

# Closing the assessment loop using pre- and post-assessment

---

Bonnie J. M. Swoger  
Science and Technology Librarian, Milne Library, SUNY Geneseo

Swoger, B. J. M. (2011). Closing the assessment loop using pre- and post-assessment. *Reference Services Review*, 39(2), 244-259. doi: [10.1108/00907321111135475](https://doi.org/10.1108/00907321111135475).

## Abstract

**Purpose:** The purpose of this study was to determine what skills students already possessed as entering first-year students, in order to define appropriate goals and objectives for library instruction sessions occurring in the first-year writing and critical thinking course.

**Design/methodology/approach:** A pre-test was administered during the first two weeks of the Fall 2008 semester. After one-shot library instruction, students took a post-test during the final exam period of the Fall 2008 semester. Librarians worked collaboratively to evaluate the results of the assessment and determine the implications for the session goals and objectives.

**Findings:** The original goals and objectives for the library instruction sessions were out of sync with student skills. Assessment also revealed that the original goals and objectives were out of sync with librarian priorities. The results of the assessment were used to refine the goals and objectives through a collaborative process.

**Practical implications:** Instruction librarians need to evaluate their course goals and objectives as one part of the assessment cycle. Assessment can be a useful tool for aligning librarian priorities and pre-existing student skills.

**Originality/value:** This study explains how the results of assessment can be used to close the assessment loop, concentrating on parts of the assessment cycle seldom discussed in the literature.

## Keywords:

Assessment, information literacy, first-year students

## About the author

Bonnie J.M. Swoger is the Science and Technology Librarian at SUNY Geneseo. She is the liaison to the Biology, Chemistry, Geosciences, Physics and Astronomy, Mathematics and Computer Sciences departments. She teaches information literacy sessions, answers reference questions and coordinates web development. She leads efforts to assess information literacy instruction at Milne Library and is a member of the new Scholarly Communications team. She has a BS in Geology from St. Lawrence University, an MS in Geology from Kent State University and an MLS from the University at Buffalo. She blogs at the Undergraduate Science Librarian – <http://undergraduatesciencelibrarian.wordpress.com> Bonnie J.M. Swoger can be contacted at: [swoger@geneseo.edu](mailto:swoger@geneseo.edu)

## Introduction

While many librarians are making excellent progress toward embedded library instruction, many sessions are still traditional one-shot instruction sessions. The ACRL Information Literacy Competency Standards for Higher Education (Association Of College And Research Libraries, 2000) have proved very useful for providing overall program guidance, but only a small subset of the outcomes can be explored in these single class sessions. Distilling from the standards what is necessary and possible for students to learn in a 50-minute session can be difficult.

Determining what to teach in a one-shot library instruction session for a freshman writing and critical thinking class can be daunting - librarians would like the students to learn enough to prepare them for college level research, but time is very limited. Traditional 'library orientation' sessions can focus on the building, the library website, the web OPAC, or other basic concepts.

Librarians at SUNY Geneseo's Milne Library used pre- and post-assessment results to evaluate and revise the goals and objectives for the one-shot library instruction sessions taught in many sections of a freshman writing and critical thinking class. The assessments helped the librarians focus on student learning outcomes and to prioritize the knowledge and skills we hope for students to learn in these sessions.

Evaluating learning outcomes is one example of "closing the loop" on assessment - using assessment results to make changes to teaching, programs, and learning outcomes. These changes can occur at multiple levels, and marks the final part of the assessment cycle (Maki, 2002; Oakleaf, 2009). Increased focus on assessment from regional accrediting agencies has placed additional pressure on academic programs and libraries to not only assess student learning, but also to show that the results of those assessments are being used to improve programs (see Middle States Commission on Higher Education, 2009). By revising our goals and objectives, we hope to better prepare first-year students for college level research.

## Literature review

Although there are many articles in the library literature about assessing student attitudes, experience or learning, these articles do not always provide detailed information about the last part of the assessment cycle – using the results to make improvements. Assessment (in several forms) can serve as one method to help outline both program and individual session goals and objectives, as illustrated in the examples below

Caspers and Bernhisel (2005) describe a study using a survey to assess the attitudes, experience and knowledge of incoming first-year students at Linfield College. Their assessment results allowed them to refocus the library instruction within their first-year seminar, excluding the mechanics of entering search terms and focusing more on research database content and characteristics. A similar survey-based study of incoming freshman knowledge and satisfaction with library services was conducted at Butler University in 1997 (Helmke & Matthies, 2004). This survey was used by librarians to help determine content for an online tutorial, although the article does not report the specifics of how the results of the study informed the tutorial content.

Changes in the teaching of specific information types have also been reported. Focusing on government documents, Seggern and Scales (2009) used assessment data to identify gaps in their library instruction sessions and planned new instructional activities to fill the gap. Other librarians used the results of the one-minute paper to make changes in their approach to teaching website evaluation (Choinski & Emanuel, 2006).

At another level, Bennett and Brothen (2010) used citation analysis of Master's level students to promote changes to assignment requirements and to focus the guidance provided via their online subject guides and tutorials. Citation analysis at the Master's level was also useful to librarians at California State University,

Long Beach (Thomas, 2000). Thomas found that the interdisciplinary nature of the resources used in Social Work Master's theses (especially the high number of medical journals) was not reflected in the resources discussed in library instruction.

Overall, these examples show how assessment can be used to make changes in program structure, session goals, instructional techniques or resources provided.

