First-Year Seminar Information Literacy Program Final Report for Fall 2021

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

Introduction

This report provides data and observations about the research component of the college's First Year Seminar experience, which is largely developed and administered by library staff. While the fall of 2021 represented a pivot back to "normal" classroom instruction, the librarians drew on lessons learned from the Covid-19 crisis and remote learning to more creatively, efficiently, and effectively deliver research instruction in FYS courses. This report includes:

- **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.
- Online learning data: Includes inputs such as use of the FYS Scaffold, information literacy tutorials, and customizable research assignments designed by library liaisons.
- **Faculty survey results:** This annual survey asks faculty about their impressions of the FYS IL program in general and their students' performance on research assignments in FYS.
- **Project Outcome survey results:** The library makes 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. For FYS instruction, we used a survey designed for first-year students only.
- Academic Integrity data: Results from the required Academic Integrity tutorial.

Key Points of This Report

- Use of the library's online learning tools dropped somewhat with the return to primarily inperson learning, while in-person instruction returned closer to pre-Covid levels.
- Faculty report feeling well served by the library staff and services.
- Faculty reported that students' biggest challenge this year was using appropriate resources for a given task.
- Students expressed high levels of knowledge, confidence, awareness of resources, and ability to apply what they have learned following library instruction.
- Students consider the library-managed Academic Integrity Tutorial to be informative and effective.

History of the FYS Information Literacy Component

The updated 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.

Note: This report does not include data from two FYS sections scheduled in SP21.

Instructional Data

Session Information

In FA21, 41 First Year Seminars were offered (two of these were the same seminar taught by one faculty member), and 8 librarians were assigned as liaisons to them. As illustrated in Figure 1, two FYS faculty did not invite their liaison conduct IL sessions for their course; however, one faculty member indicated in the faculty survey that they taught IL skills in their class without the assistance of a librarian.

Figure 1						
# of IL Sessions	# of Seminars					
0 sessions	2					
1 session	9					
2 sessions	20					
3 sessions	7					
4+ sessions	2					

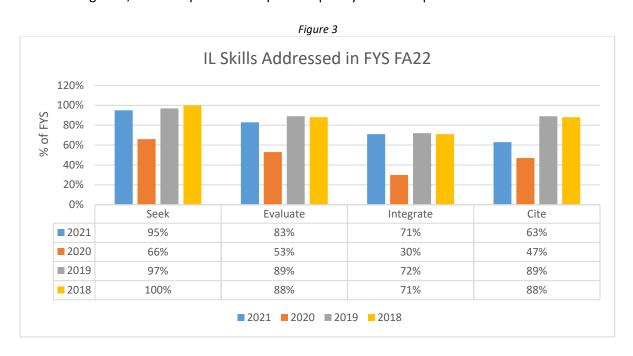
80 synchronous FYS IL sessions were conducted during FA21 which is a bit less than during typical pre-Covid semesters. The number of IL sessions taught in FYS courses since 2014 is illustrated in Figure 2.

	F				
	FA21	FA20	FA19	FA18	FA17
FY IL Sessions	80	42	77	91	93
FYS Courses	38	36	36	42	45

For more detail about IL classroom activity for FA21, see Appendix A – FYS IL Class Visits.

Content of Sessions

Librarians reported that they addressed the information literacy skills enumerated in the FYS mandate as shown in Figure 3, with comparisons to up to five prior years when possible.



Liaisons reported that they taught efficient information seeking behavior by having students work with library-provided research tools such as JumpStart (38 seminars in FA21), the library catalog (29 seminars in FA21), subject-specific databases (28 seminars in FA21), Google (13 seminars in FA21), and specialized reference works (2 seminar in FA21).

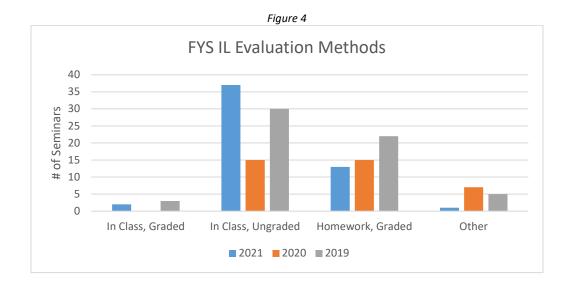
Evaluation of resources is achieved through such methods as teaching students to distinguish among source types (26 seminars in FA21), to annotate sources (18 seminars in FA21), to identify a research question, topic or thesis by doing exploratory research (12 seminars in FA21), and/or to and analyze questionable sources of information (12 seminar in FA21).

