

GE SLO S5: Information Literacy

Randomly selected GE 1000, GE 202x, and capstone course sections

Semester: FALL 2013

REPORT DATE: 1/9/2014

Information literacy in GE 1000, GE 202x, and capstone courses is assessed through administration of the Standardized Assessment of Information Literacy Skills (SAILS) test by the School of General Studies, Kean University Library, and Office of Accreditation and Assessment. SAILS is an online test with 45 multiple-choice questions. Scoring is based on the item response theory (IRT) and, in particular, the one-parameter Rasch model. Scores are placed on a scale that ranges from 0 to 1000. SAILS questions are based on the Association of College and Research Libraries' Information Literacy Competency Standards for Higher Education. SAILS measures the following eight skills:

- Developing a Research Strategy
- Selecting Finding Tools
- Searching
- Using Finding Tool Features
- Retrieving Sources
- Evaluating Sources
- Documenting Sources
- Understanding Economic, Legal, and Social Issues

Testing will continue in the Spring 2014 semester, with additional Capstone and STEM GE 202x participants.

Number of students:

GE 1000 – 141 students

GE 202x – 139 students

Capstone – 62 students

Number of sections:

GE 1000 – 6 sections

GE 202x – 8 sections

Capstone – 4 sections

Mean scores overall:

SAILS Skill Sets	Scores*
Developing a Research Strategy	472 ±14
Selecting Finding Tools	463 ±18
Searching	470 ±16
Using Finding Tool Features	488 ±22
Retrieving Sources	474 ±20
Evaluating Sources	460 ±16
Documenting Sources	462 ±20
Understanding Economic, Legal, and Social Issues	454 ±17

* Overall scores for Kean students (combined GE 1000, GE 202x, and Capstone)

Distribution of Scores:

SAILS skill set 1: Developing a Research Strategy			
	GE 1000	GE 202x	Capstone
# participants	141	139	62
Average score	457	470	514
Standard error	±20	±23	±29
Group average score range	437-477	447-493	485-543

SAILS skill set 5: Retrieving Sources			
	GE 1000	GE 202x	Capstone
# participants	141	139	62
Average score	456	457	562
Standard error	±28	±31	±45
Group average score range	428-484	426-488	517-607

SAILS skill set 2: Selecting Finding Tools			
	GE 1000	GE 202x	Capstone
# participants	141	139	62
Average score	428	468	531
Standard error	±28	±29	±37
Group average score range	400-456	439-497	494-568

SAILS skill set 6: Evaluating Sources			
	GE 1000	GE 202x	Capstone
# participants	141	139	62
Average score	447	451	509
Standard error	±25	±25	±37
Group average score range	422-472	426-476	472-546

SAILS skill set 3: Searching			
	GE 1000	GE 202x	Capstone
# participants	141	139	62
Average score	443	468	532
Standard error	±24	±26	±31
Group average score range	419-467	442-494	501-563

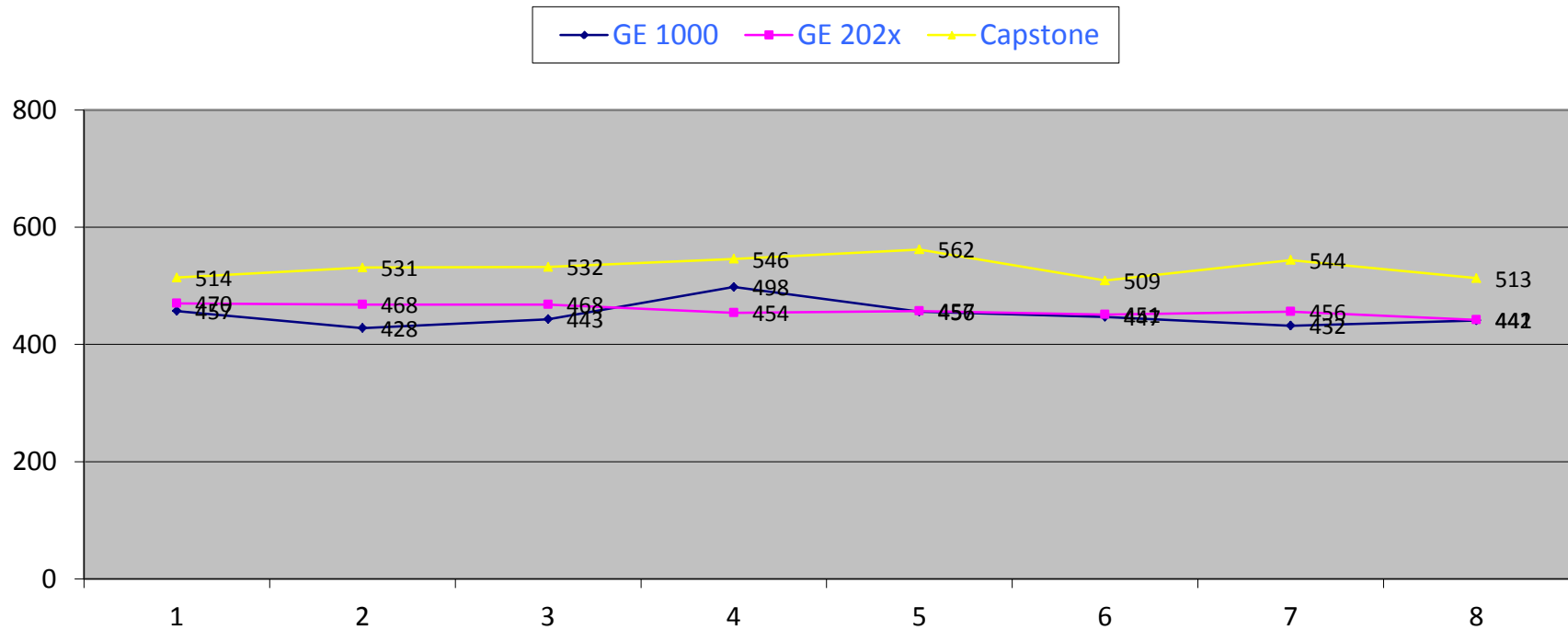
SAILS skill set 7: Documenting Sources			
	GE 1000	GE 202x	Capstone
# participants	141	139	62
Average score	432	456	544
Standard error	±33	±31	±46
Group average score range	399-465	425-487	498-590

