Introduction
Information literacy in the first-year seminar (FYS) is a vital part of the Dickinson experience, and is envisioned as the first of many opportunities for students to learn to be effective, efficient, and ethical users of information.

In previous years, librarians often struggled for inclusion in courses, and encountered the perception that information literacy was an additional stress upon an overburdened curriculum. Now, information research skills are more widely recognized as critical for student academic success at Dickinson; in fall 2012, most of the first-year faculty members include some form of exposure to information literacy. Both FYS faculty and faculty members polled in other contexts have expressed interest in an enriched understanding of information literacy.

In addition to the ability to simply locate potentially useful material, “information literacy” requires researchers to choose the correct types of sources, to critically evaluate sources, and to integrate them judiciously in the body of a work. As with writing, information literacy skills cannot be mastered via a one-class “inoculation;” but rather require the practice and revision that best comes through “scaffolded” assignments. Librarians are turning efforts toward having students practice these higher-order skills in FYS to the extent possible.

FYS Information Literacy Sessions

Overview
Forty-one first-year seminars were taught this year, with 8 librarians assigned to the classes based loosely on areas of expertise or interest. All FYS courses met with a librarian in at least once, as noted in Table 1 below.

<table>
<thead>
<tr>
<th># of sessions</th>
<th># of seminars</th>
<th>% of seminars</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>14</td>
<td>17%</td>
</tr>
<tr>
<td>2</td>
<td>18</td>
<td>44%</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>19%</td>
</tr>
<tr>
<td>4 or more</td>
<td>4</td>
<td>20%</td>
</tr>
</tbody>
</table>

Session Details
The number of sessions conducted and contact time noted in Table 2 represent opportunities for FYS students to have exposure to information literacy competencies. In addition to librarians teaching IL sessions, librarians also spend time creating lessons and assignments, grading assignments, developing online guides, and consulting with students individually.

Librarians reported that FYS faculty members in 35 out of 41 seminars included a substantial, graded assignment that required library research, not including in-class worksheets that were meant to introduce students to concepts as part of an active learning exercise. Table 2 provides more detail about how much time librarians spent with each class, and whether a substantial research assignment was included as part of a course grade.

