



Understanding Information Deficits Among Pitt's First-Year Students



Background:

For students to succeed they need to be able to navigate the information landscape, both in and out of the classroom environments. Academic libraries help students succeed by supporting the development of information literacy skills. The concept of information literacy (IL) covers not only finding and locating relevant and credible information, but also in understanding how this information can be used and shared responsibly.

The HEDS Research Practices Survey, used by over 80 colleges and universities, assesses undergraduate students' research experiences and their skills in finding, evaluating, and citing information. The University Library System (ULS) has administered HEDS to incoming first-year students and seniors at the University of Pittsburgh's regional campuses since 2014.

Each year, the ULS provides over 65 library sessions to students enrolled in FP0001: Academic Foundations on the Oakland campus. These sessions introduce foundational library and information literacy skills, similar to those surveyed in HEDS, to first-year students through a pre-class tutorial and in-class instructional session.

Problem Statement:

Our aim in this project was to understand levels of IL skills of incoming students, use the data to design effective and targeted IL training for students, and test the effectiveness of that training.

Method:

At the beginning of the Fall term, the HEDS survey is distributed via email to all first-year and senior students at the regional campuses. In 2017 HEDS was administered towards the end of the Fall semester in order to measure impacts of our first-year library-led IL training. Through analysis of the results, changes can be implemented in instruction sessions, focusing on the areas that students have low scores.

Prior assessment of FP0001 class activities showed that students were comfortable locating information but lacked more advanced skills of information evaluation and use. In 2017 we changed the focus of the pre-class activity to include more advanced IL skills. A sample of tutorial responses were scored against a rubric developed using the ACRL's Framework for Information Literacy in Higher Education to gauge the levels of competency and inform subsequent instruction development.



Table 1: Comparison of HEDS IL scores for Fall 2016 (pre-instruction testing) and Fall 2017 (post-instruction testing) of Pitt students (Regional campuses only). We note a 2.5-point improvement for First Year students and just over 3-point improvement for Seniors.

