ASSESSING THE FOUNDATION: INCORPORATING ASSOCIATION OF COLLEGE AND RESEARCH LIBRARIES INFORMATION LITERACY COMPETENCY STANDARDS INTO THE CURRICULUM

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INTRODUCTION

Following guidelines in the Association of College and Research Libraries Information Literacy Competency Standards for Higher Education, librarians at the University of North Texas have dedicated themselves to integrating library instruction into the curriculum, with the goal of establishing the roots of information literacy at the freshman level. We believe we are laying the foundation for life-long learning by teaching within the curriculum, setting the stage for student-centered learning, and providing technology competency. But are we?

To ensure we are meeting this goal, we developed a strategy of assessment that includes pre-testing (at the beginning of a library instruction session), post-testing (at the end of a library instruction session), and post post-testing (testing at the end of the semester). We test our students using in-house designed web-based software. This software requires students to perform the library skills taught in library instruction sessions, allows them to make comments, and gauges their comfort level in approaching librarians for help. Our assessment is unique; it takes advantage of new testing technologies to truly learn about students' library technology competence. Instead of reporting what they think they know students are actually performing the skills taught. This is essential because “…increasingly, information technology skills are interwoven with, and support, information literacy” (Association of College and Research Libraries Information Literacy Competency Standards).

BACKGROUND

At the University of North Texas, the required freshmen English classes have a standardized syllabus. As the culmination of their second semester of English composition, the students must complete a research paper assignment. Never one to let an opportunity pass us by, we seized the research paper assignment as an opportunity to not only teach the necessary library skills for the research paper assignment, but also to make certain that the library skills related to the ACRL Information Literacy Competency Standards. We asked to have a library orientation as part of the standardized syllabus for the freshman English classes. Once the library orientation was on the standardized syllabus, we had to decide what library skills the students needed in order to be successful in completing their research paper assignment. Our goal was to make the curriculum demands of the class a seamless match with the ACRL Information Literacy Standards and luckily, the basic steps of research for a paper fit nicely within these standards.

We determined that there were four basic tasks we needed to accomplish to help the English 1320 students successfully complete their research paper and lay the foundation for information literacy competency. The four tasks we pinpointed were: 1) overcoming library anxiety; 2) being able to find and ask for help; 3) the ability to find and access materials in the online catalog, and 4) the ability to find and access materials using Academic Search Premier. As a result, we have regular library instruction sessions and teach ACRL Information Literacy skills within our curriculum.

ASSessment REARS ITS UGLY HEAD

Problem solved, right? If only it were that easy. For a while we were satisfied. We had about 80 library instruction sessions for the English freshman class each year, and considered our work with the English department a great success. Then we began to wonder: How do we know that the students are learning the information literacy skills that we are trying to teach them? In the past, most libraries have used paper surveys and tests, many
of which were later adapted to the computer. Some libraries have started to expand their assessment much further to include tools such as Project Standardized Assessment of Information Literacy Skills (SAILS) and Information and Communication Technology Assessment (ICT). Both Project SAILS and ICT work to test institutional initiatives of information literacy skills. These tools, however, require a large amount of time for librarians to administer the tests and for the students to take the tests. And these large scale assessments do not meet the needs of librarians who only get to teach students one-shot instruction.

Most of our students are going to come to the library for instruction one time in their entire college career. While we have a thriving instruction program at the UNT Libraries, we are also fairly representative of the reality of large universities. While we, as librarians, teach a lot of classes; the number of students that actually receive instruction is hit and miss. Our FTE is over 24,000 students, and almost half of these students are transfer students. Our core curriculum is mostly made up of lists of elective choices rather than standardized classes that each student must take. The exception to this is the freshmen English courses (English 1310 and 1320), U.S. History, and Political Science. With this situation, it can be difficult to develop a plan that targets all or the majority of students. Our solution was to target the required English courses.

**Information About our Sample**

Nine hundred students attended a library instruction session for an English class in the fall of 2005. During the spring 2006 semester, 1,475 students attended these sessions. A total of 3,411 students attended one of the English course library instruction sessions held during the academic year. We administered the assessment in 48 classes. The assessment was administered only in 90 minute class sessions because we did not want to lose five minutes of instruction time in the shorter 50 minute sessions. The majority our results were derived from the spring 2006. After assessing for two semesters, we ended up with 499 useable results.

**Assessment Questions**

The assessment is completely anonymous and Institutional Review Board of Human Subject Testing approved. Here are the screen shots of our questions as the students see them:

**Step 1: Assessing a Student’s Willingness to Ask for Help**

![Step 1: Assessing a Student’s Willingness to Ask for Help](image-url)
Step 2: Assessing a Student’s Ability to Ask for Help From a Librarian

Step 3: Assessing the Ability to Perform a Subject Search
Step 4: Assessing the Ability to Search Academic Search Premier

The majority of the students in the English classes are freshmen ages 18-20. Their ability to answer these questions should give us some insight into the abilities of students who attend large mid-level universities such as UNT.

RESULTS OF OUR LIBRARY INSTRUCTION ASSESSMENT

Five questions will be discussed in relation to the results:

1) How comfortable are students asking for help from a librarian?

