Annual Assessment Report
DePaul University Library

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Part I: Follow-Up on Last Year's Assessment Report Recommendations

Last year's report included plans for sharing the assessment project data with the History faculty who regularly teach the History 298 and 299 courses, and for Special Collections and Archives (SPCA) instruction staff to be mindful of the baseline understanding of students. Jamie Nelson, Head of Special Collections and Archives, and Morgen MacIntosh Hodgetts, Special Collections Instruction Librarian, met with the director of the History undergraduate program, Dr. Valentina Tikoff, to share the results and have a conversation about their interpretation of the results and the implications for planning future instruction sessions. Special Collections and Archives librarians did not provide an overview or presentation to the History faculty as a group, but rather applied what they had learned about the students' analytical abilities to the individual planning sessions held with faculty prior to each instruction session. Librarians incorporated what they learned from the assessment project into their ongoing programmatic review of instruction as well as into the design of specific activities and assignments.

The background research for last year's project, as well as the assessment project itself and the results, encouraged Special Collections and Archives staff to become more involved with professional discussion and development opportunities, with Morgen MacIntosh Hodgetts joining the Society of American Archivists Reference, Access and Outreach section's Teaching with Primary Sources committee and attending the Librarian's Active Learning Institute-Archives and Special Collections at Dartmouth College, and Jamie Nelson presenting on the project's findings as part of a workshop at the International Federation of Library Association's Information Literacy Section Satellite Pre-conference held at DePaul in August 2016. This deeper engagement with the topic and with emerging professional guidelines for primary source literacy aids in the programmatic improvements to instruction, with an eye to improving the learning opportunities and outcomes for students.

Part II: Report on This Year's Assessment Project

<u>Abstract</u>

Since 2008, the Library has provided research instruction for both online and in-person sections of the School for New Learning's LL 300 (Research Seminar) course. All SNL undergraduate students are required to complete this research intensive course to graduate. Anecdotally, the Library has heard that many SNL students struggle with this course, especially when taken online. In Fall 2013, after months of consultation with several of the SNL faculty, the LL 300 librarians changed our curriculum in the online classes, providing additional instruction, assistance, and support for the students.

For this assessment, we analyzed students' bibliographies submitted through D2L as part of their final projects over six quarters, from Spring 2013 through Summer 2014. We developed a rubric with four criteria for evaluating the bibliographies. Then, we compared student work before and after the instituted changes to see if there were improvements in the students' scholarship.

This assessment project investigated whether or not the library has been successfully meeting our learning outcomes in the online sections of LL 300. Specifically, we hoped to discover if the changes made to the library's curriculum in Fall 2013 improved students' research skills.

<u>Learning Outcome Assessed</u>

This project examined and assessed the following DePaul University Library learning outcome: "**Search & Explore:**" *Demonstrate flexibility and persistence in developing and revising strategies for finding and using a range of resources.* While this learning outcome includes several aspects, we focused on assessing the elements: *flexibility*, *persistence*, and *using a range of resources*. Students who are flexible, persistent, and use a range of resources will be able to: find sufficient sources to fulfill the requirements of their assignment, use mostly scholarly sources, use the library databases to find the majority of their sources, and seek out sources using more than one library tool or database.

<u>Data Collection and Methodology</u>

Our study comprised all students enrolled in online LL 300 during the following quarters: Spring 2013, Summer 2013, Fall 2013, Winter 2014, Spring 2014, and Summer 2014. After obtaining Institutional Review Board approval, the team downloaded the students' final projects from the D2L dropbox. We culled just the bibliographies from the research proposals, removed any identifying information and assigned each bibliography a random number, allowing us to isolate the pre- and post-revision bibliographies, post-scoring. We reviewed 177 bibliographies in total.