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 observe that faculty have students practice this skill by writing exploratory essays, annotated bibliographies, and by submitting multiple drafts of their work.

In regard to citation, librarians most frequently teach APA, Chicago Notes/Bibliography, and MLA format, depending on the preference of the professor. A few professors accept any citation style.

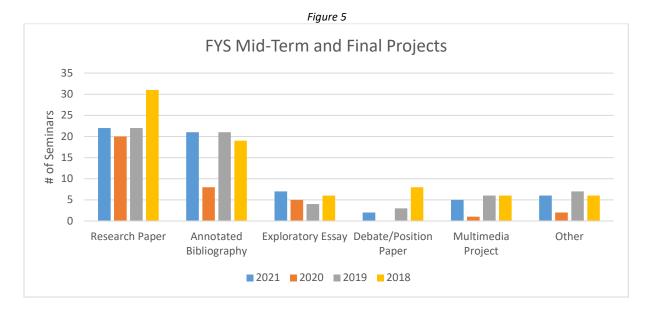
Evaluation of Student Work Following an IL Session

Librarians encourage faculty to evaluate student library work as they would any other assignment. Some FYS instructors required graded homework immediately following the IL instructional session or graded in-class work during the session, as shown in Figure 4. Some seminars use more than one method of evaluation.



Mid-Term or Final Research Projects

Library surveys show that students were required students to complete at least one mid-semester or final project that included the application of information literacy skills in at least 37 of the 41 FYS courses. Specific types of assignments are noted in Figure 5. Some seminars required more than one project, or that a project be completed in steps that included multiple library-based components.



According to library surveys, traditional research papers and annotated bibliographies have long been the most popular type of final projects assigned for FYS.

Projects in the "Other" category included comparative analyses, cause/effect papers, issue papers, marketing campaigns, literature reviews, pamphlets, and writing that mimics various types of scholarly literature.

Online Learning Data

FYS Information Literacy Scaffold

In response to the college moving online for FA20, librarians developed a detailed lesson plan called the FYS Information Literacy Scaffold that was designed to infuse information literacy instruction throughout each FYS course with or without librarian participation. Reception of the scaffold was almost universally positive, so we decided to continue using it in FA21. The scaffold was viewed 290 times during between May 2021 (when the FYS Faculty workshops take place) and the end of FA21. The scaffold is available at: https://libguides.dickinson.edu/fysscaffold.

This year's FYS faculty survey included questions about the effectiveness of the scaffold. At least half of the FYS faculty used the scaffold. They were asked how they selected elements of the scaffold to use in their courses, as shown in Figure 6.

Figure 6		
Which elements of the scaffold did you use?	FA21	FA20
A variety - did not consider whether they were considered recommended or not	7	3
All modules except those marked Optional	2	4
Modules marked Highly Recommended only	2	1
Some modules marked Recommended and some marked Highly Recommended	7	13

Faculty also were asked if they found the structure of the scaffold easy to use, as shown in Figure 7.

Figure 7

Structure of Scaffold Easy to Use?	FA21	FA20
Very Easy	7	10
Somewhat Easy	9	7
Neither Easy nor Difficult	2	6
Somewhat Difficult	0	1
Very Difficult	0	0

Tutorials

In 2015, library staff members began developing a series of <u>information literacy tutorials</u> (<u>https://libguides.dickinson.edu/tutorials</u>) designed to help students learn the foundational research skills. Librarians frequently ask faculty to assign tutorials before a librarian's class visit so that students can prepare for instruction and allow librarians to concentrate on higher-order information literacy skills that require nuance and critical thinking.

Each tutorial is designed to teach one discrete concept in approximately 10 minutes or less. The view counts shown in Figure 8 cannot be distinguished by type of user and may include non-FYS students. Despite the fact that at least 29 faculty used the scaffold (as determined by faculty self-reporting or liaisons reporting), the tutorials associated with each week's work were not accessed in FA21 as much as they were in FA20; this could be due to the return to classroom teaching.

