# Assessment Report on Information Literacy in Fall 2011 First Year Seminars

# **Introduction**

The First-Year Information Literacy program has been firmly embedded in Dickinson's curriculum for more than 5 years. First-year research instruction is now well-established with near 100% participation. We now intend to examine the program's role and efficacy in context as but one part of the library's overall efforts to promote information literacy competency.

The First-Year Information Literacy program is the first step students take to become proficient researchers and ethical users of information. We know from observation, surveying, and professional literature that students rarely enter college with accurate notions of what it means to search for, obtain, and utilize information. As with achieving competency in writing, becoming information literate is an iterative and sequential process that involves demonstration, practice, and continual acquisition of new skill sets, along with persistence and critical thinking. As the introduction to that process, the first-year seminar information literacy program at Dickinson has demonstrated effectiveness in teaching students the basics of research: they learn to rely on scholarly, vetted resources for academic research projects; they know what kinds of sources to consult for research material; they understand how to manipulate research tools to find relevant material; and they know where to go for help.

In 2008, the library developed five major information literacy goals for the First-Year Information Literacy program, with desired outcomes attached to each goal. Given the number of requirements placed on the first year seminar, however, the attention spent on information literacy is often minimal, and certainly too inconsistent across classes to assure comprehensive reach with the core skills we have determined to be essential. This report will summarize program accomplishments, and offer ideas for improvement to ensure that first year students learn, practice, and retain the skills they need.

### **Survey Results**

We have analyzed data from 3 surveys conducted in 2007, 2009 and 2011. Two of these surveys were external and one was internal:

- First Year Information Literacy in the Liberal Arts Assessment (FYILLAA) Research Practices Survey The FYILLAA survey was developed by the Oberlin group. It was administered at Dickinson in fall 2006 to all first-year students, prior to library instruction, in order to determine their research knowledge and habits. The survey was re-administered in fall 2007 to the same group who had taken it the previous year, after library instruction. We achieved a 23% response rate.
- HEDS Research Practices Survey HEDS is The Higher Education Data Sharing
  Consortium. 13 US colleges and universities participated in the HEDS survey and it was
  administered to students in all four class years during the fall of 2010 and the spring of
  2011. It was designed to determine students' research knowledge and habits. For the

- current purpose, only data provided by Dickinson's first-year students is included. About 70 first-year students participated, representing about 10% of the first-year class.
- Dickinson First Year Seminar Library Research Skills Survey This survey was developed and administered in the fall of 2008 by Dickinson librarians. 150 students were invited to participate, and 50 responded, representing approximately 8% of the first-year class. The survey was designed to examine retention of information literacy skills following library instruction.

Unfortunately, the data from these surveys does not represent a large enough sample of the first-year population to provide clear evidence of information literacy learning.

#### **Key Findings**

Synthesis and analysis of these three surveys revealed the following:

- Most responding FYs use the library at least once or twice a month; the most common reason (60-75%) for library use is "homework," with "research" second at 20 30%.
- Though FYs rely on Google for research, they also use a wide range of research material provided by the library. Emphasis on academic journal use varied among surveys.
- 40% of FYs report "never" consulting with a librarian for a research project.
- More than 60% of FYs report doing most of their work on research projects close to the due date.
- 80-90% of FYs find using the library catalog "somewhat" or "very" easy. 60-75% find using databases "somewhat" or "very" easy. 80-90% find using the Internet "somewhat" or "very" easy.
- About 80% of students find that "documenting sources" is "somewhat' or "very" easy; however only 63% were able to create a correctly formatted citation when the elements were provided, and only 40% were able to do so when they had to find a source on their own and then cite it correctly.
- Most students do not know how to use "advanced" search techniques, such as Boolean operators and truncation symbols.

## Input Data and Perception of First-Year Information Literacy Learning

The library routinely collects quantitative data on the First-Year Information Literacy program; success was measured by what librarians were able to accomplish in the classroom. In the fall

of 2010, we tracked the library modules that were taught in each seminar and what follow-up in the form of an assignment students were asked to complete. That report noted that, as with previous years, inconsistent requirement of course-integrated assignments to provide skills practice proved to be a challenge. This trend continued in 2011, with 34 seminars (80%) including an assignment that the librarian helped to create and/or grade. In most cases it was unclear whether or to what extent library work counted as part of a larger course requirement. The high points for course-integrated assignments were reached in 2008 and 2009 when 95% of first-year seminars required the completion of such work.

Also tracked for assessment purposes is the amount of time librarians spend with their assigned classes. In 2011, contact time dropped in comparison with previous years. The average per class was 150 minutes in 2007 and 128 minutes 2008, however librarian contact time in 2011 First Year Seminars ranged from 10 to 300 minutes (not including the Academic Integrity session), with most ranging between 75 – 170 minutes.

We also have attempted to measure programmatic progress by what skills we were able to teach in first-year classrooms based on the goals articulated by librarians in 2008. Listed below are the five specific information literacy goals for the FYS program including a longitudinal comparison of skills that have been introduced in the seminars.

<u>Goal 1</u> - FY students will recognize the need for, identify, & select appropriate research tools that support efforts to frame & answer an academic question.

• Outcome - Choose appropriate sources or evaluate information. Taught to 65% in 2011 and 90% in 2009.

<u>Goal 2</u> – FY students will develop relevant, balanced, & diverse lists of sources from the numerous alternatives available.

- Outcome Using the catalog. Taught to 90% in 2011 and 100% in 2009.
- Outcome Using databases. Taught to 88% in 2011 and 100% in 2009.
- Outcome Finding full-text of articles. Taught to 85% in 2011 and 100% in 2009.
- Outcome Interlibrary loan. Taught to 78% in 2011 and 88% in 2009.

