Results of the Standardized Assessment of Information Literacy Skills (SAILS)

for

University of San Francisco

Administration: USF Spring 2018

Report Date: June 2018

www.ProjectSAILS.org

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1. THE TEST AND HOW IT IS SCORED

The Test

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 two documents authored by the Association of College and Research Libraries: (1) *Information Literacy Competency Standards for Higher Education: Standards, Performance Indicators, and Outcomes;* and (2) *Objectives for Information Literacy Instruction: A Model Statement for Academic Librarians* (see Appendix F). In those documents, each of five information literacy competency standards is expanded to include performance indicators, outcomes, and objectives. The SAILS test questions are derived from the outcomes and objectives.

ACRL Standard 4 is not included in the SAILS test. Some outcomes or objectives from the other standards are not tested because they are either covered by other outcomes or objectives or are not suitable for multiple-choice testing. Project SAILS has taken an additional step and rearranged the outcomes and objectives from the ACRL documents into eight skill sets. This report gives detailed results for the eight skill sets and more general results for the four ACRL standards.

The SAILS item bank has 162 items. Each student answers 40 items from the item bank and five items that are in development. The associated document, Cohort Test Questions, contains all of the test items.

The items span the eight SAILS skill sets and the four ACRL standards targeted by the test. Students respond to different sets of items, with some common items shared across the individual tests. Figure 1.1 shows how many items are in each of the subscales. Appendix D presents the items in each skill set and standard.

Figure 1.1 Number of Items in Each Subscale

SAILS Skill Sets	Number of Items
Developing a Research Strategy	32
Selecting Finding Tools	18
Searching	27
Using Finding Tool Features	14
Retrieving Sources	15
Evaluating Sources	21
Documenting Sources	15
Understanding Economic, Legal, and Social Issues	20

ACRL Standards	Number of Items
Standard 1: Determines the nature and extent of the information needed	39
Standard 2: Accesses needed information effectively and efficiently	75
Standard 3: Evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system	21
Standard 4: NOT USED	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	27

Scoring

The measurement model used by SAILS is item response theory (IRT), specifically the one-parameter Rasch model. IRT calculates scores based on a combination of item difficulty and student performance. The process begins with merging data from all institutions into a benchmark file. Student responses to the items on the test are then used to determine the difficulty level of each item. Once that determination is made, student responses are analyzed to determine an average score for each group (or cohort). Scores in the report are placed on a scale that ranges from 0 to 1000.

The report gives results for several groups, including your institution overall, institutions of a similar type, and all institutions combined. Depending on the size of other cohorts and the variability of their responses, additional breakouts may be reported for class standing and majors. If you created any custom questions, breakouts for those may also appear in the report.

2. TEST-TAKER PROFILE

Figure 2.1 is a demographic profile of students who took the SAILS test at University of San Francisco, along with profiles for other institutions of the same type (Doctorate), for the same country, and for all other institutions combined. The table reports the available demographic data; not all elements of demographic data were reported for all test takers.

Figure 2.1

	USFCA		Institution Type: Doctorate		US Institutions		All Institutions	
	(n=120)		(n=10,407)		(n=48,072)		(n=48,642)	
Characteristics	n	%	n	%	n	%	n	%
Class Standing								
Freshman	52	43.3	4,246	40.8	19,470	40.5	19,873	40.9
Sophomore	0	0.0	1,211	11.6	5,017	10.4	5,057	10.4
Junior	0	0.0	1,136	10.9	5,090	10.6	5,101	10.5
Senior	68	56.7	2,864	27.5	16,147	33.6	16,243	33.4
Other	0	0.0	576	5.5	2,348	4.9	2,368	4.9
Not reported	0	0.0	374	3.6	0	0.0	0	0.0
Student Major								
Environmental Studies	1	0.8	78	0.7	486	1.0	486	1.0
Art History/Architecture	2	1.7	44	0.4	60	0.1	60	0.1
Business/Management	25	20.8	1,433	13.8	11,233	23.4	11,360	23.4
Communications	3	2.5	283	2.7	1,136	2.4	1,137	2.3
Education	0	0.0	445	4.3	6,048	12.6	6,076	12.5
Computer Science	6	5.0	900	8.6	1,467	3.1	1,639	3.4
General Studies	0	0.0	61	0.6	639	1.3	643	1.3
Nursing/Health Sciences	30	25.0	2,835	27.2	4,497	9.4	4,507	9.3
History	1	0.8	75	0.7	486	1.0	486	1.0
Humanities	7	5.8	198	1.9	660	1.4	669	1.4
Politics	7	5.8	165	1.6	1,021	2.1	1,033	2.1
Military/Naval Science	0	0.0	2	0.0	194	0.4	194	0.4
Performing & Fine Arts	3	2.5	340	3.3	741	1.5	764	1.6
Science/Math	12	10.0	788	7.6	1,705	3.5	1,766	3.6
Social Sciences/Psychology	23	19.2	983	9.4	6,298	13.1	6,387	13.1
Other	0	0.0	1,247	12.0	9,854	20.5	9,883	20.3
Undecided	0	0.0	468	4.5	997	2.1	1,002	2.1
Not reported	0	0.0	62	0.6	550	1.2	550	1.1

Custom Demographics	USFCA (N=120) n	%
In the past academic year, have you attended a library instruction session with a Gleeson librarian?		
1 (one) Session	32	26.7
2 (two) Sessions	36	30.0
3+ (three or more) Sessions	7	5.8
Never attended	45	37.5
Not reported	0	0.0

3. RESULTS BY SAILS SKILL SETS

Student performance is presented in this section by skill sets, which are regroupings of the ACRL objectives for information literacy instruction. See Appendix E for the full list of the original ACRL standards, performance indicators, outcomes, and objectives.