Figure 8

Tutorial	Views in FA21	Views in FA20
Waidner-Spahr Library Overview	126	360
eBooks at the Waidner-Spahr Library	39	251
Finding and Evaluating Newspaper Articles	12	29
Research Strategies	31	50
Finding a Journal Article from a Citation	41	51
Choosing a Database	110	102
Distinguishing Among Source Types	90	73
Evaluating Sources	51	188
Choosing the Best Terms for Your Search	63	77

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 FA21, 23 of 40 (57%) faculty members (one who taught 2 sections of the same seminar) responded to the survey compared with 28 of 36 (78%) in FA20, and 20 of 36 (55%) in FA19. It asked faculty to report on their perceptions of the FYS IL program and the outcomes of specific IL activities in their individual seminars. Because the survey is updated annually, with the last two years including questions about the FYS scaffold, some questions in this section may not include comparison data from prior years.

Faculty were asked if they felt that their FYS was effectively supported by library staff and services. Results are shown in Figure 9.

Fiaure 9

My FYS was effectively supported.	FA21	FA20
Agree	20 (87%)	20 (71%)
Somewhat Agree	2 (9%)	4 (14%)
Neither Agree nor Disagree	1 (4%)	2 (7%)
Somewhat Disagree	0	2
Disagree	0	0

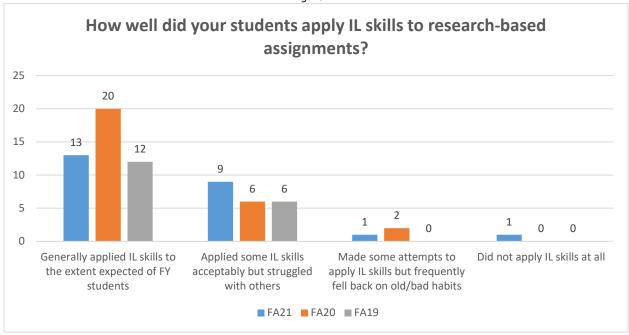
Faculty were then asked how research instruction was delivered in their course. Multiple selections were allowed for this question. Results are shown in Figure 10.

Figure 10

How did students learn IL?	FA21	FA20
Taught myself	1	1
Asynchronous lessons only	0	1
Asynchronous lessons + individual meetings with liaison	0	1
Synchronous meetings with a librarian only	12	1
Taught myself + synchronous meetings with liaison	3	3
Synchronous meetings with liaison + individual consultations with liaison	1	1
Synchronous meetings with liaison + asynchronous lessons	0	1
More than 2 methods	6	10

The next question on the faculty survey 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?" Responses are shown in Figure 11.

Figure 11



Faculty members who indicated 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:

- A couple of less mature students persisted to use online sources with little academic value for their final paper, but the majority did not.
- Assessing the viability and relevance of sources; discerning disinformation
- Citations
- Citations, reading sources critically
- Struggled with you using proper citation guidelines in a consistent way.
- Students struggled to understand what newspapers were reputable, despite our class discussions about it. Some also struggled to find peer reviewed sources.
- They relied too heavily on secondary sources. I believe they did not fully understand the value in reading and citing primary sources.
- Understanding that online journal articles should be cited using journal citation format, not webpage
- Using appropriate evidence to support ideas

Faculty members were then asked: "What is working well about the library's information literacy program for first-year students?" Comments touched on various aspects of the IL program:

- The librarian was very available and willing to meet one on one with students in my FYS.
- I think library staff supported by FYS effectively for what I wanted.
- The presentations were great and I shared them on the class Moodle page. And the one on one sessions were especially helpful as students worked on finding sources for their annotated bibliographies.
- The in-person trainings with Malinda taught skills and highlighted the importance of information literacy.
- The face-to-face classes between the class and the librarian were very effective.
- It outlined processes related to info literacy and research from general to specific, which helped students gain a sense of how to strategically approach the process. In general, the tutorials and assignments were of great value to the students.
- Kendall did an excellent job working with the students and putting together useful and interactive IL sessions on the topic of focus.
- It is extremely helpful that the librarians take the time to hold class sessions with our students. I really appreciated that the liaison for my section created assignments/activities for those class sessions that were tailored to our course content.
- I found the format of the library assignment that I offered in my class to be well-thought-out, concise and helpful.
- Got them connecting Research to thinking and learning.
- It is particularly helpful to orient students to searching and choosing databases for doing research.
- The assignments/exercises used for the IL sessions of the my calling bullshit seminar were
 excellent students were able to find articles that would otherwise be behind paywalls this is
 really valuable. I think having the students go to the library was also really important many had
 not been there yet.