<u>Goal 3</u> - FY students will make distinctions among different types of sources and determine what type of source is best for each assignment.

• Outcome - Scholarly vs. Popular. Taught to 55% in 2011, down from 83% in 2009.

<u>Goal 4</u> - FY students will write correct & complete bibliographic citations and will understand the importance of using information ethically in scholarly communication.

- Outcome Citing properly. Taught to 58% in 2011; a reduction from 78% in 2009.
- Outcome Academic Integrity.<sup>1</sup> Taught to 100% in 2011 and 100% in 2009.

<sup>&</sup>lt;sup>1</sup> Further information about the results of the Academic Integrity module will be presented in a separate report.

<u>Goal 5</u> – FY students know what kind of assistance librarians provide and know how to get help in the library.

 Outcome - What librarians do/Getting help with research. Taught to 100% in 2011 and 100% in 2009.

#### Student Feedback

We were able to sample student feedback on the library instruction portion of the first-year seminars from 9 classes taught by different librarians. The most resounding comment was that the instruction provided was "very helpful" because they "had no idea how to do [research] before." No negative feedback was recorded, though some students did use the opportunity to ask for clarification on concepts from the class (librarians followed up on the questions either directly with the student if he or she provided a name, or through the course instructor).

Specific comments on what they learned as a result of library instruction included:

- "How to use the library in a productive manner."
- "It was helpful to venture out into the stacks with assistance to find books."
- "Basic organization of the library and how to access its features."
- "How to organize my search."
- "Do not be afraid to just ask a librarian!"

# Faculty Feedback

Only fourteen FYS faculty responded to a brief questionnaire distributed in late January 2011. Responses for each question are summarized here, with some representative comments quoted.

- 1) What elements of library instruction worked best in your class and why? All of the respondents noted that simply having the students do research was the most effective element of instruction. Some added that a "tangible activity" or "hands-on worksheets" as part of the class made the experience more useful. One professor added that having the instruction "tied to an upcoming assignment" motivated the students.
- 2) What part of the library instruction could have been done better and how? Most reported that the sessions went very well. Three wished that they had planned for additional sessions. One lamented that library instruction did not include a physical tour of the library, and one, whose class had run out of time, preferred that the assignments be finished during class time. Another added: "It's important that the preparation relate to both the students and the course material. The students need more emphasis on learning by doing from the beginning of the presentation, which was the only serious problem with the presentation this fall."
- 3) What, if any, effect do you feel the library instruction had on the quality of your students' assignments? Most of the respondents agreed that instruction an effect on their students' work. Faculty commented:

- "...having someone other than the professor explain these things causes them to pay closer attention."
- "Students used more and better research sources in their papers as a consequence of the library sessions."
- Instruction "...reinforced my message about the need for precision and care in both research and writing."

One faculty member commented that, although instruction raised students' "ability to find sources and to correctly cite them." Another faculty member commented, "I am not entirely sure the instruction had a direct effect on their assignments but I do know that the students felt extremely supported by our library liaison." Still another noted that there was "some effect" in that "I emphasized the need for non-internet sources, a real plus in the library sessions. There could have been more if a more relevant case study approach had been incorporated in the first session." (Due to the anonymous nature of the survey, it is unclear what the faculty member meant by "case study" approach. He or she could have been referring to active learning exercises.)

- 4) Please provide any other comments you wish to share about the First-Year information literacy program. Faculty members commented to this prompt as follows:
  - "Continue to offer help to first year seminars. Integrating the liaison into a professor's syllabus can be hugely beneficial for all."
  - "Take the time to convince professors that this is a good element to include in their first year seminars."
  - "I found that most of our entering students really need to 'hear' things more than once
    to grasp the importance. I'm grateful for the support from librarians for the academic
    integrity program and the sessions and individualized attention librarians have provided
    these entering students."

### Recommendations

Most of the data relevant to information literacy in the first-year seminar program is either input data or perception. Despite the relative lack of outcome data, the results and observations of the first year seminar information literacy program do support the need for continued instruction. Feedback clearly confirms that information literacy instruction is both necessary and useful.

However, this data also reveals potential areas of concern. The data relevant to the skills librarians taught in the classroom, for example, indicates that 10-15% of the class of 2015 may have had no opportunity to gain familiarity with critical research skills unless these were otherwise covered by the classroom instructor. One faculty member commented, "I still found their ability to find scholarly, balanced, and thorough sources to be wanting." These measurements and perceptions need to be balanced with robust outcome data on student

information research abilities; further authentic assessment is needed to determine whether any figures represent actual deficiencies in first-year information literacy proficiency.

Assessment is based upon clearly defined outcomes. The goals that librarians developed in 2008 articulated a specific set of skills we thought first-year students should achieve based upon professional practice, knowledge of Dickinson students, and many conversations with faculty members. At this point, a more integrative approach would look at finding campus consensus about what first-year students should be prepared to do as they enter their major course of study; when they pursue a senior research project; and even what research skills they will need in graduate school or in their professional careers. The following are recommendations for future enhancement to the First Year Information Literacy program.

- Determine realistic and achievable expectations for first-year-level research skills.
- In collaboration with faculty, develop a clear statement of first-year information literacy expectations and outcomes, including what can and cannot be achieved via the first-year seminar, and best practices for achieving desired goals.
- Gain additional knowledge about first-year research skill application and retention through authentic assessment. Assess student work that includes a research component from every first-year seminar. Since similar material is required for Writing Center assessment, we could perhaps share evidence where appropriate so that the faculty is not burdened twice with submitting large amounts of information.

<sup>--</sup>Christine Bombaro, Associate Director for Research & Instructional Services

<sup>--</sup>February 2012