Figures and text are provided only for skill sets that have enough items and where enough data were collected to allow for analysis on the skill set.

The first part of this section reports findings from across the skill sets, with a Summary of Results followed by Detailed Results in a table. The second part of this section focuses on each of the individual skill sets.

A. Across the Skill Sets

Summary of Results

Students at University of San Francisco performed better than the institution-type benchmark on the following SAILS Skill Sets:

Selecting Finding Tools
Searching
Retrieving Sources
Evaluating Sources
Documenting Sources
Understanding Economic, Legal, and Social Issues

Students at University of San Francisco performed about the same as the institution-type benchmark on the following SAILS Skill Sets:

Developing a Research Strategy
Using Finding Tool Features

To identify which skill sets were easier and which were more difficult for University of San Francisco students, below are the skill sets ordered by performance, from best to worst. Skills set scores cannot be directly compared to each other. Instead, the ordering reflects the magnitude of difference between your institution's mean and the institution-type benchmark mean. We calculate the mean and standard deviation of all of the Administrations in the benchmark for each skill set. The ranking is then the distance your mean is from the benchmark mean as a fraction of the standard deviation.

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

Detailed Results - Data Table

Scores are placed on a scale that ranges from 0 to 1000. In the following table, the average score for each group is reported. Standard errors above and below the score are indicated with ±. The accuracy of the average score calculation is affected by sample size and variability. Small samples or large variability can reduce the accuracy of the score calculation. In those cases, the standard error is larger. (Standard error is the combination of sampling error and measurement error.) Where we are able to measure the score with a high degree of accuracy, the standard error is small.

The true group average score falls between two numbers. Those numbers can be calculated by adding and subtracting the standard error to the reported score. For example, a reported score of 525 with a standard error of ± 5 has a range from 530 to 520. The true group average score falls in the range of 530 to 520.

To determine whether two groups are meaningfully different from each other, see whether the ranges of scores overlap. Ranges of scores that do overlap are not meaningfully different from each other; those that do NOT overlap are meaningfully different.

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

	University of San Francisco	Institution Type: Doctorate	US Institutions	All Institutions
SAILS Skill Sets				
Developing a Research Strategy	574 ±10	562 ±3	519 ±1	519 ±1
Selecting Finding Tools	588 ±14	549 ±3	498 ±1	498 ±1
Searching	560 ±10	541 ±3	494 ±1	494 ±1
Using Finding Tool Features	563 ±14	561 ±4	517 ±1	517 ±1
Retrieving Sources	579 ±15	553 ±4	499 ±1	499 ±1
Evaluating Sources	565 ±13	540 ±3	489 ±1	489 ±1
Documenting Sources	546 ±17	525 ±4	459 ±1	459 ±1
Understanding Economic, Legal, and Social Issues	582 ±14	546 ±3	497 ±1	497 ±1

B. Within Skill Sets

This section reports in detail the performance of University of San Francisco students on the individual SAILS skill sets. For each skill set, the report includes: Summary of Results; Detailed Results - Data Table; Detailed Results - Chart; and ACRL Objectives Measured by the Skill Set. Results for the custom demographic questions are presented in the charts.

1. SAILS Skill Set: Developing a Research Strategy

Summary of Results

University of San Francisco Compared to Other Doctorate Institutions, by Demographic Characteristics

Students at University of San Francisco performed better than the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Freshman
Major:	Business/Management, Science/Math

Students at University of San Francisco performed about the same as the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Senior
Major:	Nursing/Health Sciences, Social Sciences/Psychology

Demographic Groups within University of San Francisco Compared to the USFCA Overall Performance on This Skill Set

Within University of San Francisco, the following groups performed better than the USFCA-average-student benchmark:

Major:	Science/Math

Within University of San Francisco, the following groups performed about the same as the USFCA-average-student benchmark:

Class Standing:	Freshman, Senior
Major:	Business/Management, Nursing/Health Sciences, Social Sciences/Psychology

Detailed Results - Data Table

Scores are placed on a scale that ranges from 0 to 1000. In the following table, the average score for each group is reported. Standard errors above and below the score are indicated with ±. The accuracy of the average score calculation is affected by sample size and variability. Small samples or large variability can reduce the accuracy of the score calculation. In those cases, the standard error is larger. (Standard error is the combination of sampling error and measurement error.) Where we are able to measure the score with a high degree of accuracy, the standard error is small.

