

First-Year Seminar Information Literacy Program

Final Report for Fall 2019

Submitted by Christine Bombaro, Associate Director, Waidner-Spahr Library

Introduction

The First-Year Seminar resolution passed by faculty vote in 2015 states that “All seminars will include at least one assignment that requires students to a) seek and evaluate information on a topic relevant to the seminar, and b) integrate that new knowledge into a project that allows students the opportunity to engage in scholarly conversation appropriate to the first-year level.” It adds, “Revision is essential to developing the skills of critical analysis, writing, and information literacy. For this reason, all seminars will teach the research and writing process so as to provide opportunities for revision.” Each year, librarians participate in the First Year Seminar (FYS) experience by assisting faculty members with integrating the program’s information literacy (IL) goals into their courses.

At the conclusion of each fall semester, we examine various elements of the FYS IL program to identify areas that are working well and those we may improve the following year. This report demonstrates through data and the perceptions of students and faculty members that the critical aspects of the FY mandate are being met successfully. The following areas are closely examined:

- **Instructional data:** Includes inputs such as instruction statistics and the type of IL work conducted with each FYS. Data comparing prior years is included when possible. See page 2.
- **Supplemental IL course evaluations:** This data comes from a questionnaire that was added to the FYS course evaluation packet between 2015-2018. This year, rather than administer the evaluation again, we did a retrospective examination of the results from 2015-2018. See page 5.
- **Project Outcome survey:** The library has begun to make use of a series of surveys created by the Association of College and Research Libraries (ACRL) for institutions like ours in which long-term and large-scale studies of information literacy are not locally feasible. See page 9.
- **Faculty survey:** This annual survey asks faculty about their impressions of the FYS IL program in general and their students’ performance on research assignments in FYS. See page 10.
- **Academic Integrity:** Few changes to the college’s required academic integrity tutorial were made since a new version went online in 2018, but we routinely collect feedback from students about its effectiveness. See page 12.

Key points of this report:

- The library’s FYS program is stable, consistent, and produces positive learning outcomes that meet the college’s mandate.
- Most students self-report high levels of ability and confidence as they learn research skills through the library’s FYS program; further, they report that they use what they learn both in the FYS and beyond.
- Faculty report that most FYS students are generally performing research to expected levels of ability following IL instruction.
- The depth of IL instruction in each FYS is wholly dependent on how individual faculty members structure their syllabi. While most students begin to learn the research process in class through the library’s FYS program, each year, there is a significant subset of students who do not work with librarians through their FYS, or whose experience with research in the classroom is only cursory.

Instructional Data

Session Information

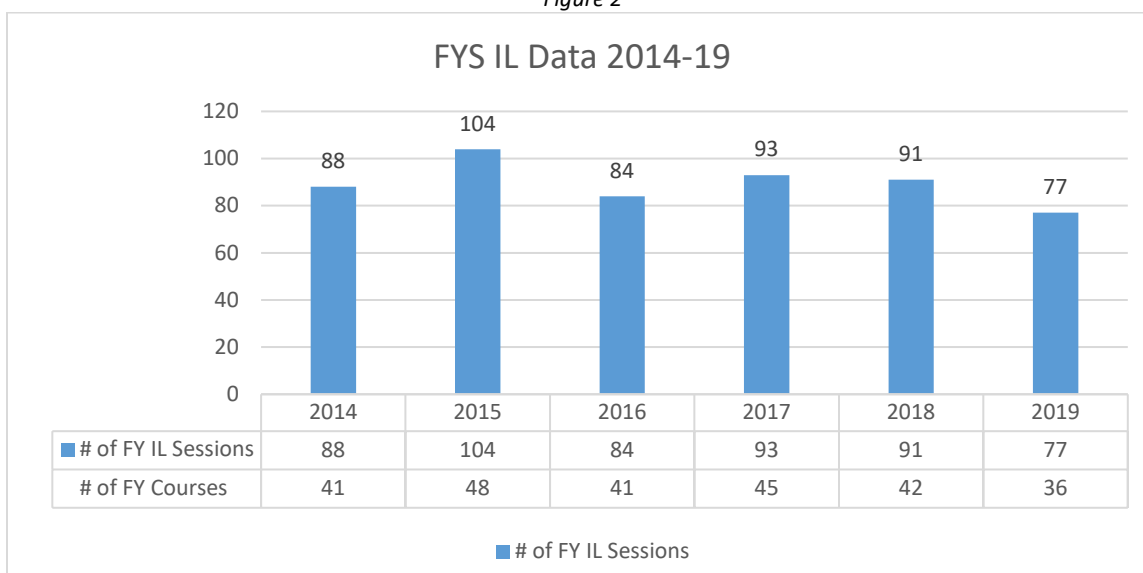
In fall 2019, 36 First Year Seminars were offered, and 9 librarians were assigned as liaisons to them. As illustrated in Figure 1, all except one of the FYS instructors scheduled librarians for at least one in-person IL session. In total, 77 FYS IL sessions were taught (with two groups of seminars combining two courses into one IL session). For more detail about IL classroom activity for 2019, see Appendix A – Class Visits and Activity by Instructor.

Figure 1

# of IL Sessions	# of Seminars
0 sessions	1
1 session	7
2 sessions	14
3 sessions	13
4 sessions	1

The number of IL sessions taught in individual FYS courses since 2014 is illustrated in Figure 2. It should be noted that in 2015 Dickinson admitted an unusually large first year class and in 2019 there was an unusually small first year class.

