

University Library System

HEDS Research Practice Survey
Fall Term academic year 2015/16
Greensburg, Bradford, and Titusville
Freshmen and Sophomore Cohorts

Executive Summary

Higher Education Data Sharing Consortium, or HEDS Consortium, is an independent not-for-profit corporation which specializes in administering six different kinds of surveys: the HEDS Alumni Survey, the HEDS First Destination Survey, the HEDS Research Practices Survey, the HEDS Senior Survey, the HEDS Teaching Quality Survey, and the HEDS Sexual Assault Campus Climate Survey.

At the beginning of the Fall term of academic year 2015/16 a total of 579 Freshman and Sophomore students from Bradford, Greensburg, and Titusville campuses took the HEDS Research Practices Survey. This survey is part of a three year test-run that started in Fall 2014 meant to decide whether we want to replace the previously used SAILS survey. The survey collected information on the research experience of the students and assessed their information literacy skills. The questions are based on the Association of College and Research Libraries' five information literacy competency standards. The Freshmen's participation in the survey was voluntary and a few material incentives were used to increase the response rate.

This report comprises three parts:

- Part 1 is an in-depth analysis of the HEDS survey administered to Freshmen at University of Pittsburgh's Bradford, Greensburg, and Titusville campuses in September 2015, along with comparing their results to the HEDS baseline.
- Part 2 focuses on the comparisons of the performance of the Freshmen surveyed in September 2014 against Sophomores surveyed in September 2015. Since it is the same cohort, the numbers show how their performance improved after one year at Pitt.
- Part 3 contrasts the gap between Pitt's Freshmen and HEDS benchmark and Pitt's seniors at HEDS benchmark in order to assess whether the gap is changing or stays the same.

Major Findings: Part 1

- The overall SAT scores of students at Greensburg, Bradford, and Titusville place them close to the bottom of the rank of universities included in the HEDS sample. The information literacy levels at these campuses are slightly but consistently below the sample baseline.
- Admitted Freshmen arrive at Pitt with a much higher overconfidence than their Freshmen counterparts in the HEDS sample. Approximately, one in two students at Pitt think that research skills are easy but used them poorly, in contrast to the baseline of one in four students.
- 'Finding sources' skills show a small negative difference from the benchmark, 'citing sources' skills show a medium negative difference from the benchmark, and 'evaluating research and sources skills' show a large negative difference from the benchmark.
- The areas with least experience are: obtaining materials through ILL, using databases, and using the library catalog.

- Five most difficult skills for Pitt Freshmen are: developing your main argument; knowing how to cite a source; documenting your sources; expressing your ideas clearly; organizing your materials into a logical and unified structure.
- Five easiest skills for Pitt Freshmen are: using an internet search engine; using search tools to find possible sources; selecting your topic; using evidence from your research to support your argument effectively; deciding what information from your sources to integrate into your project.

Major Findings: Part 2

- In all instances, with two exceptions, sophomores performed better than freshmen.
- Significant improvement was recorded in the following areas: defining a peer-reviewed journal; generating additional sources on a given topic; determining when citations are needed.
- Areas that show minimal improvement are: deciding the scholarly value of different sources and interpreting citations.

Major Findings: Part 3:

- There is a marked improvement in IL skills performance between University of Pittsburgh Regional Campuses freshman and senior student cohorts.
- While both (freshman and senior) Pitt cohorts perform below the sample averages, there is a statistically significant improvement in the size of the gap. This finding may indicate that Pitt students derive a greater value from their time at Pitt than students in sample institutions derive from their experiences at their institutions.

Table of Contents

SAMPLE	5
HEDS SAMPLE	5
UNIVERSITY OF PITTSBURGH SAMPLE	5
PART 1: PITT FRESHMEN COHORT VS. HEDS BENCHMARK	6
A. RESEARCH ATTITUDES AND PRACTICES.....	6
C. RESEARCH TERMS AND STRATEGIES - SKILLS SUMMARY	27
PART 2. SOPHOMORES FY16 VS. FRESHMEN FY15	30
INFORMATION LITERACY PERFORMANCE	30
PART 3. FRESHMEN VS. SENIORS. CLOSING THE COHORT GAP	34
APPENDIX	38
RESEARCH PRACTICES QUESTIONNAIRE	38

Sample

HEDS Sample

	# of Valid First-Year Respondents	Response Rate	SAT
Carleton College	248	58%	2115
Washington and Lee University	150	35%	2075
Trinity College	200	32%	1860
Centre College	264	70%	1830
Juniata College	175	48%	1720
Hampden-Sydney College	39	13%	1620
Hartwick College	51	16%	1650
Principia College	87	93%	1590
St. John Fisher College	212	33%	1565
University of Pittsburgh	501	49%	
University of Pittsburgh - Greensburg			1500
University of Pittsburgh - Bradford			1430
University of Pittsburgh - Titusville			1310

University of Pittsburgh Sample

A total of 579 students from Pitt took the survey, 501 (86.5%) Freshmen and 78 (13.5%) Sophomores. The response rate was 49%.

Campus	Freshmen	Sophomores	Total
Bradford	158	33	191
	83%	17%	100%
	32%	42%	33%
Greensburg	257	32	289
	89%	11%	100%
	51%	41%	50%
Titusville	86	13	99
	87%	13%	100%
	17%	17%	17%
Pitt Total	501	78	579
	87%	13%	100%
	100%	100%	100%

Part 1: Pitt Freshmen cohort vs. HEDS benchmark

A. Research Attitudes and Practices

1. When you did research in the most recent year, how often did you use resources from the following kinds of libraries? This includes visiting the library in person, using the library website, or accessing online databases and journals provided by the library.

Pitt Freshmen tend to prefer the university library over the public one and this tendency is higher than the baseline.

Figure 1. Using the public library

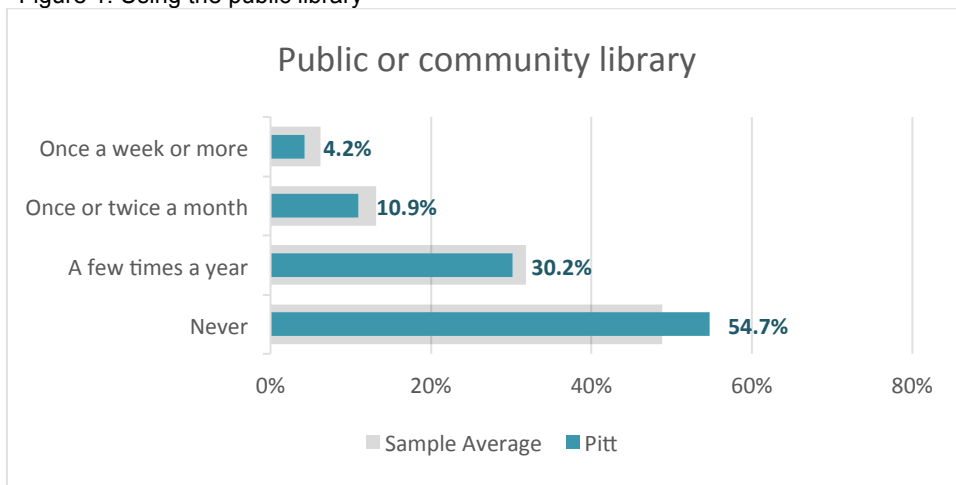
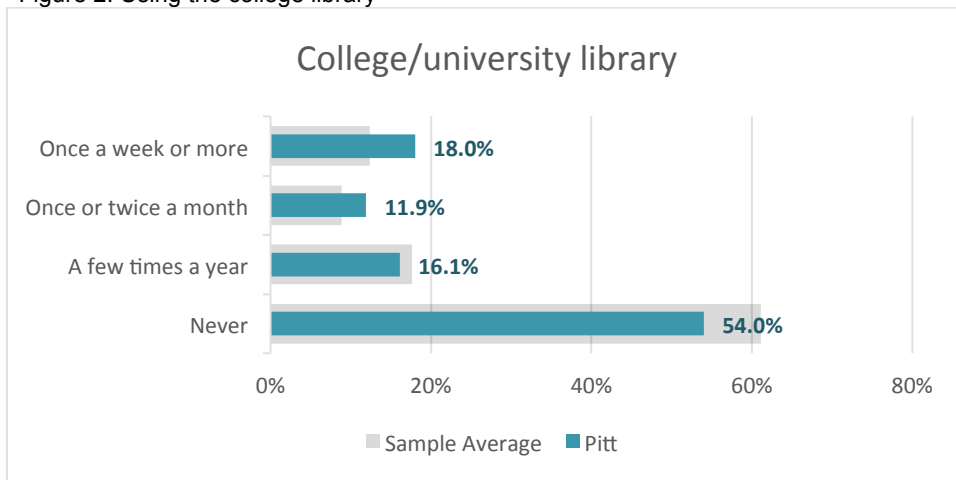


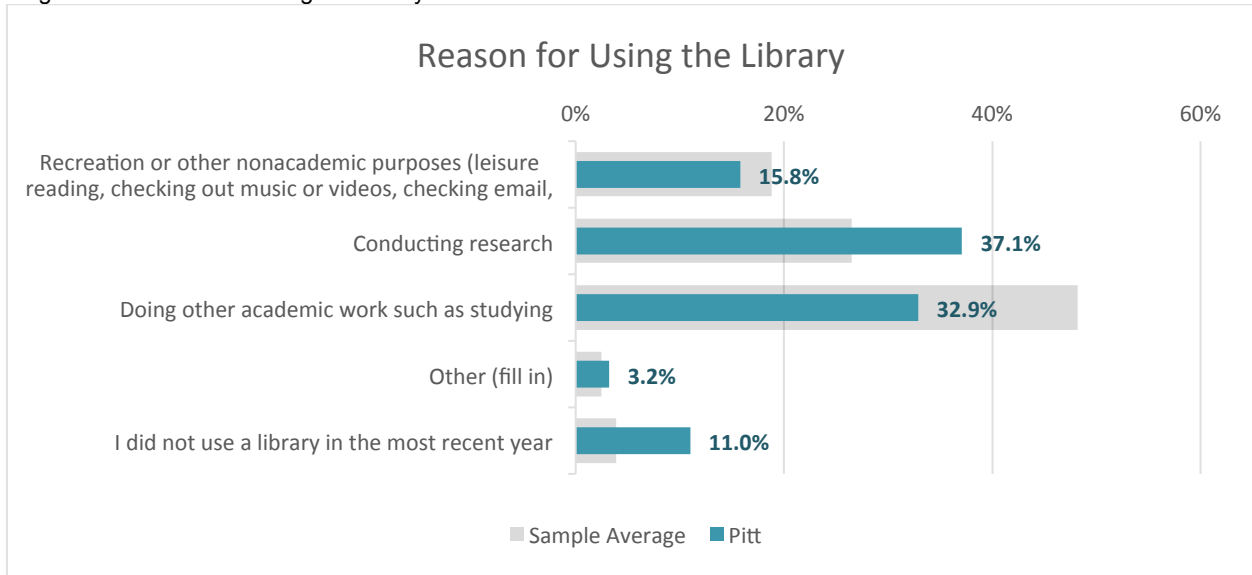
Figure 2. Using the college library



2. In the most recent year, what was your MOST FREQUENT reason for using a library?

The main reasons our Freshmen use the library are primarily divided between conducting research and doing other academic work, such as studying. Conducting research is a more prevalent reason at Pitt than at other institutions in the sample.

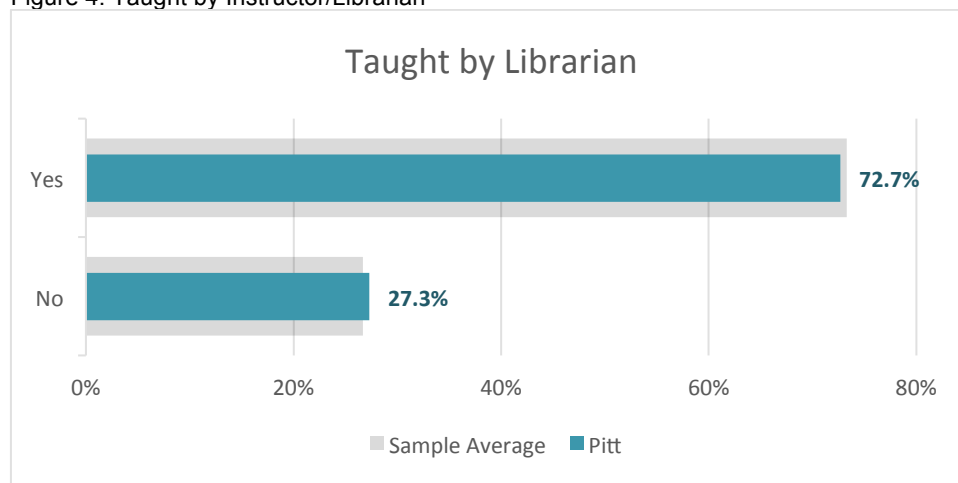
Figure 3. Reasons for using the library



3. In the most recent year, did an instructor or a librarian talk with one or more of your classes about how to use library resources, including Internet resources?

72.7% Freshmen at Pitt received some form of instruction from a librarian in the most recent year. The prevalence of students exposed to a librarian-led session sessions was similar to the baseline.

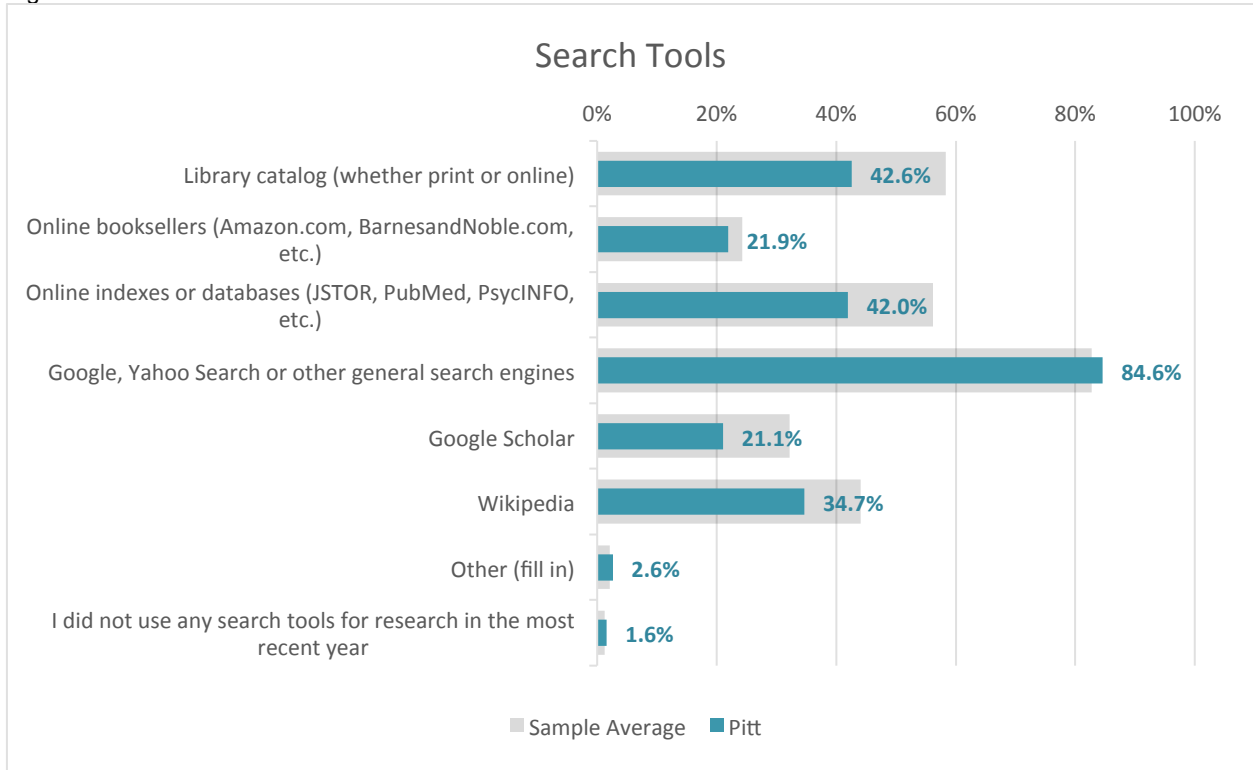
Figure 4. Taught by Instructor/Librarian



4. When you did research in the most recent year, which of the following search tools did you use to find sources?

The most used research tools by Freshmen at Pitt are, in decreasing order of prevalence: Google and other search engines, 84.6%; Library catalog, 42.6%; Databases, 42.0%; Wikipedia 34.7%.

