During academic year 2005, the Rutgers University Libraries participated along with seventy-seven other academic institutions in Phase III of the Project for the Standardized Assessment of Information Literacy Skills (Project SAILS). Participants administered a measurement instrument to students and provided test results and student information to project managers. The purpose of Project SAILS “has been to develop an instrument for programmatic level assessment of information literacy skills that is valid and thus credible to university administrators and other academic personnel. We envisioned a tool to measure information literacy that:

- Is standardized
- Contains items not specific to a particular institution or library
- Is easily administered
- Has been proven valid and reliable
- Assesses at institutional level
- Provides for both external and internal benchmarking

With such a tool, we will be able to measure information literacy skills, gather national data, provide norms, and compare information literacy measures with other indicators of student achievement. Armed with this tool, libraries that utilize SAILS will be able to document information literacy skill levels, establish internal and peer benchmarks of performance, pinpoint areas for improvement, identify and justify resource needs, assess and demonstrate effect of changes in their instructional programs. This tool will enable librarians to clarify for themselves and their institutions what role, if any, information literacy plays in student success and retention.”

Project SAILS is headquartered at Kent State University, is endorsed by the Association of Research Libraries, and is funded by a grant from the Institute of Museum and Library Services.

The SAILS Instrument

The SAILS instrument is based on item-response theory: questions for each skill set were created for different levels of difficulty, and analysis involves looking at the pattern of responses on the same standard or skill set. First and foremost, the rankings compare cohorts, not individuals. Therefore, no score has been established indicating mastery of a skill set.

SAILS cannot provide an overall information literacy score because one construct may not be related to another, e.g., does the ability to build an adequate search strategy equal the ability to critically analyze a journal article? If scores do become possible, they will measure individual skill sets and not compare sets to each other.

**Rutgers University Libraries Activities**

Eileen Stec, Instruction and Outreach Librarian, was appointed Principal Investigator for RUL, preparing all Human Subjects Review process documents, attending three Project SAILS meetings at annual and mid-winter meetings of the American Library Association (ALA) during 2004-2005, and procuring demographic data from the Office of Institutional Research for the 100 SAILS participants. Jeanne Boyle, Associate University Librarian for Public Services and Communications, facilitated and oversaw major aspects of the Libraries participation in Project SAILS.

Faculty Collaboration:
- An email was sent from University Librarian Marianne Gaunt to the Deans of Livingston, Cook and FAS requesting approval for student participation in SAILS.
- Cook Faculty Marie Siewierski and Sherice Richardson each brought a section from the *Ecology, Evolution, and Natural Resources* course.
- Four evenings at Douglass library only brought four to five students from Cook College.
- English Writing Program Director Kurt Spellmeyer distributed 25 packets to ENG 101 instructors.) Eileen Stec and Jackie Mardikian spent ten evenings at the Alexander Library. Four students from ENG 101 participated.
- Jeris Cassel and other librarians assessed four sections of Livingston College’s Mission Course *Building Community*.

Marketing and Computing Interface:
- Shaun Ellis, Libraries Web Developer, created the PHP interface required for online administration of the SAILS instrument
- Ken Kuhl, Lucye Millerand, and Jeanne Boyle designed and distributed promotional material and provided participant prizes.

**Rutgers Results**
Rutgers students tested were undergraduates over seventeen years old who had earned fewer than twenty-three credits as of the Fall 2004.

Results for Rutgers students were analyzed and reported for all skills sets except set eight, which had fewer than thirty students tested. Questions were randomized from the question bank, and students did not answer all questions nor was each student tested on every skill set.

The average student at Rutgers University performed on all standards at about the same level as the average student from all institutions combined.

The sixty-seven academic institutions that participated in this phase included six of Rutgers peer institutions:
- University of California, Irvine
- University of Colorado at Boulder
- University of Kansas
- University of Maryland (College Park)
- Syracuse University
- University of Texas at Austin

Where Does Project SAILS Go From Here?