Figure 2



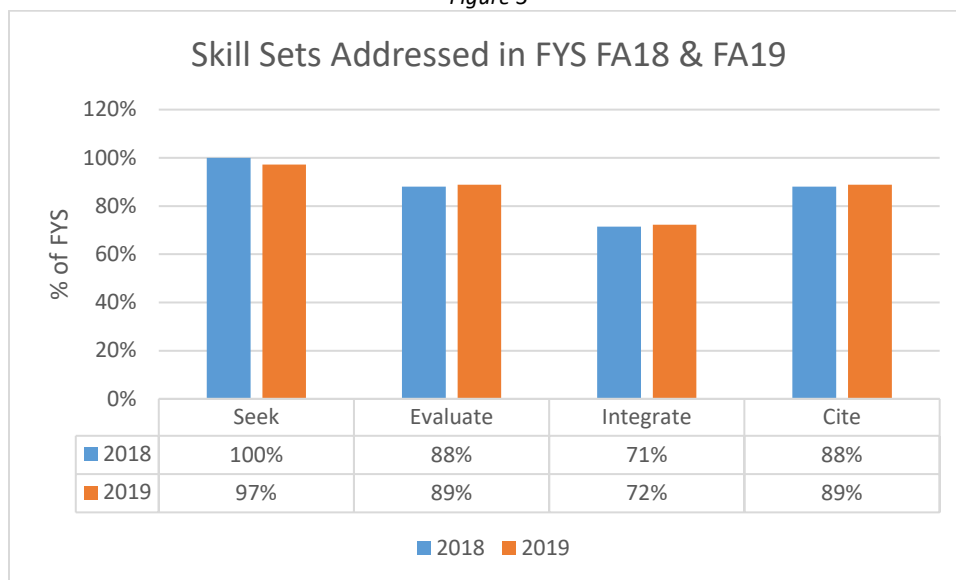
A smaller FY class in 2019 did not significantly reduce the librarians' overall workload. The average number of sessions per seminar remained the same at 2.5. In addition, in fall 2019 librarians taught only 12 fewer IL sessions total (for all courses and disciplines) than they did in fall 2018, with 180 sessions taught in fall 2018 and 168 taught in fall 2019.

Content of Sessions

Librarians reported that they addressed the information literacy skills enumerated in the FYS mandate as shown in Figure 3, which includes comparisons between 2018 when there were 42 seminars offered

and 2019 when there were 36 seminars offered. (Data does not appear on the chart for years prior to 2018 because it was not collected in the same way.)

Figure 3



Efficient information seeking behavior is usually taught by using library-provided research tools such as Jumpstart, other general-purpose databases, subject-specific databases, the library catalog, Google, the physical bookstacks, and WorldCat.

Evaluation of resources is achieved through such methods as teaching students to distinguish among source types (e.g. by helping them to identify what types of sources they find) and to determine if those sources are appropriate for the information need by answering questions about them after a critical read. Students in some seminars also learn to annotate sources; to formulate a research question, topic or thesis by doing exploratory research; and/or to and analyze questionable sources of information (“fake” news).

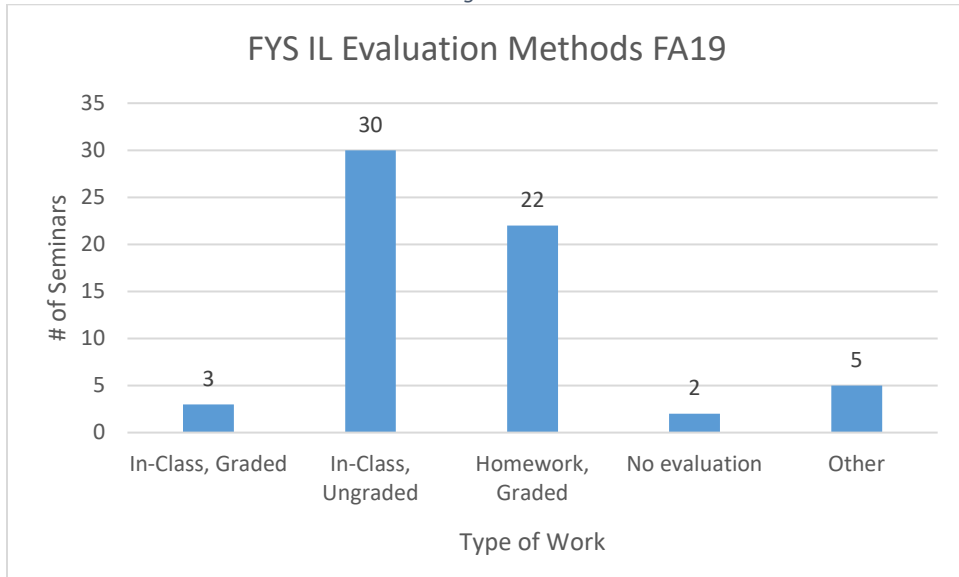
Integration of research material and situating new information within a conversation is a complicated skill that is best practiced through regular writing and discussion in class. However, librarians begin to teach students this skill by having students identify the theses/hypotheses of scholarly sources, consider how all the sources they find complement or contradict one another, and select specific data points from each source that are new and useful to them.

In regard to citation, librarians most frequently teach APA, Chicago, and MLA styles, depending on the preference of the professor.

Research Assignments Resulting from an IL Session

Many FYS instructors required graded homework immediately following the IL instructional session or graded in-class work during the session. As noted in Figure 4, two seminars in 2019 did not include an evaluation following an IL session, which is a number typical of most years. (Data from years prior does not appear on the chart because it was not collected in the same way.)