In order to develop a meaningful rubric, we consulted several sources: the School for New Learning's guidelines for the class (Appendix C), the LL 300 syllabus, as well as our own curriculum and learning goals. Our final rubric (Appendix A) contained four criteria:

1. Number of sources
2. Number of scholarly sources
3. Number of sources found through library databases
4. Number of perspectives represented in the bibliography

We conducted several norming sessions to prove inter-rater reliability and then independently scored the bibliographies. We randomly divided the bibliographies into three groups, one set for each librarian, and recorded the scores on a master spreadsheet.

After reviewing the scores, we set the following thresholds for success for each of the criteria:

● <u>Number of sources</u> (Criteria 1): a score of 15 would be considered acceptable.
  While this number is not stipulated for the final project, students are required to submit 15 annotations as part of the literature review, which is one of the scaffolded steps in this assignment. Our data confirmed that 15 was the mode when taking into account the scores of all students in this category.
● <u>Number of scholarly sources</u> (Criteria 2): 70% (11 of 15) would be considered acceptable.
  While the SNL rubric does not stipulate a number or percentage of sources, we know that professors generally require scholarly sources for all or most of the 15 items in the annotated bibliography. Professors may make exceptions for including some non-scholarly sources if students are researching topics where trade literature is critical (*e.g.* business) or if current news sources are important. Based on our library goals of teaching students to meaningfully evaluate sources, and to understand the value of scholarly literature, we established that 70% of the 15 sources (11) should be scholarly to meet an acceptable level of performance.
● <u>Number of sources from library databases</u> (Criteria 3): 70% (11 of 15) would be considered acceptable.
  Our goal was for students to use the library's resources in their research whenever possible. 70% of 15 sources (11) is an appropriate threshold to establish an acceptable level of performance, based on the underlying needs of the assignment.
● <u>Perspectives</u> (Criteria 4): 70% (2 of 3) would be considered acceptable.
  The SNL rubric states that in order to achieve a grade of A, students must incorporate at least 3 perspectives into their sources. (Appendix C) This requirement aligns with our library goal for students to be familiar with a range of library resources and tools. By utilizing various subject-specific databases in their research, the students would be

more likely to uncover different perspectives than if they had only used one database in one subject area. Documenting 2 out of 3 perspectives establishes an acceptable level of performance.

Results

In order to count the total number of students who successfully met our learning outcomes with acceptable or better performance, we examined only those students who took the class after we had revised our curriculum (Fall 2013, Winter 2014, Spring 2014, Summer 2014), for a total of 112 students. Then, we determined that if students were successful with 70% of the criteria in the rubric, they will have achieved acceptable or better performance.   84 students (75%) successfully met 3 out of the 4 criteria at the established threshold.

Learning Outcome	# Students Assessed	# Students with Acceptable or Better Performance
Search & Explore: Demonstrate flexibility and persistence in developing and revising strategies for finding and using a range of resources.	112	84

For the entire group of 177 bibliographies, collected over 6 quarters, we found the highest levels of success when measuring students' flexibility and persistence in finding appropriate resources through three of our rubric criteria (Appendix B, Table 1):

- Finding at least 15 sources. 74% of students (n=131) were successful
- Finding at least 11 articles from library databases. 81% of students (n=143) were successful.
- Providing evidence of 2 or more perspectives. 86% of students (n=152) were successful.

Unfortunately, fewer than half of the students over the entire 6 quarters were successful with Criteria 3, finding scholarly articles.

- Finding at least 11 scholarly articles. 48% of students (n=85) were successful.

After reviewing the bibliographies in total, we investigated how our curricular changes implemented in Fall 2013 affected students' research abilities. In each of the four rubric categories, student performance improved, as evidenced by the average scores (Appendix B, Table 3) as well as the total number of students reaching the thresholds for success (Appendix B, Table 1).

We compared the 65 bibliographies submitted before Fall 2013 with the 112 bibliographies submitted in the four subsequent quarters. (Appendix B, Table 1). These results demonstrate that we are steadily improving student learning outcomes across the board.