## Background

At SUNY Geneseo, all first-year students take the interdepartmental writing and critical thinking class INTD 105. Faculty are required to bring their students to the library for at least one library instruction session. Most faculty meet this requirement and librarians have a minimum of one 50-minute session to teach the students some information literacy skills. Based on course schedules and faculty needs, some classes come in for a 75-minute session, and some faculty bring their students back for additional sessions. Although research is not a required portion of the course, many faculty include a research component in some of the writing assignments.

Each INTD 105 course is centered around a different theme chosen by the professor. Topics include traditional English literature themes (Arthur Miller, "The Hero's Journey"), sociological topics (Women and Work, Race and Visual Culture) or off-the-beaten path topics (Pirates, "Sex, Skulls and Aliens"). Instruction librarians tailor their instruction to the theme of the course and to any research assignment the students may have. As a result, each information literacy session is slightly different.

In order to provide common ground between these sessions, instruction librarians originally developed a small set of goals for each session based on ACRL Information Literacy Competency Standards for Higher Education (Association Of College And Research Libraries, 2000). The original goals were developed in 2001 and did not include detailed student objectives. Starting in 2001, the INTD 105 goals were posted on the Milne Library Website, which now contains our current goals and objectives (see table 2) (Milne Library, 2009).

Starting in the fall 2007 semester, instruction librarians met as a group to collaboratively revise our goals and objectives for the INTD 105 sessions (see figure 1 for a timeline of assessment activities). The library director was asking for additional assessment of our instruction program, and we were facing outside pressure to assess student information management skills. In order to effectively assess our program, we need assessable goals and objectives. The 2001 goals were too broad to be effectively assessed.

We were able to build on the 2001 goals by defining specific objectives and updated some out-of-date technical language (see table 1). Small groups of two to three librarians were formed to write a rough draft of the objectives for each of three goals that were defined by the whole group. The group then provided some feedback and editing before adopting the final version of the instructional objectives.

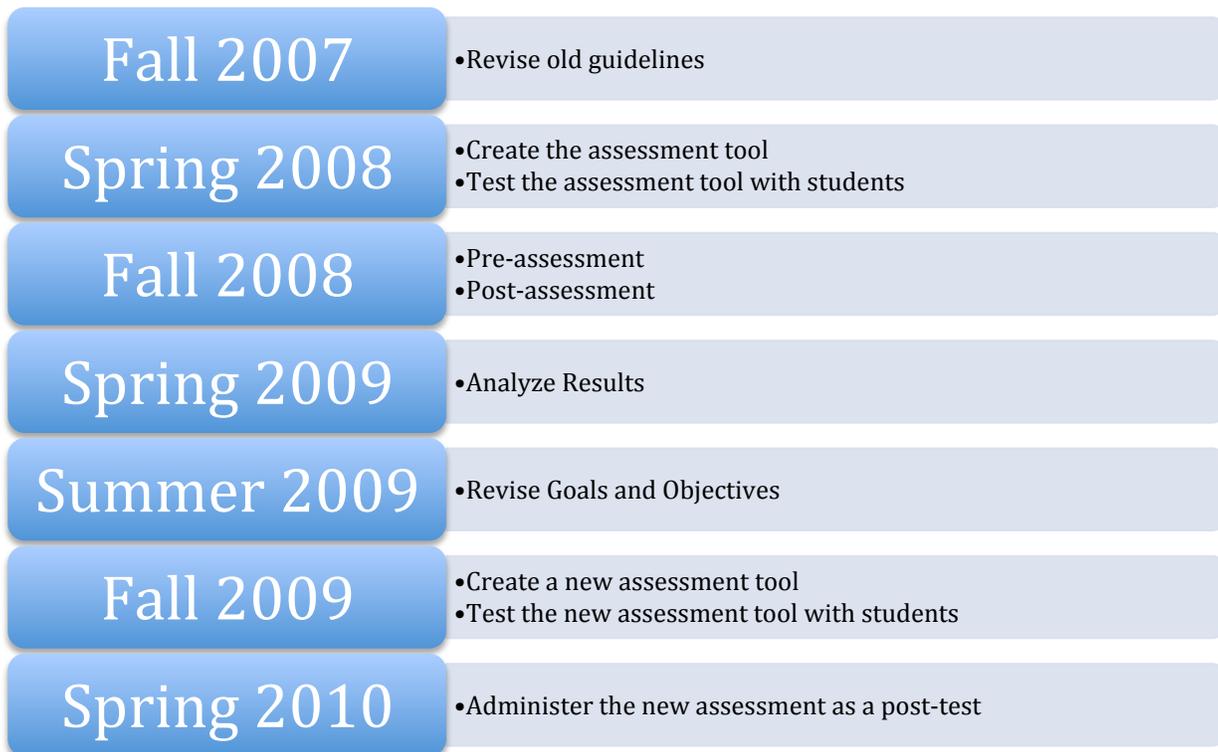


Figure 1: Timeline of recent assessment activity at SUNY Geneseo's Milne Library

Overall, our 2008-2009 goals were very similar to traditional library orientation sessions – introduce students to some relevant resources (including our OPAC, GLOCAT), show them the library website and get them into the library. Since this was most likely the students’ first introduction to the library, we decided that higher level concepts related to the evaluation of resources (e.g. scholarly vs. popular sources) would not fit into the typical 50-minute session for which we were building our goals and objectives. We hoped that instructors would bring students back for additional sessions in order to cover these more advanced concepts, and many of them did. Between 2005 and 2010, 50-85% of the INTD 105 classes we taught returned for multiple library instruction sessions. We also teach a wide variety of library instruction sessions in upper level courses covering additional concepts, and knew that some students would receive this additional instruction.