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Figure 3.2 Data Table for Skill Set: Developing a Research Strategy

	University of San Francisco	Institution Type: Doctorate	US Institutions	All Institutions
Overall	574 ±10	562 ±3	519 ±1	519 ±1
Class Standing				
Freshman	589 ±15	563 ±4	503 ±1	503 ±1
Senior	563 ±13	556 ±4	536 ±1	536 ±1
Majors				
Business / Management	585 ±20	544 ±7	521 ±1	520 ±1
Nursing / Health Sciences	563 ±19	568 ±8	524 ±2	524 ±2
Science / Math	627 ±31	572 ±7	543 ±3	544 ±3
Social Sciences / Psychology	553 ±23	561 ±8	528 ±1	528 ±1

CUSTOM DEMOGRAPHICS QUESTIONS

In the past academic year, have you attended a library instruction session with a Gleeson librarian?	
1 (one) Session	595 ±17
2 (two) Sessions	568 ±17
3+ (three or more) Sessions	Insufficient data
Never attended	567 ±16

Detailed Results - Chart

The chart on the following pages compare the average student performance at your institution to the average for your institution type, for the same country, and the average for all institutions.

Charts may also include indicators of performance by class standing, major, and custom demographics.

On the left side of each chart (the vertical axis), the scale ranges from 0 to 1000. Average scores for each group (cohort) are shown on the chart. Use the color key to identify each group.

Each box on the chart shows the average score for that group plus the standard error. The accuracy of the average score calculation is affected by sample size and variability. Small samples or large variability can reduce the accuracy of the score calculation. In those cases, the standard error is larger. (Standard error is the combination of sampling error and measurement error.) Where we are able to measure the score with a high degree of accuracy, the standard error is small.

On the chart, the bigger boxes show larger standard error. The upper and lower boundaries of each box can be calculated by adding and subtracting the standard error to the score. For example, a score of 525 with a standard error of ± 5 has a box that ranges from 530 to 520. The true group average score falls in the range of 530 to 520.

To determine whether two groups are meaningfully different from each other, see whether the ranges of scores, represented by the boxes, overlap. Ranges of scores (boxes) that do overlap are not meaningfully different from each other; those that do NOT overlap are meaningfully different.