- In all ways. Many of my students commented in their exploratory essay how they learned to utilize databases (e.g. Jumpstart and others) and how to use boolean connectors to widen their search. I was pleasantly surprised they picked up on this considering how unbelievably quiet and shy this group was.
- We collaborated on 3 specific sessions that dovetailed with the students' main writing assignments and leveraged both our information literacy and content expertise.
- Susan was very responsive to specific needs of our research project and helped with finding things that worked for the students in the context of their topic.
- The two workshops with Chris were awesome!
- Theresa gave an excellent presentation and prepared a worksheet tailored for our students.

Faculty members were also asked what they thought could be improved about information literacy instruction in FYS:

- I am not sure how it could be improved. For my FYS it was fine.
- My classes were great....
- I think the program is excellent; I don't have any recommendations for improvement.
- Students seem to be fairly disconnected to the library as a physical entity and don't always have a sense of how or when to use (or even experience) the physical materials. I was surprised at how many students did not check out physical copies of books or take time to explore those areas of the stacks for resources that they might not have come across online. This was certainly mentioned in our sessions, but it might be nice to have an exercise based on physical browsing (I apologize if this was an option that I missed!).
- I'm not really sure how it can be improved I think I have improved my use of the program with more knowledge and experience teaching the FYS
- I think the students need even more practice with searching in databases. I am not sure this completely falls on the library. It is something I plan to do more of the next time I teach FYS.
- I was affiliated with the Ideas seminar, and so many of us have used this format over the years that it works well for the students and the professors.
- I think the program is effective as long as the IL supports are complemented by robust in-class work (which I did/do).
- She could take over for me as the full time instructor.
- We need modules for multimedia projects such as the creation of academic posters. The
 usefulness of the IL modules or sessions would also improve if we had a repository of student
 papers that act as models of successful writing in various academic genres and for a variety of
 topics. This would help the teaching of IL generic skills feel much more relevant to the FYS
 course content and learning goals.¹
- I felt like it worked pretty well for my students. As a self criticism, I think I could have reached out sooner about our research needs so that our first session might have been a bit more productive but I think the students learned a good bit from all three sessions anyway. I even had students requesting things through interlibrary loan and other avenues this time and this is the first time for that so I think it was a pretty successful class in terms of an introduction to our library and what it has to offer.
- None. She is great!

¹ The Writing Program already has such a repository available on its website and the library has growing repository of award-winning research papers as well. We will send those links to faculty in future communications.

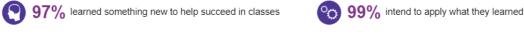
ACRL Project Outcome Survey

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 each year as a replacement for the self-developed end-of-semester evaluation we had used for four years.

The survey was administered in some FYS courses following instruction in FA21. Official enrollment for the Class of 2024 was reported at 691 and we received 149 responses, for a 22% response rate. By comparison, in 2020 there was a 16% response rate, and in 2019 there was 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 13.

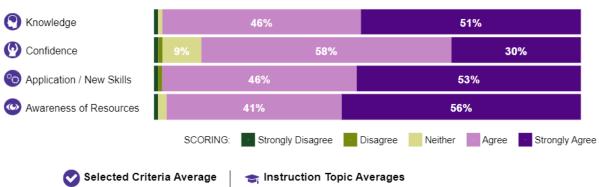
Figure 12

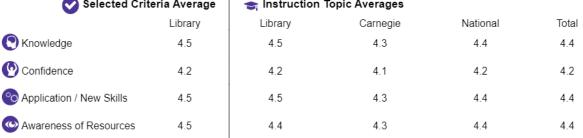
Results A total of 149 survey responses were collected. Of the patrons surveyed, the following percentages either agreed or strongly agreed that they benefited from the program or service:





The full results of the survey(s) are shown below. (Note that due to rounding, percentages may not add up to 100%)





AVERAGES: Ranges from 1.0 (Strongly Disagree) to 5.0 (Strongly Agree)

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

The scores from this survey have remained consistent over the three years we have used it. Dickinson's overall scores are quite high and compare favorably to colleges in our peer group who also used Project Outcome.