Although our goal was to standardize the learning goals and objectives for the INTD 105 session, we did not seek to proscribe any teaching techniques, specific article databases, or search examples. Librarians were still free to work with faculty members to customize instruction sessions based on the assignment and the course content.

After the goals and objectives were defined, we were able to develop an online survey-based assessment tool to evaluate student knowledge and skills related to these objectives. As part of an overall information literacy program assessment, we wanted to know if the first-year students were learning what we were trying to teach them.

Table 1: Goals and Objectives for INTD 105 developed by Milne Library instruction librarians during the fall 2007 semester

Fall 2008 – Spring 2009 Goals and Objectives	
Goals	Objectives

<p>Access Library resources and services by successfully navigating the Milne Library website.</p>	<ul style="list-style-type: none"> <li>• Demonstrate an understanding of the organization of the library website</li> <li>• Describe the purpose of: <ul style="list-style-type: none"> <li>○ IDS (Interlibrary Loan)</li> <li>○ Student Research Consultations</li> <li>○ The Reference Desk</li> <li>○ The Circulation Desk</li> <li>○ The Citation Style Guides</li> </ul> </li> </ul>
<p>Use GLOCAT (OPAC) to locate a variety of materials in Milne Library.</p>	<ul style="list-style-type: none"> <li>• Define GLOCAT and the types of material it contains</li> <li>• Find books by topic, author or title</li> <li>• Interpret results lists and item records</li> <li>• Demonstrate an understanding of where books and journals are physically located in Milne Library</li> </ul>
<p>Use research tools and strategies to identify and locate periodical articles on a specific topic.</p>	<ul style="list-style-type: none"> <li>• Select an appropriate periodical database for a given task</li> <li>• Find appropriate articles on a given topic</li> <li>• Determine the availability of full text articles online, in print at Milne Library, and through IDS (ILL)</li> </ul>

## Assessment Methods

The assessment tool was created by a committee of instruction librarians during the spring 2008 semester (see appendix 1 for the original assessment tool questions and results). The assessment tool was intended to assess student learning related to our goals and objectives, and to provide some attitudinal and demographic information. The assessment survey included:

- Multiple choice and short answer questions regarding the information literacy skills outlined in our goals and objectives,
- A few short answer questions outside of the scope of our goals related to broader information literacy skills
- Multiple choice and short answer questions regarding student opinions and attitudes
- Basic demographic questions.

The assessment tool was not validated against external data.

Because we want students to utilize any and all library resources during the course of their regular work, the assessment tool was considered “open book” and students were encouraged to use the library website to answer any questions. Many of the questions required students to use article databases or our OPAC to answer questions.

An initial “test run” of the assessment tool was administered to students in the INTD 105 classes during the spring 2008 final exam period. Faculty were able to bring students to the library during their final exam period

due to long standing requirements that they participate in an assessment of library instruction. In addition, many faculty do not give a final exam for this class. Results from this initial administration were used to re-order and clarify questions and were not included in the final analysis of results.

Prior to the fall 2008 semester, librarians sent an email to faculty asking them to encourage their students to take the assessment as a pre-test in the first few weeks of their college career. Some faculty required their students to take the assessment, others encouraged it with extra credit. We encouraged faculty to make it part of a participation grade, as previous experience has shown that simply offering extra credit is not an effective method of getting students to participate in assessments. A total of 100 students took the pre-test on their own time, outside of the classroom. The pre-test was vital to help us understand what skills the students possessed on entering college, and what skills were acquired throughout their first semester, partly through the library instruction sessions.

Following the library instruction sessions that occurred throughout the semester, a post-test was administered at the end of the fall 2008 semester to 190 students. The post-test was generally administered during the final exam session in an in-class setting. While the different administration conditions raise some questions about the comparability of the pre- and post-test, we feel that the impact is minimal because of the open book nature of the exam.

The short answer questions on the assessment (see appendix 1) were graded by first scanning the results to develop categories, then categorizing each answer.

## **Results of the first assessment**

We found that students already met some of our goals at the beginning of their college careers, met some of our goals following the INTD 105 class, and failed to meet other goals. Using the results of this assessment, we were able to significantly revise our goals and objectives for the INTD 105 information literacy sessions. Question by question results are listed in appendix 1.

### **Goal 1: Access Library resources and services by successfully navigating the Milne Library website.**

At the beginning of their first year, most of our students were able to select appropriate library services given a scenario. When asked about getting research help, checking out books, and getting technical help, a very high percentage of students were able to successfully pick the appropriate library service from a list at the beginning of their freshman year (>85%).

Our students were less able to successfully select our interlibrary loan service (called Information Delivery Services or IDS) at the beginning of the year (70%), but showed significant improvement at the end of the fall semester (95%).

Navigation of the library website did not show marked improvement from the pre-test to the post-test. Questions asking students about content on our "Resources by Subject" pages showed little improvement over time (pre-test: 40%, post-test: 46%). Student ability to find information on our citing sources web page started off slightly higher (66%), but also showed only minor improvement (75%).

### **Goal 2: Use GLOCAT to locate a variety of materials in Milne Library.**

GLOCAT is our online public access catalog. Due to the nature of the research that is done in the first-year writing and critical thinking courses, instruction for GLOCAT made up a large portion of our in-class time.

Assessment results related to this goal were mixed. Students could easily interpret results lists and item records at the beginning of the school year (89 - 99%) with the exception of call numbers (58%). We saw significant gains in students' ability to understand call numbers by the end of the year (78%). We also saw significant gains in students' awareness of the location of the most commonly used items in our physical library (59% to 77%).