For example,

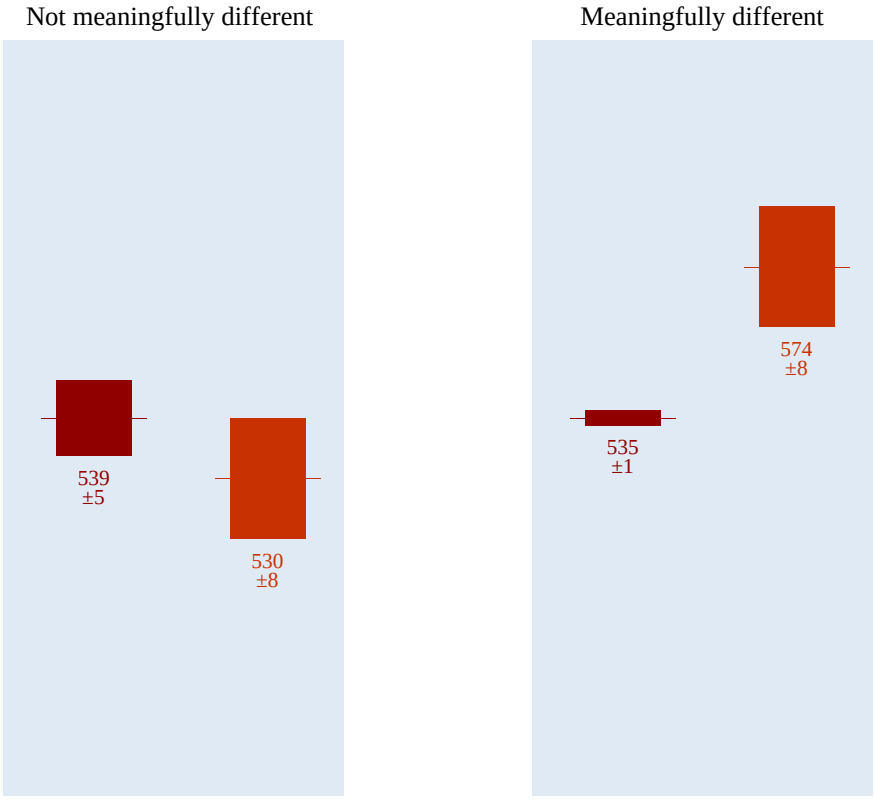

Figure 3.3 Chart for Skill Set: Developing a Research Strategy

Figure 3.3 (continued) Chart for Skill Set: Developing a Research Strategy

Figure 3.3 (continued) Chart for Skill Set: Developing a Research Strategy

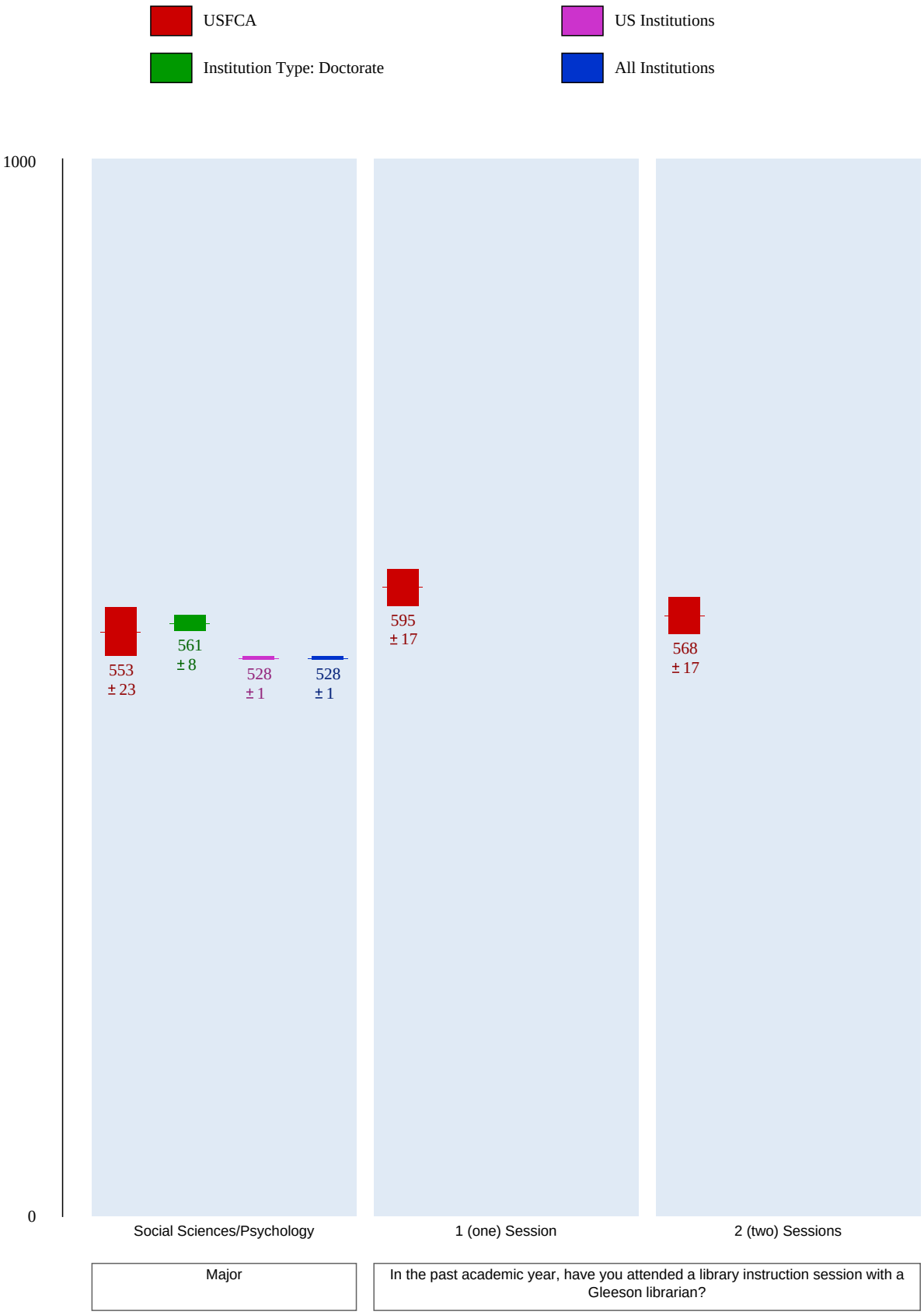

Figure 3.3 (continued) Chart for Skill Set: Developing a Research Strategy

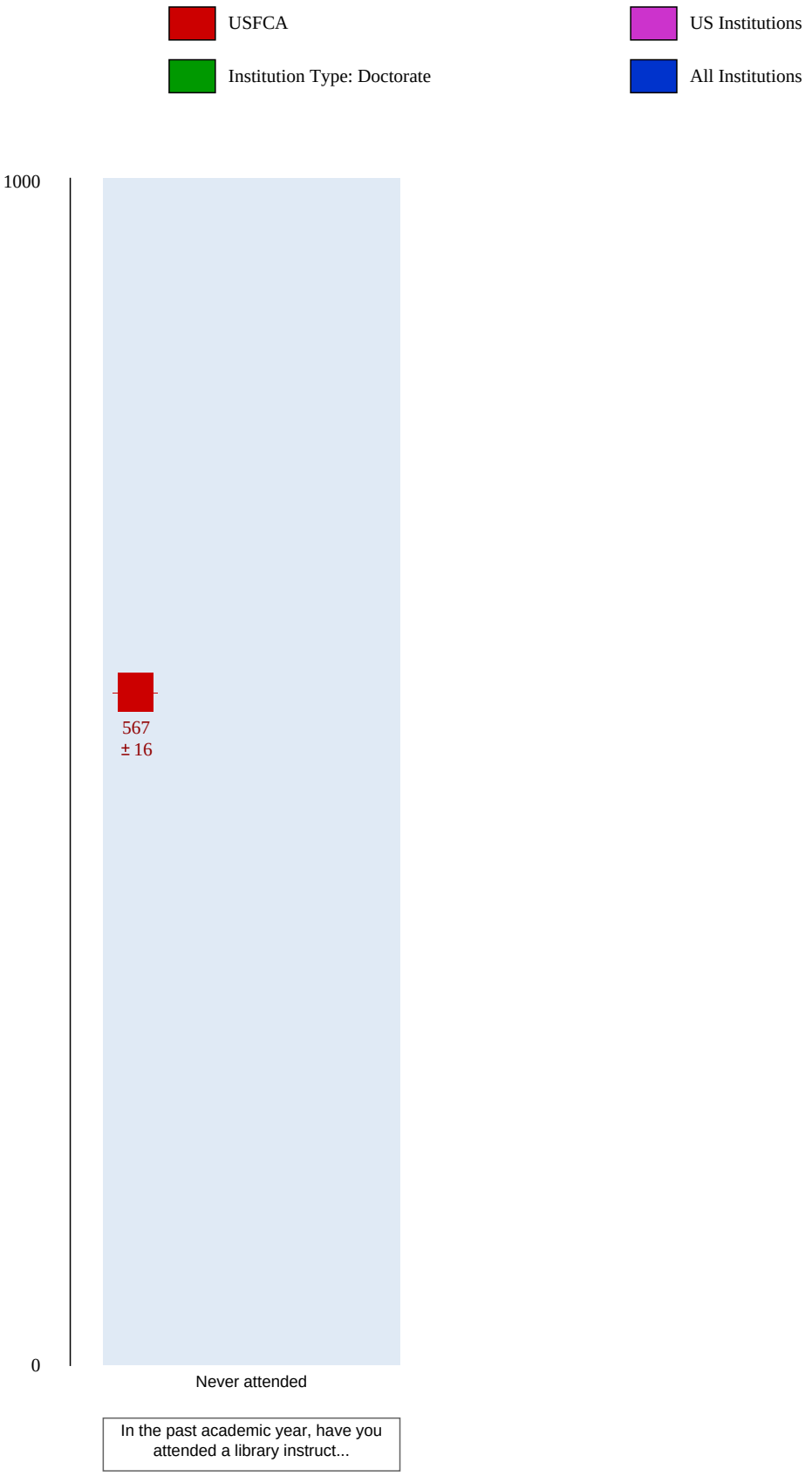

Figure 3.4 Objectives and Outcomes for Skill Set: Developing a Research Strategy

The numbering refers to the ACRL documents: the first digit is the ACRL standard, the second is the ACRL performance indicator, the third is the ACRL outcome, and the fourth is the ACRL objective.

1.1.1 Confers with instructors and participates in class discussions, peer workgroups and electronic discussions to identify a research topic, or other information need

1.1.4.1 Identifies an initial question that might be too broad or narrow, as well as one that is probably manageable.

1.1.4.3 Narrows a broad topic and broadens a narrow one by modifying the scope or direction of the question.

1.1.4.4 Demonstrates an understanding of how the desired end product (i.e., the required depth of investigation and analysis) will play a role in determining the need for information.

1.1.4.5 Uses background information sources effectively to gain an initial understanding of the topic.

1.1.4.6 Consults with the course instructor and librarians to develop a manageable focus for the topic.

1.1.5.3 Decides when a research topic has multiple facets or may need to be put into a broader context.

1.2.1.2 Defines the "invisible college" (e.g., personal contacts, listservs specific to a discipline or subject) and describes its value.

1.2.2.1 Names the three major disciplines of knowledge (humanities, social sciences, sciences) and some subject fields that comprise each discipline.

1.2.2.4 Describes how the publication cycle in a particular discipline or subject field affects the researcher's access to information.

1.2.3.1 Identifies various formats in which information is available.

1.2.5.1 Describes how various fields of study define primary and secondary sources differently.

1.2.5.2 Identifies characteristics of information that make an item a primary or secondary source in a given field.

1.4.1.1 Identifies a research topic that may require revision, based on the amount of information found (or not found).

1.4.1.2 Identifies a topic that may need to be modified, based on the content of information found.