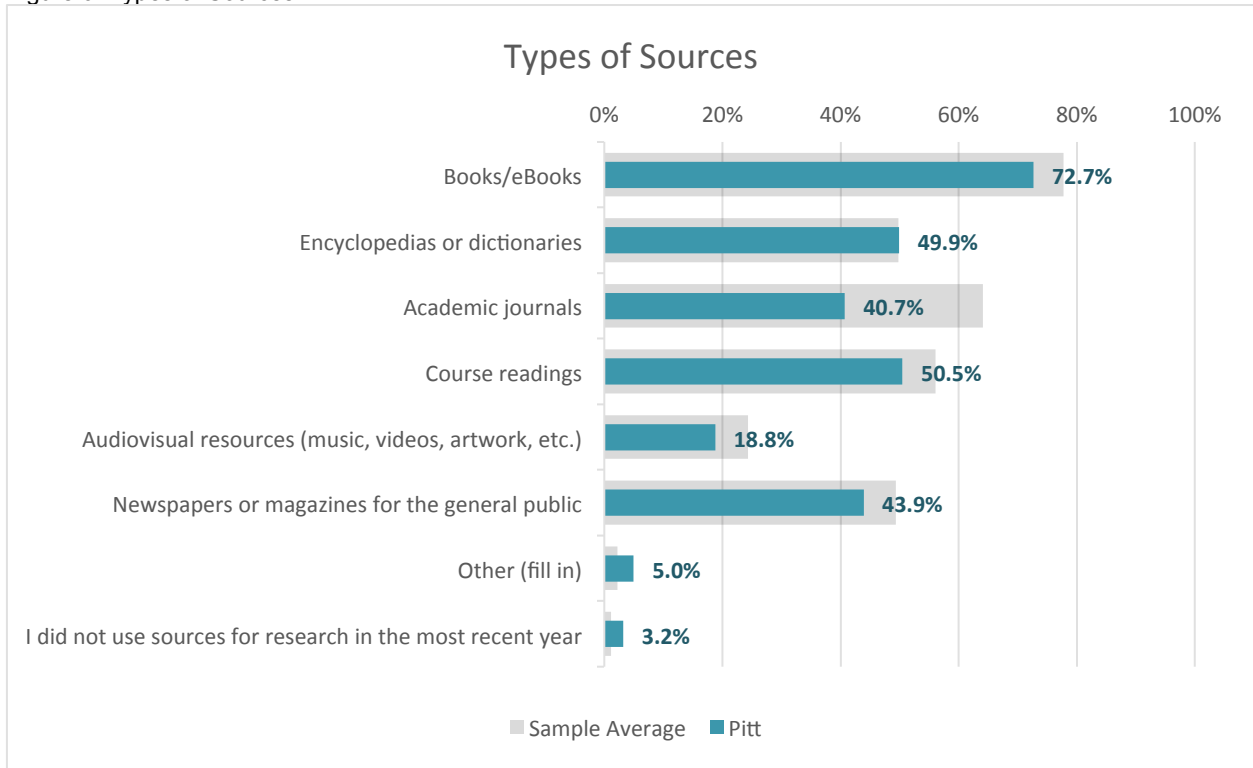
Figure 5. Search tools used



5. When you did research in the most recent year, what types of sources (whether print, electronic, or online) did you use?

The mostly used types of resources by Freshmen at Pitt are, in decreasing order of prevalence: Books/eBooks, 72.7%; Course readings, 50.5%; Encyclopedias and dictionaries, 49.9%; Newspapers or magazines, 43.9%.

Figure 6. Types of Sources

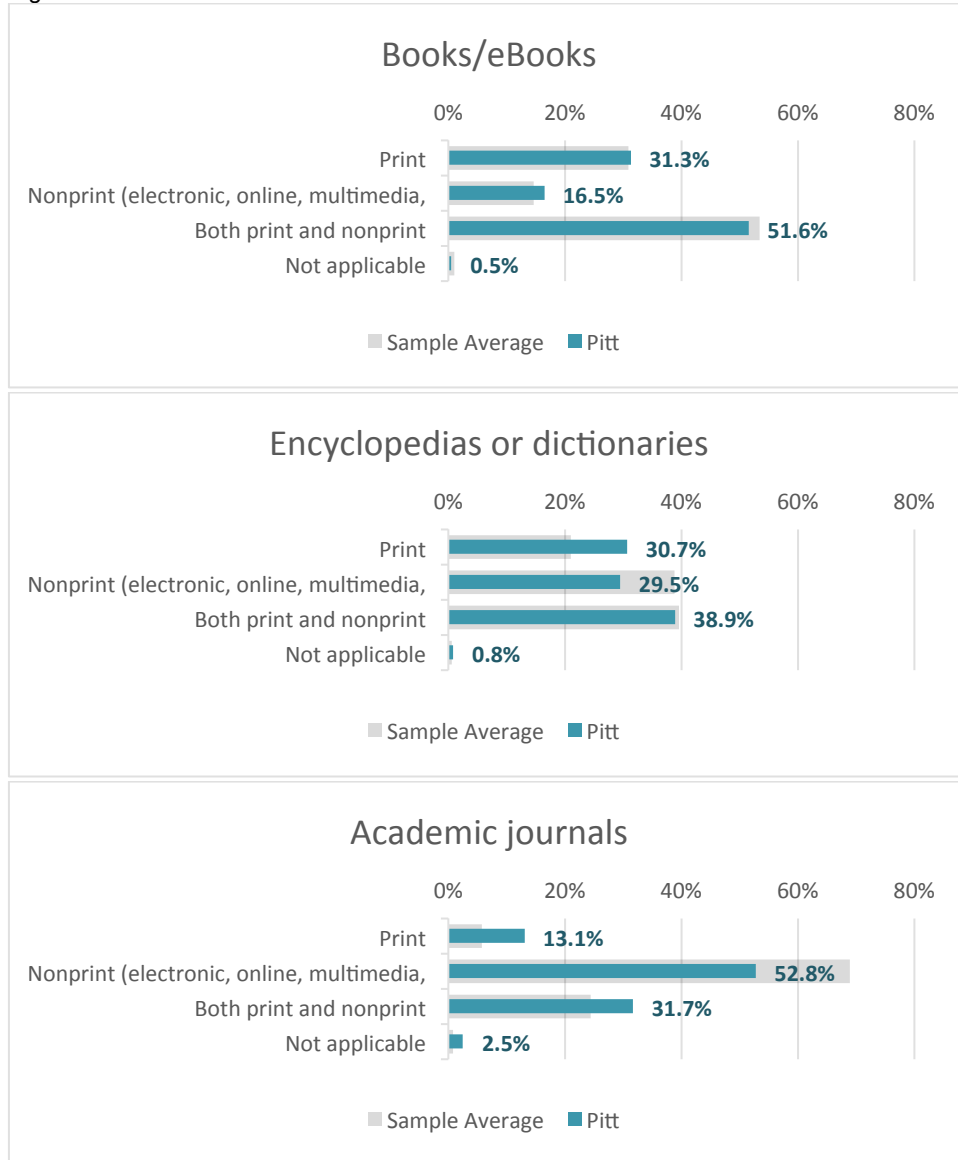


With the exception of search engines, overall, the numbers are slightly lower than the average in the sample, especially for library catalog, databases, and academic journals. However, they approximately follow the trends in the baseline.

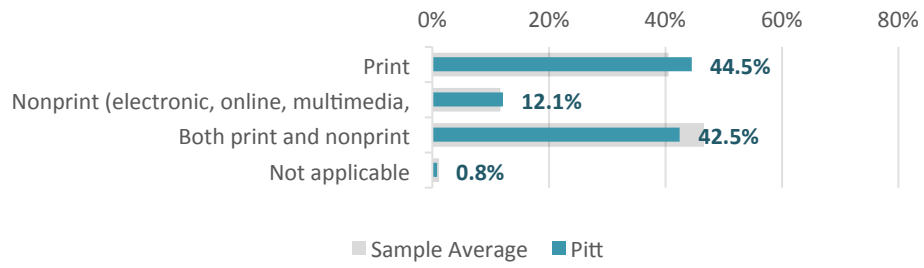
6. What was the format of the sources that you used?

Freshmen at Pitt prefer to use books and course readings in print form and academic journals and visual resources in non-print form.

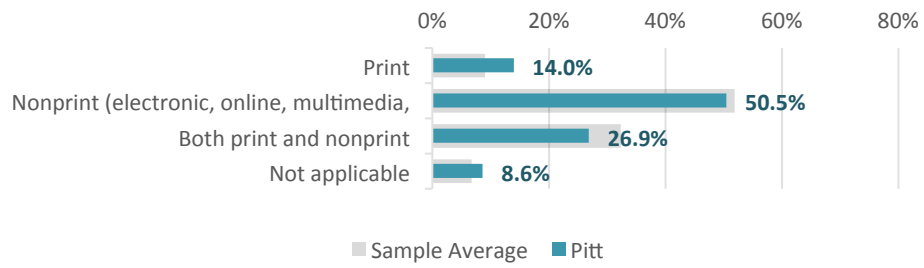
Figure 7. Sources used



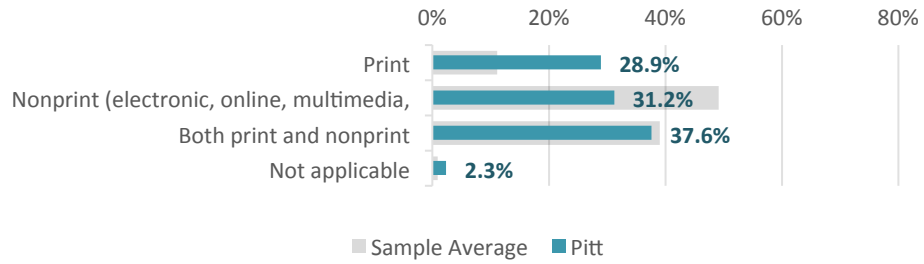
Course readings



Visual resources



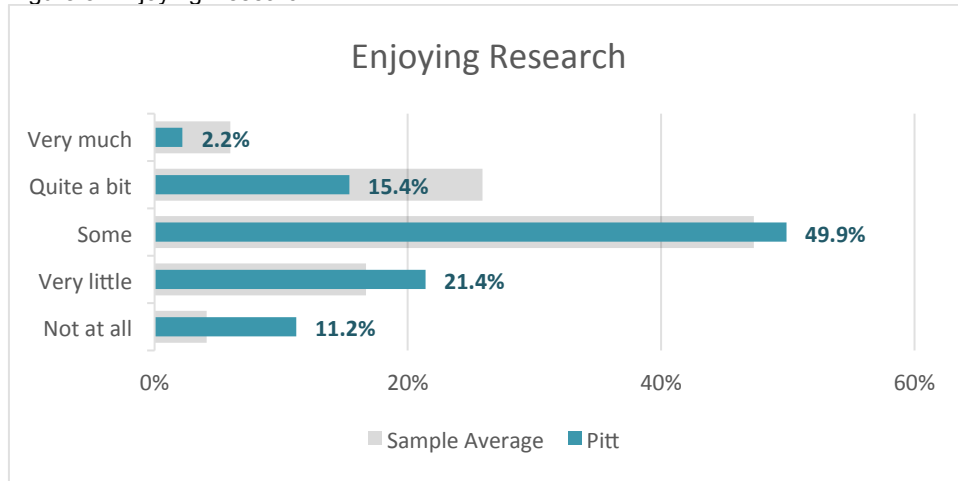
Newspapers or magazines



7. In general, how much do you enjoy doing research?

About 18% of Freshmen at Pitt enjoy doing research very much and quite a bit, which is visibly lower than 32% in the larger sample. Additionally, 32.6% Freshmen at Pitt enjoy doing research very little or not at all, which is visibly higher than approximately 21% in the larger sample. Overall, Freshmen at Pitt come with significantly less desire to do research than in the rest of the sample, on average.

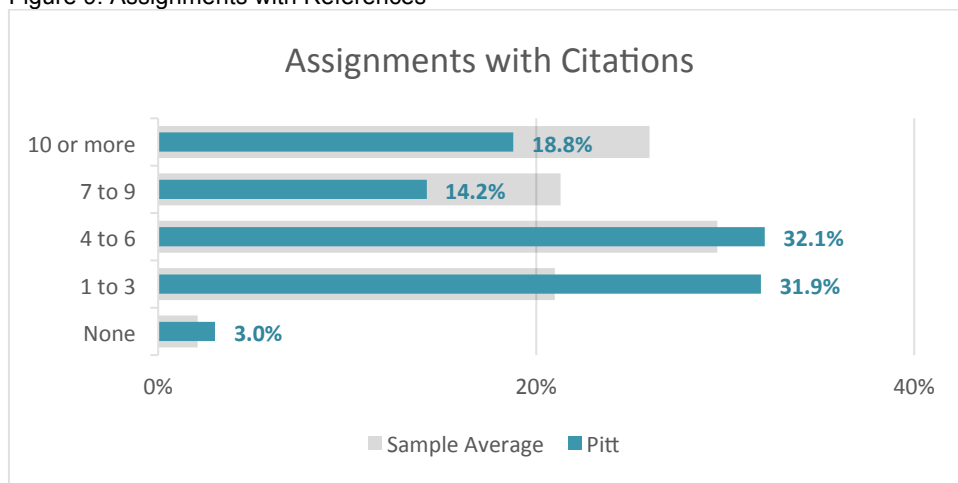
Figure 8. Enjoying Research



8. How many assignments have you completed in the most recent year that required you to cite at least three sources in a bibliography, references, or works cited list?

A visibly lower percentage of Freshmen at Pitt, 33% vs. 47.3%, were required to complete more than seven assignments with three or more citations. A higher percentage of Pitt students were assigned fewer than six assignments, 67% vs. 52.7%.

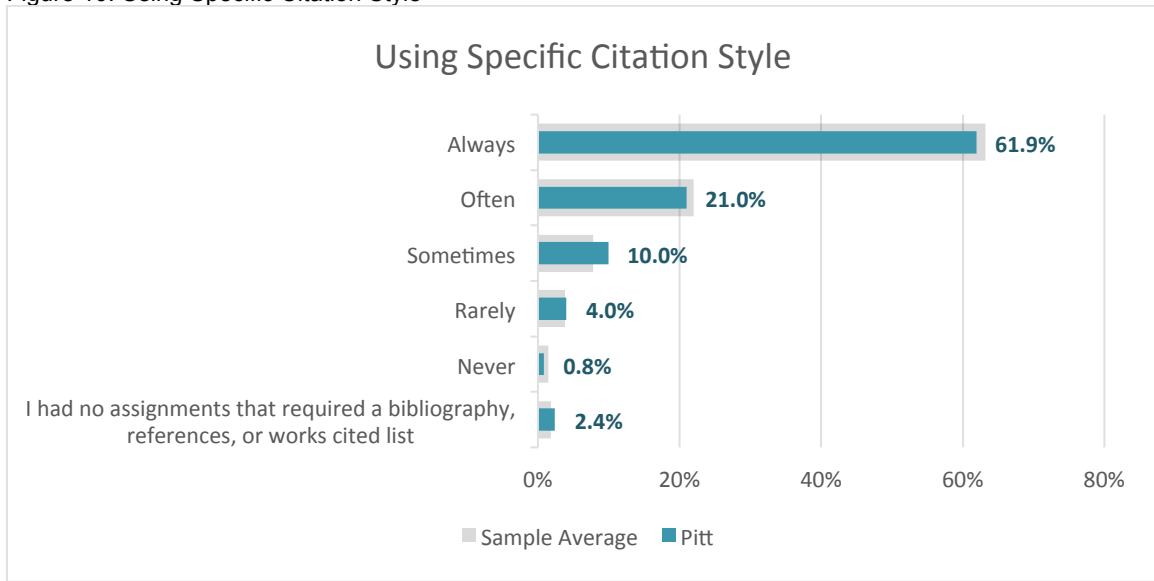
Figure 9. Assignments with References



9. In the most recent year, when you were given assignments that required a bibliography, references, or works cited list, how often were you required to use a specific format (such as APA, MLA, or some other style assigned by your instructor) for your sources?