SAILS skill set 4: Using Finding Tool Features			
	GE 1000	GE 202x	Capstone
# participants	141	139	62
Average score	498	454	546
Standard error	±33	±38	±48
Group average score range	465-531	416-492	498-594

SAILS skill set 8: Understanding Economic, Legal, and Social Issues			
	GE 1000	GE 202x	Capstone
# participants	141	139	62
Average score	441	442	513
Standard error	±25	±27	±34
Group average score range	416-466	415-469	479-547

Distribution of Scores

Kean University SAILS Results Fall 2013



Project SAILS collects data for the following information literacy skill sets, with data corresponding to the numbered items on the horizontal axis:

- | | |
|------------------------------------|--|
| 1 = Developing a Research Strategy | 5 = Retrieving Sources |
| 2 = Selecting Finding Tools | 6 = Evaluating Sources |
| 3 = Searching | 7 = Documenting Sources |
| 4 = Using Finding Tool Features | 8 = Understanding Economic, Legal, and Social Issues |

Discussion/Action/Closing the Loop:

Discussion

According to the results of the Fall 2013 SAILS test administration:

- Capstone scores are higher than GE 1000 and GE 202x scores for all eight information literacy skills.
- GE 202x scores were lower than GE 1000 scores for one skill area: Using Finding Tool Features.
- GE 202x scores were barely greater than GE 1000 scores for three skill areas:
 - Retrieving Sources
 - Evaluating Sources
 - Understanding Economic, Legal, and Social Issues
- The group differences, while important, are meaningfully different in only four instances: the difference between Capstone and GE 1000/GE 202x scores for four skill areas (Searching, Retrieving Sources, Documenting Sources, and Understanding Economic, Legal, and Social Issues). In all other instances, the large standard errors found within groups contributed to overlap among the group average score ranges, rendering the scores not meaningfully different from each other.
- The large standard errors are most likely due to small sample size and large variability of scores.
- A comparison by SAILS of Kean University's mean scores to the institution-type benchmark mean finds that Kean students had the least amount of difficulty with the Documenting Sources; Understanding Economic, Legal, and Social Issues; and Searching skills.
- A comparison by SAILS of Kean University's mean scores to the institution-type benchmark mean finds that Kean students struggled most with Selecting Finding Tools, followed by Using Finding Tool Features, Retrieving Sources, and Developing a Research Strategy.
- Fall 2013 Capstone scores are slightly higher than Capstone scores collected in 2011-2012.
- In 2010-2011, GE 202x scores were lower than GE 1000 scores for one skill: Developing a Research Strategy. GE 202x scores are higher than GE 1000 scores for this particular skill in Fall 2013.
- Previous "closing the loop" actions had focused on creating assignments (i.e., the Annotated Bibliography Assignment with Information Literacy Rubric), online tutorials, and handouts to help students improve the following skills: Evaluating Sources and Developing a Research Strategy. For Fall 2013, these two areas are no longer ranked by SAILS as being the most difficult for Kean students (when compared to how students at other colleges perform).

Recommendations for Closing the Loop Actions

- Librarians and faculty teaching GE 202x should develop ideas for embedding existing online information literacy tutorials and research guides into the GE 202x course (for instance, through Blackboard).
- Librarians and faculty teaching GE 202x should consider “flipping the classroom” strategies that will require students to complete the existing online information literacy tutorials and foster additional active learning experiences as part of library instruction programming.
- Librarians and faculty teaching GE 202x should develop and implement activities that will help students improve the Selecting Finding Tools skill.
- The Library should pursue outreach to the academic departments in an effort to map information literacy to the curriculum beyond GE courses (i.e., in 3000- and 4000-level courses that students will take before the capstone).
- The Library should monitor the upcoming revisions to the Information Literacy Competency Standards for Higher Education, which will incorporate threshold concepts and metaliteracy and will hopefully make it easier to work with faculty on integrating information literacy into the curriculum in GE as well as major courses.

Listed below are the specific courses and sections tested using SAILS during the Fall 2013 semester (from Linda Cifelli):

Transition to Kean

**GE 1000:18
GE 1000:21
GE 1000:28
GE 1000:34
GE 1000:38
GE 1000:49**

Research and Technology

**GE 2021.04
GE 2021.05
GE 2022.04
GE 2022.05
GE 2023.03
GE 2023.05
GE 2024.03
GE 2025.01**

Capstone

**PSY 4940.K1
MATH 4890.02
MGS 4999.01
EDUC 4000.02**