1.4.1.3 Decides when it is and is not necessary to abandon a topic depending on the success (or failure) of an initial search for information.

2.2.1.1 Describes a general process for searching for information.

2.2.2.4 Identifies keywords that describe an information source (e.g., book, journal article, magazine article, Web site).

2.3.3.3 Identifies the appropriate service point or resource for the particular information need.

2.3.3.5 Uses the Web site of an institution, library, organization or community to locate information about specific services.

2.5.5 Uses various technologies to manage the information selected and organized

3.4.1 Determines whether information satisfies the research or other information need

2. SAILS Skill Set: Selecting Finding Tools

Summary of Results

University of San Francisco Compared to Other Doctorate Institutions, by Demographic Characteristics

Students at University of San Francisco performed better than the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Freshman, Senior
Major:	Science/Math, Social Sciences/Psychology

Students at University of San Francisco performed about the same as the institution-type benchmark on this skill set for the following demographic groups:

Major:	Business/Management, Nursing/Health Sciences

Demographic Groups within University of San Francisco Compared to the USFCA Overall Performance on This Skill Set

Within University of San Francisco, the following groups performed about the same as the USFCA-average-student benchmark:

Class Standing:	Freshman, Senior
Major:	Business/Management, Nursing/Health Sciences, Science/Math, Social Sciences/Psychology

Detailed Results - Data Table

Scores are placed on a scale that ranges from 0 to 1000. In the following table, the average score for each group is reported. Standard errors above and below the score are indicated with ±. The accuracy of the average score calculation is affected by sample size and variability. Small samples or large variability can reduce the accuracy of the score calculation. In those cases, the standard error is larger. (Standard error is the combination of sampling error and measurement error.) Where we are able to measure the score with a high degree of accuracy, the standard error is small.

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To determine whether two groups are meaningfully different from each other, see whether the ranges of scores overlap. Ranges of scores that do overlap are not meaningfully different from each other; those that do NOT overlap are meaningfully different.