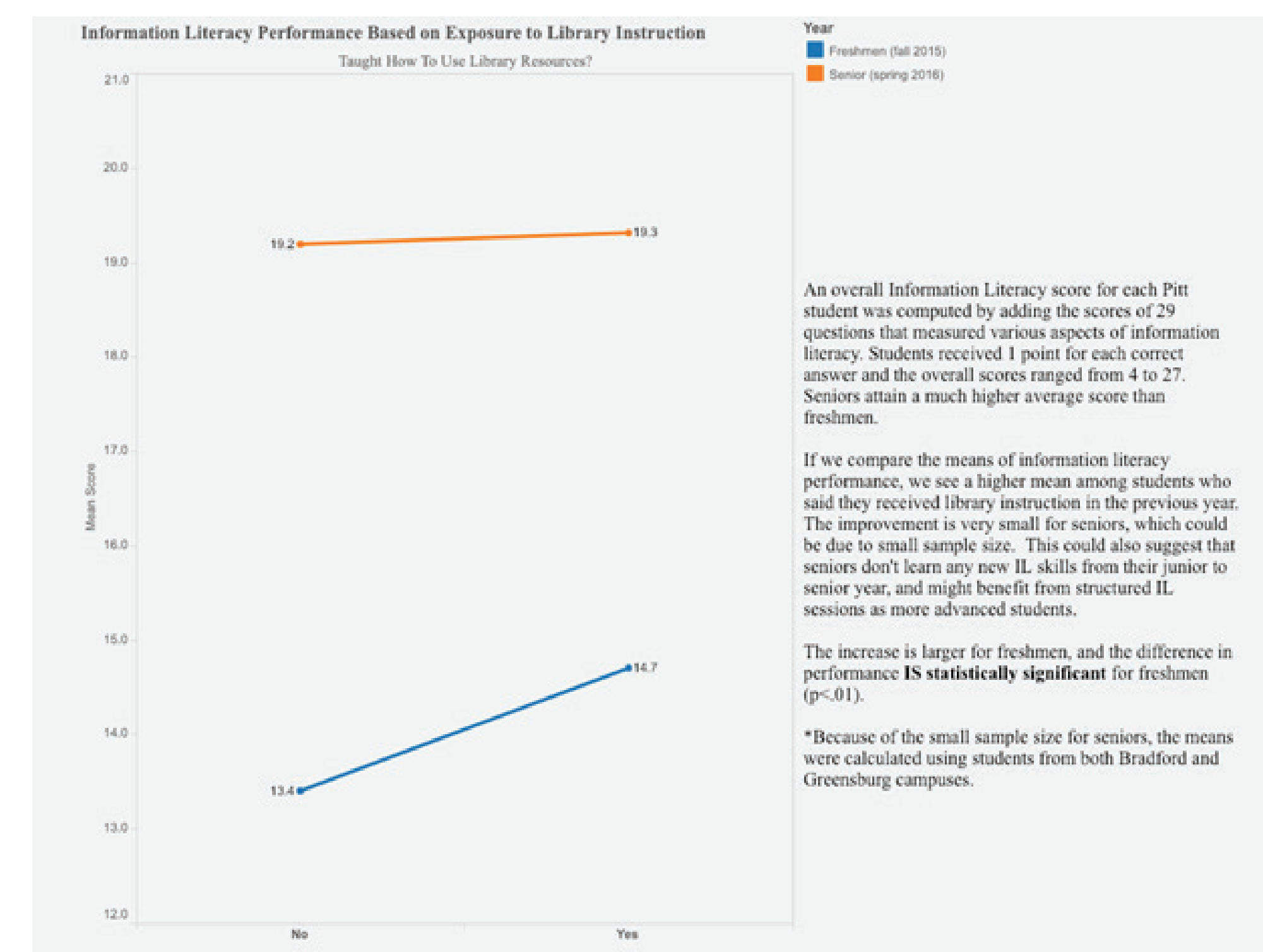


Table 3

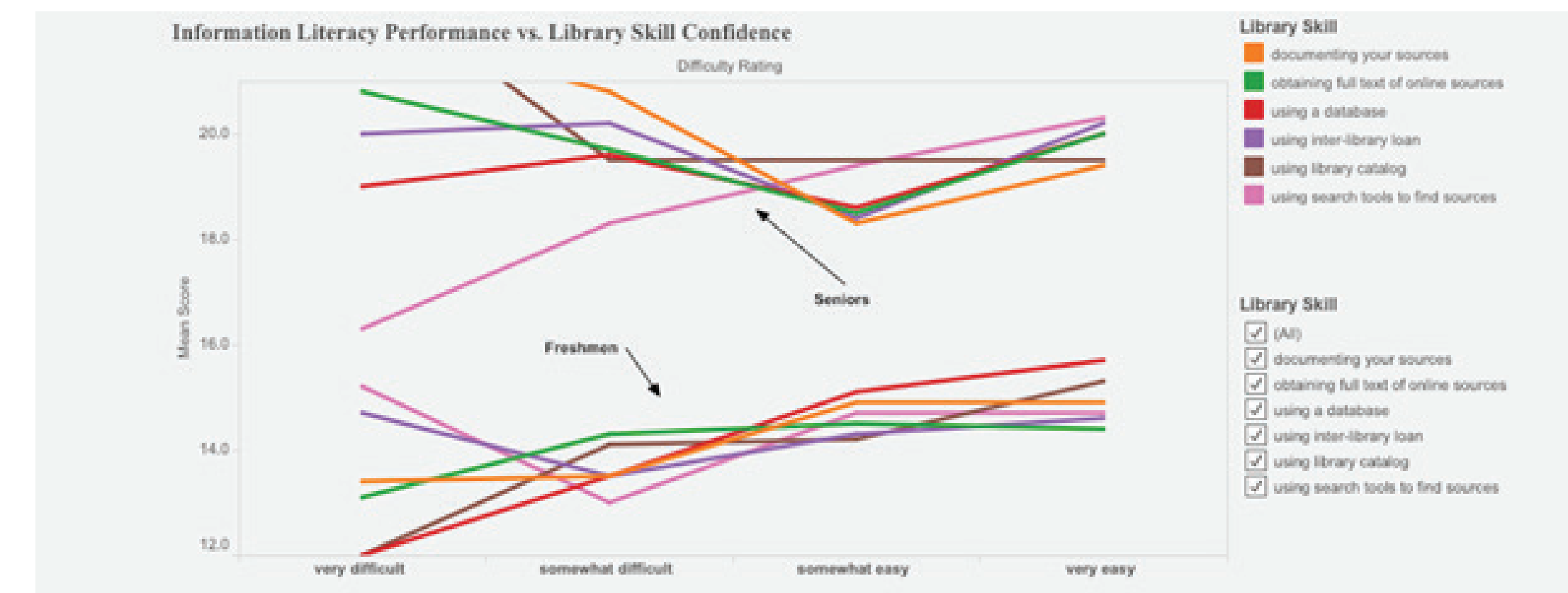


Table 2: The chart above shows the relationship between Pitt students' confidence levels in their IL skill levels and mean scores for IL testing (the score range was between 4 and 27 points; with 28 being a max possible score). (2016 HEDS administration)