As part of the Project Outcome survey, students were asked, "What did you like most about this session?" Some common responses included interactivity of library sessions, the breadth and depth of resources offered to them, and generally learning how to use the library.

When asked what more the library could do to help them do to succeed, students mentioned more help with citing, more quiet study space, and additional research instruction. Some requested help that does not fall under the library's purview (e.g. "correcting my essays," "info on tutoring"). Otherwise, they provided no actionable feedback.

Academic Integrity

Fall 2021 was the sixteenth 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 the next semester's classes. The tutorial takes most students about 30 minutes to complete. Although more than 100 students had not completed the tutorial by this year's deadline (this number is typically between 50 - 100), we believe that all matriculated students finished it by the end of FA21.

Effectiveness

Assessment results suggest that the tutorial continues to be informative and helpful for many students. In 2021, the question asked near the beginning and end of the tutorial, "Have you ever committed an act of plagiarism?" resulted in a 41% change following instruction about academic integrity. This data compares consistently with prior years as noted in Figure 14.

Figure 13

"Have you ever committed an act of plagiarism?"	2021	2020	2019	2018	2017
"No" at beginning of tutorial	85%	83%	82%	80%	77%
"No" at end of tutorial	50%	44%	47%	47%	48%

Students are also asked to indicate how much of the material is new to them. Responses have remained fairly consistent over the years, as noted in Figure 15, when more students than usual indicated that at least some of the information was new to them.

Figure 14

"How much of this material was new to you?"	2021	2020	2019	2018	2017
All of the information was new to me	2%	0%	1%	2%	1%
Most of the information was new to me	10%	9%	8%	12%	9%
Some of the information was new to me	56%	50%	48%	46%	38%
Very little of the information was new to me	27%	30%	34%	30%	40%
None of the information was new to me	6%	7%	8%	9%	10%
No response	0%	3%	1%	1%	2%

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 15

Did you find this tutorial to be effective?	2021	2020	2019	2018	2017
Extremely Effective	12%	12%	11%	11%	8%
Very Effective	45%	47%	38%	40%	47%
Somewhat Effective	35%	30%	39%	37%	31%
Only a Little Effective	7%	5%	8%	8%	9%
Not At All Effective	1%	2%	4%	4%	3%
No Response	0%	2%	0%	0%	2%

Comments

Very few students left comments. As is typical, comments collected from fall 2021 were generally positive with many saying it was useful or helpful. Some students complained, as they always do, about the length of the tutorial, and a few mentioned that it was a lot to absorb all at once. This year a few mentioned that the feedback to quiz questions in particular was too lengthy. Librarians are in the process of trimming the tutorial a bit, but otherwise it will not undergo any significant revision for 2021. Some notable comments include the following:

- Although I learned most of this information in prior schooling, I still believe that this module is vital in establishing a baseline agreement of academic integrity for new Dickinsonians.
- At first I thought I never plagiarized before but I'm surprised how much I unintentionally plagiarized in the past.
- I liked how you could go at you own pace.

A few students mentioned that it would be helpful to add audio accompaniment. While we agree with this suggestion, currently it is technologically impossible to do within the constraints of Moodle. The introductory page includes this statement:

Instructions

Most students complete this tutorial in under an hour. You must answer all questions on each page to get credit for the tutorial. **We recommend that you take this tutorial on a desktop or laptop computer.** For help with assistive technology such as screen reader software, please see the Assistive Technology website from the office of Access and Disability Services.

Conclusion

Librarians have been successfully managing the information literacy requirements of the FYS experience for decades. The Covid-19 crisis revealed new opportunities for delivery of library instruction, and librarians have continued to build on the new teaching methods learned while preparing for online-only sessions in 2020.

The library's IL program for FYS flourishes and is remarkable for its endurance and consistent positive outcomes. However, the program must continue to evolve as we learn more about student preferences and learning styles, and consider the pressure put on faculty to work many requirements into on course. In addition, the permanent loss of a librarian position in early 2019 has stretched the remaining librarians to their limits and has necessitated that we reconsider how we can maintain the quality of instruction while also attending to the many other duties required to effectively run an academic library. To that end, for Fall 2022, the library is proposing to make more robust use of the FYS Scaffold by shifting all of the foundational aspects of library instruction online, accompanied by limited in-person instruction. Faculty who require students to complete the foundational modules will then have the opportunity to invite a librarian to meet with their class. At that point, the librarian can focus on concepts that require critical thinking and nuance. Naturally, we will discuss this plan with APSC and at FYS faculty workshops in May.