Prepared by C. Bombaro,
Associate Director for Information Literacy & Research Services
<table>
<thead>
<tr>
<th>Seminar</th>
<th>Professor</th>
<th># of Sessions</th>
<th>Time Spent (minutes)</th>
<th>Research Assignment?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process and Invention in the Arts</td>
<td>Arsenault</td>
<td>2</td>
<td>75</td>
<td>Yes</td>
</tr>
<tr>
<td>School Desegregation in the U.S.</td>
<td>Bair</td>
<td>3</td>
<td>150</td>
<td>Yes</td>
</tr>
<tr>
<td>Bob Dylan’s Music and Jungian Psychology</td>
<td>Berger</td>
<td>4</td>
<td>200</td>
<td>Yes</td>
</tr>
<tr>
<td>Evolution of a Cheeseburger</td>
<td>Boback</td>
<td>2</td>
<td>100</td>
<td>Yes</td>
</tr>
<tr>
<td>Democracy in the 21st Century World</td>
<td>Bova</td>
<td>1</td>
<td>90</td>
<td>Yes</td>
</tr>
<tr>
<td>Haiti Noir</td>
<td>Brindeau</td>
<td>2</td>
<td>100</td>
<td>Yes</td>
</tr>
<tr>
<td>Economics of Human Mating Behavior</td>
<td>Brockman</td>
<td>2</td>
<td>150</td>
<td>Yes</td>
</tr>
<tr>
<td>Family Drama</td>
<td>Chilson</td>
<td>2</td>
<td>100</td>
<td>Yes</td>
</tr>
<tr>
<td>The Culture of Science</td>
<td>Connor</td>
<td>3</td>
<td>150</td>
<td>Yes</td>
</tr>
<tr>
<td>Ideas that Have Shaped the World</td>
<td>DeBlasio</td>
<td>1</td>
<td>45</td>
<td>Yes</td>
</tr>
<tr>
<td>Ideas that Have Shaped the World</td>
<td>Donaldson</td>
<td>1</td>
<td>45</td>
<td>Yes</td>
</tr>
<tr>
<td>Analyzing the causes of pediatric obesity</td>
<td>Erfle</td>
<td>2</td>
<td>100</td>
<td>Yes</td>
</tr>
<tr>
<td>Transforming Lives: Social Justice Leaders</td>
<td>Farrell</td>
<td>4</td>
<td>75</td>
<td>Yes</td>
</tr>
<tr>
<td>Biomedical Ethics: Cases and Quandaries</td>
<td>Feldman</td>
<td>1</td>
<td>50</td>
<td>No</td>
</tr>
<tr>
<td>Lies, Damned Lies, and Statistics</td>
<td>Forrester</td>
<td>2</td>
<td>75</td>
<td>Yes</td>
</tr>
<tr>
<td>The 1970s: The Promise and Pitfalls of Liberation</td>
<td>Gilmore</td>
<td>1</td>
<td>75</td>
<td>Yes</td>
</tr>
<tr>
<td>Ideas that Have Shaped the World</td>
<td>Haque</td>
<td>1</td>
<td>75</td>
<td>Yes</td>
</tr>
<tr>
<td>Ideas that Have Shaped the World</td>
<td>Johnston</td>
<td>1</td>
<td>75</td>
<td>Yes</td>
</tr>
<tr>
<td>Picturing Health, Disease and Medicine</td>
<td>Lee</td>
<td>2</td>
<td>150</td>
<td>Yes</td>
</tr>
<tr>
<td>Mediated Realities</td>
<td>Lewis</td>
<td>2</td>
<td>105</td>
<td>Yes</td>
</tr>
<tr>
<td>Stand Up &amp; Be a Man</td>
<td>MacDonald</td>
<td>2</td>
<td>80</td>
<td>Yes</td>
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<tr>
<td>Ancient Democracy: A Modern View</td>
<td>Maggidas</td>
<td>1</td>
<td>60</td>
<td>Yes</td>
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<tr>
<td>Getting the Boot: The Italian Experience in America</td>
<td>McMenamin</td>
<td>1</td>
<td>100</td>
<td>Yes</td>
</tr>
<tr>
<td>Founders of Modern Discourse: Marx, Nietzsche, Freud</td>
<td>Pagano</td>
<td>2</td>
<td>40</td>
<td>Yes</td>
</tr>
<tr>
<td>Chasing the Flying Car: A History of the Future</td>
<td>Pawley</td>
<td>3</td>
<td>90</td>
<td>Yes</td>
</tr>
<tr>
<td>What is science?</td>
<td>Pedersen</td>
<td>1</td>
<td>45</td>
<td>Yes</td>
</tr>
<tr>
<td>Sustainability and Renewable Energies</td>
<td>Pfister</td>
<td>2</td>
<td>100</td>
<td>No</td>
</tr>
<tr>
<td>Law &amp; the War on Terrorism</td>
<td>Pohlman</td>
<td>1</td>
<td>60</td>
<td>Yes</td>
</tr>
<tr>
<td>Utopias, Dystopias, and Engineering “Progress”</td>
<td>Qualls</td>
<td>2</td>
<td>100</td>
<td>Yes</td>
</tr>
<tr>
<td>El Kid: Discovering the Medieval Epic Hero</td>
<td>Quintanar</td>
<td>1*</td>
<td>20</td>
<td>No</td>
</tr>
<tr>
<td>Mental Illness: From Movies to Memoir</td>
<td>Rauhut</td>
<td>2</td>
<td>100</td>
<td>Yes</td>
</tr>
<tr>
<td>Lord of the Castle, Lady of the House</td>
<td>Reed</td>
<td>2</td>
<td>100</td>
<td>?</td>
</tr>
<tr>
<td>Between 2 Worlds: Mexican Americans in US</td>
<td>Reyes-Zaga</td>
<td>3</td>
<td>150</td>
<td>Yes</td>
</tr>
<tr>
<td>Sites of Memory: Reclaiming Indigenous Histories</td>
<td>Rose</td>
<td>5</td>
<td>280</td>
<td>Yes</td>
</tr>
<tr>
<td>Politicization of Science</td>
<td>Sak</td>
<td>3</td>
<td>150</td>
<td>Yes</td>
</tr>
<tr>
<td>Sustainability, Greening and Entrepreneurship</td>
<td>Sarcone</td>
<td>4</td>
<td>200</td>
<td>Yes</td>
</tr>
<tr>
<td>Poetry of Place and Identity</td>
<td>Su</td>
<td>2</td>
<td>100</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Topics Covered
Students must learn the basics of research at the college level as a foundation either before or concurrently with higher-order information literacy skills, such as analyzing sources, choosing the correct types of sources for the need, and incorporating them ethically into a project. Librarians were able to verify that students demonstrate competency in these areas when the faculty member required students to complete a substantial, graded research assignment that was evaluated by the cooperating librarian.