Figure 3.5 Data Table for Skill Set: Selecting Finding Tools

	University of San Francisco	Institution Type: Doctorate	US Institutions	All Institutions
Overall	588 ±14	549 ±3	498 ±1	498 ±1
Class Standing				
Freshman	582 ±20	538 ±5	482 ±1	482 ±1
Senior	592 ±19	554 ±6	514 ±1	514 ±1
Majors				
Business / Management	554 ±32	541 ±9	501 ±1	501 ±1
Nursing / Health Sciences	592 ±27	557 ±10	503 ±2	503 ±2
Science / Math	618 ±36	550 ±9	528 ±4	528 ±4
Social Sciences / Psychology	578 ±36	532 ±10	503 ±2	502 ±2

CUSTOM DEMOGRAPHICS QUESTIONS

In the past academic year, have you attended a library instruction session with a Gleeson librarian?	
1 (one) Session	664 ±24
2 (two) Sessions	551 ±23
3+ (three or more) Sessions	Insufficient data
Never attended	578 ±23

Detailed Results - Chart

The chart on the following pages compare the average student performance at your institution to the average for your institution type, for the same country, and the average for all institutions.

Charts may also include indicators of performance by class standing, major, and custom demographics.

On the left side of each chart (the vertical axis), the scale ranges from 0 to 1000. Average scores for each group (cohort) are shown on the chart. Use the color key to identify each group.