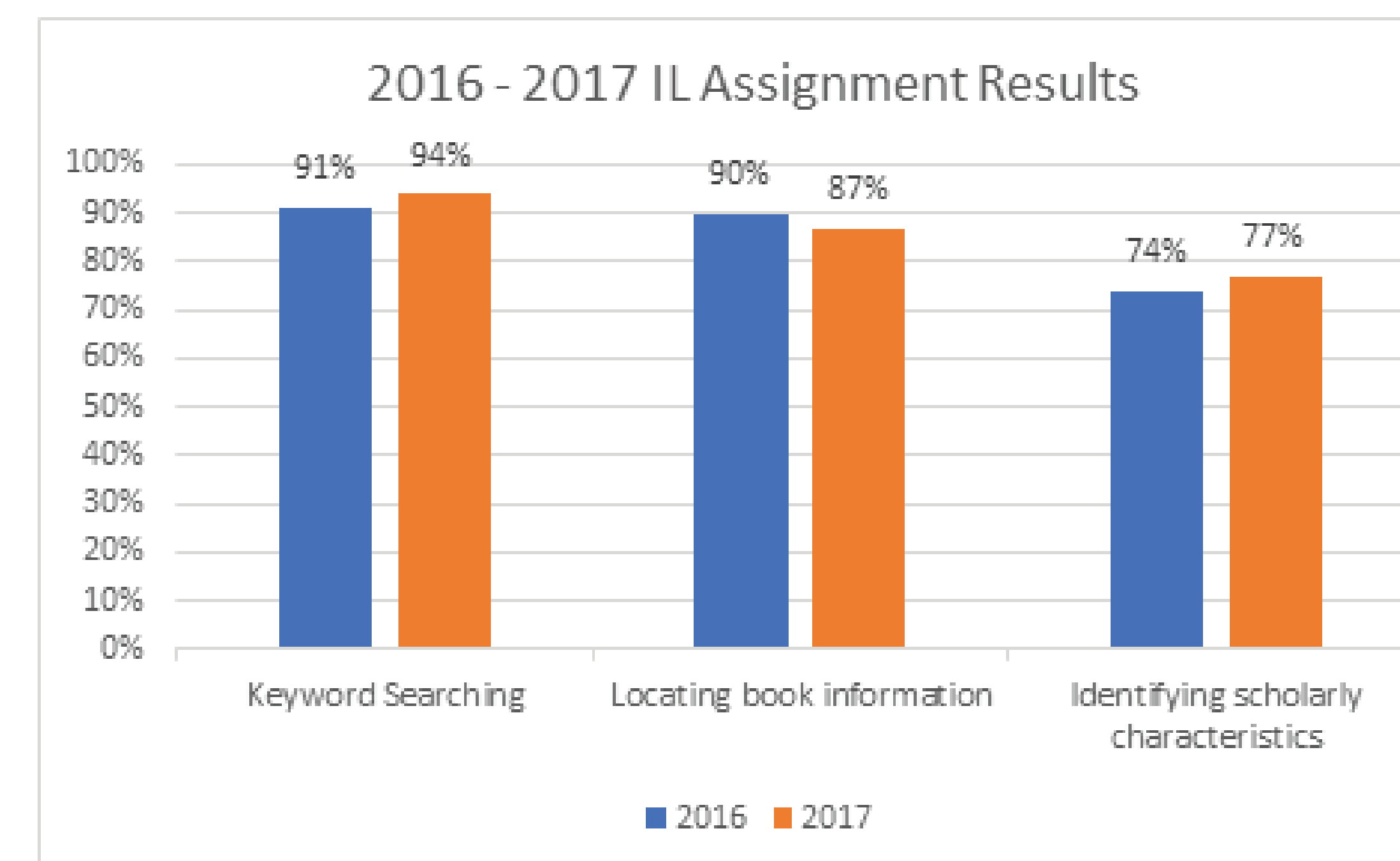


Table 4: The chart above shows comparisons in rubric data for 2016 (n= 200) and 2017 (n=210).

2016 measurement included if students found a book on the shelf. 2017 measurement decrease included locating a book record in the catalog and identifying citation information.

2016 measurement included if students could identify at least 3 scholarly characteristics of an article after receiving in-class instruction. This topic was introduced in the 2017 pre-class tutorial and measurement increase included if students properly identified an article as scholarly or non-scholarly and provided at least 2 characteristics to justify this decision.



Findings:

The averages for HEDS testing across all skills were around 50% for first-year students. Seniors fared better with an average of 65% (Table 1). Those surveyed showed inability to differentiate between types of information presented to them and how to use them effectively in their coursework. The HEDS data shows that higher knowledge confidence in first-year students does not result in correct answers (Table 2). However, we see a difference among scores of first-year students depending on whether they had a previous library instruction session. This relationship does not hold true for seniors (Table 3).

A sample of scored FP0001 assignments completed before class instruction in 2017 showed that 77% were able to identify an article as scholarly or non-scholarly and provide two characteristics to justify this decision. A similar metric was used in 2016 for an assignment after the class instruction session, finding the only 74% of students were able to identify three characteristics of a scholarly article (Table 4).

Future Considerations:

The low levels of IL skills of our incoming students (and only modest improvements while at Pitt) are a concern that should be tackled collaboratively by both academic instructors and librarians by incorporating information literacy into the course curriculum. In particular, librarians can assist instructors in designing assignments that evaluate information skills.

In Fall 2019 the HEDS survey will be extended to include Oakland first-year students and the results will be shared with academic leaders on campus.

Assessment of the Fall 2018 Academic Foundations courses will take place this spring and will be used to inform Fall 2019 lesson development.

Citations:

HEDS Research Practices Survey. <https://www.hedsconsortium.org/heds-surveys/>

University Library System. Assessment Resources. <https://library.pitt.edu/assessment-resources>

Diana Dill
Leslie Poljak
Berenika Webster

University Library System (ULS)
University of Pittsburgh, Pittsburgh, PA 15260
library.pitt.edu/assessment