On a more negative note, a very small percentage of students could accurately describe the items that could be located in our catalog (11%) with no significant increases at the end of the semester (12%). Most students assumed they could find journal articles in GLOCAT. Similar challenges regarding the content of an OPAC were reported by Hufford (2010).

### **Goal 3: Use research tools and strategies to identify and locate periodical articles on a specific topic.**

Once again, results were mixed. For goal 3, objective 1 (*Select an appropriate periodical database*) students faced some difficulty when asked to find our "Resources by Subject" online resource guides, with little improvement from pre to post tests (40%, 46% respectively). This is partly a web design issue that will hopefully be addressed with a summer 2010 revision of our library website. On the other hand, students could easily recognize that Yahoo! search would not be the most appropriate database to find scholarly articles on both the pre-test (90%) and the post-test (91%).

For objective 2, (*Find appropriate articles on a given topic*), students could easily locate relevant items, but had difficulty finding an article in the appropriate format. Understanding item types and formats (scholarly vs. non-scholarly, book reviews, new items, etc.) was largely outside of our goals and objectives. For example, when asked to find an article about Native Americans in film, 50% of students on the pre-test (and 77% of students on the post test) found a book review relevant to the topic. The increase was largely due to the increased number of students who attempted to answer that question (24% of students left it blank on the pre-test).

## **Closing the Loop: Revising our Goals**

An important part of our process was to examine librarian reactions to the assessment results. For example, while students had difficulty determining the physical location of some library resources (especially our special collections), librarians were more concerned by students answers to assessment questions that fell outside of our original goals and objectives. This led us to question whether we were spending our limited time teaching students the skills we really wanted them to know.

In our original fall 2007 creation of the goals and objectives, we felt that evaluating resources fell outside of what could reasonably be accomplished in a 50-minute session. The results of the assessment convinced us that students needed to learn this skill more than they needed guidance navigating our OPAC or learning about the physical location of items in the library.

We spent the summer and fall of 2009 revising our goals and objectives for the class sessions. All instruction librarians participated by examining the results of the pre- and post-assessments. Once the librarians agreed on a new set of instructional goals, small subgroups were formed to outline the details of the objectives. The entire group edited and refined the new goals and objectives which were adopted in September 2009 (see table 2).

**Table 2: Revised Goals and Objectives for INTD 105 sessions**

Fall 2009 – Spring 2010 Goals and Objectives (Current)
--

Goals	Objectives
<p>Select resources appropriate for assignments by being able to differentiate between scholarly, popular and trade materials.</p>	<p>Students will be able to</p> <ol style="list-style-type: none"> <li>1. Identify characteristics of a popular, scholarly or trade publication (online or in print).</li> <li>2. Define "peer-reviewed" as a subset within scholarly resources (and recognize that some scholarly journals are not peer-reviewed).</li> <li>3. Select a scholarly journal article from a group of articles.</li> </ol>
<p>Access an assortment of resources available in various formats and locations.</p>	<p>Students will be able to:</p> <ol style="list-style-type: none"> <li>1. Identify the format of a resource from a results list (such as print books, e-books, online articles, print articles, book reviews, websites, multimedia, etc.)</li> <li>2. Demonstrate an understanding of the physical location of print and multimedia resources in Milne Library.</li> <li>3. Demonstrate an understanding of how to access materials electronically through databases, and other online mediums.</li> <li>4. Understand how and determine when to request items through IDS.</li> </ol>
<p>Promote the use of appropriate resources and services to satisfy student research needs.</p>	<p>Students will be able to:</p> <ol style="list-style-type: none"> <li>1. Determine appropriateness of using multidisciplinary and/or subject-specific databases.</li> <li>2. Identify recommended databases, reference sources, web sites, etc. pertaining to a specific subject (e.g. through Resources by Subject pages, myCourses, etc.).</li> <li>3. Understand what content can be found in WorldCat Local.</li> <li>4. Have an awareness of available help (self-service and mediated) - i.e. writing, citing, research, ask a librarian, consultations, IM, library web site, etc.</li> </ol>

## Discussion

In revising our goals, we concentrated our effort on two main categories of assessment results:

1. Assessment questions that a large portion of students answered successfully on the pre-assessment (>75%).
2. Assessment questions that were beyond the scope of our original goals and objectives.

We were also facing some big changes to online library services. Reference librarians had decided to replace the primary search tool on our library website (our OPAC in 2008-2009) with WorldCat Local. Combined with the assessment results related to goal #2, we decided to drop our OPAC completely from our goals and objectives. While we recognized that it might be a useful source that was still covered in some INTD 105 library instruction sessions assessment results made it clear that students could already do basic author and title searches, as well as interpret item results. We felt that our time was better spent on other areas.

Although we dropped the objective for students to “interpret results lists and item records” we kept an objective related to understanding an item format. Assessment results indicated that students often had a difficult time distinguishing between the variety of information formats available via the web. While they could easily determine the author of a book from a record in our OPAC, they had difficulty determining if an item in a database was a book review or an article.

We re-examined our 2008-2009 goal #1, asking students to navigate the library website. This goal was originally developed ca. 2001, and the online environment had changed drastically. Questions assessing this goal offered mixed results, and we finally determined that much of this could be better handled by usability revisions to our website. Specifically, although students could find our citation guides, they had difficulty locating our subject guides. A large scale revision of our website will put our subject guides on our homepage, making them much easier to find without using valuable in-class instruction time. Our web statistics indicate that our subject guides are heavily used, however this assessment provided valuable information about how the novice user might access these pages.