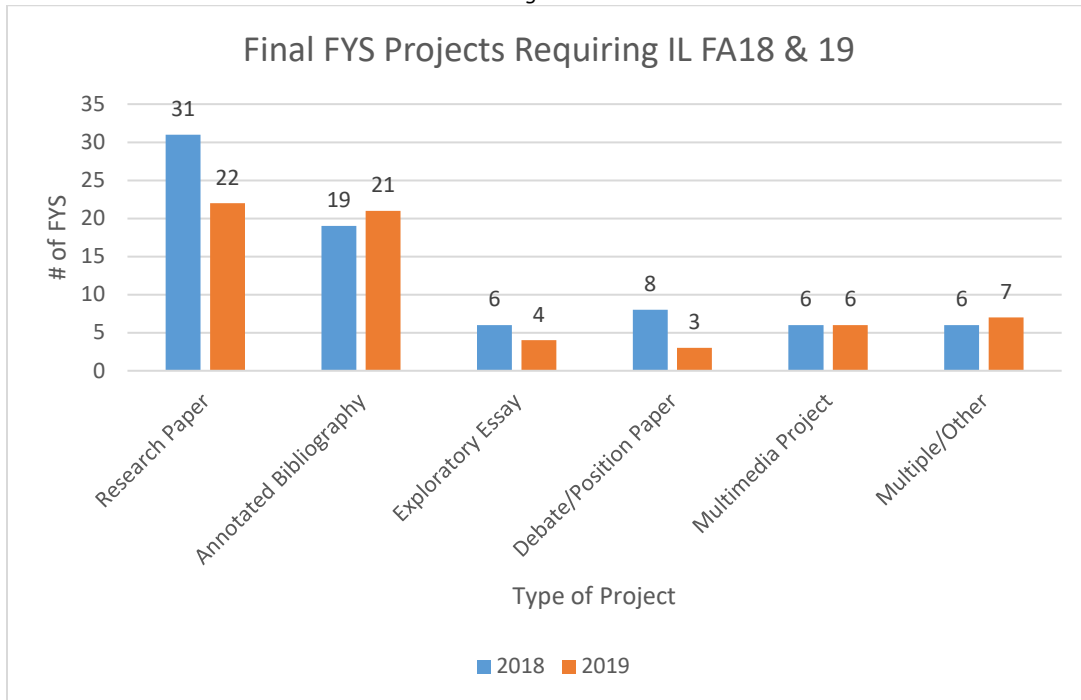
Figure 4



Mid-Term or Final Research Projects

Librarians report that FYS professors required students to complete at least one mid-semester or final project that included the application of information literacy skills. Specific types of assignments for FA18 and FA19 are noted in Figure 5.

Figure 5



This data does not appear in the chart for prior years because it was not collected in the same way before 2018; however, according to our surveys, traditional research papers have long been the most

popular type of final project for FYS (e.g., 33 FYS courses required a research paper in 2015). Annotated bibliographies have been consistently reported as the second most frequently assigned mid-term or final project.

Projects in the “Other” category included comparative analyses, cause/effect papers, and issue papers.

Online Tutorials

In 2015, the library staff developed a series of [information literacy tutorials](#) designed to help students learn how to do simpler research tasks so that librarians could concentrate on higher-order information literacy skills during their limited time in the classroom. In 2019, 20 instructors agreed to require their students to complete at least one online IL tutorial (compared to 21 in 2018), usually prior to a librarian’s classroom visit. Tutorials used in FYS this year were:

- Evaluating Sources¹ – 13 seminars
- Choosing a Database – 11 seminars
- Choosing Search Terms – 11 seminars
- Distinguishing Among Source Types – 10 seminars
- Choosing Search Terms – 11 seminars
- Finding Books – 7 seminars
- Finding a Journal Article from a Citation – 5 seminars

Course Evaluation

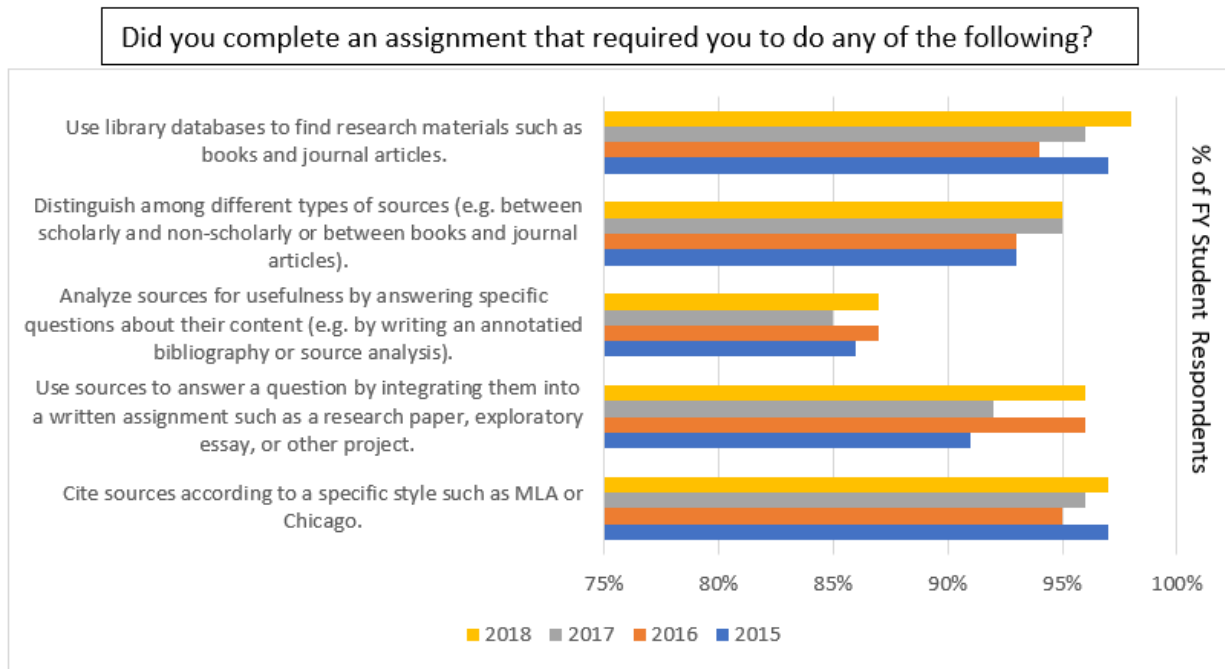
From 2015 through 2018, a questionnaire about information literacy instruction was added to traditional FYS course evaluations. The intent of this evaluation was for students to self-report on the extent and effectiveness of their IL experiences within the course. We reported on the results for each of the four years that we collected this data. For fall 2019, we did not re-administer the evaluation, but instead decided to examine the data retrospectively because a national assessment tool, described in the next section, became available.