About 83% of Pitt Freshmen were always or often required to use a specific citation style for their assignment sources. The percentage is similar with the baseline.

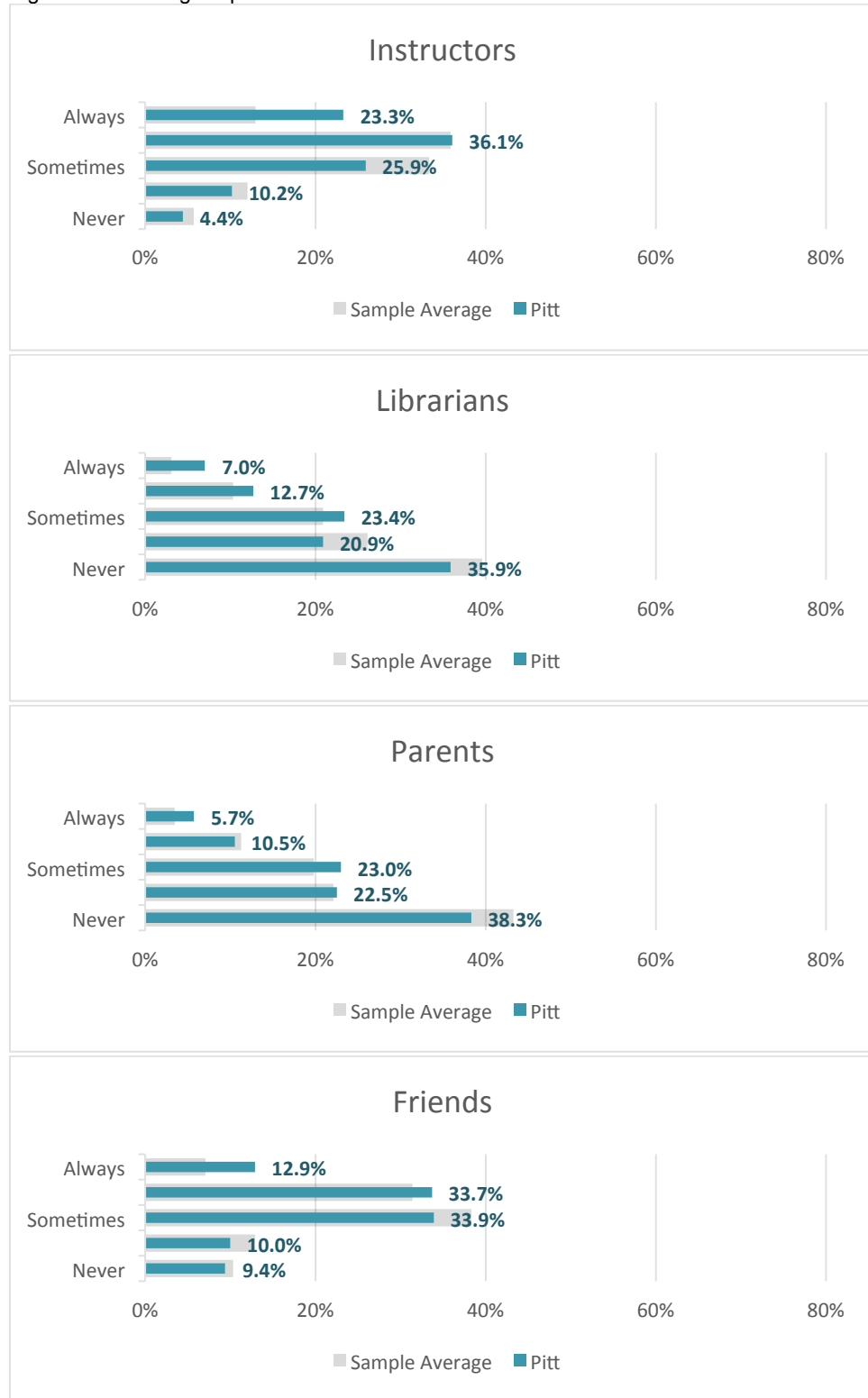
Figure 10. Using Specific Citation Style

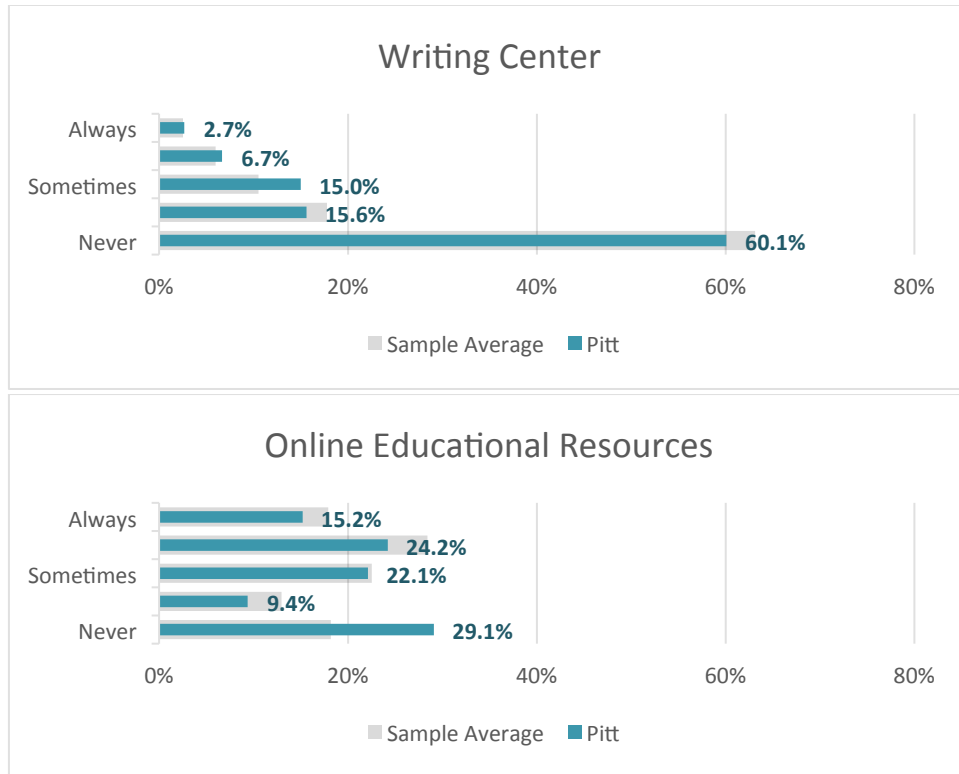


10. In the most recent year, when you were working on assignments that required citations and sources, how often did you seek help or advice from each of the following?

Freshmen at Pitt are more inclined to seek help from instructors and from peers. The prevalence is also higher than in the baseline, with 59% vs. 49% for instructors, and 47% vs. 39% for peers. Pitt students are less inclined to ask help from librarians, parents, and writing centers. The numbers approximately follow the baseline distribution, with a small tendency to be higher across the board in terms of frequency of seeking help.

Figure 11. Seeking Help



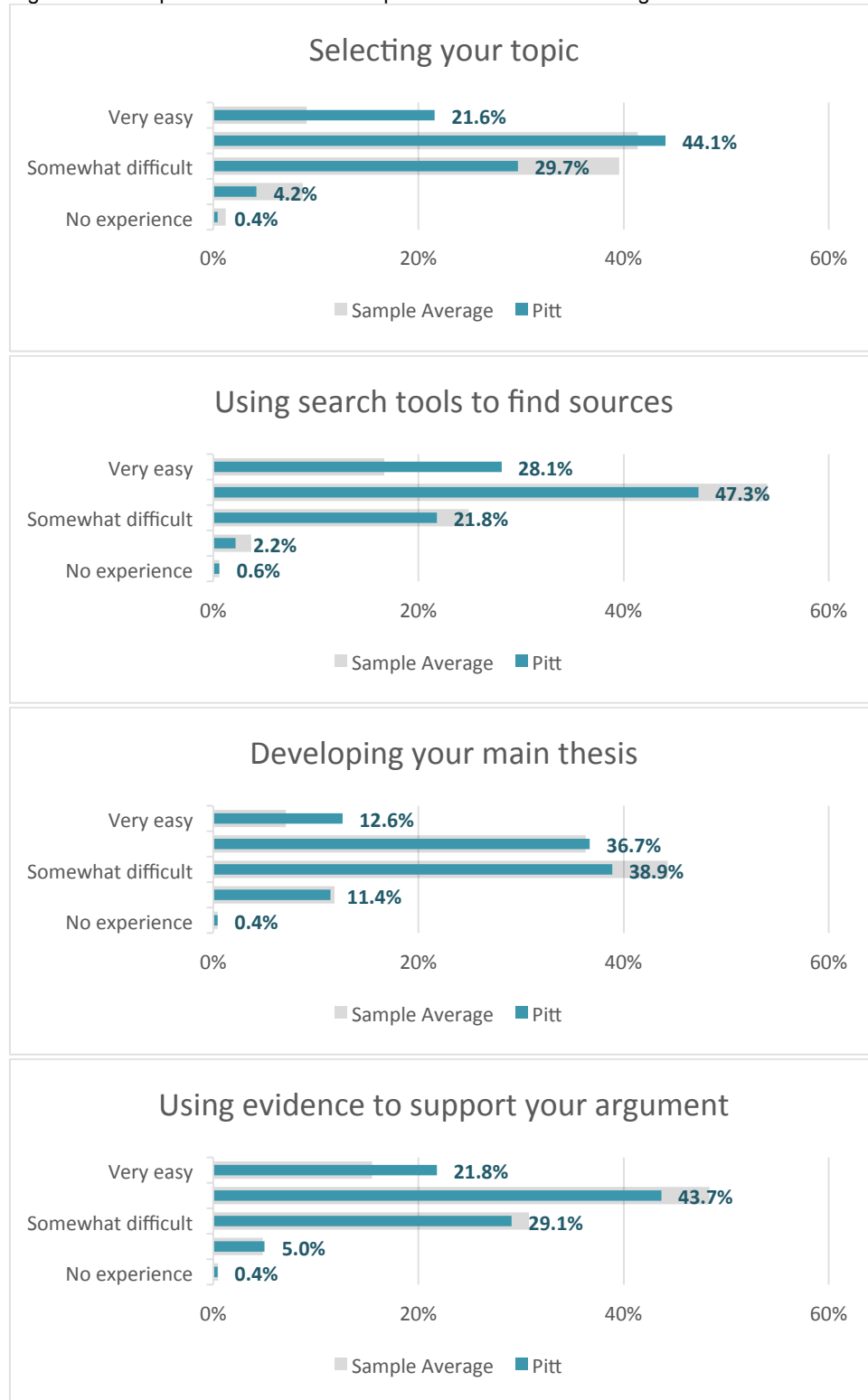


11. How challenging are the following components of research for you?

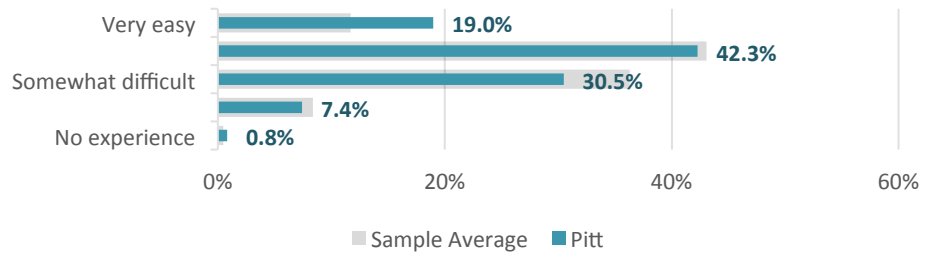
The majority of Freshmen at Pitt perceive various components of **research very easy and somewhat easy**. A consistently higher percentage of our students find these tasks easier than their counterparts in the larger sample. These tasks are, in increasing order of perceived difficulty:

- using search tools to find possible sources, 75% (vs. 71% in baseline)
- selecting your topic, 66% (vs. 51%)
- using evidence to support your argument, 66% (vs. 64%)
- organizing your materials, 61% (vs. 55%)
- expressing your ideas clearly, 61% (vs. 54%)
- documenting your sources, 60% (vs. 65%)
- developing your main argument, 49% (vs. 43%)

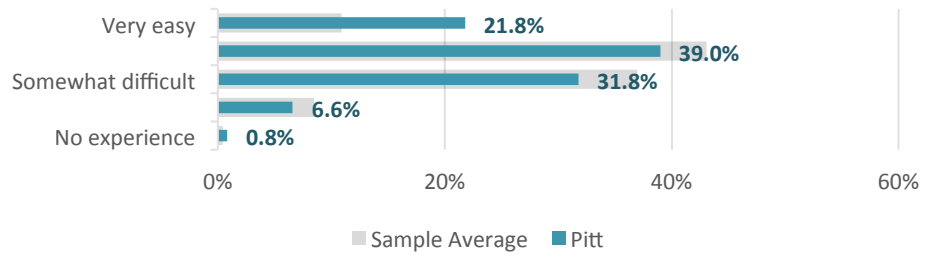
Figure 12. Components of Research – perceived levels of challenge



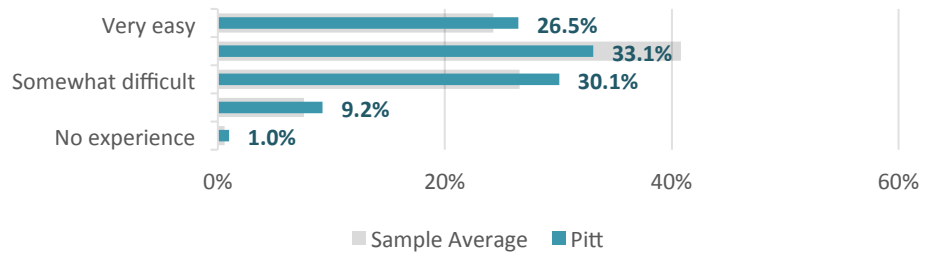
Organizing materials into a logical structure