Lack of consistency in instruction and practice remains a problem across seminars. The data in Table 3 suggests that 30 first year students have not been taught to find a book in the library, 60 first year students were not taught to locate the full-text of journal articles, and 180 were not taught to distinguish among source types. This last skill is a growing problem since most data is now available online, and to the untrained eye, all sources look alike; to students, this is often interpreted to mean that all sources carry equal authority. While we are encouraged to see at least that all students were introduced to using databases, this is only one aspect of the research process, critical though it is. Using a database is a skill that is somewhat reduced in usefulness if the students do not know from that point how to access the material listed in the database (find full-text of articles).

<table>
<thead>
<tr>
<th>Skill</th>
<th># of classes</th>
<th>% of classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Reference Material</td>
<td>12</td>
<td>29%</td>
</tr>
<tr>
<td>Evaluate/Annotate Source</td>
<td>27</td>
<td>66%</td>
</tr>
<tr>
<td>Use Catalog</td>
<td>39</td>
<td>95%</td>
</tr>
<tr>
<td>Find Books in Library/LC</td>
<td>35</td>
<td>85%</td>
</tr>
<tr>
<td>Search Databases</td>
<td>41</td>
<td>100%</td>
</tr>
<tr>
<td>Find Full-text of Articles</td>
<td>37</td>
<td>90%</td>
</tr>
<tr>
<td>Find Quality Websites</td>
<td>10</td>
<td>24%</td>
</tr>
<tr>
<td>Interlibrary Loan</td>
<td>15</td>
<td>37%</td>
</tr>
<tr>
<td>Distinguish Among Source Types</td>
<td>29</td>
<td>71%</td>
</tr>
<tr>
<td>Read a Citation</td>
<td>20</td>
<td>49%</td>
</tr>
<tr>
<td>Create a Citation</td>
<td>28</td>
<td>68%</td>
</tr>
<tr>
<td>Prepare a Bibliography</td>
<td>22</td>
<td>54%</td>
</tr>
<tr>
<td>Choose/Narrow Topic</td>
<td>12</td>
<td>29%</td>
</tr>
</tbody>
</table>

Faculty Feedback
Each year the first-year seminar faculty members are asked to complete a brief survey about the efficacy of the library instruction that took place in their course. For 2011, 21 of 41 professors responded, slightly more than half the number of faculty who taught a first-year seminar. Results are noted below.

Watched: Surveillance and Society
Turner 1 60 Yes
Green Music
Wilson 2 50 No
Chinese Attitudes towards the Environment
Yang 1 60 No
On the Delivery of Healthcare
Zwemer 2 100 Yes

*Instruction in this seminar was curtailed to less than 20 minutes due to the course evaluation taking place before the librarian was permitted to begin.
How did your librarian support your first-year seminar?

<table>
<thead>
<tr>
<th></th>
<th># of Responses</th>
<th>% of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taught information literacy skills during class time</td>
<td>20</td>
<td>100%</td>
</tr>
<tr>
<td>Consulted with students outside of class time</td>
<td>10</td>
<td>50%</td>
</tr>
<tr>
<td>Developed an information literacy skills activity and/or assignment</td>
<td>20</td>
<td>100%</td>
</tr>
<tr>
<td>Helped to evaluate/grade assignments that required students to use information literacy skills</td>
<td>8</td>
<td>40%</td>
</tr>
<tr>
<td>Provided required reading material</td>
<td>3</td>
<td>15%</td>
</tr>
</tbody>
</table>

Did you require your students to complete a graded assignment that required information literacy skills?

19 faculty members answered yes and one answered no. Those who answered yes were asked to comment on the quality of their student’s work.

<table>
<thead>
<tr>
<th>Level of Quality</th>
<th># of Faculty Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>6</td>
</tr>
<tr>
<td>Average</td>
<td>7</td>
</tr>
<tr>
<td>Poor</td>
<td>4</td>
</tr>
<tr>
<td>Mixed Results</td>
<td>1</td>
</tr>
</tbody>
</table>

Some faculty provided additional opinions about the assignments:

- “Unlike other assignments, I hadn't asked to see a rough draft. I think this is what accounts for the low performance in some cases.”
- “Generally better than their other assignments.”
- “It was difficult for them.”
- “They had two information literacy assignments. They seemed to be caught up in the formatting of citations (not that they did this particularly well) to the exclusion of the thinking parts of the assignment—they found some interesting things, but had some trouble working out which were worthwhile.”

The faculty member who said that he/she required no information literacy assignment commented, “My students completed annotated bibliographies as part of a writing portfolio leading to two final papers for the course.” It should be noted that this type of assignment does indeed require information literacy skills, so it seems incumbent upon the librarians to better define “information literacy” at FYS faculty orientation.

How can your librarians improve information literacy instruction for first-year seminars?