Course Integrated IL

The first question asked students to recall what IL tasks they had engaged in during the FYS. As shown in Figure 6, they reported doing a wide variety of activities across seminars, with the most common lessons remaining fairly consistent over four years. Naturally, though, some of these lessons are emphasized more in some classes than others, depending on the nature of the assignments for each individual course, and how much time each professor allots to information literacy.

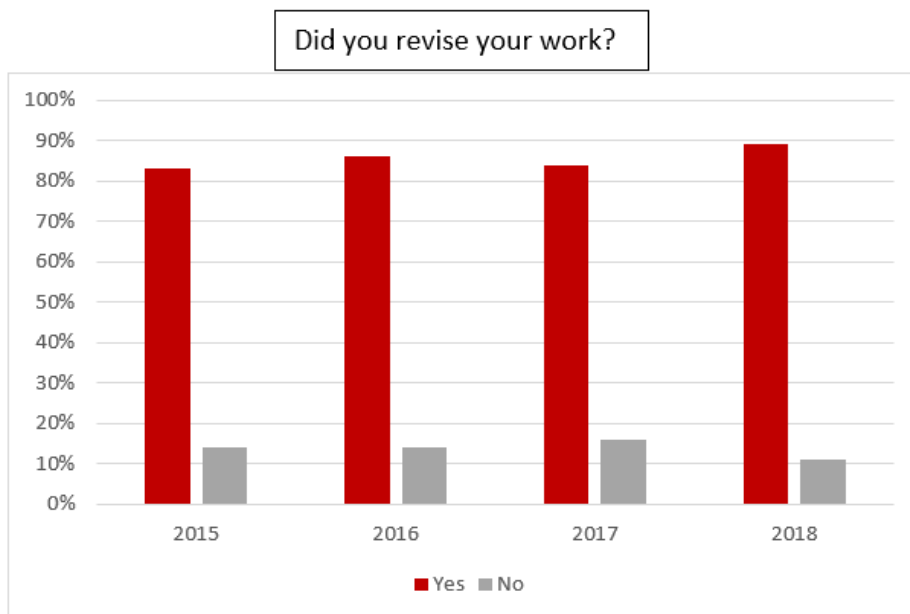
¹ This tutorial earned the American Library Association’s highly selective Primo Designation, which recognizes quality online information literacy resources.

Figure 6



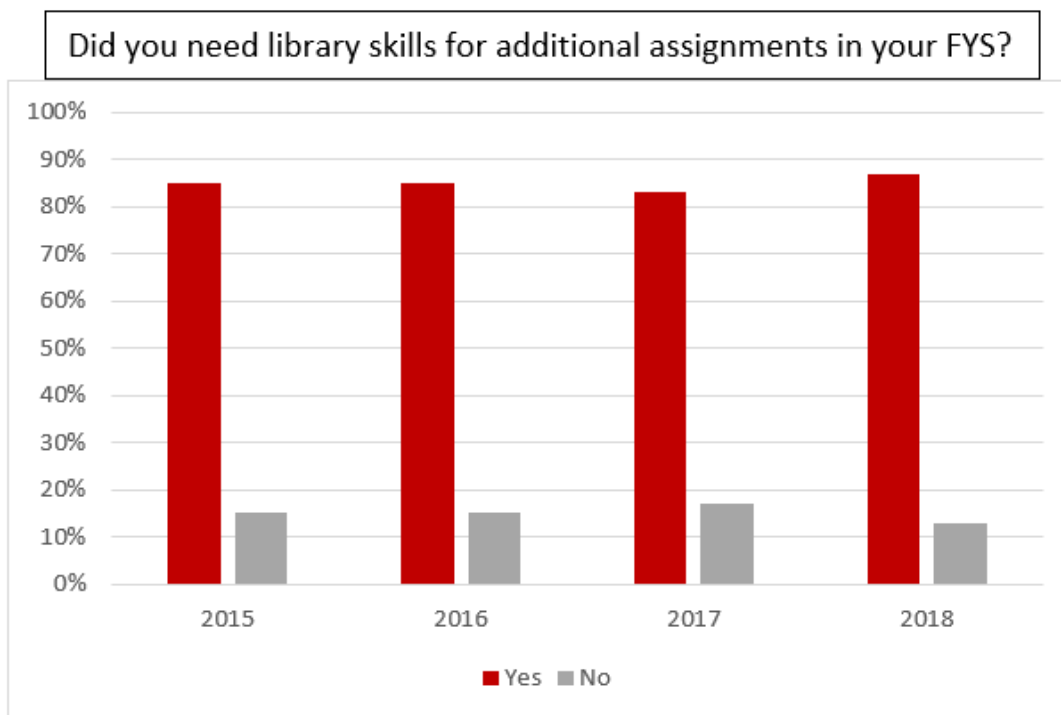
The next question asked students: “Did you revise your original research strategy after completing a first draft of a research assignment? (For example, by improving/adding to your source list or by revising an annotated bibliography/source analysis?).” As shown in Figure 7, we see consistently over four years that 80% or more of first year students report being required to revise their original research work.