Expressing your ideas clearly



Documenting your sources

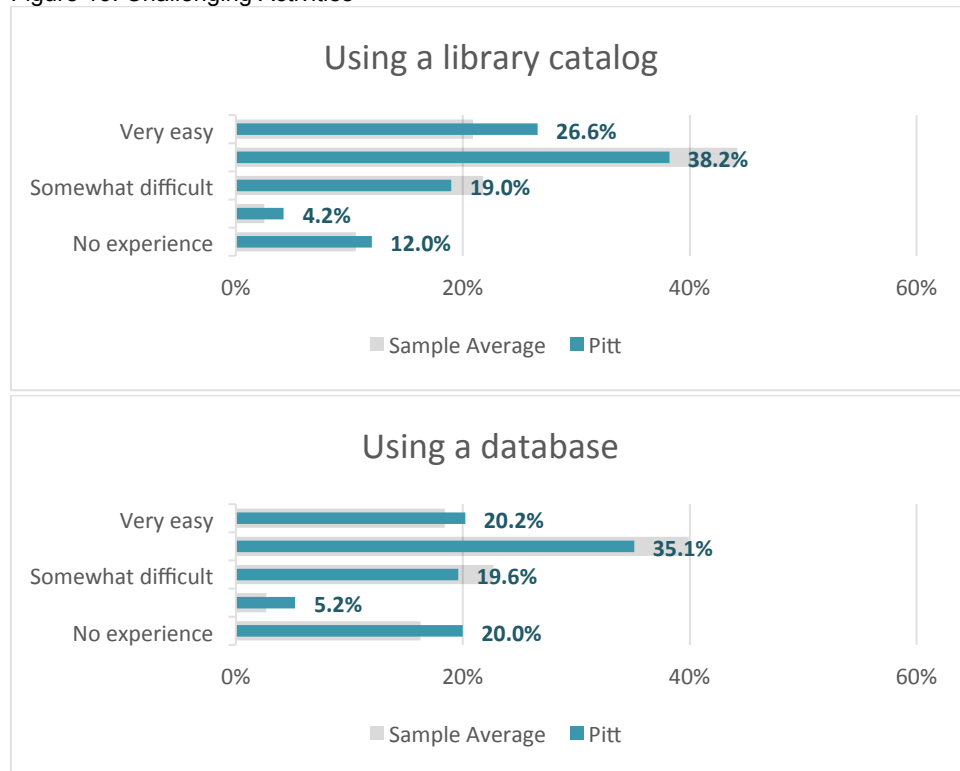


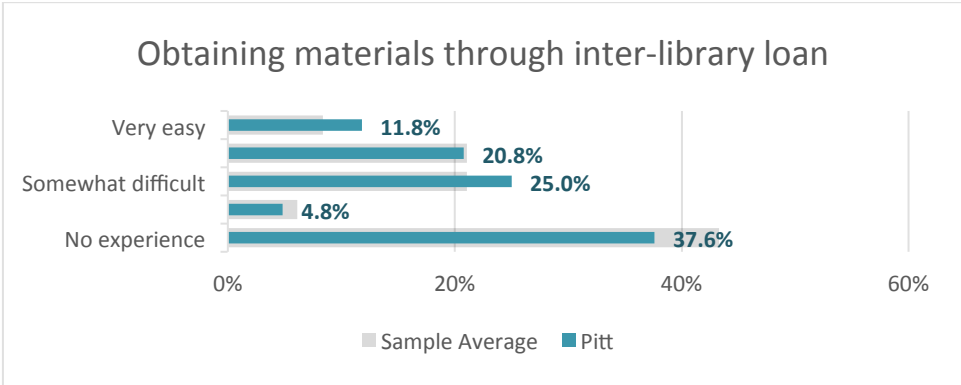
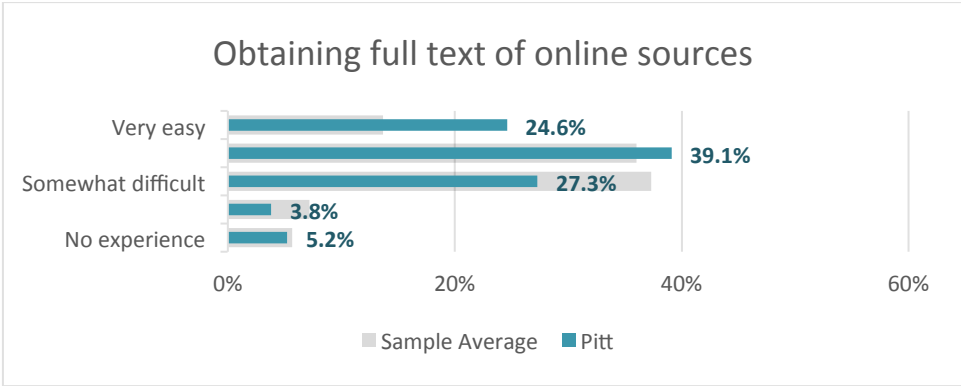
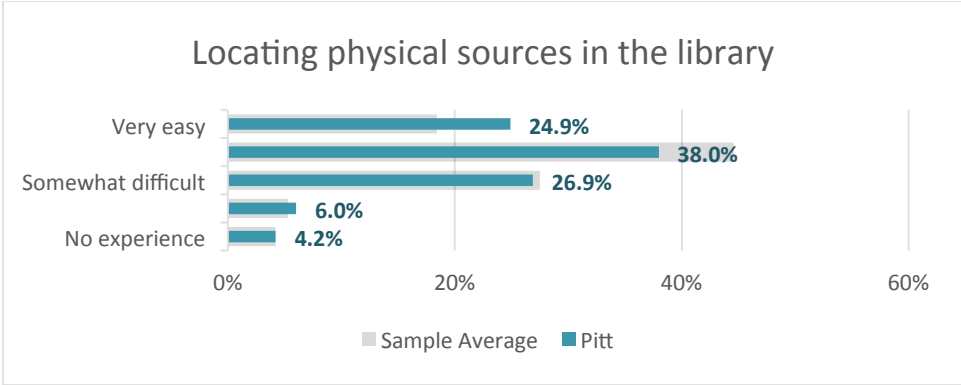
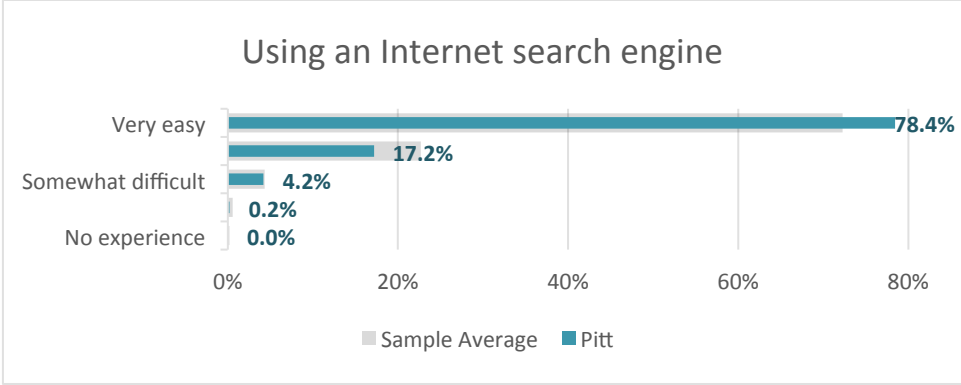
12. How challenging are the following activities for you?

The level of difficulty of various tasks related to finding and citing sources follows a similar distribution to the baseline. In general, more Pitt freshmen find these task very easy than their counterparts in the sample. These activities are, in increasing order of difficulty:

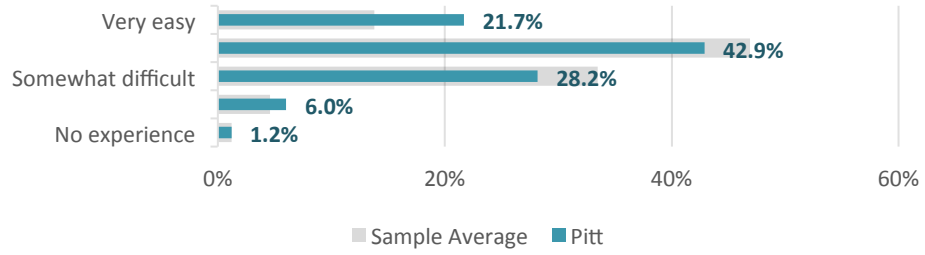
- using an Internet search engine, 97% (vs. 95% of baseline)
- deciding what information to use, 65% (vs. 60%)
- using a library catalog, 65% (vs. 65%)
- determining credibility, 65% (vs. 61%)
- obtaining full text online, 64% (vs. 50%)
- locating physical sources in the library, 63% (vs. 63%)
- knowing *when* you need to cite, 62% (vs. 58%)
- knowing *how* to cite, 56% (vs. 59%)
- using a database, 55% (vs. 58%)
- obtaining materials through ILL, 33% (vs. 30%)

Figure 13. Challenging Activities

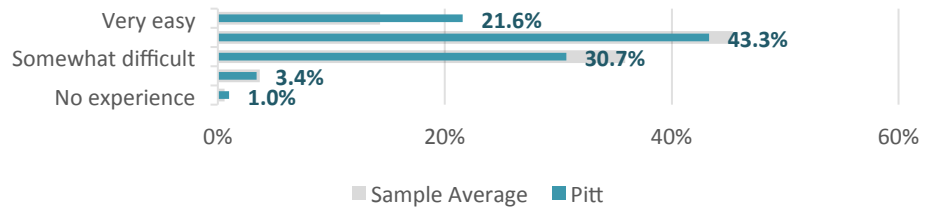




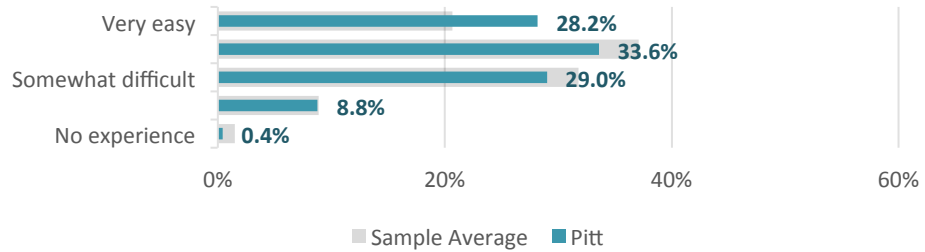
Determining whether a source is credible



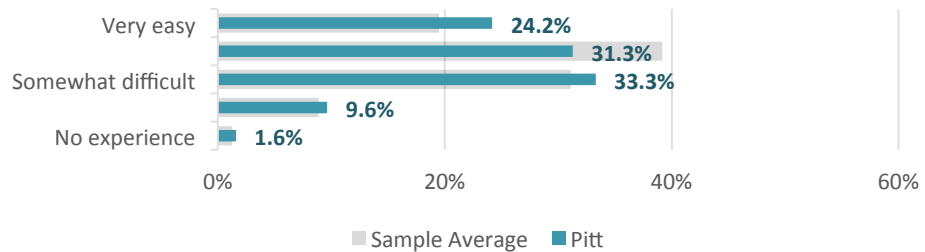
Deciding what information to integrate into project



Knowing *when* to cite a source



Knowing *how* to cite a source



B. Information Literacy Performance: Pitt vs. Baseline

According to the overall SAT scores of admitted students, our three campuses, i.e. Greensburg, Bradford, and Titusville, score at the bottom of the rank of universities included in the sample. Consequently, we expect the information literacy level at the campuses to be below the baseline.

Areas that present a higher level of difficulty or confusion are:

- defining a peer-reviewed journal
- understanding citations
- evaluating resources
- generating relevant resources on a given topic
- fair use of copyrighted material

Areas of higher performance are:

- searching online databases
- supporting a theoretical argument
- determining when citations are needed

There are a few areas where there seems to be a much wider gap between our scores and the baseline:

- generating relevant resources on a given topic
- determining when citations are needed
- fair use of copyrighted materials

Information Literacy Standards and Questions

For the purpose of the analyses we have grouped all skills-based questions in the survey into Information Literacy Standards for Higher Education, as defined by the American Library Association.

Standard One: The information literate student determines the nature and extent of the information needed.

Question 17. Which of the following statements about academic journals and popular magazines is INCORRECT?

Question 19. For each of the following, indicate whether the item is an entire book, a journal article, or a portion of a book.

Question 20. Researchers must distinguish between primary and secondary sources. Drag each source on the left into the box that best describes it on the right: primary source or secondary source. If you do not know the answer, drag the source into the box labeled "Don't know."

Question 22. A peer-reviewed or refereed journal is BEST described as:

Question 29. You are required to write a research paper for your American history class examining the roles of women in the American Civil War. An initial search turns up the following sources. Which source is LEAST likely to be appropriate to cite in your paper?

Standard Two: The information literate student accesses needed information effectively and efficiently.

Question 13. You are researching presidential speeches. What would you type into a database search to yield the most RELEVANT sources for your topic?

Question 14. If you type "psyc" into a database search, what types of search results would you likely get?*

Question 15. Using a database search, you find the following article that is relevant to your anthropology project focusing on Korean American students:

Park, J. J. (2011). "I needed to get out of my Korean bubble": An ethnographic account of Korean American collegians juggling diversity in a religious context. Anthropology and Education Quarterly, 42(3), 193–212.

Which of the following would most likely generate the largest list of additional relevant sources for your project?

Question 16. You are searching for articles on any of the following US car companies: Ford, General Motors, and Chrysler. What would you type into a database search to yield the LONGEST LIST of relevant sources for your topic?

Question 18. You find the following entry in the References section of a recent article:

Erisman, H. M. (2002). The Cuban Revolution's evolving identity. Latin American Politics and Society, 44(1), 145–153.

In what issue of Latin American Politics and Society will you find this article?

Question 21. You have selected DNA structure as your topic for a Chemistry 331 research paper. Which of the following would likely yield the most comprehensive list of scholarly articles that are relevant to this topic?

Standard Three: The information literate student evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system.

Question 27. An author makes the following argument: Students should be required to live on campus during their first year of college because this promotes better study habits. Assuming that all of the following statements are true, which statement BEST supports the author's argument?

Question 28. You are researching the health effects of marijuana. Which of the following websites likely does NOT contain biased information?

Standard Four: The information literate student, individually or as a member of a group, uses information effectively to accomplish a specific purpose.

Standard Five: The information literate student understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally.

Question 23. In a scholarly article or research paper, a citation is:

Question 24. A citation is NOT required when:

Question 25. Indicate if each of the following statements about plagiarism is TRUE or FALSE.

Question 26. Which of the following is considered fair use of copyrighted material?