- Finding 15 or more sources. Increased from 68% to 78%
- Finding 11 or more scholarly sources. Increased from 35% to 55%
- Finding 11 or more sources from library databases. Increased from 74% to 85%
- Providing evidence of multiple perspectives. Average score increased from 2.2 to 2.4 (Table 3)

It is noteworthy that the area that still needs attention is the use of scholarly materials. Although this measure increased from 35% (n=23) to 55% (n=62) after our curricular changes, approximately half of these students are still struggling with finding enough scholarly material for their research.

Interpretation of Results

Based on our results, we are doing a good job of teaching students persistence and flexibility in how to find sources. The library's work with LL 300 students was definitely focused on enabling the students to find the quality material needed for their final projects, so it is rewarding to know that 74% of students overall found at least the minimum number of articles and 81% of students overall were using library databases appropriately in their coursework.

Unfortunately, students often still struggle with recognizing scholarly sources and understanding their value. Our assignments and communication with the students intended to teach students not only how to find material using library tools, but also how to evaluate those resources. We did not expect to find that less than half of the students were able to incorporate an appropriate amount of scholarly material in their final projects, even when they were using the library's resources. One possible reason for this low number is that many SNL students often research current business topics that don't have an abundance of accumulated scholarship. While strategies can be employed to find related scholarship and peer reviewed research that should be included in a bibliography for these topics, it can be more difficult to find these items. We should take any opportunities available for improving student achievement in this area.

The last measure in our rubric was to determine if students represented three different perspectives in their bibliographies. This was possibly the most difficult item to quantify in our rubric, and we ultimately based our evaluation on the name of the source, or title of the journal. While the goal was for students to use a range of library resources and tools in their research, achieving this library measure does not necessarily correspond to providing evidence of at least three different perspectives. While only 45% of students successfully provided three

different perspectives in their range of resources, on average, students were successfully finding 2 perspectives (Appendix B, Table 2).

Aware that we could always do more for these students, in September 2015, we replaced one of our online tutorials for identifying scholarly articles with a more robust, graded, and interactive tutorial on this topic. The data we examined above does not include September 2015 forward. It would be interesting to see if the numbers for this metric are higher with data from Fall 2015 forward. (Unfortunately, due to IRB restrictions, we were only able to use older data.)

Some factors that may influence our data which are outside of our control include:

- Variations in course instructor engagement with students. We often see variations between instructors in how and when feedback is provided to students.
- Variations in course instructor expectations (e.g. some instructors may provide more flexibility in the number scholarly sources or number of required sources)
- Variations according to which quarter students take the course (Summer vs. Winter, etc.)
- Research topic choices. It is possible that three different perspectives is not a realistic goal for many of the chosen research topics.

Recommendations and Plans for Action
Based on the results of our study, we plan to continue to provide the same level of support for our online LL 300 students, as it has been largely successful. Since we have added new content to our curriculum (including two updated tutorials), we hope to be able to assess more recent data to see if students using the new curriculum are better able to distinguish scholarly resources from non-scholarly resources. We also hope to integrate a component in the curriculum that contextualizes the necessity to use various subject-specific article databases as way to better represent various domains of knowledge (perspectives).

At this time, the School for New Learning is undergoing a complete undergraduate curriculum change. As a result, several key changes are being made that will impact the library's involvement. In the new curriculum, LL 300 will be split into two sequential, required courses: Research Writing and Research Methods. The library has been in close communication with SNL faculty throughout the curriculum revision process.

The results of our study will be taken into consideration as we revise the library curriculum for undergraduate SNL students. These revisions may also provide more opportunities for scaffolding the content we deliver to the SNL students. Discussions with SNL are ongoing and

final decisions regarding the library's involvement in the curriculum have not been made. SNL will most likely not begin to offer this new curriculum until Fall 2017.

