looking specifically at the theme of iteration within the sample of research maps, less than half of students wrote about the need to revisit earlier steps in the research process; librarians saw that students often view research as a step-by-step, linear process or as a series of hoops to jump through, rather than an exploratory exercise that takes time, persistence, and revision. Librarians will partner with writing instructors of Advanced Writing 31XX in 2021-2022 to specifically work on assignment design and
instruction that supports students’ learning in this area. The research maps are a new tool for assessment; we intend to couple these with a complete set of reflection questions about the assignments designed with this learning outcome in mind in order to assess this learning outcome more robustly in the future.

Appendix A:
Research Map Prompts:
Think about a recent research assignment and the process you went through.

1. Take 15-20 minutes to draw the steps you took for that research project. (Use as much spaces as you need. You can include text, pictures, arrows – whatever helps you express your approach.)
2. Once you’ve finished drawing your process, describe each step in a few words or a sentence.
3. Thinking about the process you have drawn, answer the following:
   a. Why do you do things in this order?
   b. How do you feel about various steps? Are some more challenging or frustrating than others? Are some easier or more fun?

Assignment 2: Mid-Process Reflection
After submitting an annotated bibliography/ topic proposal/ other mid-process research assignment, students will respond to these reflection questions.

1. What is your topic or research question?

1. Have new questions come up related to your research topic? Has your research topic changed? Look at your research process map to answer the next 2 questions.

1. What stage of the process are you at?

Think about your research process so far for this class. Have you gone through the same steps in the same order as you expected when you drew the map? Describe your path.

Assignment 3: Final Reflection
This is part of a research project into students’ experiences and attitudes related to the research process. (Project information sheet)

Please respond to the following questions about your experience completing research during your most recent research assignment. Your response should be approximately 300-600 words, or around one double-spaced page. Plan to spend about a half an hour writing this informal reflection.

What process did you use to find sources for your assignment and what did you learn from that process?

- Where did you search for information? What types of resources or tools did you use?
- Approximately how much time did you spend searching?
- What challenges or problems did you encounter while searching? What did you do when you came across these challenges or problems? Be specific and provide examples.
- What worked when you were doing your research? What did you try that didn’t work? Be specific and provide examples.
- How did you feel at different points during the research process?
- What would you do differently the next time you complete a research project? Has your approach to research changed over the semester? If so, describe how your process has changed.