Figure 7



Students were also asked: “Were the library research skills you learned needed in order for you to complete additional assignments during your First Year Seminar?” As shown in Figure 8, we see consistently over four years that 80% or more of first year students reported that they needed research skills for work beyond that assigned in connection with an information literacy session.

Figure 8



Transferability

Students were also asked open ended questions. One was “What library research skills that you learned in your FY seminar have been useful to you in other classes?” Responses across all four years fell into the following categories:

- Using library databases to find scholarly material
- Identifying most appropriate databases for the task
- Evaluating resources for appropriateness to the task
- Citing material appropriately
- Navigating the library physically and virtually
- Distinguishing among source types for appropriateness to the task
- How to adjust searches to narrow or expand results
- Knew nothing about how to use the library prior to IL sessions
- Creating annotated bibs/source analyses

Some students named other courses that required use of research skills; these included including biology, French, INBM, chemistry, history, film studies, environmental science, and women’s and gender studies.

Each year about 50 students reported that they did not learn library research skills in their FYS and that this knowledge gap concerned them. While this is a fact confirmed by library statistics, sometimes these responses come from classes in which other students in the class reported otherwise. Without personally identifying students during the assessment process, it is impossible to determine what causes this discrepancy. Possible reasons are that these students did not complete their required work, that they were not in class for IL sessions, or that they did not understand what they were doing or what the question was asking.

A few students each year also reported that IL instruction had not yet otherwise been useful because they were not required to complete research assignments in other classes, many of which are introductory level for first-year students.

Challenges

Students were also asked, “What challenges did you face while engaging in research for your FY seminar?” Their responses to this question fell into the following categories:

- Finding credible or relevant sources appropriate to the task
- Finding too many or too few sources
- Citing sources
- Integrating sources with writing
- Sources were beyond student’s level of comprehension on the topic
- Time management and organization

Misconceptions

Each year, numerous students reported various difficulties with the research process. Some of those difficulties stem from misconceptions about the purpose of research, the process of developing research questions, and how to analyze and interpret source material. For example, some students each year reported that the sources they examined did not closely enough “match their argument” or “prove their point,” apparently having assumed that every research query should garner source material fitting a preconceived notion. Some also claimed that because a topic was “new,” there was little or no material that help them understand it or write a paper about it. Additionally, new researchers tended to view sources along a dichotomy of “good” or “bad,” rather than considering their value on a continuum inclusive of potentially contradictory ideas. In some cases, students may not have found acceptable research material simply because they were attempting to search incorrectly; for example, by using a database inappropriate to the topic or attempting to ask questions in the style of a Google search rather than using individual subject terms.

Despite their misconceptions, some students figured out how to work through their challenges. Some made comments to the effect of:

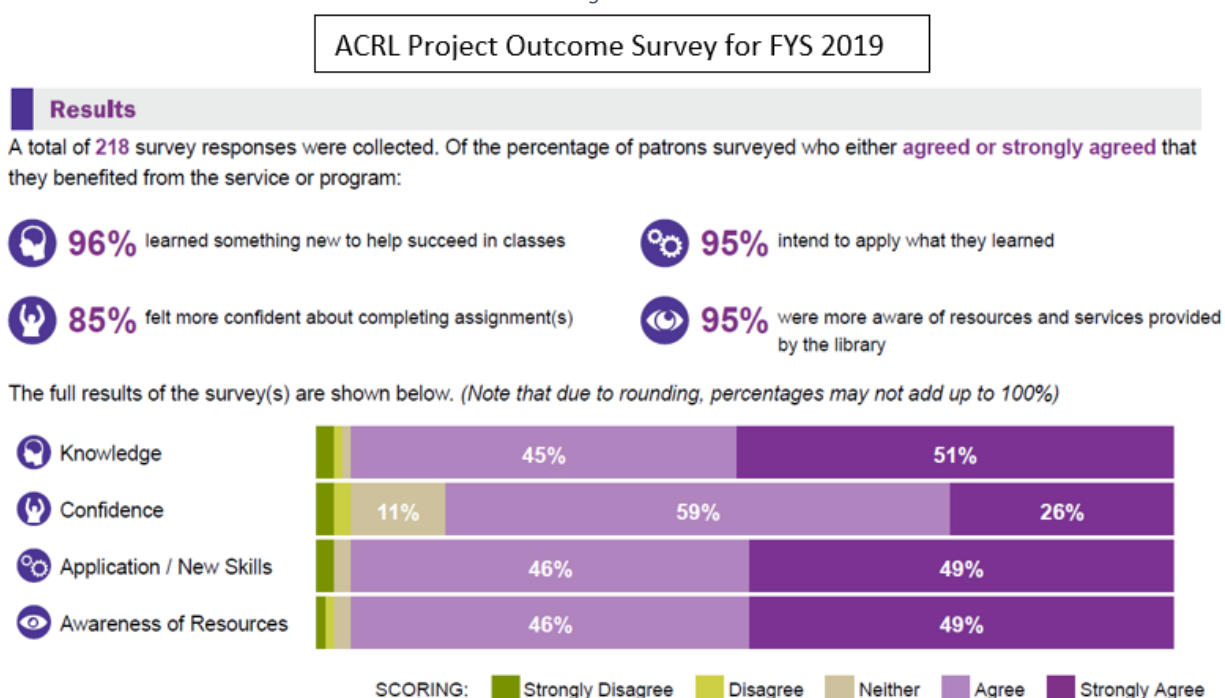
- Sometimes I had to rework my thesis.
- The process became easier with frequent practice.
- You must consult multiple sources to get answers.