Importantly, we decided that evaluating resources was simply too valuable to college level research to be left out of students initial introduction to the library. We had added a question to the assessment asking students to find a scholarly article on a certain topic. While students should be able to find an article, the “scholarly” part was outside the scope of our original goals and objectives. We were more concerned about the poor responses to this question than other questions on our assessment. Search tools change often, and students will still turn to search engines to find information. We felt that teaching students to evaluate the material they find would serve them better than learning the mechanics of specific search tools. As a result we re-arranged some of our objectives, dropped several and added a new goal – students should be able to distinguish between scholarly, trade and popular materials.

Although our new list of goals and objectives may still be ambitious, we feel that it better reflects the fundamental skills and knowledge that students will need to be successful at freshman-level college research.

## Ongoing Assessment

As part of our ongoing assessment efforts, a new assessment tool was developed during the fall 2009 semester and tested in the spring 2010 semester. The new tool was revised to reflect our new goals and objectives.

Students took the revised assessment during fall 2010. Results of these assessments will be provided to individual library instructors to help them make evaluations of their own teaching and classes.

We would like to repeat the pre-test post-test methodology during the 2011 – 2012 school year to better assess student knowledge of these concepts upon entering college, and to see how our new goals and objectives effect

student learning. We also hope to use the results of our freshman level assessment to inform our instruction at upper levels, and to guide our assessment efforts at that level.

## Conclusion

One of the most important but often overlooked parts of the assessment cycle is the opportunity to reflect on the assessment results and make appropriate changes. While assessment results may occasionally reveal that everything is going perfectly, there is almost always room for improvement. Revising instructional goals and objectives is just one possible outcome of assessment. Adjusting teaching methodologies, changing program structure, altering assignment requirements or working with faculty to devote more class time to library instruction are all possible outcomes.

At SUNY Geneseo, we were able to use our assessment results to revise and focus our instructional goals for one part of our library instruction program. This process utilized information gained through our pre- and post-assessment of student information literacy skills and allowed us to make evidence-based decisions.

Although it was time-intensive to collaboratively make changes to our program goals and objectives, failing to adequately evaluate our assessment results and make necessary changes would have resulted in wasted time on the part of the librarians taking part in the original assessment as well as the faculty and student time needed to complete the assessment.

## Works Cited

- Association Of College And Research Libraries, 2000. *Information Literacy Competency Standards for Higher Education*, Chicago, IL. Available at:  
<http://www.ala.org/ala/mgrps/divs/acrl/standards/informationliteracycompetency.cfm>.
- Bennett, E. & Brothen, E., 2010. Citation Analyses as a Prioritization Tool for Instruction Program Development. *Journal of Library Administration*, 50(5), pp.425-442. Available at:  
<http://www.informaworld.com/openurl?genre=article&doi=10.1080/01930826.2010.488585&magic=crossref|D404A21C5BB053405B1A640AFFD44AE3> [Accessed December 14, 2010].
- Caspers, J. & Bernhisel, S., 2005. What do freshmen really know about research? Assess before you teach. *Research Strategies*, 20(4), pp.458-468. Available at:  
<http://linkinghub.elsevier.com/retrieve/pii/S0734331006000413>.
- Choinski, E. & Emanuel, M., 2006. The one-minute paper and the one-hour class: Outcomes assessment for one-shot library instruction. *Reference Services Review*, 34(1), pp.148-155. Available at:  
<http://www.emeraldinsight.com/10.1108/00907320610648824>.
- Helmke, J. & Matthies, B., 2004. Assessing Freshman Library Skills and Attitudes Before Program Development. *College & Undergraduate Libraries*, 11(2), pp.29-49. Available at: 10.13 [Accessed December 15, 2010].
- Hufford, J.R., 2010. What Are They Learning ? Pre- and Post-Assessment Surveys for LIBR 1100, Introduction to Library Research. *College & Research Libraries*, 71(2), pp.139-159. Available at:  
<http://crl.acrl.org/content/71/2/139.full.pdf+html>.

- Maki, P., 2002. Developing an assessment plan to learn about student learning. *The Journal of Academic Librarianship*, 28(1-2), pp.8-13. Available at: <http://linkinghub.elsevier.com/retrieve/pii/S0099133301002956>.
- Middle States Commission on Higher Education, 2009. *Characteristics of Excellence in Higher Education*, Philadelphia, PA. Available at: [http://www.msche.org/publications/CHX06\\_Aug08REVMarch09.pdf](http://www.msche.org/publications/CHX06_Aug08REVMarch09.pdf).
- Milne Library, 2009. Current INTD 105 Information Literacy Outcomes. Available at: <http://library.geneseo.edu/services/faculty/instruction/105litoutcomes.shtml> [Accessed December 15, 2010].
- Oakleaf, M., 2009. The information literacy instruction assessment cycle: A guide for increasing student learning and improving librarian instructional skills. *Journal of Documentation*, 65(4), pp.539-560. Available at: <http://www.emeraldinsight.com/10.1108/00220410910970249> [Accessed June 25, 2010].
- Seggern, M.V. & Scales, B.J., 2009. The Assessment Cycle: Improving Learning and Teaching in Government Documents Instruction. *DttP: Documents to the People*, 37(3), pp.31-35.
- Thomas, J., 2000. Never Enough: Graduate Student Use of Journals - Citation Analysis of Social Work Thesis. *Behavioral & Social Sciences Librarian*, 19(1), pp.1-16. Available at: [http://www.informaworld.com/openurl?genre=article&doi=10.1300/J103v19n01\\_01&magic=crossref||D404A21C5BB053405B1A640AFFD44AE3](http://www.informaworld.com/openurl?genre=article&doi=10.1300/J103v19n01_01&magic=crossref||D404A21C5BB053405B1A640AFFD44AE3) [Accessed December 15, 2010].