The Academic Integrity tutorial will not be significantly changed for FA21, though we are making attempts to shorten it to the extent possible. Staff from Enterprise Systems have set up a process that should make the reporting of completion much easier. This process will be tested in spring 2022.

Appendix A – FYS IL Class Visits

Librarian	FYS Faculty	Title of Seminar	# of IL sessions
Triller-Doran	Alahmed	Black Horror: Black Spirituality and Literature and Culture of the Supernatural	2
Bombaro	Arsenault	Process and Invention in the Arts: Investigating the Nature of Creative Practice	2
Triller-Doran	Ball	Civil Disobedience in History	3
Vandale	Barrett	Outsider Performance: Creative Interventions Beyond the Empty Space	1
Arndt	Beevers	Seeing and Understanding the Human Place in Nature	2
Howard	Bickford	Magic, Mystery, and Mayhem: Imagining Witches	2
Sailer	Bilodeau	Ideas That Have Shaped the World	1
Thompson	Boback	The Evolution of a Cheeseburger	2
Triller-Doran	Burgin	How the U.S. Institutionalized Racism	3
Bombaro	Campbell	Calling Bullshit: Fighting for Facts in a Post-Truth World	2
Boucher	Chilson	Family Drama	6
Sailer	Diamant	Arguing about Politics, Society, and Culture in China, Vietnam, and Japan	2
Vandale	Duperron	From Babble to Babel: Becoming Bilingual	3
Thompson	Edwards	Polar Opposites? Global Warming at Earth's Extremes	0
Boucher	Engelhardt	Catastrophe and Care: The past and Present of Mutual Aid	3
Sailer	Farrington	Ideas That Have Shaped the World	1
Thompson	Ford	The Psychology of Living Your Best Life	3
Bombaro	Gavenonis	Calling Bullshit: Fighting for Facts in a Post-Truth World	2
Vandale	Harper-McCombs	Outsider Performance: Creative Interventions Beyond the Empty Space	3
lan Boucher	Hawks	Lies, Revenge, and Really Bad Ideas: How Behavioral Economics Explains Some of Our Most Human Moments	0
Thompson	Henson	Pandemics: Part, Present, and Potential	2
Boucher	Hoefler	The Design of Everyday Things: A Starter Kit for Good Design	2
Thompson	Holden	What? Now You Say We Have LOTS of Oil?	2
Boucher	Jin	How to Avoid High-tech Dystopia? The Promises and Perils of Digital Technology for Humanity, Economy, and Society	3
Sailer	Johnston	Ideas That Have Shaped the World	1
Boucher	Katunich	A State of Denial: Understanding and Responding to Climate Change Denialism	1
Boucher	Kelahan	Philosofood: Making Sense of Ourselves through Our Relationships with Food	1
Boucher	Kelahan	Philosofood: Making Sense of Ourselves through Our Relationships with Food	1
Arndt	Kongar	Political Economy of Gender, Race, and Class	1
Bombaro	Moffat	Suffragettes, Radicals, and Riveters: British Women in The First World War	2
Howard	Quintanar	The Unending Crusades: Religion, Violence, Mythistory and its Legacy	2

Sailer	Roman	Ideas That Have Shaped the World	2
Triller-Doran	Sartwell	But Is It Art?	1
Arndt	Siddiqui	Science vs. Religion: Discord or Accord?	2
Howard	Sosa	I Am Not Who You Think I Am: Fictions of Self, Identity, and Difference in Literature, Film, Popular Culture	4
Howard	Steinbugler	Queer in Space (and Place)	2
Bombaro	Suver	Reality and Other Lies	1
Triller-Doran	Sweeney	From Peasants to Technocrats: The Nature of Work	0
Chris Bombaro	Thibodeau	Calling Bullshit: Fighting for Facts in a Post-Truth World	2
Thompson	Tu	Rise of the Machines: Representations of Artificial Intelligence in Science Fiction	2
Bombaro	Underwood	Calling Bullshit: Fighting for Facts in a Post-Truth World	2
Vandale	Yarnell	Wicked Problems/Virtuous Solutions: Strategies for the Greater Good	1