ACRL Project Outcome Survey

In 2018, the Association of College and Research Libraries (ACRL) released a series of surveys to help libraries assess their programs and services, and to help libraries compare performance against their peers.² The library piloted the ACRL Project Outcome Survey for Instruction with FYS courses in fall 2018, and after examining those results, decided to use it in 2019 as a replacement for the self-developed end-of-semester evaluation we had used for four years. The Project Outcome survey has the added benefit of allowing the library to compare our results against peer institutions, which should prove useful after some years as more libraries participate.

The survey was administered in most FYS courses. The FY class size was reported at 462 and we received 218 responses, for a 47% response rate. Each question used a Likert scale from 1 to 5 with 1 indicating “Strongly Disagree” and 5 indicating “Strongly Agree.” Overall results of the survey are shown in Figure 9.

Figure 9



As part of the Project Outcome survey, students were asked, “What did you like most about this session?” Their most common responses are recorded in Figure 10.

² ACRL Project Outcome for Academic Libraries, <http://www.ala.org/acrl/sites/ala.org.acrl/files/content/Field-testing-surveys.pdf>

Figure 10

What did you like most about this session?	# of Responses
Selecting the Best Databases for the Topic	40
Refining a Search	9
Citing Sources	35
Using the Library's Website	32
Interactivity of the Session	22
Other	52

Answers in the "Other" category included reading the library map, learning the Library of Congress Classification system, and meeting the library liaison.

When asked what more the library could help them to do succeed, 15 students said that they wanted more help with creating citations. Other recurring responses to this question included:

- How to conduct research
- How to evaluate sources
- How to formulate a thesis
- Acquiring sources not available in the library
- Getting more feedback about their work from librarians

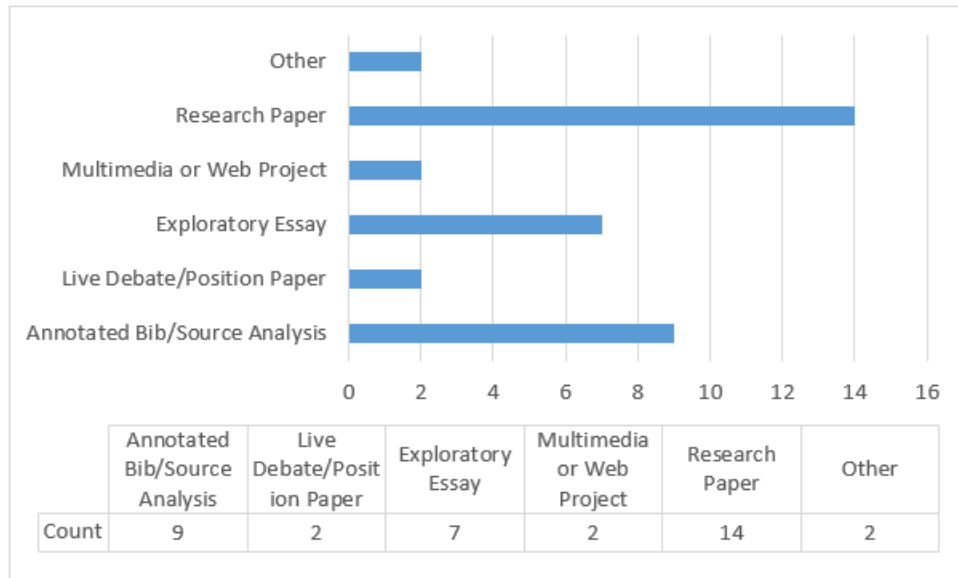
Faculty Survey

Each year, faculty members who teach First-Year Seminars are asked to complete a short survey about the effectiveness of library instruction in their classes. In 2019, 20 of 36 (55%) FYS faculty responded to the survey. It asked faculty to report on their perceptions of the FYS IL program and the outcomes of specific IL activities in their individual seminars. (This section includes data for fall 2019 only.)

Of the 20 respondents, 19 confirmed that their students were required to complete a mid-term or final project that required the application of information literacy skills, with the breakdown illustrated in Figure 11.

Figure 11

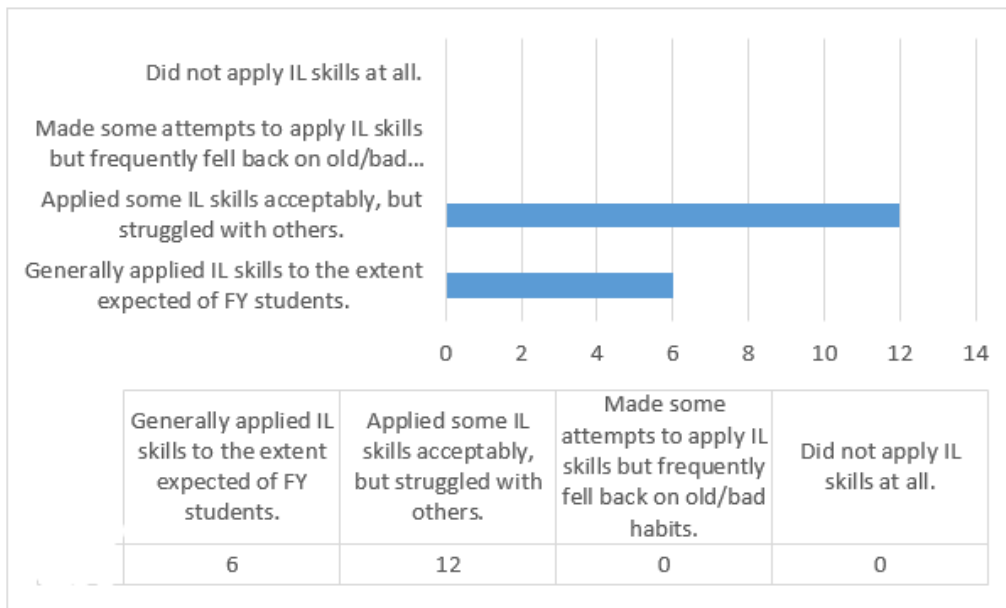
What type of assignment requiring the application of information literacy skills did you require your FYS students to complete?