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For example,

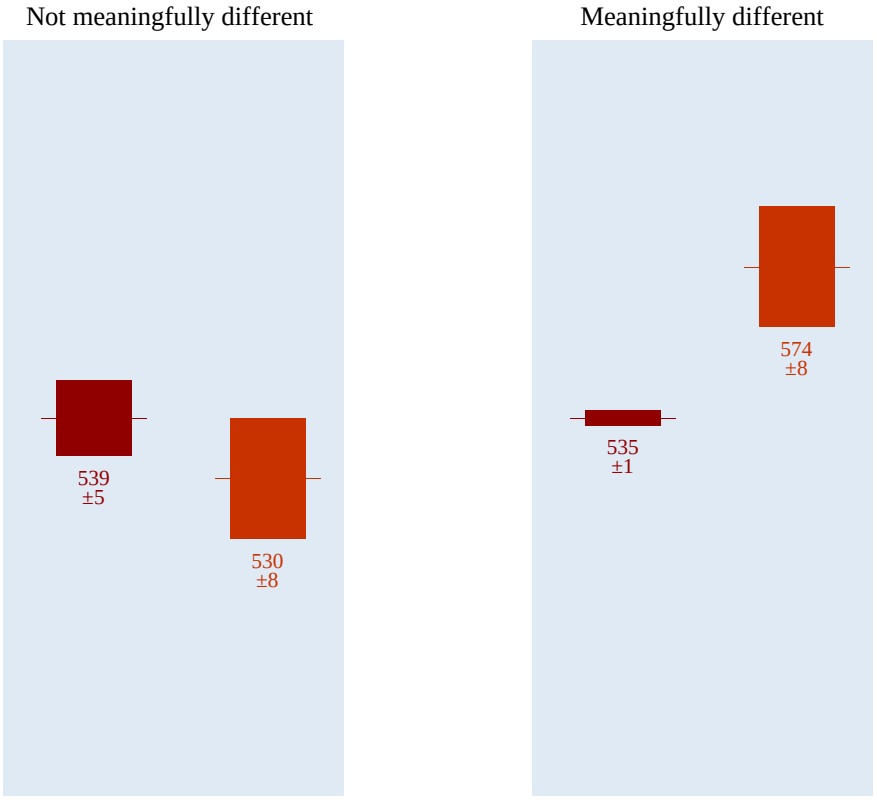

Figure 3.6 Chart for Skill Set: Selecting Finding Tools

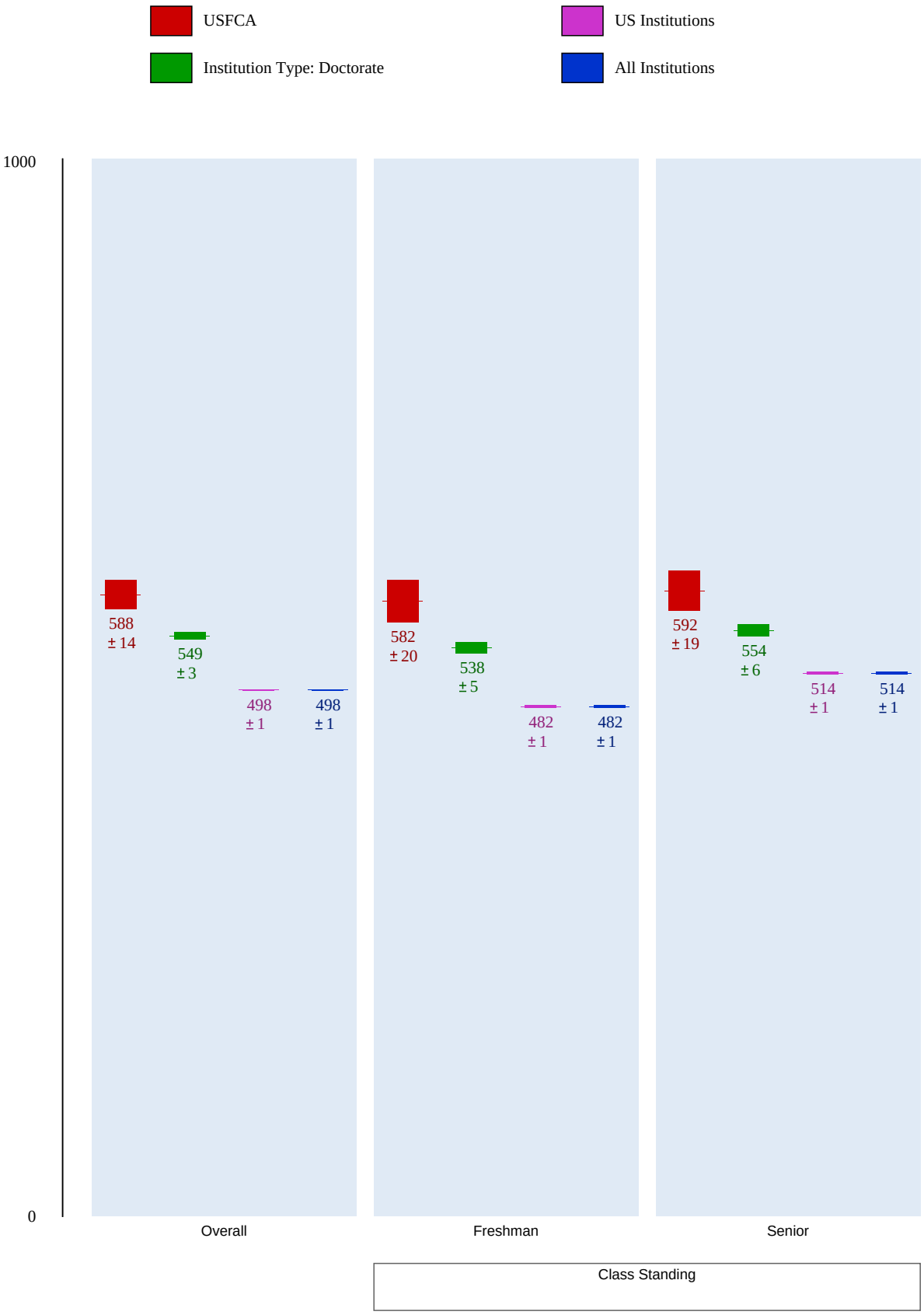

Figure 3.6 (continued) Chart for Skill Set: Selecting Finding Tools