Since students will not walk into the library knowing everything about research, it is important to assess their willingness, and ability, to ask a librarian for assistance. In the pretest, 40% of students were very willing to ask for help from a librarian; 30.72% were somewhat likely; 17.11% were neutral; 2.47% were not at all likely; and 9.69% had no response. We believe one of the most important aspects of our instruction is presenting ourselves as friendly, knowledgeable, and helpful and even though the pre-test results were largely positive, we were hopeful that they would be even more likely to approach us after the instruction session. We were pleased to find in the posttest that 57.11% were very likely to ask for help from a librarian; 27.84% were somewhat likely; 7.63% were neutral; 0.21 were not at all likely; and 7.22% had no response. These results represent a marked increase in students’ willingness to ask for help.

2) What do students know in terms of basic library and technology skills when they first start college?

According to our results, 68.04% of students were able to find the page on the library website that offers help from a librarian. Only 1.24% of the students were able to perform a subject search in the library catalog. 16.49% of students were able to perform a search in Academic Search Premier.

These results were surprising to us. We knew that students were struggling with using library resources prior to attending library instruction sessions, but how much they are struggling was a big eye opener. Only 6 out of 499 students could successfully perform a subject search in the catalog. It was shocking to discover that so few students could use the catalog!

A student’s ability to perform these basic searches is an essential skill needed for information literacy. These skills are the basic foundational building blocks on which information literacy is built. We know that the overwhelming majority of students use, and feel comfortable with, Google. However, few students use and feel comfortable with the library catalog. The problem is with the limited amount of time we get to teach students all of these information literacy concepts.
Within the limited instruction time we get, we must teach students the basics of searching and embed the importance of using library resources to increase the likelihood of finding quality information. The shorter evaluation time for library resources is contrasted with the amount of time and knowledge needed to evaluate freely-available internet sources.

3) Do students understand some tools better than others?

We wanted to understand this in terms of pre-instruction and post-instruction. Our original hypothesis was that finding this out would point to whether our teaching methods were effective. Since beginning the study, we have expanded that interpretation to include the finding that some tools are much harder for students to understand than others.

After instruction, only 11.13% of students could perform a subject search in the catalog. We found that 49.69% could perform a search in Academic Search Premier. This represents a 9.89% increase in ability to search the catalog, and a 33.20% increase in ability to search Academic Search Premier.

There is not a greater time spent covering Academic Search Premier than the catalog in the library instruction session. One implication of our findings is that catalog may be far less intuitive than Academic Search Premier—a suspicion that multitudes of reference librarians have voiced in various forums throughout the country.

An alarming discovery we made was that students actually decreased in their ability to find the Help page after the instruction. In the pretest, 68.04% found the Help page, while 58.56% found the Help page in the post test. After reflection, we decided the reason for this may be that instead of showing students how to find the Help page directly from the Library Home page, we show them from another page titled Library Services for UNT Off-Campus Users (see image below).
We have learned that, for future sessions we should always go back to the Libraries Homepage and show them the Ask a Librarian link under the Help menu rather than showing them from another page.

This finding points to the necessity of being very clear with students. This may seem obvious, but experts in any field tend to forget what it was like to be at the beginning stages of learning their specialty. Librarians are skilled at quickly scanning pages and finding bits of information. Students, on the other hand, are still learning this skill and can be easily confused when delving into websites.

4) Are some students learning more, differently, or better than others?

One of the variables we are examining is gender. 186 of the students assessed were female; 122 were male; 177 did not say. See table below:

<table>
<thead>
<tr>
<th></th>
<th>Pre-test Catalog</th>
<th>Post-test Catalog</th>
<th>Total Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>1.6%</td>
<td>11.8%</td>
<td>10.2%</td>
</tr>
<tr>
<td>Male</td>
<td>1.6%</td>
<td>8.1%</td>
<td>6.5%</td>
</tr>
</tbody>
</table>

5) Are students retaining what we are teaching?

In the post post-test, 7.8% were able to do a subject search in the catalog; 47.36% could successfully search Academic Search Premier; 73.7% could find the help page. This shows that students are retaining the skills they are learning in the library instruction session.

**Conclusion**

Many critics state that one-shot library instruction sessions are a waste of time and undermine true information literacy efforts. We heartily disagree. While we work to change the climate of many campuses to include information literacy offerings, we also must take into account the reality of the overwhelming majority of campuses. As we have previously stated, the majority of library instruction sessions are one-shot. This is the reality. We have to do our best to reach our students within this framework. Should we work to change the system? Yes, and we hope our research will go a little way towards helping librarians make their case that the system does indeed need changing. But in the meantime, it is clear that every minute we get with students is fundamental to laying the foundation of their being able to use the library to complete their assignments effectively and to build up information literacy skills.

**Further Resources**

ACRL Information Literacy [http://www.ala.org/ala/acrl/acrlstandards/informationliteracycompetency.htm](http://www.ala.org/ala/acrl/acrlstandards/informationliteracycompetency.htm)

Byerly, G., & Downey, G. UNT Assess [http://www.library.unt.edu/assess/](http://www.library.unt.edu/assess/)


Information and Communication Technology Assessment. Available online: [http://www.ets.org/portal/site/ets/menuitem.435c0b5cc7bd0ae7015d9510c3921509/?vgnextoid=b8a246f1674f4010VgnVCM10000022f95190RCRD](http://www.ets.org/portal/site/ets/menuitem.435c0b5cc7bd0ae7015d9510c3921509/?vgnextoid=b8a246f1674f4010VgnVCM10000022f95190RCRD)