The next question asked: “How well did your students apply the information literacy (IL) skills (e.g. finding information, evaluating information, citing information) to their research-based assignments?” The results are shown in Figure 12.

Figure 12

How well did your students apply the information literacy (IL) skills to their research-based assignments?



Faculty members who responded that students struggled with some aspects of information literacy were asked to elaborate by responding to an additional question: “With what aspects of information literacy did your students struggle?” They responded as shown in Figure 13.

Figure 13

Students struggled with...	
Citing	6
Evaluating sources	3
Finding relevant sources	4

Also mentioned were distinguishing between different types of sources, integrating sources into writing, and “too much reliance on Google.”

Faculty members were then asked: “What is working well about the library's information literacy program for first-year students?” Their comments are summarized loosely by category below:

- Exposure to the library building and services
- Teaching students to use library resources
- Contact with library liaison
- Helping students with the intricacies of searching
- Librarian-designed homework or projects
- Citing/plagiarism instruction

Faculty members were also asked what they thought could be improved about information literacy instruction in FYS. Some responded to the effect of “nothing.” Some comments that will be discussed with the next group of FYS faculty members include the following:

- Standardize and require certain elements of instruction
- Hold more sessions with each class
- Make sure all sessions include a hands-on activity
- More instruction on citing

Academic Integrity

Fall 2019 was the fourteenth year in which all new students—first-years, transfers, and internationals—were required to complete the library-developed Academic Integrity (AI) instruction, which is currently in the form of an asynchronous online tutorial delivered through Moodle. Non-compliance results in a hold being placed on the student’s account, thus preventing registration for spring classes during the mid-fall course registration period. The tutorial takes most students about 30 minutes to complete. In fall 2019, 32 students had not completed the tutorial by the deadline (compared with 11 in fall 2018). Because we were unable to determine the enrollment status of some students, we were unable to conclusively determine how many still had not completed the tutorial by the end of the fall 2019 semester but believe the number to be close to zero.

Effectiveness

Assessment results suggest that the tutorial continues to be informative and helpful for many students. In 2019, the question asked near the beginning and end of the tutorial, “Have you ever committed an

act of plagiarism?” resulted in a 74% change following instruction about academic integrity. This data compares consistently with prior years as noted in Figure 14.

Figure 14

“Have you ever committed an act of plagiarism?”	2014	2015	2016	2017	2018	2019
“No” at beginning of tutorial	73%	73%	78%	77%	80%	82%
“No” at end of tutorial	48%	50%	51%	48%	47%	47%

Students are also asked to indicate how much of the material is new to them. Their responses had remained fairly consistent until our 2018 redesign, as noted in Figure 15, when more students than usual indicated that at least some of the information was new to them.

Figure 15

“How much of this material was new to you?”	2014	2015	2016	2017	2018	2019
All of the information was new to me	1%	1.5%	1%	1%	2%	1%
Most of the information was new to me	5%	4%	7%	9%	12%	8%
Some of the information was new to me	40%	45%	43%	38%	46%	48%
Very little of the information was new to me	42%	36%	36%	40%	30%	34%
None of the information was new to me	12%	12.5%	11%	10%	9%	8%
No response	0%	0%	2%	2%	1%	1%

Additionally, students are asked if they found the tutorial to be effective. Those responses along with prior year comparisons are noted in Figure 16.

Figure 16

Did you find this tutorial to be effective?	2014	2015	2016	2017	2018	2019
Extremely	6%	8%	10%	8%	11%	11%
Very	43%	46%	49%	47%	40%	38%
Somewhat	35%	33%	29%	31%	37%	39%
Only a little	12%	11%	7%	9%	8%	8%
Not at all	4%	2%	3%	3%	4%	4%
No Response	0%	0%	2%	2%	0%	0%

Comments

As is typical, comments collected from fall 2019 were generally positive. Some students complained, as they always do, about the length of the tutorial. A few self-identified international students noted that plagiarism is not an issue in their home country and so found this to be a welcome lesson. Other students were surprised to learn that particular types of unattributed source use (such as patchwriting and paraphrasing) constitute plagiarism. Some notable comments include the following:

- The presentation helped discuss how plagiarism and citations are handled, specifically at Dickinson. Additionally, it provided an overview of which citation methods are commonly used as well as provided resources to help with citations and where to go with any questions.
- It was...interesting learning about the resources Dickinson has for writing in a foreign language.
- I liked how it offered students a variety of examples with each type of format.
- It was pretty useful, but hard to understand for an international student.

- It was kind of long, but very important information and necessary for incoming students to know.
- I think this was a good idea and information that we definitely needed to know. I wish that I could have listened to the information, it would have made it much easier. Overall, I am glad I have this information to carry into my freshman year.
- ...reinforced my existing knowledge on plagiarism.
- I have used paraphrasing without citing and patch writing several times but did not realize that it was an offense that was on the same level as direct plagiarism at the college level. This was very useful to me and I have even saved the Dickinson Citations Styles guide from this tutorial into my computer.
- Answering questions was nice instead of listening to a lecture.
- I never knew you had to cite Google Translate.
- In high school, I was exposed to MLA style most frequently, so it was helpful to have APA and Chicago styles explained as well.
- It is very good to have this support beforehand! Even though I'm already familiar with citations, it was great to have some guidelines to display more information about how to cite properly. Besides, this tutorial shows how committed Dickinson College is to the students. Excellent job!