Information Literacy Comparisons

Figure 14. Information Literacy. Standard One. Seniors vs. Benchmark

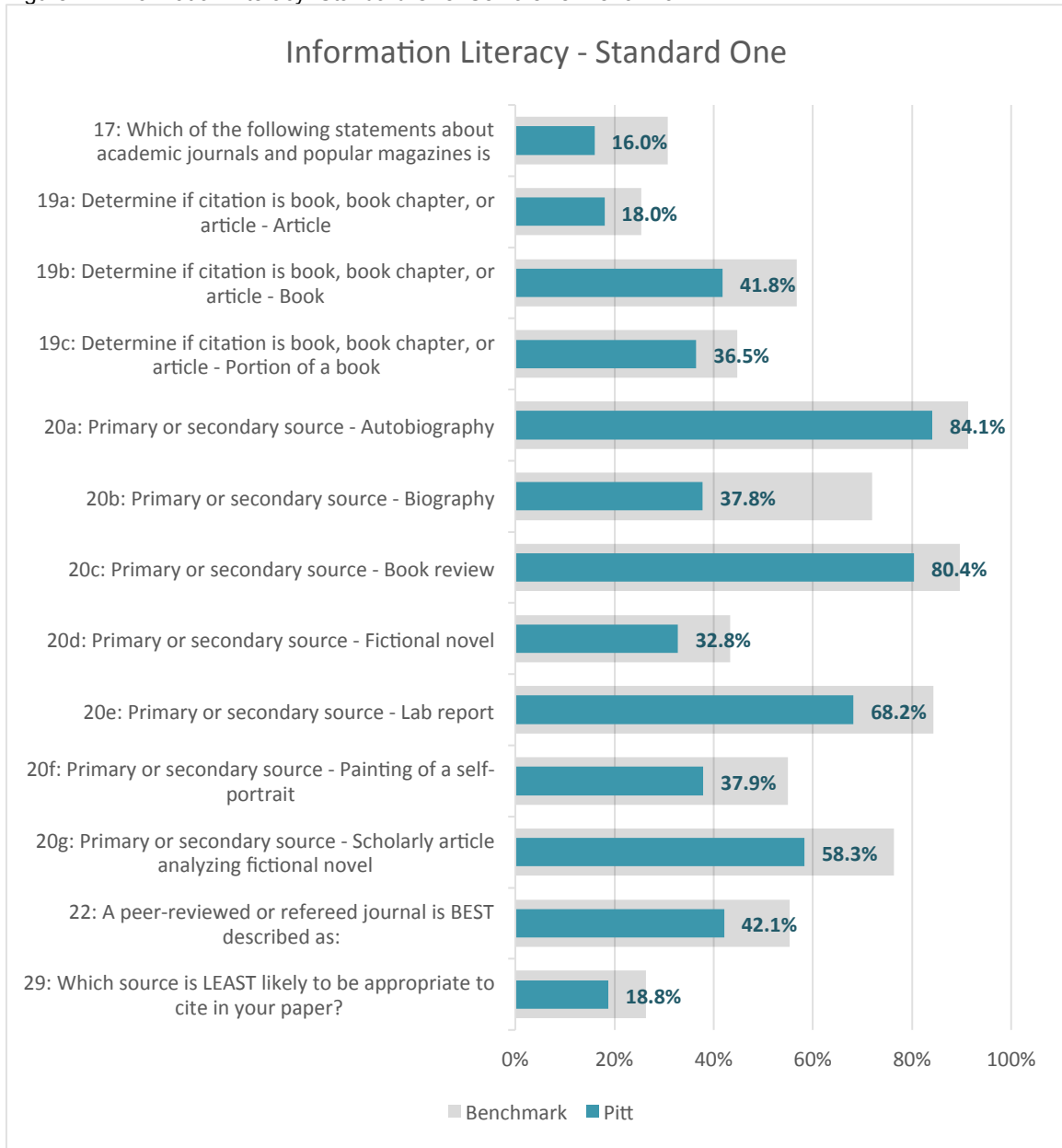


Figure 15. Information Literacy. Standards Two and Three. Seniors vs. Benchmark

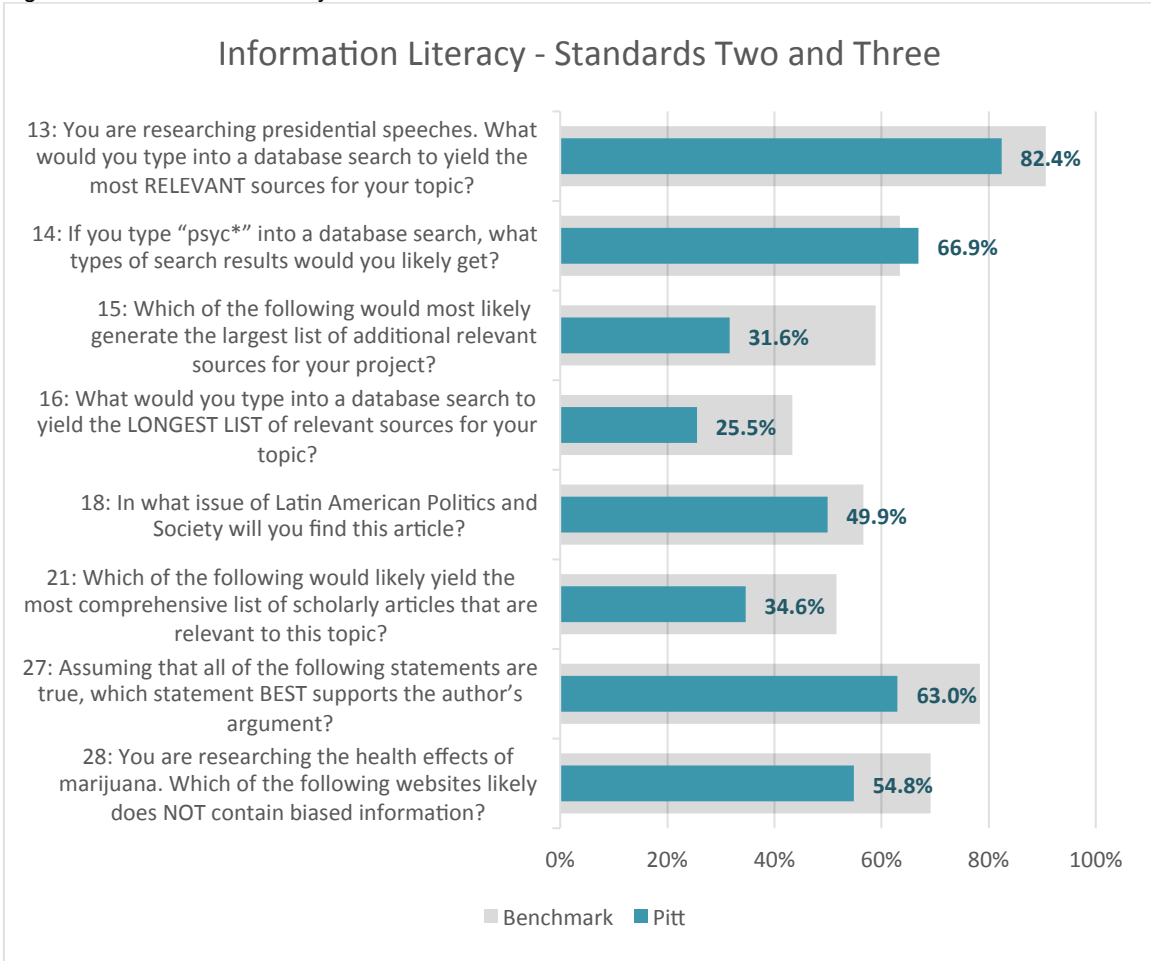
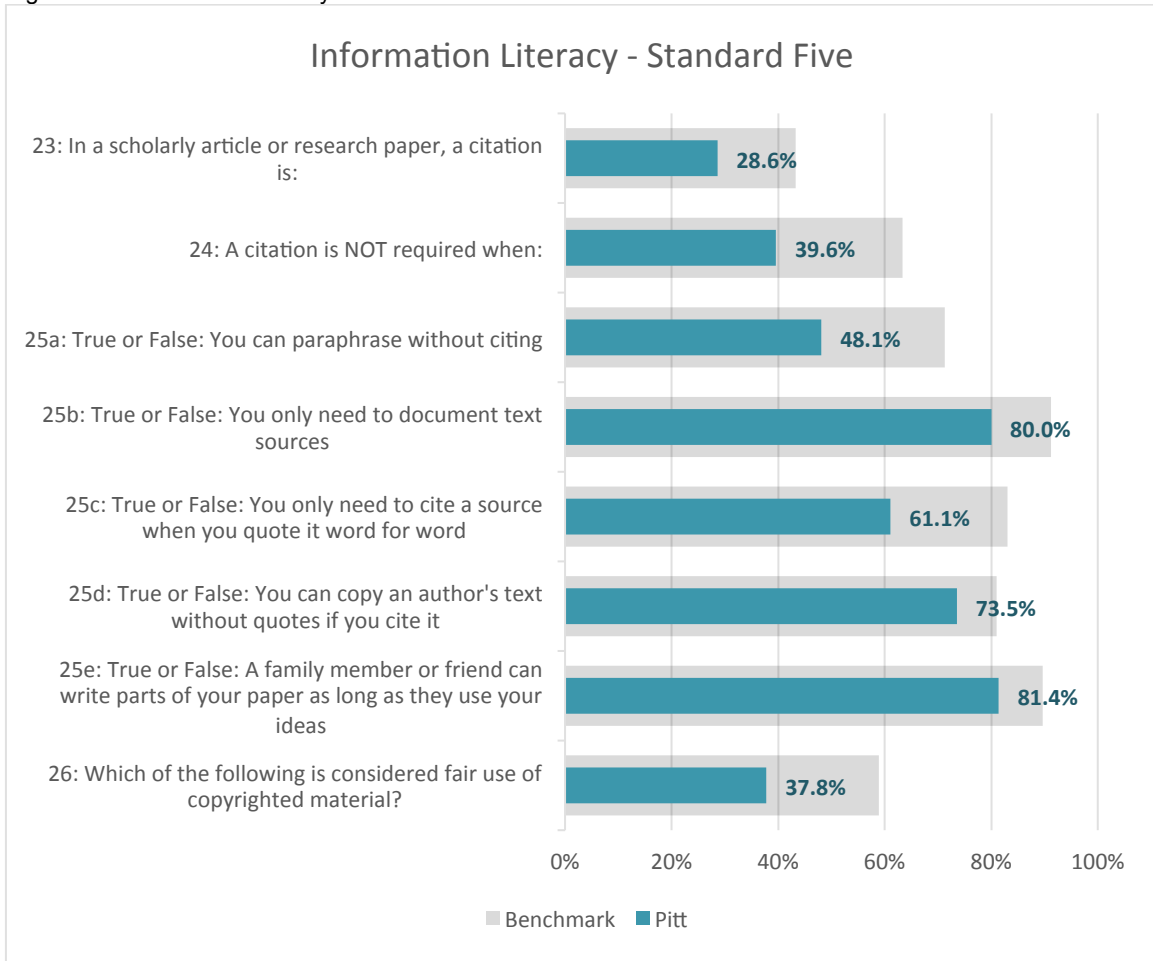
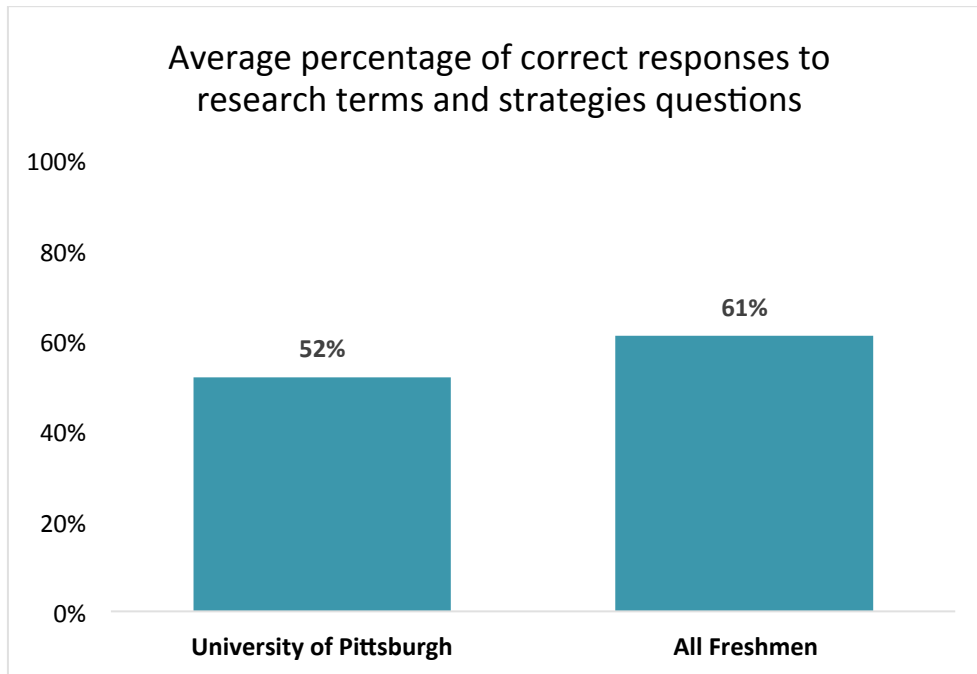


Figure 16. Information Literacy. Standard Five. Seniors vs. Benchmark



C. Research Terms and Strategies - Skills Summary

The graph below compares the average percentage of correct responses that Pitt students had on the 29 information literacy questions with the average percentage of correct responses that Freshmen had at (a) all institutions that have participated in the HEDS survey, and (b) the highest scoring institutions that have participated in the survey. The highest scoring institutions are those with scores in the top 25% of all institutions that have participated in the HEDS survey.



HEDS asks students to report how difficult it is for them to use different research terms and strategies. HEDS considers students overconfident when they report that using research terms and strategies is easy, but score below average on correctly using these terms and strategies. The following table compares the percent of overconfident students at Pitt to the percent of overconfident students at all institutions and at the highest scoring institutions.

	Pitt Freshmen	All Freshmen Students
Percentage of students who thought that research skills were easy but used them poorly	47%	27%

Three research skills in which your students have the least experience

Percentage of FY students who reported they had no experience with the skill		
	University of Pittsburgh	All Freshmen
1 Obtaining materials through inter-library loan	38%	40%
2 Using a database (JSTOR, PubMed, PsycINFO, etc.)	20%	18%
3 Using a library catalog (whether print or online)	12%	10%

The table below identifies the five research skills that your students rated as most difficult. The table compares the percentage of first-year (FY) students at your institution who reported that using those skills was either somewhat or very difficult to the percentage of students who responded similarly at (a) all institutions and (b) the highest scoring institutions (i.e., institutions that scored in the top 25th percentile on correctly using research terms and strategies).

Five most difficult skills for Pitt Freshmen

Percentage of FY students who reported the skill was difficult				
	University of Pittsburgh	All Freshmen	Top 25%	
1	Developing your main argument, thesis statement, or hypothesis	50%	53%	55%
2	Knowing how to cite a source in text and in a bibliography	43%	40%	40%
3	Documenting your sources	39%	34%	35%
4	Expressing your ideas clearly	38%	46%	48%
5	Organizing your materials into a logical and unified structure	38%	44%	46%

The table below identifies the five research skills that your students rated as easiest. The table compares the percentage of first-year (FY) students at your institution who reported that using those skills was either somewhat or very easy to students who responded similarly at (a) all institutions and (b) the highest scoring institutions.

Five easiest skills for Pitt Freshmen

Percentage of FY students who reported the skill was easy				
	University of Pittsburgh	All Freshmen	Top 25%	
1	Using an Internet search engine	96%	95%	94%
2	Using search tools to find possible sources	75%	73%	70%
3	Selecting your topic (including narrowing and broadening topic)	66%	56%	49%
4	Using evidence from your research to support your argument effectively	66%	63%	61%
5	Deciding what information from your sources to integrate into your project	65%	61%	57%

PART 2. Sophomores FY16 vs. Freshmen FY15

Information Literacy Performance

This analysis include data from Greensburg and Bradford cohorts from Fall 2014 administration (Freshman only) and Greensburg and Bradford cohorts from Fall 2015 administration (sophomores only). The purpose is to compare performance of the same groups of students as they progress in their academic careers.

In all instances, with two exceptions (see Fig. 25 and 26 below), sophomores performed better than freshmen.