- “I'm not sure they can; the challenge is to build more time for this into syllabi, and to do it immediately post-FYS--this is often the fallow period when there is no follow-up.”
- “The library assignment needs to be integrated into the course in a way that makes the experience (in this case an annotated bibliography) useful to something they are doing, like a research essay. This is something I will recommend to the Humanities Collective.”
- By the end of the semester, I realized many of my students were still utterly bewildered by the database options available through the library. I realize now that I did too little in class on the
notion of "information literacy" and that our sessions with our library liaison were not enough. The variety of databases available through the library is overwhelming and we (across all first-year seminars) could benefit from a far more coherent and collective effort towards working with library materials...Also, while I'm at it, I'd say that 3 hours per week is not enough time for all the skills we want to integrate into the first-year seminar. As a faculty member, I'd say I still feel a bit uncertain as how we are defining "information literacy" at Dickinson. I'd like more conversations and workshops on the whole concept of "information literacy," much as we are doing more workshops now on writing in the curriculum through the Writing Center.

Please provide any other comments you would like to share regarding the first-year information literacy program.

- "I would just like to reinforce the importance of this aspect of FYS. I found it very helpful to get the students to the library early in the semester, but not until they have a research topic in mind. Although several of my students modified their topics after our two library sessions, they were more engaged in the sessions because they could relate the activities to their own work."
- "I'd just reiterate that I'm inspired by the idea 'information literacy' and that I'd like to see more and more explicit conversations about what Dickinson College means by 'information literacy.'"
- "I think FYS should be either content-driven or focus on the skills we should teach students in order for them to become good college students. Doing the latter would make it easier to integrate librarians and information literacy even more seamlessly in the classroom."

Student Feedback
During information literacy sessions and/or as part of an assignment, students also were asked to comment on their experience.

Positive feedback:
- "I got a really good idea of how to navigate the website and library. Now I feel a lot more comfortable looking for a resource."
- "I learned how to easily access and find books in the library."
- "One of the things that I learned was the ability to navigate Dickinson College's online and library resources and to find what I needed from them. I could see how this availability of this many sources could be daunting for a student who was taught to use their limited (compared to the college's) high school resources."
- "Even though this was time consuming I believe that this practice annotated bibliography is going to help me with my research paper due next week."
- "This assignment definitely was helpful in introducing me to the library's system and usefulness. Now I not only have a larger spectrum of references for my work, but also a much better understanding of the importance of articles, journals, reviews, etc."
- "I learned that there is an extensive set of databases at my disposal, and I also learned that the information on those databases is a lot more quality than a Google search."
- "I did not know how to navigate the library web page earlier. Learning how to find databases and request books is super helpful!"
Where they asked for additional help:

- Physically locating books in the stacks using the LoC classification scheme
- What to do if the full-text of an article isn’t instantly available online
- How to tell the difference among source types online
- Additional citation help - students wanted more time on how to do citations, and an explanation of the different styles
- Most of the students had been in the library before, but almost none of them had been to the library website, used any of the search tools, or checked out a book.

Academic Integrity

The academic integrity program is being refreshed and redesigned for 2013; therefore a lengthy assessment report is not being prepared for the 2012 year. However, the tutorial allows us to gather useful data for improvement, and the feedback from all previous years of the tutorial’s online existence is being used to design the next version. 100% of all first-year, transfer, and international students completed the tutorial. We are able to achieve 100% compliance thanks to the hold on course registration that is imposed on students who do not complete the tutorial by the stated deadline. As in previous years, feedback about the tutorial was generally positive. A number of Oberlin Group colleges recently asked to view our tutorial, and Williams College requested permission to adapt it for their own first-year programming.

Successes

- 100% of the faculty members allowed the librarian some contact with their class.
- Those faculty members who utilized the librarian’s expertise reported success and satisfaction with the process and the results.
- Students who commented generally reported positive learning experiences.

Challenges/Discussion Points

- There remains a lack of consistency in student information literacy learning across the FYS program. This means that some students are not as well-prepared as others for their next research requirement.
- For the 2013 FYS season, the library staff will work closely with Noreen Lape to integrate “scaffolded” research and writing assignments.
- The library staff is working to define “information literacy” with our campus, especially in the context of the FYS experience. We will be clearer about defining information literacy at FYS faculty orientation.
- In the classroom, librarians should emphasize on evaluating sources, not simply the mechanics of finding them.
- Discuss in FYS faculty orientation the pitfalls of considering library work as an “add-on” or a “field trip.” Use an article to promote discussion: “More than Just a Field Trip: Faculty and Librarian Collaboration in the First-Year Writing Classroom” by Smith and Brown.
- Work with faculty to make sure librarians have opportunities to address ongoing questions from students regarding research assignments after they are submitted.