Details of our plan for implementing our recommendations are below:

Fall 2016:

- Share results of assessment project with all instruction librarians at upcoming instruction workshop.
- Emphasize importance of teaching students how to evaluate resources and the significance of scholarly material.
- Discuss findings with librarians who specifically work with SNL's LL 300 class both online and in person. Develop recommendations for emphasizing the importance of evaluating information and finding information using a variety of library resources, and the value of multiple perspectives for research. Share these recommendations with instruction librarians and SNL faculty involved with curriculum planning.

Winter 2017:

- Present study to SNL faculty who are revising the LL 300 curriculum.
- Collaborate with SNL faculty to clearly determine expectations for the literature review and/or annotated bibliography assignments in revised LL 300.

Spring - Summer 2017:

- Ensure that librarians working with revised LL 300 class emphasize importance of scholarly sources and (if still appropriate) importance of multiple perspectives in the research portion of the class.

Appendix A: LL 300 Online Bibliography Assessment Rubric & Definitions

Scoring Rubric

CRITERIA	Acceptable	Not Acceptable
Sufficiency of Sources	15 or more sources listed	Less than 15 sources listed
Quality of sources	11 or more scholarly sources	Less than 11 scholarly sources
Selection of sources	11 or more sources came from library databases	Less than 11 sources came from library databases
Variety of Perspectives	2 or more different fields of thought represented in the source selection	Less than 2 different fields of thought represented in the source selection

Explanations and Definitions for Scoring

Criteria	Definition/Instructions
Sufficiency of sources	*Exclude any course textbooks that are not directly related to the topic, e.g., the Leedy book. *Exclude any sources that allude to class content or exchanges with a professor. *Count all sources listed (minus noted exceptions); this includes those things listed under "other resources."
Quality of sources	Make a preliminary determination of scholarly by using the information in the citation. If in doubt, look up the article to make the determination. Dissertations should not be counted as scholarly. In most cases, proceedings from conferences should not be counted as scholarly; however, exceptions to this rule may be in the fields of science and technology. In these cases, use the title of the proceeding and/or look it up to see if it is in fact scholarly (e.g., addressing a research problem and not just tips or how-tos.)
Selection of sources	*If the article comes from a scholarly journal, assume that it came from an article database. *If a URL is included that clearly indicates the item came from the open web, do not count it as coming from a library database. *Books (with the exceptions mentioned in "Sufficiency of Sources" should be counted as having come from a library database.
Variety of Perspectives	Based on the source titles

Appendix B: Results

Table 1. Students meeting thresholds for success, Pre and Post Curricular Change

Rubric Criteria	Pre-Curricular Change: Before Fall 2013 (n=65)		Post-Curricular Change: Fall 2013 and after (n=112)		All Students (n=177)	
	Number	%	Number	%	Number	%
15 or more sources	44	68%	87	78%	131	74%
11 or more scholarly	23	35%	62	55%	85	48%
11 or more from databases	48	74%	95	85%	143	81%
2 or more perspectives	57	88%	95	85%	152	86%

Table 2. Cumulative Scores for All Students in All Quarters

	Number of Sources	Number of Scholarly Sources	Number of Sources from Databases	Number of Perspectives
Average	15.6	10.0	13.7	2.3
Mode	15	13	15	3
Median	15	10	15	2

Table 3. Average Scores, Pre vs. Post Curricular Change

Learning Outcome	Average Score Pre	Average Score Post
1: Number of sources	**14.6**	**16.3**
2: Number of scholarly sources	**8.8**	**10.7**
3: Number of sources from a database	**13.0**	**14.0**
4: Number of perspectives	**2.2**	**2.4**
Total Average	**65.5**	**72.5**