Significant improvement was recorded in the following areas:

- defining a peer-reviewed journal
- generating additional sources on a given topic
- determining when a citation is needed

Areas that show minimal improvement are:

- deciding the scholarly value of different sources
- interpreting citations

Figure 17. Information Literacy. Standard One. Seniors vs. Freshmen

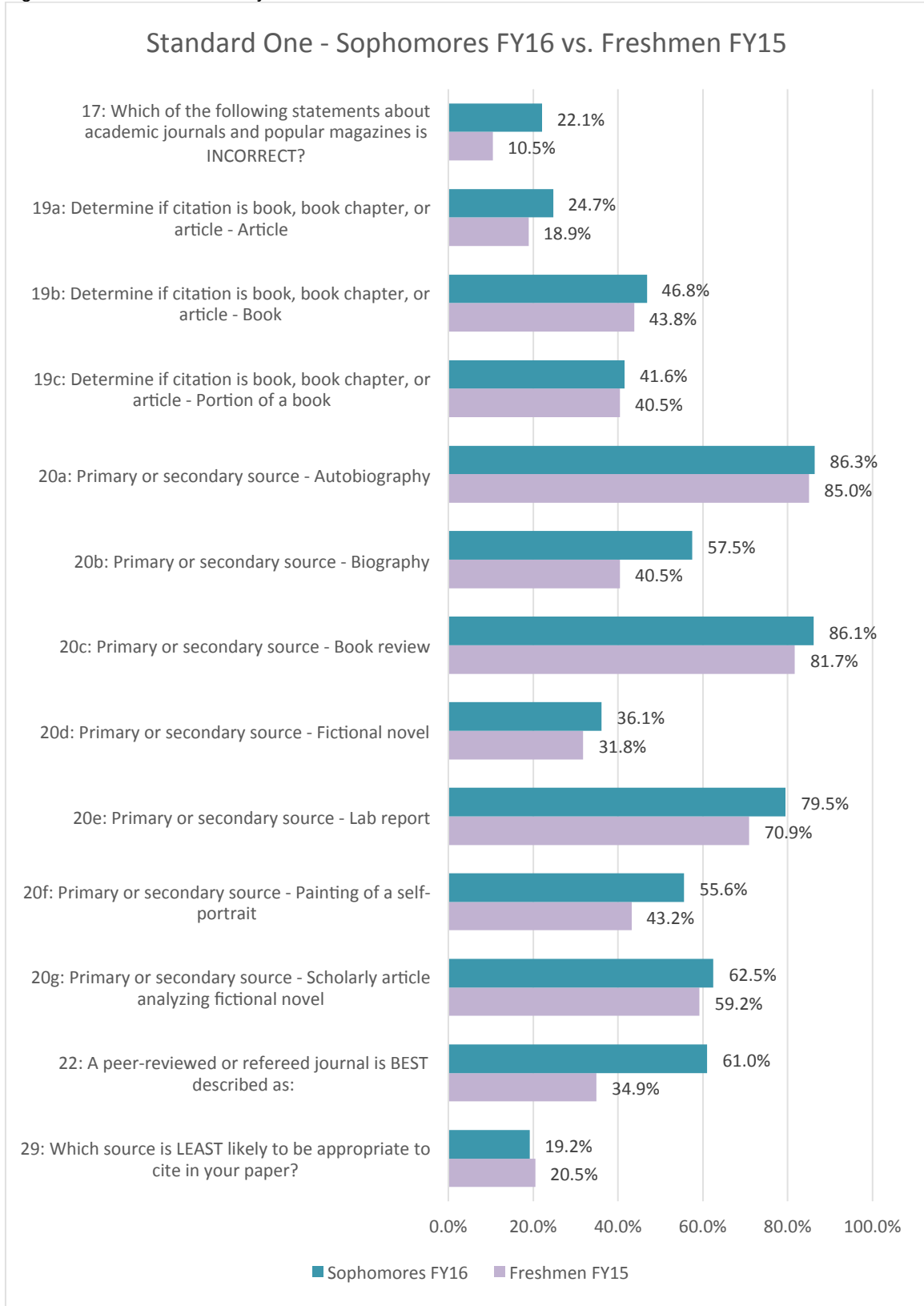


Figure 18. Information Literacy. Standard Two and Three. Seniors vs. Freshmen

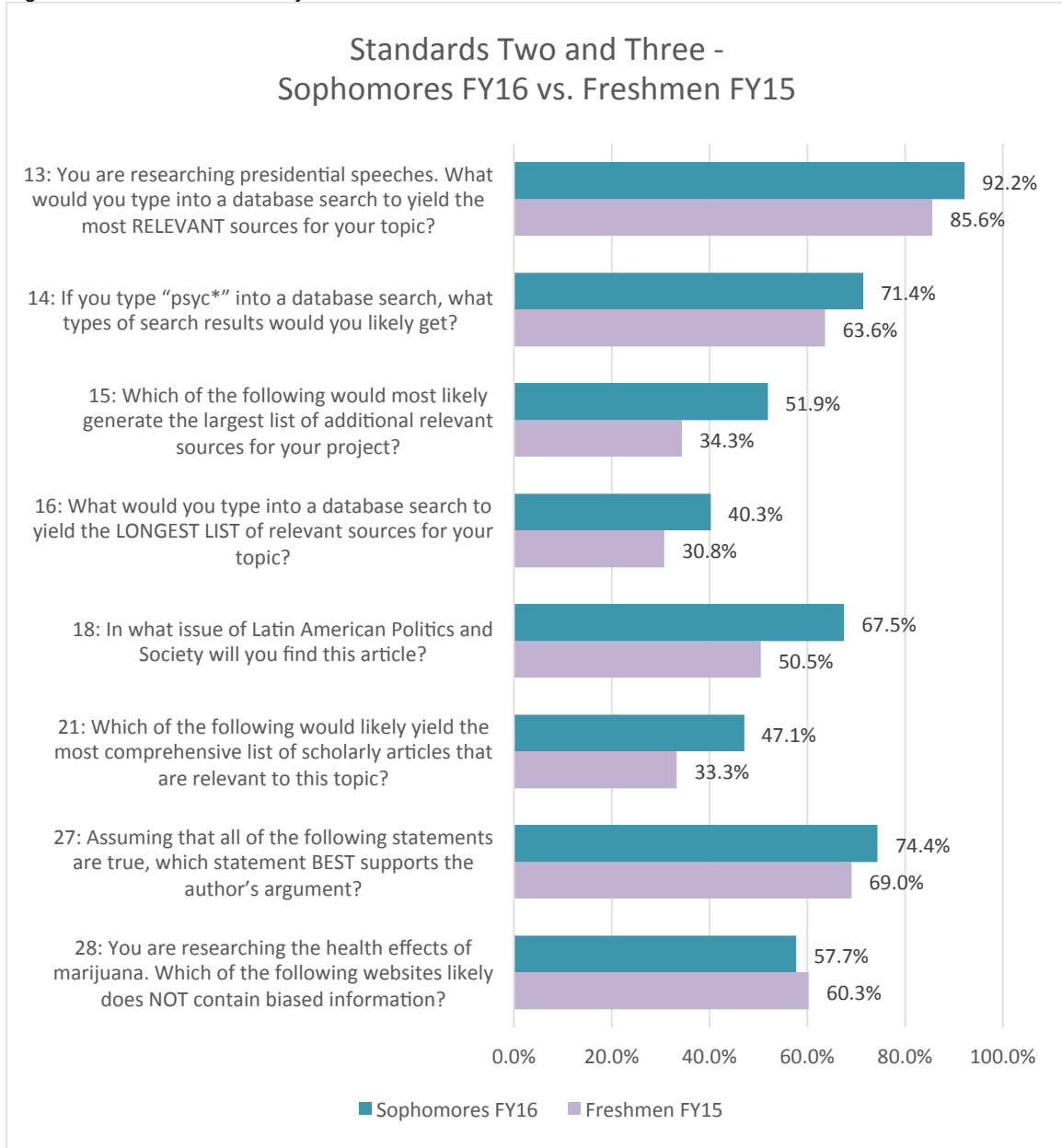
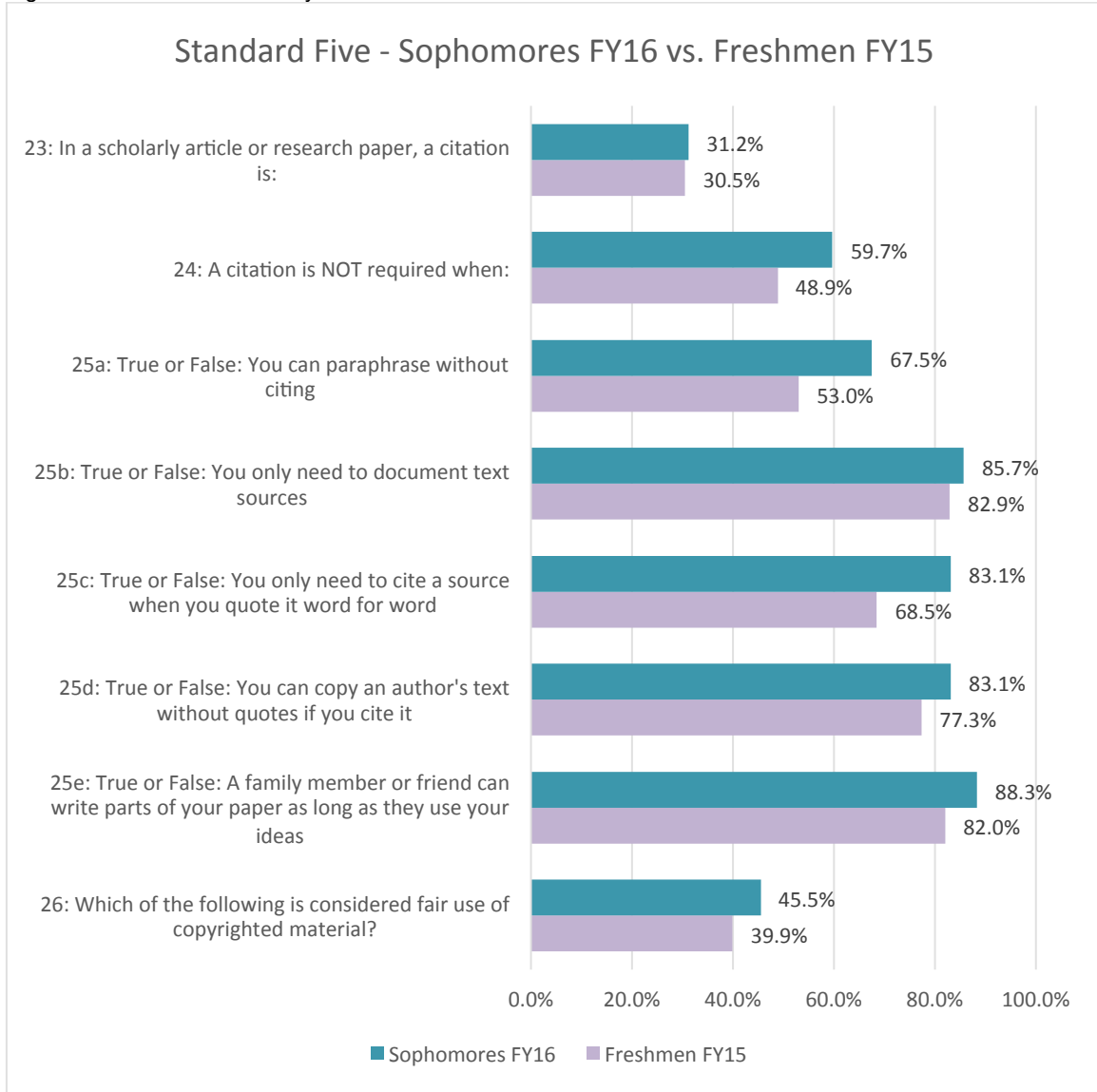


Figure 19. Information Literacy. Standard Five. Seniors vs. Freshmen



Part 3. Freshmen vs. Seniors. Closing the Cohort Gap

The Freshmen (Fall 2016) and the Seniors (Spring 2015) cohorts were compared against their respective baselines. Overall, our freshman and senior students performed below the baselines. All the universities in the sample admitted students with higher SAT scores than our three campuses, on average. We were interested to see whether the gap between our students' performance and the baselines is the same or changes when we compare seniors to freshmen. In order to determine that we subtracted the seniors-to-baseline gap from the freshmen-to-baseline gap.

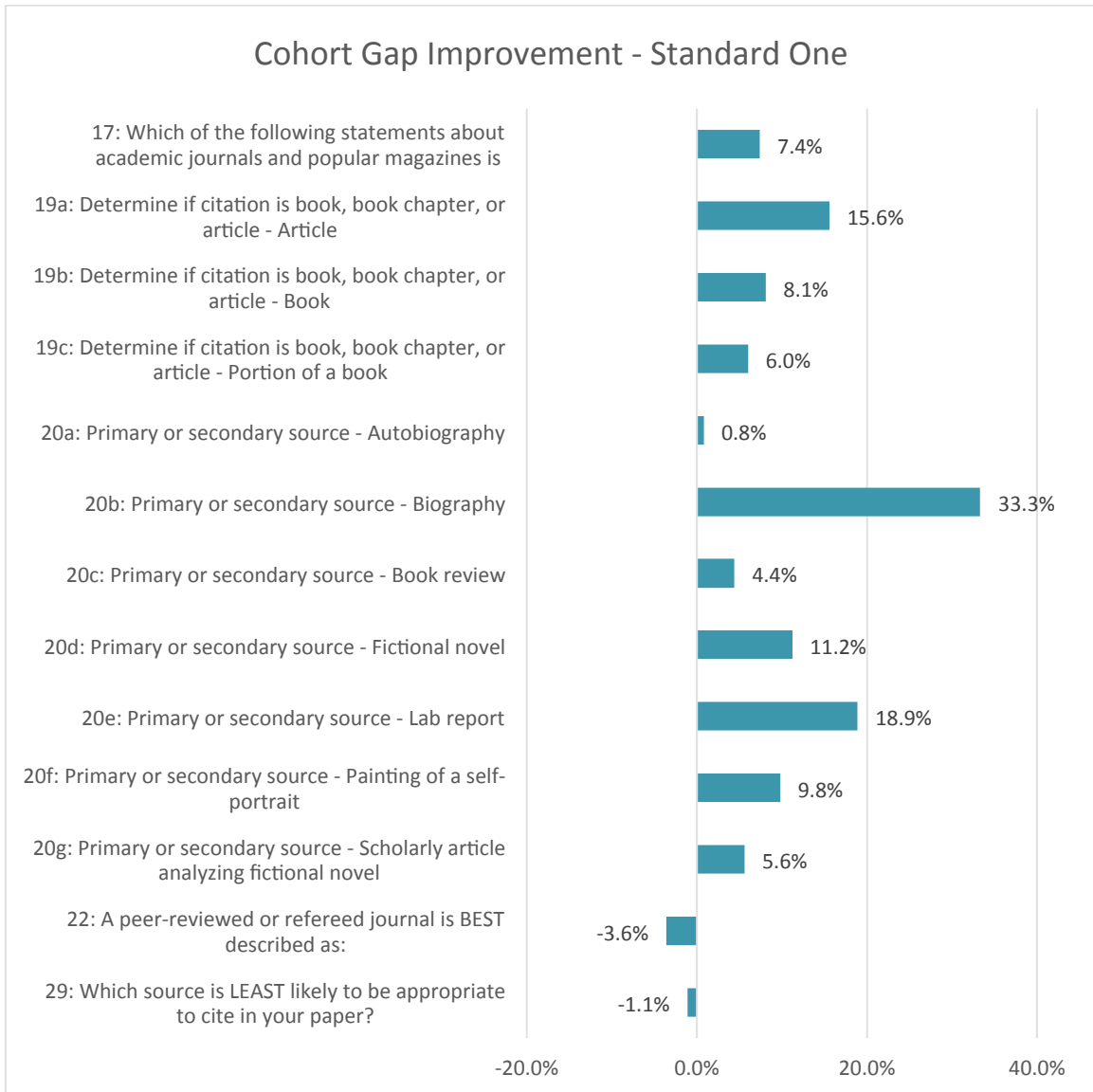
For example, the students were asked whether the following statement is true or false: "You only need to cite a source when you quote it word for word." 61.1% of our freshmen and 83.0% of freshmen in the HEDS sample responded correctly. The freshmen-to-baseline gap, in this case, is 21.9%. The same question was answered correctly by 78.9% of our seniors and 91.0% of the seniors in the HEDS sample. The senior-to-baseline gap, in this case, is 12.1%. If we subtract the senior-to-baseline gap from the freshmen-to-baseline gap we get an improvement of $21.9\% - 12.1\% = 9.8\%$. When the number is positive, this means that the gap is closing after four years of studying at Pitt. When the number is negative, this means that the gap widened and although our seniors performed better than the freshmen, they fell behind the seniors in the HEDS sample in terms of rate of improvement.

What we found is that there is a statistically significant reduction of the gap from freshmen to seniors. The size of the improvement on each item is represented in the charts below. The most significant improvements in information literacy performance are for standards one and five; for standards two and three the results are mixed.