## Appendix 1

Pre- and Post-assessment questions, answers and results. The pre-test was administered in the first two weeks of the Fall 2008 semester. The Post Test was administered during final exam week of the Fall 2008 semester.

Goal and Objective	Question #	Question	PreTest n=100	PostTest n=190
I.1	1	Name two Milne Library recommended databases in business. (Open ended)	40%	46%
I.2	2	Milne Library does not have a journal article that you want. Which service would provide you with that article? <ul style="list-style-type: none"> <li>✓ Request the article through IDS</li> <li>• Request the article through a Student Research Consultation</li> <li>• Request the article from Tech Help</li> <li>• Request the article through a Student Technology Consultation</li> </ul>	70%	95%
I.2	3	You are having trouble creating a web page or a multimedia presentation and would like in-depth help. Which library service would you use? <ul style="list-style-type: none"> <li>• IDS</li> <li>• Circulation Desk</li> <li>✓ Student Technology Consultation (STC)</li> <li>• Resources by Subject</li> </ul>	88%	93%

<b>I.2</b>	4	You are starting a research paper and don't know which article database to use. Which library service would you use? <ul style="list-style-type: none"> <li>• <i>IDS</i></li> <li>• <i>Circulation Desk</i></li> <li>• <i>Tech Help</i></li> <li>✓ <i>Reference Desk</i></li> </ul>	85%	93%
<b>I.2</b>	5	You would like to check out one of Milne Library's books. Which library service would you use? <ul style="list-style-type: none"> <li>• <i>IDS</i></li> <li>✓ <i>Circulation Desk</i></li> <li>• <i>Reference Desk</i></li> <li>• <i>Tech Help</i></li> </ul>	86%	92%
<b>I.1, I.2</b>	6	Which of the following citation guides is not included in the library website's "Citing Sources" guide? <ul style="list-style-type: none"> <li>• <i>MLA (Modern Language Association)</i></li> <li>✓ <i>MHRA (Modern Humanities Research Association)</i></li> <li>• <i>APA (American Psychological Association)</i></li> <li>• <i>Turabian Manual of Style</i></li> </ul>	66%	75%
<b>II.1</b>	7	What types of materials can you find through GLOCAT? <ul style="list-style-type: none"> <li>• <i>Books, DVDs and Newspaper articles</i></li> <li>✓ <i>Journal Titles, Books and CDs</i></li> <li>• <i>Journal Articles, Books, and DVDs</i></li> <li>• <i>Books, CDs and Blogs</i></li> </ul>	11%	12%
<b>II.1</b>	8	You want to know if Milne Library owns a copy of Harry Potter and the Half Blood Prince. What database do you use? <ul style="list-style-type: none"> <li>✓ <i>GLOCAT</i></li> <li>• <i>Proquest Research Library</i></li> <li>• <i>PubMed Central</i></li> <li>• <i>Gale's Literary Index</i></li> </ul>	76%	92%

Choose format: **Standard format** Catalog card Citation Name tags MARC tags

Record 2 out of 3 [◀ Previous Record](#) [Next Record ▶](#)

Cover Image 

Holdings **All items** ↙ A

035 **⦿(OCoLC)57358293**

Personal Name **⦿Rowling, J. K.**

Title **⦿Harry Potter and the half-blood prince / by J.K. Rowling ; illustrations by M GrandPré.**

Imprint **⦿New York : Arthur A. Levine Books, c2005.**

Descr. **x, 652 p. ; 24 cm.**

Call Number **juv F R884hah 2 Weeks/Juv** ↙ B

Variant title **Half-blood prince**

Target Audience **Suggested grades: Grade 5 up.**

Subject **⦿Wizards -- Fiction.**  
**⦿Magic -- Fiction.**  
**⦿Schools -- Fiction.**  
**⦿England -- Fiction.**  
**⦿Fantasy.**

Add.Entry **⦿GrandPré, Mary,**

Document Type **⦿Juvenile/YA Col.**  
**⦿children's book** ↙ C

ISBN **0439784549**

Sys. no. **000404139** ↙ D

Holdings **All items**

The image above is a screenshot of the result of a search for the book Harry Potter and the Half Blood Prince. What part of the screen gives you information which will help you find the book in the library?

- A
- ✓ B
- C
- D

II.3	10	Use Milne Library's catalog to find the call number for the book <i>Women in the Middle Ages</i> . Write the call number here: [Open Ended]	47%	54%
------	----	---	-----	-----

II.2	11	Use Milne Library's catalog to find a book about running a small business out of your home. Write the title and author below: [Open Ended]	56%	64%
------	----	--	-----	-----

