

## SAILS Experience: Science Information Literacy Project

### SPRINGFIELD COLLEGE

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### Science Information Literacy Grant

- Embedding IL into upper-level science courses (five per semester)
- Each class focusing on different IL objective(s)
- Pre and post-semester test to determine improvement in any/all IL skills within EACH course

### What is Project SAILS?

- The Standardized Assessment of Information Literacy Skills (SAILS) is a knowledge test with multiple-choice questions targeting a variety of information literacy skills.
- Questions on the SAILS test are based directly on the ACRL's *Information Literacy Competency Standards for Higher Education*.
- The project aims to measure information literacy skills, gather national data, provide norms, and compare information literacy measures with other indicators of student achievement. (<https://www.projectsails.org/sails/history.php>)

### SAILS Test Items

- The SAILS test questions are derived from four of the five ACRL Standards, Outcomes and Objectives (ACRL Standard 4 is not included in the SAILS test).
- Project SAILS also arranged pragmatic groupings of the ACRL objectives into eight skill sets. The test items span the eight SAILS skill sets and the four ACRL standards.
- Students respond to different sets of items, with some common items shared across the individual tests.

### Number of Items in Each ACRL Standard

ACRL Standard	Number of Items
Standard 1: Determines the nature and extent of the information needed	33
Standard 2: Accesses needed information effectively and efficiently	58
Standard 3: Evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system	18
Standard 4: Uses information effectively to accomplish a specific purpose	0
Standard 5: Understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally	25

### Number of Items in Each Skill Set

SAILS Skill Set	Number of Items
Developing a Research Strategy	26
Selecting Finding Tools	12
Searching	25
Using Finding Tool Features	9
Retrieving Sources	13
Evaluating Sources	16
Documenting Sources	14
Understanding Economic, Legal, & Social Issues	19

### SAILS Format & Reliability

- 45 multiple-choice questions
- Randomized (134 total questions)
- Online or paper administration
- Anonymous
- Monitored or independent
- Reliability > 0.80
- Validity: medium correlation with ILT
- IRT measurement model (scores based on a combination of item difficulty and student performance)

### SAILS Report

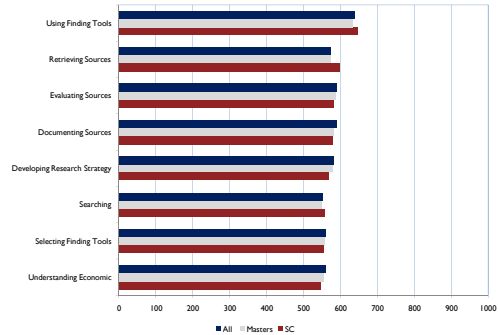
- Average student performance by skill set and ACRL standard
- Comparison data
  - All institutions
  - Peer institutions (associates, masters, etc.)
- Breakouts within each skill set
  - Class standing
  - Major
  - Two customized categories

### Tables & Charts

Figure 3.1 Data Table Showing Overall Scores Across All SAILS Skill Sets

SAILS Skill Sets	Springfield College (n=248)	Institution Type: Masters (n=6,749)	All Institutions (n=39,640)
Developing a Research Strategy	568 ±10	577 ±2	582 ±1
Selecting Finding Tools	553 ±15	556 ±3	558 ±1
Searching	556 ±14	549 ±2	552 ±1
Using Finding Tool Features	646 ±18	634 ±4	637 ±2
Retrieving Sources	597 ±21	572 ±5	573 ±2
Evaluating Sources	581 ±11	587 ±2	589 ±1
Documenting Sources	479 ±10	583 ±3	590 ±2
Understanding Economic, Legal, and Social Issues	546 ±11	488 ±2	559 ±1

### Results by Skill Set



### Benefits of SAILS

- Online format
- One class period (≈ 30 minutes)
- Report includes national benchmark data
- Validity and reliability
- Cost (\$3 per test, \$2,000 cap)
- Responsive administrators
  - Adjusted our report

### Drawbacks of SAILS

- No individual data
  - Cannot track performance over time
- Not conducive for small sample sizes
  - No data available for groups <10
  - No valid data available for groups <50
- Report availability
  - Only January and June
- No customized test questions
- No customized feedback for students