A few students mentioned that there is a lot of text on some pages, and we agree that some of it can probably be reduced, so we will make edits to the length of the tutorial for fall 2020.

Adding audio to accompany the tutorial is currently a labor-intensive and thus prohibitive process. A manual recording of the entire session has the immediate probability of becoming incorrect when even minor edits are made. However, to address the audio issue, we will add links to assistive technology on the introduction page.

Conclusion

This report points to a highly successful, ongoing partnership between the library and First Year Seminar program. The library's FYS IL program is stable, consistent, and produces positive learning outcomes that meet the college's mandate. Our curriculum is appropriately skilled and paced. Our students self-report high levels of ability and confidence as they gain IL skill sets through the FYS program, and report that they use what they learn. Faculty input further points to the success of the program as they report that students are generally performing to expected levels of research ability at this stage in their education. This year it is worth noting that none of our faculty respondents indicated that students had trouble retaining the IL skills they had learned, or that they had fallen back on bad habits later in the semester, as has been reported in prior years.

The college should recognize that while the library's FYS program flourishes and is remarkable for its endurance and consistent positive outcomes, each year there is a subset of students who become immediately disadvantaged because the FYS curriculum is not consistent. The depth of IL instruction including practice and revision for each seminar is wholly dependent on how individual faculty members structure their FYS syllabi. While the majority of students engage in research at a level appropriate to the FYS, some students are provided only a cursory introduction to IL and some receive no IL instruction at all. This inconsistency obviously has repercussions in later semesters as the students declare majors and are expected by faculty members to have basic grounding in research before they learn the more nuanced methods of their disciplines.

It is clear that our instructional efforts should stay focused on helping students learn to find quality material, evaluate it, and acknowledge it. Areas of information literacy that are the least emphasized in FYS courses are analyzing and integrating sources, which we will discuss with FYS faculty at the May workshops. Otherwise, we do not anticipate making major changes to the program in the near future unless the FYS program itself is for some reason changed significantly by the college.

Appendix A – Class Visits and Activity by Instructor

Librarian	FYS Faculty	Title of Seminar	# of IL sessions
Loneragan	Barber	Molecules of Madness	2
Howard	Bedi	Food Justice	3
Boucher	Bender	Terminator vs. Astro Boy: Robots in Fantasy and Real Life	3
Sailer	Bilodeau	Ideas that Have Shaped the World	1
Arndt	Cervino	ID: Self-Portraiture and Notions of Identity	2
McGeary	DeLutis-Eichenberger	Passport to South America: Ecocritical Journeys through Contemporary Literature	3
Arndt	Eng	But Is It Really Art? Golden Toilets and Piles of Candy	3
Loneragan	Hamilton-Drager	The Search for Life in the Solar System and Beyond: What Are We Looking For, and What Do We Do If We Find It?!?!?	2
Triller-Doran	Johnson	Sunday Saints, Saturday Night Sinners, and Literary Clubbers: Explorations of Harlem Renaissance Sociality	2
Bombaro	Kushner	Bioethics and Bioissues	2
Bombaro	Lape/McKiernan	Speaking Truth to Power	2
Suppok	Laurent	America in the Eyes of the World	2
McGeary	Martin	Black Magic: The Contributions and Influence of Artists of the Harlem Renaissance	3
Boucher	McKay	Help Yourself: Thoughtful Consumption of Advice in Books and Other Media	3
Howard	Menon	Reading Race: Culture Wars & Civil Rights	3
Boucher	Middaugh	Paying the Game of Life: Balancing Proactive and Reactive Financial Decisions Beyond the College Years	3
Boucher	Niebler	Ouija Boards to Big Data: Possibility, Probability, and Prediction	4
McGeary	Past	On the Map? Puerto Rican Citizenship, Culture, and Hidden History	3
Triller-Doran	Philogene	The Aesthetics of Freedom: Arts of the Harlem Renaissance	1
Bombaro	Pinsker	Dickinson & Slavery: How Should We Remember	2
Loneragan	Pires	Biophilia: Human Connections to Other Life Forms	2
McGeary	Pound	Music, Mediated: How Recording Technology Transformed Music	3
Loneragan	Roberts	Precision Medicine: Promises and Pitfalls	1
Triller-Doran	Rose	Education (In)Justice: Intersecting Pasts and Shared Futures	2
Loneragan	Sak	Post-Facts, Big Data: Bias and Denialism in Modern America	3
Loneragan	Samet	Science for \$1000: A Nation in Jeopardy?	3
Suppok	Schadler	Ideas that Have Shaped the World	1

Howard	Sias	Just Kidding: The Nature of Humor and its Place in the Good Life	0
Suppok	Sider-Jost	Ideas that Have Shaped the World	1
Sailer	Skalak	Ideas that Have Shaped the World	1
McGeary	Stein	Pensar en la pelota: Thinking about Soccer Culture in Latin America	2
Boucher	Strand	A Parliament of Things: Representing Nature in Politics and Poetry	3
McGeary	Suver	We're Not Gonna Take It: Politics and Social Protest in American Popular Music	1
Triller-Doran	Tynan	Water: From Abundant Resources to Scarce Good	2
Lonergan	Witter	The Poisoning of America: Are We Safe?	2
McGeary	Wronski	Myth, Religion, and the Creative Impulse	2