#	Author	Title	Year	Copies (owned/out)	Collection & Call Number
1	<input type="checkbox"/> Bartolomé, Lilia I.	<b>Ideologies in education :</b>	2008	(1 / 0)	LC212.2 .I33 2008
2	<input type="checkbox"/> Karabell, Zachary.	<b>Peace be upon you :</b>	2007	(1 / 0)	BL410 .K37 2007
3	<input type="checkbox"/>	<b>Africa's lakes : &lt;Digital Map&gt;</b>	2006	(1 / 0)	G2446.C2 A37 20
4	<input type="checkbox"/> De Blij, Harm J.	<b>Why geography matters :</b>	2005	(1 / 0)	GF503 .D4 2005
5	<input type="checkbox"/> Gordon, Raymond G.	<b>Ethnologue :</b>	2005	(1 / 0)	Reference ref P371 .E83 200
6	<input type="checkbox"/> Lenhoff, Alan.	<b>Modern Europe and Imperialism &lt;Kit&gt;</b>	2005	(1 / 0)	curr CX 373.8 CH PRINTS S940.2 M
7	<input type="checkbox"/> National Geographic Society (U.S.).	<b>Atlas of the world / &lt;Map&gt;</b>	2005	(1 / 0)	ref G1021 .N38 20
8	<input type="checkbox"/> National Geographic Society (U.S.).	<b>Africa : &lt;Map&gt;</b>	2005	(1 / 0)	Map case drawer

Base your answer to this question on the image above. Which of the following items is shelved on the lower floor of Milne Library?

<b>II.3</b>	13	Base your answer to this question on the image above [used in question 12]. Is the map, Atlas of the World, currently checked out of Milne Library?	89%	94%
-------------	----	---	-----	-----

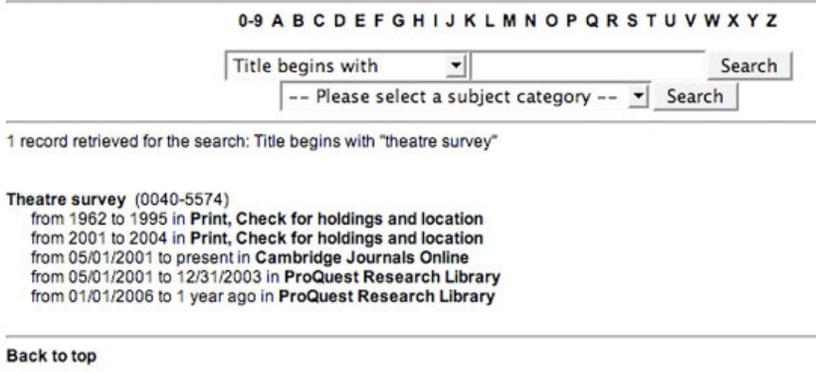
<b>II.3</b>	14	<p>Record 1 out of 2 <a href="#">Previous Record</a> <a href="#">Next Record</a></p> <p>Cover Image </p> <p>Holdings <b>All Items</b> 035 <a href="#">(OCoLC)156817276</a></p> <p>Personal Name <a href="#">Jordt, Ingrid.</a></p> <p>Title <a href="#">Burma's mass lay meditation movement : Buddhism and the cultural construction of power / Ingrid Jordt.</a></p> <p>Imprint <a href="#">Athens : Ohio University Press, c2007.</a></p> <p>Descr. xxii, 265 p. : ill. ; 22 cm.</p> <p>Series ( Ohio University research in international studies. Southeast Asia series ; no. 115)</p> <p>Call Number <b>BQ438 .J67 2007 Regular Loan</b></p> <p>Web Link <a href="http://www.loc.gov/catdir/enhancements/fy0739/2007031090-b.html">http://www.loc.gov/catdir/enhancements/fy0739/2007031090-b.html</a> <a href="http://www.loc.gov/catdir/enhancements/fy0739/2007031090-d.html">http://www.loc.gov/catdir/enhancements/fy0739/2007031090-d.html</a></p> <p>Bibliogr. Includes bibliographical references (p. [251]-257) and index.</p> <p>Subject <a href="#">Buddhism -- Social aspects -- Burma.</a> <a href="#">Buddhist laymen -- Burma.</a> <a href="#">Buddhism and politics -- Burma.</a> <a href="#">Human rights movements -- Burma.</a></p> <p>Series Add.Entry <a href="#">Research in international studies. Southeast Asia series ; no. 115.</a></p> <p>ISBN 9780896802551 (pbk. : alk. paper) 0896802558 (pbk. : alk. paper)</p> <p>Sys. no. 000418780</p> <p>Holdings <b>All Items</b></p>	99%	98%
-------------	----	---	-----	-----

Base your answer to this question on the image above. Which of the following is the author of this book?

- *Burma*
- ✓ *Ingrid Jordt*
- *Ohio University Press*
- *Buddist Laymen*

<b>EXTRA</b>	15	Base your answer to this question on the image above [Used in question 14]. Which of the following is NOT a subject of this book?	89%	91%
--------------	----	---	-----	-----