Appendix C: SNL Research Seminar Rubric

RESEARCH SEMINAR

Evidence for Assessment	Criteria by Level (Grades A-C)	Weighting
Develops clearly defined research question(s) for a designated audience and purpose	***Develops clearly defined research question(s) with which to develop the research proposal.*** Grade of A • Develops a minimum of one research question, with clearly defined indicators for each that relate to the analysis plan Grade of B • Develops a minimum of one research question, with clearly defined indicators for each OR • Develops a minimum of one research question, each of which relates to the analysis plan Grade of C • Develops a minimum of one research question, with no indicators of relationship to the analysis plan	15% of the final draft proposal
Develops a literature review that: • Uses contemporary and historically important resources • Describes, critiques and analyzes resources within field(s) related to one's research question(s) • Clearly places one's research question(s) within	***Develops a literature review for a draft research proposal that address each component.*** Grade of A • Uses a combination of contemporary and historically important resources, identifying the significance of the historical resources • Describes, critiques and analyzes resources within at least three fields related to the research question(s) • Uses a combination of at least three of the following types of resources within each of the three fields: o Articles from peer-reviewed journals o Interviews with persons identified as having	25% of the final draft proposal

| contemporary works in the field | important, relevant knowledge
○ Web resources from sources identified as either peer-reviewed or otherwise professional-level
○ Books published by significant figures within the field

● Clearly places the research question(s) within contemporary thought in the field by drawing parallels and by identifying gaps in the literature base

Grade of B
● Uses only contemporary or historically important resources, identifying the significance of the historical resources
<div align="center">OR</div>● Uses a combination of contemporary and historically important resources, without identifying the significance of the historical resources

● Describes, critiques and analyzes resources within two fields related to the research question(s)
<div align="center">OR</div>● Describes and critiques, but does not analyze resources within at least three fields related to the research question(s)

● Uses a combination of at least two of the following types of resources within each of the three fields:
○ Articles from peer-reviewed journals
○ Interviews with persons identified as having important, relevant knowledge
○ Web resources from sources identified as either peer-reviewed or otherwise professional-level
○ Books published by significant figures within the field
<div align="center">OR</div>● Uses a combination of at least three of the following types of resources within two of the three fields: | |

	o Articles from peer-reviewed journals o Interviews with persons identified as having important, relevant knowledge o Web resources from sources identified as either peer-reviewed or otherwise professional-level o Books published by significant figures within the field • Clearly places the research question(s) within contemporary thought in the field by drawing parallels and by identifying gaps in the literature base Grade of C • Uses only contemporary or historically important resources, without identifying the significance of the historical resources • Describes, critiques and analyzes resources within one field related to the research question(s) OR • Describes and critiques but does not analyze resources within two fields related to the research question(s) • Uses one of the following types of resources within each of the three fields: o Articles from peer-reviewed journals o Interviews with persons identified as having important, relevant knowledge o Web resources from sources identified as either peer-reviewed or otherwise professional-level o Books published by significant figures within the field OR • Uses a combination of at least three of the following types of resources within one field: o Articles from peer-reviewed journals o Interviews with persons identified as having important, relevant knowledge o Web resources from sources identified as either peer-reviewed or otherwise	

	professional-level o Books published by significant figures within the field ● Does not place the research question(s) within contemporary thought in the field	
● Describes the advantages and disadvantages of at least two research methodologies and two or more research designs associated with each method ● Describes the appropriate use of mixed methodologies and triangulated data sources ● Develops a written methodology plan that identifies chosen designs, taking into consideration those advantages, disadvantages and appropriate uses ● Successfully completes the designated Web-based Human Subjects module	***Develops a research methodology design for a draft research proposal that address each component.*** <u>Grade of A</u> ● Describes and compares the advantages and disadvantages of at least two individual methodologies and at least two research designs associated with each method ● Describes the appropriate use of mixed methodologies and triangulated data sources in comparison to the advantages and disadvantages of the individual methodologies identified <u>Grade of B</u> ● Describes and compares the advantages and disadvantages of only one methodology and at least two research designs associated with that methodology ● Describes the appropriate use of mixed methodologies and triangulated data sources in comparison to the advantages and disadvantages of the individual methodology identified OR ● Describes and compares the advantages and disadvantages of at least two individual methodologies and at least two research designs associated with each method ● Describes the appropriate use of mixed methodologies and triangulated data sources without comparison to the advantages and disadvantages of the individual methodologies identified	25% of the final draft proposal