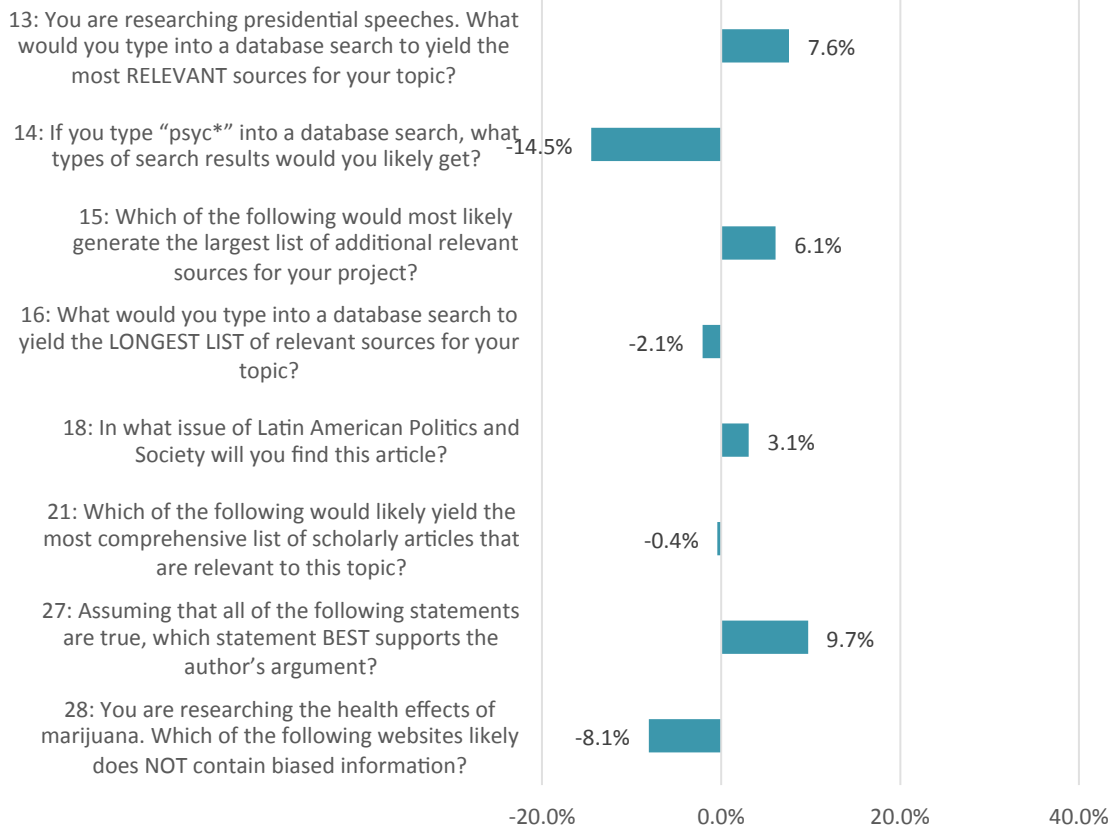
This analysis is based on a couple of presumptions. The first assumption is that HEDS samples of universities that gave the baseline values for freshman and senior cohorts are comparable. In other words, the universities in the seniors sample are not ranked lower than the universities in the freshmen sample and, consequently, the possible lower ranking does not explain for a decreasing gap between seniors performance and baseline. A simple visual inspection of the two samples seems to indicate the opposite: that is the senior sample of universities is actually stronger than the freshmen sample. Moreover, there are more students who took the survey in the upper half of the senior sample than in the lower half. This means that the factor responsible for closing the gap is studying at Pitt. The witnessed improvement is not necessarily the result of sampling.

Total SAT ranges of admitted students	number of universities in freshmen sample	number of universities in senior sample
1500 – 1599	1	2
1600 – 1699	2	2
1700 – 1799	2	1
1800 – 1899	2	2
1900 – 1999		
2000 – 2099		1
2100 – 2199		1

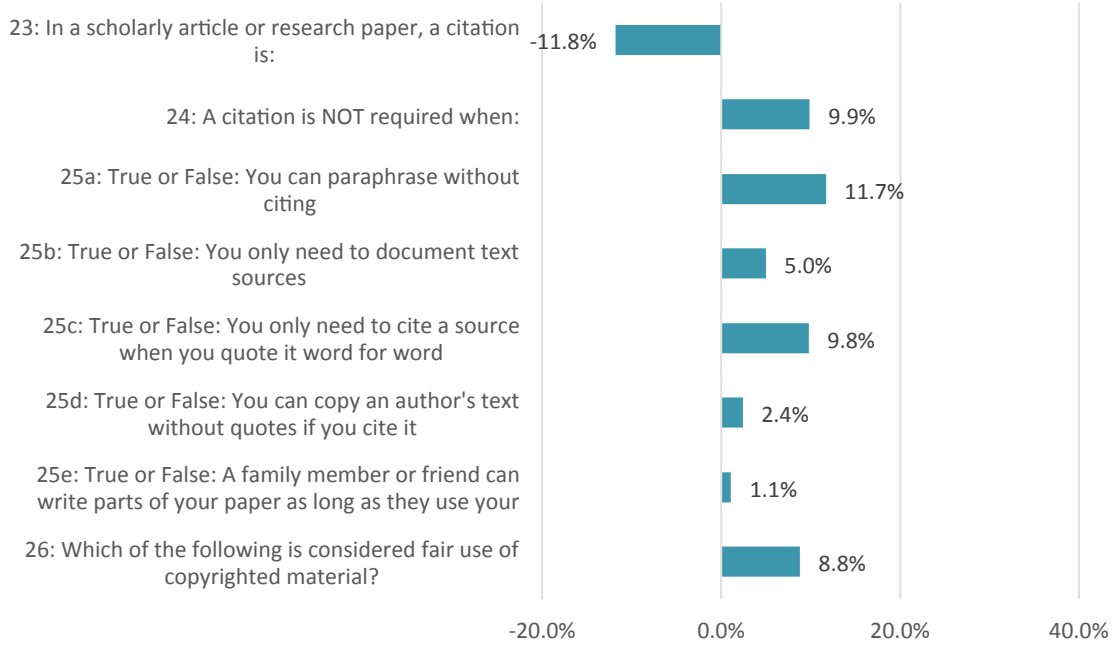
The second assumption is that there isn't a significant difference in competence between the Freshmen cohort of FY16 and the freshmen cohort of FY11 which is the generation of students who became seniors in FY15.



Cohort Gap Improvement - Standard Two and Three



Cohort Gap Improvement - Standard Five



Appendix

Research Practices Questionnaire Detailed Answers

1. When you did research in the most recent year, how often did you use resources from the following kinds of libraries? This includes visiting the library in person, using the library website, or accessing online databases and journals provided by the library.

#	Question	Once a week or more	Once or twice a month	A few times a year	Never	Total Responses
1	Public or community library	4.2%	11.1%	29.0%	55.7%	100%
		24	63	165	317	569
2	College/university library	20.6%	13.7%	18.7%	47.0%	100%
		117	78	106	267	568
3	High school library	24.7%	21.2%	29.3%	24.8%	100%
		144	124	171	145	584

2. In the most recent year, what was your MOST FREQUENT reason for using a library?

#	Answer	Response	%
1	Recreation or other nonacademic purposes (leisure reading, checking out music or videos, checking email, etc.)	90	15%
2	Conducting research	216	36%
3	Doing other academic work such as studying	213	36%
4	Other	21	4%
5	I did not use a library in the most recent year	59	10%
	Total	599	100%

Other
Computer lab
Printing stuff
Class
Paperwork
Find scholarships
Printing
Printing
Printing
To watch march madness
I would go to the library every day for study hall. Some days I would do homework, other days I had no homework so I would read or talk to friends. Academic and nonacademic were 50/50
Typing a paper
Studying another language
Printing
Writing center
Forced by teacher or assignment
Needing supporting details for English papers
Predetermined study hours
Research and printing
Socializing
Computer services
Printing

3. In the most recent year, did an instructor or a librarian talk with one or more of your classes about how to use library resources, including Internet resources?

#	Answer	Response	%
1	Yes	445	74%
0	No	154	26%
	Total	599	100%

4. When you did research in the most recent year, which of the following search tools did you use to find sources? (Check all that apply)

#	Answer	Response	%
1	Library catalog (whether print or online)	273	46%
2	Online booksellers (Amazon.com, BarnesandNoble.com, etc.)	127	21%
3	Online indexes or databases (JSTOR, PubMed, PsycINFO, etc.)	261	44%
4	Google, Yahoo Search or other general search engines	487	82%
5	Google Scholar	146	24%
6	Wikipedia	197	33%
7	Other	15	3%
8	I did not use any search tools for research in the most recent year	11	2%

Other
Librarian
Grolier
Librarian
I havent been in school for 17 years
Online database of articles
Books
Ebscohost
Baidu
Database
Books, articles,
Schools database

5. When you did research in the most recent year, what types of sources (whether print, electronic, or online) did you use? (Check all that apply)

#	Answer	Response	%
1	Books/eBooks	437	73%
2	Encyclopedias or dictionaries	278	47%
3	Academic journals	274	46%
4	Course readings	301	50%
5	Audiovisual resources (music, videos, artwork, etc.)	106	18%
6	Newspapers or magazines for the general public	264	44%
7	Other	30	5%
8	I did not use sources for research in the most recent year	19	3%

Other
Internet
Internet
Online
Online
Electronic
Online
Google.com
Online magazines and newspapers
Wikipedia
Online articles
Online Articles
Internet
Databases and google
Websites
Microsoft
Company websites
Internet pages
Online
Google
Online articles
Web articles
Online
Websites teachers recommend

6. What was the format of the sources that you used?

#	Question	Print	Nonprint (electronic, online, multimedia, etc.)	Both print and nonprint	Not applicable	Total Responses
1	Books/eBooks	29.5%	18.8%	51.3%	0.5%	437
		129	82	224	2	437
2	Encyclopedias or dictionaries	30.5%	30.1%	38.6%	0.7%	272
		83	82	105	2	272
3	Academic journals	10.0%	57.2%	30.5%	2.2%	269
		27	154	82	6	269
4	Course readings	43.7%	12.2%	43.4%	0.7%	295
		129	36	128	2	295
5	Visual resources (sheet music, artwork, graphic novels, etc.)	12.4%	51.4%	27.6%	8.6%	105
		13	54	29	9	105
6	Newspapers or magazines for the general public	27.5%	32.1%	37.8%	2.7%	262
		72	84	99	7	262
7	Other:	24.0%	40.0%	24.0%	12.0%	25
		6	10	6	3	25

7. In general, how much do you enjoy doing research?

#	Answer	Response	%
4	Very much	16	3%
3	Quite a bit	94	16%
2	Some	295	49%
1	Very little	127	21%
0	Not at all	65	11%
	Total	597	100%

8. How many assignments have you completed in the most recent year that required you to cite at least three sources in a bibliography, references, or works cited list?

#	Answer	Response	%
4	10 or more	112	19%
3	7 to 9	89	15%
2	4 to 6	190	32%
1	1 to 3	184	31%
0	None	20	3%
Total		595	100%

9. In the most recent year, when you were given assignments that required a bibliography, references, or works cited list, how often were you required to use a specific format (such as APA, MLA, or some other style assigned by your instructor) for your sources?

#	Answer	Response	%
5	Always	362	61%
4	Often	131	22%
3	Sometimes	59	10%
2	Rarely	23	4%
1	Never	5	1%
0	I had no assignments that required a bibliography, references, or works cited list	15	3%
Total		595	100%

10. In the most recent year, when you were working on assignments that required citations and sources, how often did you seek help or advice from each of the following?

#	Question	Always	Often	Sometimes	Rarely	Never	Total Responses
1	Professors, teachers, or other instructors	21.8%	35.5%	27.4%	9.8%	5.6%	592
		129	210	162	58	33	592
2	Librarians	6.9%	12.4%	23.1%	21.7%	35.9%	580
		40	72	134	126	208	580
3	Parents or other adult family members	5.2%	10.5%	21.9%	21.5%	41.0%	581
		30	61	127	125	238	581
4	Friends, classmates, or siblings	13.0%	33.5%	33.2%	10.0%	10.3%	591
		77	198	196	59	61	591
5	Writing labs or centers	3.5%	7.5%	15.7%	15.2%	58.2%	574
		20	43	90	87	334	574
6	Online educational resources (Purdue OWL, Khan Academy, library guides, etc.)	16.9%	25.0%	22.4%	8.8%	27.0%	581
		98	145	130	51	157	581
7	Software help screens	3.0%	6.0%	9.5%	14.4%	67.1%	568
		17	34	54	82	381	568
8	Other	2.1%	4.2%	6.3%	2.8%	84.7%	144
		3	6	9	4	122	144

Other
Gremlins
Used an auto-citation maker
Internet
Easy Bib
Hacker Book

11. How challenging are the following components of research for you?

#	Question	Very Easy	Somewhat easy	Somewhat difficult	Very difficult	No experience	Total
1	Selecting your topic (including narrowing and broadening topic)	20.2%	45.4%	29.6%	4.5%	0.3%	595
		120	270	176	27	2	595
2	Using search tools to find possible sources	27.7%	48.2%	21.5%	2.0%	0.5%	595
		165	287	128	12	3	595
3	Developing your main argument, thesis statement, or hypothesis	12.0%	38.3%	39.1%	10.3%	0.3%	593
		71	227	232	61	2	593
4	Using evidence from your research to support your argument effectively	21.0%	44.7%	29.6%	4.4%	0.3%	595
		125	266	176	26	2	595
5	Organizing your materials into a logical and unified structure	18.8%	43.0%	30.3%	7.2%	0.7%	595
		112	256	180	43	4	595
6	Expressing your ideas clearly	21.2%	39.4%	31.8%	6.9%	0.7%	594
		126	234	189	41	4	594
7	Documenting your sources	26.6%	33.8%	30.1%	8.7%	0.8%	595
		158	201	179	52	5	595

12. How challenging are the following activities for you?

#	Question	Very easy	Somewhat easy	Somewhat difficult	Very difficult	No experience	Total
1	Using a library catalog (whether print or online)	25.3%	39.5%	20.4%	3.5%	11.1%	592
		150	234	121	21	66	592
2	Using a database (JSTOR, PubMed, PsycINFO, etc.)	21.1%	36.6%	20.4%	4.6%	17.4%	593
		125	217	121	27	103	593
3	Using an Internet search engine	77.8%	17.8%	4.2%	0.2%	0.0%	591
		460	105	25	1	0	591
4	Locating physical sources in the library	23.6%	38.4%	27.7%	5.8%	4.6%	589
		139	226	163	34	27	589
5	Obtaining full text of online sources	23.9%	40.7%	27.5%	3.6%	4.4%	590
		141	240	162	21	26	590
6	Obtaining materials through inter-library loan	12.5%	21.3%	24.9%	4.6%	36.7%	591
		74	126	147	27	217	591
7	Determining whether a source is credible	21.8%	42.7%	28.6%	5.8%	1.2%	588
		128	251	168	34	7	588
8	Deciding what information from your sources to integrate into your project	21.5%	43.2%	31.3%	3.2%	0.8%	592
		127	256	185	19	5	592
9	Knowing when you need to cite a source in text and in a bibliography	168	205	170	46	2	591
		28.4%	34.7%	28.8%	7.8%	0.3%	591
10	Knowing how to cite a source in text and in a bibliography	24.0%	33.6%	32.4%	8.6%	1.4%	592
		142	199	192	51	8	592

13. You are researching presidential speeches. What would you type into a database search to yield the most RELEVANT sources for your topic?