		<ul style="list-style-type: none"> <li>• <i>Buddhism - Social aspects - Burma</i></li> <li>✓ <i>Research in international studies. Southeast Asia series ; no. 115.</i></li> <li>• <i>Human rights movements - Burma</i></li> <li>• <i>Buddhism and politics - Burma</i></li> </ul>		
<b>EXTRA</b>	16	Base your answer to this question on the image above [Used in question 14]. Where would you click to find more books on this topic?	85%	89%
		<ul style="list-style-type: none"> <li>• <i>Title</i></li> <li>• <i>Imprint</i></li> <li>✓ <i>Subject(s)</i></li> <li>• <i>Web Link</i></li> </ul>		
<b>II.3</b>	17	<p>Record 1 out of 4 <a href="#">◀ Previous Record</a> <a href="#">Next Record ▶</a></p> <p>Cover Image </p> <p>Holdings <b>All items</b> 035 <a href="#">(OCoLC)ocm60349178</a></p> <p>Personal Name <a href="#">Hargett, James M. (James Morris), 1948-</a></p> <p>Title <a href="#">Stairway to heaven : a journey to the summit of Mount Emei / James M. Hargett. [electronic resource]:</a></p> <p>Imprint <a href="#">Albany : State University of New York Press, c2006.</a></p> <p>Descr. xvii, 294 p. : ill., map ; 24 cm.</p> <p>Series <a href="#">( SUNY series in Chinese philosophy and culture)</a></p> <p>Call Number <b>Electronic book Online Resource</b></p> <p>Web Link <a href="#">To read click here, then click view/open.</a></p> <p>Variant title Journey to the summit of Mount Emei</p> <p>Bibliogr. Includes bibliographical references (p. 249-261) and index.</p> <p>Subject <a href="#">Buddhism -- China -- Emei Mountain.</a> <a href="#">Emei Mountain (China) -- Religion.</a></p> <p>Document Type <a href="#">Internet Resource</a> <a href="#">SUNY Press</a> <a href="#">Electronic book</a></p> <p>ISBN 0791466817 (hardcover : alk. paper)</p> <p>Sys. no. 000412104</p> <p>Holdings <b>All items</b></p> <p>[Based on the image above] What type of resource is this item?</p>	96%	96%
		<ul style="list-style-type: none"> <li>• <i>DVD</i></li> <li>✓ <i>Electronic Book</i></li> <li>• <i>CD</i></li> <li>• <i>Journal article</i></li> </ul>		
<b>II.3</b>	18	[Based on the image in question 17] Where would you click to access the full text of this item?	96%	92%
		<ul style="list-style-type: none"> <li>• <i>Subject</i></li> <li>• <i>Title</i></li> <li>✓ <i>Web Link</i></li> <li>• <i>Document Type</i></li> </ul>		
<b>II.4</b>	19	Which of these items is NOT located on Milne Library's Upper Level?	59%	77%
		<ul style="list-style-type: none"> <li>• <i>How To Dismantle an Atomic Bomb (music CD)</i></li> <li>✓ <i>History of Philosophy Quarterly (journal)</i></li> <li>• <i>Borat (DVD)</i></li> </ul>		

		<ul style="list-style-type: none"> <li>The Pessimism of Thomas Hardy (<i>book</i>)</li> </ul>		
I.1, III.1	20	<p>You have been asked to write a paper on symbolism in the novels of the writer James Joyce. Which of the following databases is a library recommended resource for researching an assignment in an English class?</p> <ul style="list-style-type: none"> <li>PAIS</li> <li>✓ MLA</li> <li>JSTOR</li> <li>RIA</li> </ul>	48%	56%
III.1	21	<p>You are in a class where the professor has stated that your research must be based strictly on scholarly resources. Which of the following search engines/databases would be appropriate for you to use?</p> <ul style="list-style-type: none"> <li>Google</li> <li>Wikipedia</li> <li>Yahoo!</li> <li>All of the above</li> <li>✓ None of the above</li> </ul>	90%	91%
EXTRA	22	<p>Locate a scholarly journal article about the effectiveness of the new vaccine for the human papilloma virus (HPV). Enter the Journal name, article title, search terms and resource used in the spaces provided. [Open Ended]</p>	34%	54%
III.2	23	<p>Using the library resource Proquest, find a journal article about the portrayal of native Americans in film. Enter the journal name and article title in the spaces provided. [Open Ended] [Most students on the pre and post-tests found book reviews instead of articles. 24% of students left this question blank on the pretest vs. 6% on the posttest.]</p>	11%	6%
III.3	24	 <p>[Based on the image above] What would be the fastest way to get your hands on an article from the 1993 volume of Theatre Survey? (Print)</p> <ul style="list-style-type: none"> <li>✓ Go get a print copy from Milne Periodicals on the lower level</li> <li>Get the article online through Cambridge Journals Online</li> <li>The item is not readily available. Submit a request through IDS</li> </ul>	58%	71%

		<ul style="list-style-type: none"> <li>• <i>Get the article online through JSTOR</i></li> </ul>		
<b>III.3</b>	25	<p>[Based on the image in question 24] What would be the fastest way to get your hands on an article from the 2007 volume of Theatre Survey? (Cambridge Journals Online)</p> <ul style="list-style-type: none"> <li>• <i>Go get a print copy from Milne Periodicals on the lower level</i></li> <li>✓ <i>Get the article online through Cambridge Journals Online</i></li> <li>• <i>The item is not readily available. Submit a request through IDS</i></li> <li>• <i>Get the article online through JSTOR</i></li> </ul>	48%	48%
<b>III.3</b>	26	<p>[Based on the image in question 24] What would be the fastest way to get your hands on an article from the 1999 volume of Theatre Survey? (IDS)</p> <ul style="list-style-type: none"> <li>• <i>Go get a print copy from Milne Periodicals on the lower level</i></li> <li>• <i>Get the article online through Cambridge Journals Online</i></li> <li>✓ <i>The item is not readily available. Submit a request through IDS</i></li> <li>• <i>Get the article online through JSTOR</i></li> </ul>	49%	70%
<b>EXTRA</b>	27	<p>Click here to open a new window showing the results of a search in Milne Library's catalog for books on Cuban music. Examine this list and select the book that would help you understand the role of Cuban music both in Cuba and in the United States.</p> <ul style="list-style-type: none"> <li>• <i>Rites of rhythm :</i></li> <li>• <i>The music of Santeria :</i></li> <li>✓ <i>Essays on Cuban music :</i></li> <li>• <i>Gloria Estefan, Cuban-American singing star</i></li> </ul>	45%	48%