	Grade of C • Describes and compares the advantages and disadvantages of only one methodology and at least two research designs associated with that methodology OR • Describes and compares the advantages and disadvantages of only one individual methodology without at least two research designs associated with each method • Describes the appropriate use of mixed methodologies or triangulated data sources in comparison to the advantages and disadvantages of the individual methodology identified OR • Does not address the appropriate use of mixed methodologies or triangulated data sources	
Per SNL policy, successfully completes the designated Web-based Human Subjects module with a passing grade. Required to pass Research Seminar.		*Pass/Fail*
Develops an appropriate Informed Consent document, per DePaul University Institutional Review Board policy Discusses the level of oversight required by the developed research design	***Develops an appropriate Human Subjects consideration, per DePaul University Institutional Review Board policy*** Grade of A • Develops an appropriate Informed Consent document, per DePaul University Institutional Review Board policy, that clearly explains the project to subjects in age-appropriate language; discusses in the methods section the level of oversight required by the type of human subjects involvement OR • Completes an IRB Exempt worksheet and discusses in the methods section why the design might qualify for exempt status Grade of B • Develops an appropriate Informed Consent document, per DePaul University Institutional Review Board policy; discusses in the methods	10% of the final draft proposal

	section the level of oversight required by the type of human subjects involvement OR - Completes an IRB Exempt worksheet with no accompanying discussion Grade of C - Develops an appropriate Informed Consent document, per DePaul University Institutional Review Board policy, with no accompanying discussion OR - Inappropriately completes an IRB Exempt worksheet with or without accompanying discussion	
Anticipates and reflects on the significance of both expected and unexpected research outcomes	***Develops a deliberative section of the research proposal that anticipates and reflects on the significance of both expected and unexpected research outcomes*** Grade of A - Describes anticipated results of the research proposed and the significance of those results for personal understanding and practice, including possible areas for future research - Describes the effect of results that are not anticipated, including the significance of those results for personal understanding and practice, including possible areas for further research Grade of B - Describes anticipated results of the research proposed and the significance of those results for personal understanding and practice, without consideration of possible areas for future research OR - Describes anticipated results of the research proposed and possible areas for future research, without consideration of possible areas for future research - Describes the effect of results that are not	20% of the final draft proposal

	anticipated, including the significance of those results for personal understanding and practice, without consideration of possible areas for further research OR • Describes the effect of results that are not anticipated and possible areas for further research, without consideration of the significance of those results for personal understanding and practice Grade of C • Identifies anticipated results of the research proposed, without elaboration • Identifies possible unanticipated results of the research proposed, without elaboration	
Clearly describes personal suppositions and predispositions and the effect of those on proposal design	***Develops a section within the methods section that identifies and describes personal suppositions and predispositions about the research question(s) and how those personal beliefs affected proposal design*** Grade of A • Identifies and describes personal suppositions and predispositions about the research question(s) and how those personal beliefs affected proposal design Grade of B • Identifies and describes personal suppositions and predispositions about the research question(s) OR • Identifies but does not describe personal suppositions and predispositions about the research question(s) and how those personal beliefs affected proposal design Grade of C • Identifies personal suppositions and predispositions about the research question(s), but does not describe them and does not describe the effect of those beliefs on proposal	5% of the final draft proposal

	design	
Developed research proposal conforms to all standards of proper academic writing	***Developed research proposal conforms to all standards of proper academic writing*** Having already demonstrated competence in L4, students are responsible for ensuring that their proposals: • conform to the style manual specified by the instructor (5% deduction from total score for substandard) • contain no spelling errors (5% deduction from total score for substandard) • contain no punctuation errors (5% deduction from total score for substandard) • contain no grammatical errors (5% deduction from total score for substandard)	Deduction from total score of proposal elements J. Holtz