Did you know that President Barack Obama declared October Information Literacy Awareness Month? I mention this because it ties directly to our topic this morning.
When this panel topic was first posed to me, I believe in my perverse thought process, I thought or understood, “What do we, as college and university librarians, expect new undergraduate students to know, in terms of library use?” My initial response was “Absolutely nothing!”

While I would like to be able to realistically expect a certain level of proficiency and skills, I realize that our students come to us with such a variety of backgrounds and varying levels of information literacy proficiency that uniform expectations aren’t realistic.

And if we have some uniform expectations, we are setting ourselves up for lots of disappointment!
Many of you may be familiar with the IL Standards for Student Learning published in 1998 by AASL and the AECT. Briefly the 9 standards are broken into three major areas…
Independent Learning Standards
The student who is an independent learner is information literate and...
Standard 4: ...pursues information related to personal interests.
Standard 5: ...appreciates literature and other creative expressions of information.
Standard 6: ...strives for excellence in information seeking and knowledge generation.
Wouldn’t we be pleased if our graduating high school seniors were proficient in all these areas?

Information Literacy Standards for Student Learning

Social Responsibility Standards
The student who contributes positively to the learning community and to society is information literate and...
Standard 7: ...recognizes the importance of information to a democratic society.
Standard 8: ...practices ethical behavior in regard to information and information technology.
Standard 9: ...participates effectively in groups to pursue and generate information.
These standards connect with the Information Literacy Competency Standards for Higher Education endorsed by the American Association for Higher Education, and the Council of Independent Colleges, as well as by the Association of College and Research Libraries (ACRL).

A one sentence definition: **Information competency is a set of abilities requiring individuals to identify when information is needed and to have the ability to effectively and efficiently locate, evaluate, and use the needed information.**

We soon determined that we needed to assess our students’ information literacy skills to determine what areas specifically needed to be addressed in our developing information competency program.
Some of you may have heard me present data at this meeting last year from the Research Practices Survey we administered to our new students (544) at St. Mary’s University in the Fall of 2007.

I am going to focus on our assessment of new students in the Fall of 2007 for today’s purposes.

A few more words about the Research Practices Survey, or RPS.
ND0101 is the “non-departmental” Personal & Academic Skills course that all incoming freshmen are required to take. It’s a course that orients students to various services of the campus, as well as covering skills such as money, time, and stress management and preparing students for other aspects of college life. The library has a module in this course, that provides students with an overview of the library’s collections and services and provides hands-on searching opportunities in using our catalog and one of our subscription databases. We administered the RPS to all students who attended the library session of this course, prior to providing an overview of library services and resources.

Today I’m focusing on the students’ responses to objective questions measuring information literacy competencies.
The students were asked several objective questions about various search strategies. All of these questions had five answer options, including a “don’t know” option.

When asked which of these options would retrieve the most results in an online search, 17% of the new students correctly indicated the phrase “movies OR films” would retrieve the most results. However, 51% of ND0101 students incorrectly indicated “movies AND films” would retrieve the most results, while 19% indicated they did not know.
When asked which of the following was the correct way to truncate a search word, 6% of the ND0101 students correctly indicated “using the * or ! symbol in place of the last few letters of the word,” but many students (26%) incorrectly indicated “none of the above” while 43% indicated they did not know.

It appears that some students confused the Boolean connectors concept with truncation. And many students do not seem to know what the word “truncate” means or how to do it in an online environment.

The ability to effectively use Boolean connectors and to truncate searches is not unique to library research. Other disciplines employ online databases where these search strategies are needed.
Students were shown this catalog record.
And were then asked this question.

More than half correctly indicated that searching again using subject heading would be the most efficient way to find a comprehensive list of other books in the catalog on this topic.
The combined mean or average score among our new students for these 4 questions measuring searching ability was 28 (out of 100 possible).

Even though these students are digital natives and they can operate a mouse and a keyboard, or they can quickly text-message, that doesn’t mean that they know how to effectively search databases or that they understand the information they are viewing when they retrieve a list of results.

Which of the following is likely to yield the most comprehensive list of relevant scholarly articles for a research project?

(34%) a. Searching an electronic index or database in a specific academic field (History, Biology, Music, etc.)

(7%) b. Using a general Internet search like Google or Yahoo

(15%) c. Searching the library catalog

(32%) d. All of the above are equally effective

(12%) e. Don’t know
The combined mean or average score among our new students for these 4 questions measuring searching ability was 28 (out of 100 possible). Even though these students are digital natives and they can operate a mouse and a keyboard, or they can quickly text-message, that doesn’t necessarily mean that they know how to effectively search databases or that they understand the information they are viewing when they retrieve a list of results.

Differences among students from the three schools were analyzed (see figures 4-7).
The survey listed several citations and students were asked to identify the type of source it was, whether an entire book, a journal article, or a portion of a book. 60% of the new students incorrectly identified the journal article citation as a portion of a book.


( 6% ) a. Entire book
( 27% ) b. Journal article
( 60% ) c. Portion of a book
( 7% ) d. Don’t know
Students did better in identifying a book source, although 42% incorrectly identified this source as a journal article.
Only 16% correctly identified this book chapter as a portion of a book.
The combined mean or average score among our new students for these 3 questions plus 6 other questions measuring source identification and documentation ability was 44 (out of 100 possible).
In looking at evaluation ability, the students were asked about each of eight different types of resources whether the source was likely to be “scholarly,” “non-scholarly,” “can’t be determined,” or “don’t know.” Source options given included: was published by a university press; has a lengthy list of references; was recently published; is posted on a political blog; etc.

Only 15% of the ND0101 correctly identified a source that “was published in Time, Newsweek or US News & World Report” as non-scholarly, while 61% indicated this type of source was likely to be scholarly. The results for this question for our students were actually better than the findings of the FYILLAA institutions, which reported that 78% of their freshmen thought this was a scholarly source.
Combined correct responses to 11 questions measuring evaluation ability: 46%
We combined the 3 variables or indices we made into a combined overall information literacy score: approximately 40% or less than half.
Rather than asking “what Undergraduates need to know?” let’s ask, “what do Undergraduates need to be able to do?”

They need to be able to effectively identify, locate, evaluate, integrate, and ethically use needed information.

And now Jeanne will discuss some ways we can teach students to do this.