#	Answer	Response	%
1	president OR speech	21	4%
2	president AND speech	495	84%
3	president NOT debate	6	1%
4	speech INSTEAD OF debate	13	2%
5	Don't know	56	9%
	Total	591	100%

14. If you type "psyc*" into a database search, what types of search results would you likely get?

#	Answer	Response	%
1	Articles that only focus on psychometrics	4	1%
2	Articles written only by psychologists	41	7%
3	All articles that contain terms such as psychology, psychopaths, and psychedelic	396	67%
4	Articles relating only to the psychology major	32	5%
5	Don't know	118	20%
	Total	591	100%

15. Using a database search, you find the following article that is relevant to your anthropology project focusing on Korean American students: Park, J. J. (2011). "I needed to get out of my Korean bubble": An ethnographic account of Korean American collegians juggling diversity in a religious context. Anthropology and Education Quarterly, 42(3), 193-212. Which of the following would most likely generate the largest list of additional relevant sources for your project?

#	Answer	Response	%
1	Examining the article's references	202	34%
2	Browsing this volume of Anthropology and Education Quarterly for another article about Korean American students	146	25%
3	Searching for more articles by this author	75	13%
4	Locating the physical copy of the article in the library and scanning the shelves nearby	41	7%
5	Don't know	126	21%
	Total	590	100%

16. You are searching for articles on any of the following US car companies: Ford, General Motors, and Chrysler. What would you type into a database search to yield the LONGEST LIST of relevant sources for your topic?

#	Answer	Response	%
1	Ford OR General Motors OR Chrysler	162	28%
2	Ford AND General Motors AND Chrysler	353	60%
3	Ford NOT General Motors NOT Chrysler	12	2%
4	Ford OR General Motors INSTEAD OF Chrysler	9	2%
5	Don't know	52	9%
	Total	588	100%

17. Which of the following statements about academic journals and popular magazines is INCORRECT?

#	Answer	Response	%
1	Academic journal articles provide objective facts; popular magazine articles do not.	98	17%
2	Articles in academic journals usually include a list of references to other scholarly works; articles in popular magazines usually do not.	76	13%
3	The intended audience for academic journals is mainly other scholars; the intended audience for popular magazines is the general public.	104	18%
4	Authors and editors for academic journals are usually employed in higher education; authors and editors for popular magazines typically are not.	115	20%
5	Don't know	194	33%
Total		587	100%

18. You find the following entry in the References section of a recent article: *Erisman, H. M. (2002). The Cuban Revolution's evolving identity. Latin American Politics and Society, 44(1), 145–153.* In what issue of *Latin American Politics and Society* will you find this article?

#	Answer	Response	%
1	Volume 2002, Issue Number 44	27	5%
2	Volume 44, Issue Number 1	304	52%
3	Volume 1, Issue Number 44	145	25%
4	The issue cannot be determined	8	1%
5	Don't know	104	18%
Total		588	100%

19. For each of the following, indicate whether the item is an entire book, a journal article, or a portion of a book.

#	Question	Entire book	Journal article	Portion of a book	Don't know	Total
1	Jorgenson, Lars W. "Reinterpreting Navajo Rites." Navajo Culture 6.1 (1946): 469-78.	6.9%	18.9%	61.6%	12.7%	583
		40	110	359	74	583
2	Allen, Glover Morrill. Bats. Cambridge: Harvard University Press, 1939.	42.6%	42.6%	3.3%	11.5%	584
		249	249	19	67	584
3	Tanaka, Kazuko. "The New Feminist Movement in Japan, 1970-1990." Japanese Women. Ed. Kumiko Fujimura-Fanselow. New York: Feminist Press, 1995. 343-52.	18.0%	32.2%	37.6%	12.2%	583
		105	188	219	71	583

20. Researchers must distinguish between primary and secondary sources. Drag each source on the left into the box that best describes it on the right: primary source or secondary source. If you do not know the answer, drag the source into the box labeled "Don't know."

#	Answer	Primary source	Secondary source	Don't know
1	Autobiography	482	80	8
2	Biography	330	232	9
3	Book review	91	461	17
4	Fictional novel	188	313	68
5	Lab report	395	149	26
6	Painting of a self-portrait	230	247	92
7	Scholarly article analyzing fictional novel	196	332	39

21. You have selected DNA structure as your topic for a Chemistry 331 research paper. Which of the following would likely yield the most comprehensive list of scholarly articles that are relevant to this topic?

#	Answer	Response	%
1	Searching an electronic index or database related to the sciences (Web of Science, SciFinder, etc.)	206	36%
2	Using a general Internet search like Google or Yahoo	34	6%
3	Paging through print volumes of academic journals in chemistry	32	6%
4	Searching the library catalog for sources available in the library	35	6%
5	All of the above are equally effective	187	32%
6	Don't know	85	15%
	Total	579	100%

22. A peer-reviewed or refereed journal is BEST described as:

#	Answer	Response	%
1	A journal that publishes reviews of other articles	69	12%
2	A journal that publishes articles that have been approved for publication by other scholars	259	45%
3	A journal that includes only articles written collaboratively by peers	93	16%
4	A journal that includes references for each article it publishes	27	5%
5	Don't know	131	23%
	Total	579	100%

23. In a scholarly article or research paper, a citation is:

#	Answer	Response	%
1	A direct quotation from someone else's written work	64	11%
2	Source information for any ideas or text from someone else's written work	168	29%
3	The physical location of a source (book, journal, etc.)	32	6%
4	All of the above	287	50%
5	Don't know	26	5%
Total		577	100%

24. A citation is NOT required when:

#	Answer	Response	%
1	You are paraphrasing, rather than quoting, a source	99	17%
2	More than one source says the same thing	17	3%
3	You are stating a fact that is common knowledge	245	42%
4	All of the above	166	29%
5	Don't know	53	9%
Total		580	100%

25. Indicate if each of the following statements about plagiarism is TRUE or FALSE.

#	Question	True	False	Don't know	Total
1	If you paraphrase (use your own words to describe) the main idea of an article, you do not need to cite the article.	41.0%	50.7%	8.3%	578
		237	293	48	578
2	You only need to document text sources; you do not need to document sources for graphs, tables, or charts.	7.8%	80.8%	11.4%	579
		45	468	66	579
3	You only need to provide documentation for a book or an article when you quote it word for word.	28.5%	64.2%	7.3%	578
		165	371	42	578
4	You can copy another author's text without using quotation marks if you cite it in the bibliography, references, or works cited list.	16.8%	74.9%	8.3%	578
		97	433	48	578
5	A family member or friend can write parts of your paper for you as long as they use your own ideas.	6.7%	82.4%	10.9%	578
		39	476	63	578

26. Which of the following is considered fair use of copyrighted material?

#	Answer	Response	%
1	Student group uses a copyrighted image from the Internet for an event flyer.	80	14%
2	Student photocopies the course readings and shares them with other students in the course who did not buy the textbook.	83	14%
3	Student blogger critiques a recently copyrighted film and posts the critique on a blog site.	224	39%
4	Student group hosts an open screening of a copyrighted film or video.	51	9%
5	Don't know	141	24%
	Total	579	100%

27. An author makes the following argument: Students should be required to live on campus during their first year of college because this promotes better study habits. Assuming that all of the following statements are true, which statement BEST supports the author's argument?

#	Answer	Response	%
1	Students who live on campus are involved in more student activities than those who live off campus.	110	19%
2	Students who live on campus are more likely to review class materials with their classmates than those who live off campus.	374	64%
3	Students who live in off-campus apartments are more likely to drink socially than those who live in residence halls.	23	4%
4	Students who live on campus are more likely to sleep 8 hours or more than students who live off campus.	14	2%
5	Don't know	59	10%
	Total	580	100%

28. You are researching the health effects of marijuana. Which of the following websites likely does NOT contain biased information?

#	Answer	Response	%
1	Norml: Working to reform marijuana laws (http://norml.org)	28	5%
2	Above the Influence (http://www.abovetheinfluence.com)	46	8%
3	CALM: Citizens Against Legalizing Marijuana (http://www.calmcca.org)	29	5%
4	Americans for Safe Access: Advancing Legal Medical Marijuana Therapeutics and Research (http://safeaccessnow.org)	91	16%
5	All of the above websites likely contain biased information	319	55%
6	Don't know	65	11%
	Total	578	100%

29. You are required to write a research paper for your American history class examining the roles of women in the American Civil War. An initial search turns up the following sources. Which source is LEAST likely to be appropriate to cite in your paper?

#	Answer	Response	%
1	Culpepper, M. M. (1991). Trials and triumphs: Women of the American Civil War. East Lansing: Michigan State University Press.	38	7%
2	Heidler, D. S., & Heidler, J. T. (Eds.). (2000). Encyclopedia of the American Civil War: A political, social and military history (Vols. 1–5). Santa Barbara, CA: ABC-CLIO.	181	31%
3	Hearts at Home: Southern Women in the Civil War. (1997). Diaries, letters, photographs, and papers in the Special Collections of the University of Virginia Library. Retrieved from http://www.lib.virginia.edu/small/exhibits/hearts	55	10%
4	Varon, E. R. (2011). Gender History and the Origins of the Civil War. OAH Magazine Of History, 25(2), 19.	60	10%
5	Lewis, J. J. (2013). Female Spies of the Confederacy. Retrieved from http://womenshistory.about.com/od/civilwar/a/women_spies_con.htm	109	19%
6	Don't know	135	23%
Total		578	100%

30. What is your college classification for the 2015-2016 Academic Year?

#	Answer	Response	%
1	Freshman/First Year	501	87%
2	Sophomore	65	11%
3	Junior	11	2%
4	Senior	0	0%
5	Other	2	0%
Total		579	100%

31. Are you Hispanic or Latino/a?

#	Answer	Response	%
1	Yes	24	4%
2	No	554	96%
Total		578	100%

33. Is there something specific you are hoping to learn about doing research that you would like your instructors or librarians to know?

Text response
I want to be able to like researching.
I want to learn how to explain topics better and make a thesis better.
How to find credible sites and research
Juts how to research most efficiently
Using databases
How to configure a paper so it has a better overall flow.
I am hoping to learn how to make research more open to me and how to narrow my sources to the limit of sources that i need for each paper.
How to actually use the data base and how to cite sources.
I am hoping that i am able to use more books than the internet.
How to appropriately use the information i find and work it into my paper correctly
How to succeed
I would like to know how to properly cite sources properly and when to cite them.
Be able to use in-text citations at the right places effectively
Is there fast tips to getting around things
Mla format
How to cite sources correctly
How to make better citations
How to find reliable sources.
I want to make it fun.
I would like to learn how to cite my sources in the most efficient way possible
I would like to learn how to use an old fashioned card catalog, rather than a digital catalog.
What are some good websites that are specifically for researching?
I have nothing in specific that i would like to know. I am open to learning just about anything and i am walking into college with an open mind.
No, my teachers and librarian were helpful in high school and taught us how to look further for our information then what was on the surface.
I will probably need help in writing research papers for mistakes.
I would love to be able to understand how the library books are organized within the pitt library system.
I would like to be able to do other citation methods aside from mla because i have only ever worked with the mla format.
How to properly cite in text
Learn how to write a good research paper.
Learn how to do research, learn how to cite papers
I intend to develop and nurture the ability to confer my academic knowledge in concise, effective and comprehensive literary format. I would also like to learn how to utilize the university's library database.
I want to be able to cite my sources effectively.
Databases
Where to get reliable sources, and how to tell if they're reliable.
Where to start with undergraduate research, what resources are available for choosing a topic
How to find books or materials in the library a little more easily and not time consuming
How to properly cite my work
I know something's about research and typically are okay with doing them.

I like to research about sports
How to correctly cite works.
Formats, citations
Just how to look for the right information from a source full site.
I would like to be taught how to do a correctly written bibliography. Teachers in high school failed to do so.
I would like to learn knowledge that i can bring up in everyday conversations so i can look more intelligent and well informed.
I would like to learn how to better incorporate my sources into my writing, because for some reason i have a tremendous amount of difficulty doing that.
I would like to know how to go into more detail and what are the more credible sources to use
I suck at research papers, i know how to get the information, i just have a hard time putting it all together.
I want to be the very best, that no one ever was, with writing research papers.
I hope i will learn to be able to find credible sources, instead of clicking the first page of websites that pops up on my search.
To see how to allow athletes with heart conditions still be allowed to play
When to cite and when not.
How to do internal citations correctly
How to write citations better.
Not really
I really need help determining what needs to be cited, and what does not

34. What is the field of study of your undergraduate major(s)? If you have not yet declared a major, please select your intended major(s). (Check all that apply)

#	Answer	Response	%
1	Biological Sciences (e.g., Biology, Biochemistry, Environmental Science, Neuroscience/Biopsychology)	107	18%
2	Business and Management (e.g., Accounting, Business Administration, Finance, Marketing)	89	15%
3	Communications (e.g., Journalism, Mass Communication, Speech, Speech Pathology)	8	1%
4	Education (e.g., Elementary Education, Secondary Education, Special Education)	36	6%
5	Engineering (e.g., Chemical Engineering, Civil Engineering, Electrical Engineering, Mechanical Engineering)	26	4%
6	Fine and Performing Arts (e.g., Architecture, Art, Dance, Music, Theatre)	4	1%
7	Health Sciences (e.g., Exercise Science, Nursing, Pharmacy, Public Health)	136	23%
8	Humanities (e.g., Classics, English, Modern Languages & Literature, Philosophy)	10	2%
9	Physical Sciences, Mathematics, and Computer Science (e.g., Astronomy, Chemistry, Earth Sciences, Physics)	31	5%
10	Social Sciences (e.g., Anthropology, Economics, Political Science, Psychology, Sociology)	85	15%
11	Other:	60	10%
12	Undecided	44	8%

Other:
Information science
Creative writing
Criminal justice
Pre pharmacy
Social work
Criminal justice
Pschiatry
Pre- physical thearphy
Literature
Pre med
Sports management
International policy
Mathematics
IT
Physical therapy assistant
Natural science
Computer programming
Physical therapy
Criminal justice
Advertising
Criminal justice
Criminal justice
Pre-vet
Ecology and Evolution & Environmental Engineering
History
Human services
Criminal justice
Criminal jutice
Criminal justice
Criminal justice
Chinese
Criminal justice
Mathematics
Pre med
Information technology
History
Criminal justice
Computer System in Tech
Math
Criminal justice
Computer science
Criminal justice
Information system managment
Criminal justice
Information technology
Criminal justice
Criminal justice
Criminal justice

Criminal justice
Criminal justice
Nursing
Criminal justice
Radiological science
Computer Information Systems and Technologies
Criminal justice
Health and Physical Education
Physician assistant
Math
Athletic training

35. What is your gender?

#	Answer	Response	%
1	Man	221	38%
2	Woman	355	61%
3	Fill in:	4	1%
Total		580	100%

Fill in:
Agender
Agender
GenderFluid

36. What is your citizenship status?

#	Answer	Response	%
1	U.S. citizen	567	98%
2	U.S. permanent resident but not a US citizen	8	1%
3	Not a U.S. citizen or permanent resident	5	1%
Total		580	100%

37. Please indicate the race or races with which you identify. (Choose one or more)

#	Answer	Response	%
1	American Indian or Alaska Native	12	2%
2	Black or African American	84	15%
3	Asian	34	6%
4	Native Hawaiian or other Pacific Islander	3	1%
5	White	475	83%

40. Please indicate your campus.

#	Answer	Response	%
1	Bradford	191	33%
2	Greensburg	290	50%
3	Titusville	99	17%
	Total	580	100%

41. If you communicated with a librarian or participated in an instruction session led by a librarian, to what degree do you feel that the information you received met your needs?

#	Answer	Response	%
6	Very high degree	70	12%
5	High degree	130	22%
4	Average degree	156	27%
3	Low degree	5	1%
2	Very low degree	4	1%
1	I never requested or received information from a librarian.	213	37%
	Total	578	100%