Project SAILS researchers view the instrument as only one tool used for information literacy assessment, and should be used in concert with additional methodology. Following the debriefing at the June 2005 ALA conference, the SAILS researchers will be consulting with the Educational Testing Service (ETS) about possible collaboration. ETS has been developing an information and communication technology instrument. SAILS will not, however, give away their test item library. Over the summer, SAILS researchers will conduct comparison tests with performance-based assessments and develop additional test items for SAILS. The SAILS researchers discovered that there are too many easy questions in the data bank. Additional questions at a higher level of difficulty will be developed.

Although the three-year development track and IMLS grant has finished, Project SAILS will continue. The architecture supporting the instrument will be redesigned over the next year - 2005-2006 - to increase stability, incorporate changes requested by the participating colleges, and ease administration, i.e., customize labels for print administration, payments via credit-card or invoice, and provide real-time statistics from web-based tests.

Over the next year, comparisons will be made between student-reported demographic data and that reported through institutional research departments. If there is sufficient validity between the two, the instrument may rely on self-reported information in the future.
Many schools have requested pre-test, post-test ability through SAILS as a measure of program effectiveness.

The SAILS staff plans to resume test administration as early as spring 2006 or by the ALA annual 2006 meeting.

The SAILS wish list includes creation of additional discipline-specific assessments.

**Recommendations for the Rutgers University Libraries**

Mini-presentations to the faculty who participated in SAILS, library faculty and staff, and the annual undergraduate teaching conference are recommended. Distribution in Library and campus print media should be considered, as well as contact with academic departments preparing for accreditation reviews.

SAILS should not be the only tool used to assess undergraduate information literacy. As previously indicated, no score has been established indicating mastery of information literacy. It is important to continue our efforts to assess instruction effectiveness in this area and sustain those efforts in the consciousness of university academic decision makers.

**How Other Libraries Have Leveraged SAILS Participation**

Glendale Community College, AZ

1. GCC was mandated by their regional accrediting body to satisfy an information literacy requirement. Consequently, a library representative was placed on the College’s assessment committee.

2. The SAILS results called attention to the at-risk students at GCC, and the realization that information literacy is a curriculum underpinning missing for success. The current information literacy course is non-credit; the College is considering a credit-bearing course for the future.

Samford University, AL.

1. Professors wanted feedback on the bibliographic instruction sessions conducted by the librarians. Poor SAILS results provided a rationale to teaching faculty on why the librarians teach the specific material covered in sessions.

2. Another result of low scores of citation skills was reaching out to the campus writing center. The writing center began tutoring students to improve and increase source documentation.
3. The judicial board joined in the conversation indicating that they want help dealing with student plagiarism.

4. As a result of SAILS, the institutional research office wants to participate in analyzing current and future SAILS results.

5. The librarians learned to do face-to-face, mini-presentations of SAILS results to other university departments, not full results. These presentations illuminated the potential for further steps toward IL.

University of Western Ontario, Canada

1. The group had poor participation in Phase II (137 students). As campus (academic department) interest increased, Phase III participants numbered 1,300.

2. Overall, interest in accountability has increased at Western Ontario, and SAILS fits in well with that interest.

3. In Phase III, there was a sufficient number of participants allowing separation of the group into specific cohort groups for further analysis.

Utah State University, UT

1. The English department approached the library for assistance in showing assessment required for accreditation. SAILS results were combined with the department’s essay scoring and citation analysis already in place.

2. On the negative side, instrument administration logistics were difficult. There was no computer lab large enough to accommodate a large number of students, so paper tests were used. (Too many hours of administrivia were necessary to accomplish this.)

3. SAILS was used as a pre- and post-test, beginning at the start of ENG 1010, and at the completion of ENG 2010 - two required, consecutive general education requirements. Librarians provided “one shot” instruction in each course. No statistical difference was found between the two groups, showing that no information literacy learning took place. Surprisingly, the result was an increased desire for the English department to work more (not less) with the library.

Washburn University, KS

1. Shared the SAILS results with the Library’s Friends group.

2. Shared SAILS results with academic departments.
3. Began collaborating with a local High School Librarian; developed a grid of common information literacy standards to see where the High School and University could collaborate more and ease students’ transition into higher education.

4. Phase III participation is being used to evaluate students completing an information literacy skills course. Promised to report results to the SAILS email list.

5. Problems discovered after Phase II, among the Washburn U students: problems evaluating and citing sources, problems with database mechanics.