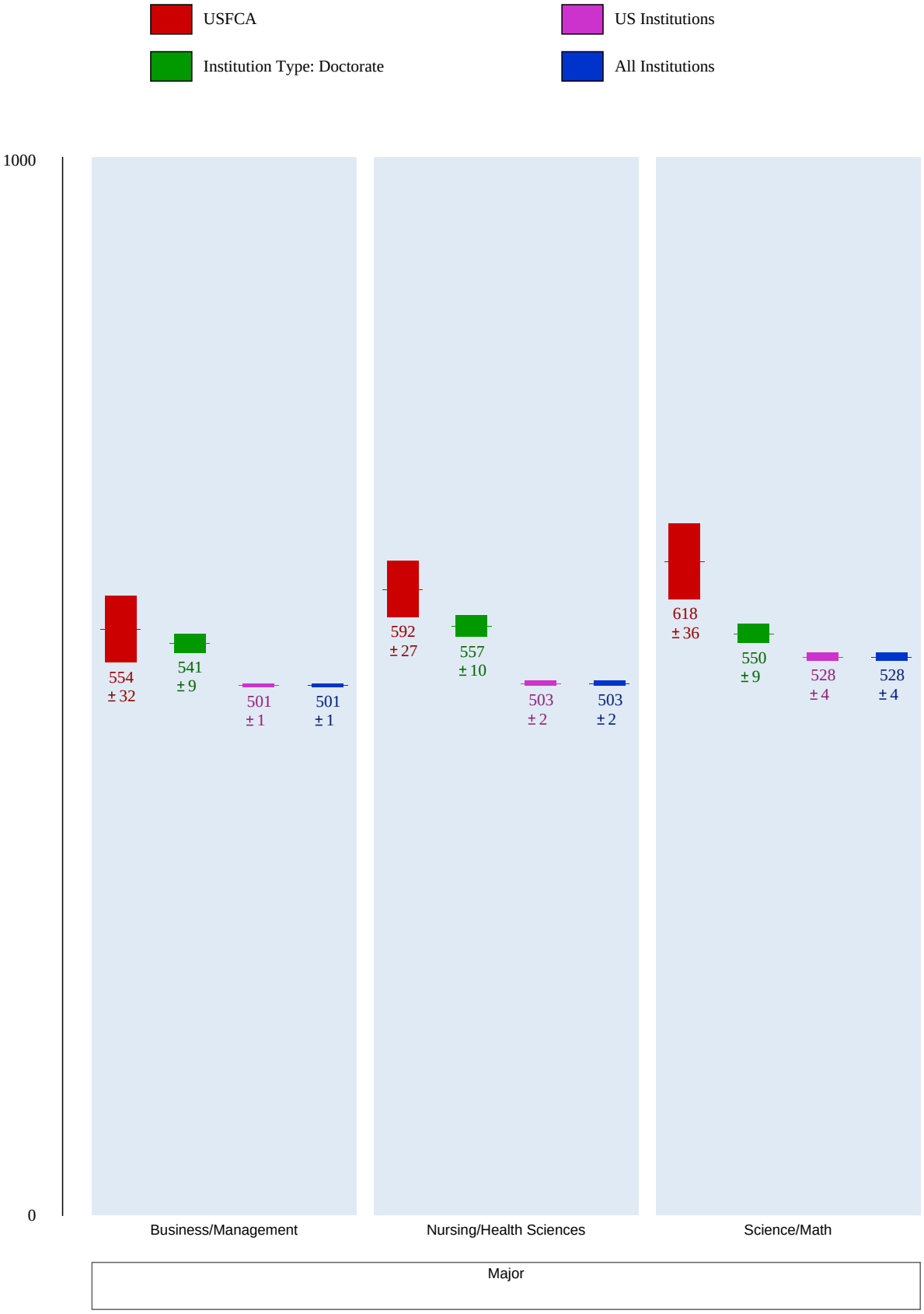

Figure 3.6 (continued) Chart for Skill Set: Selecting Finding Tools

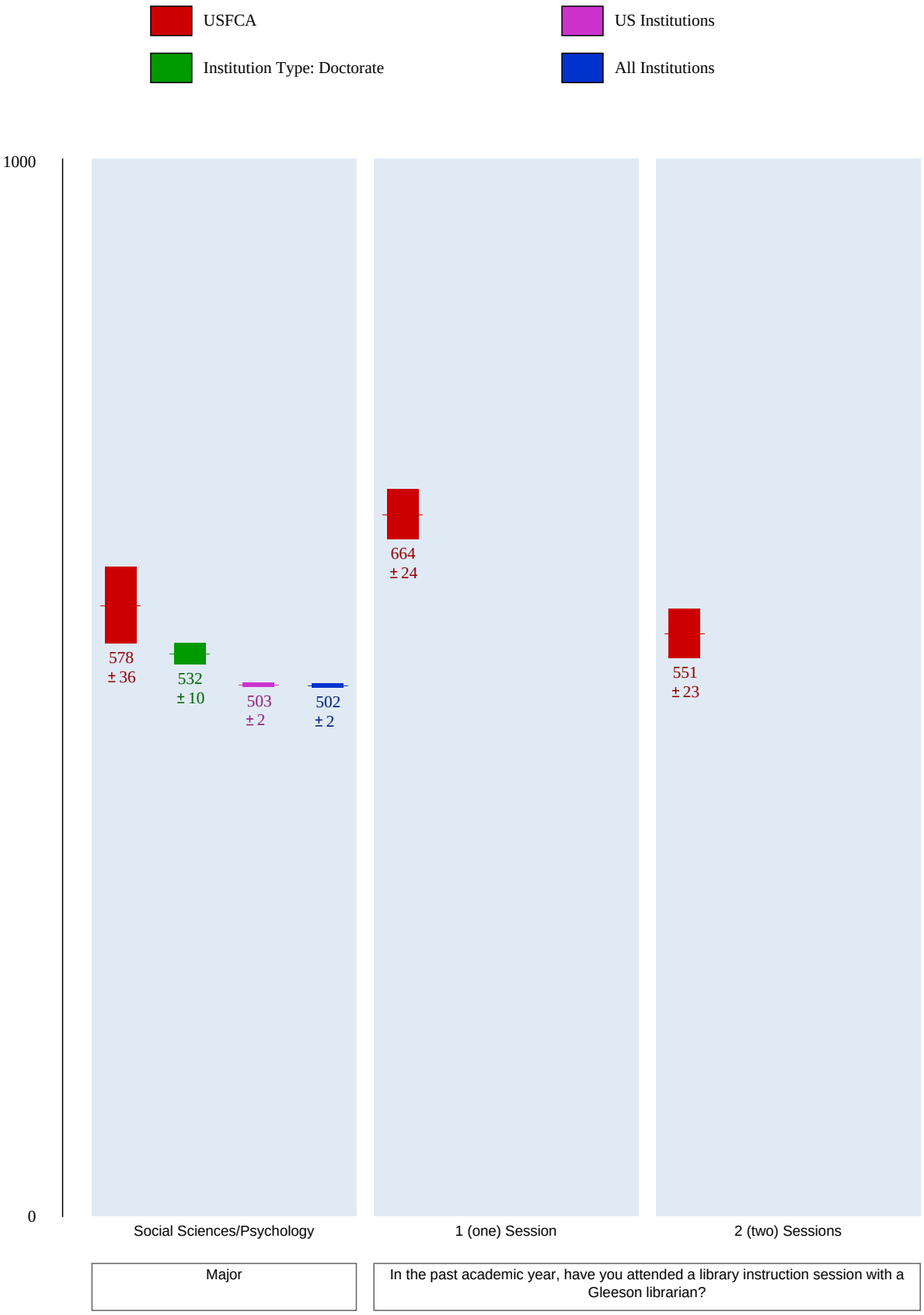

Figure 3.6 (continued) Chart for Skill Set: Selecting Finding Tools

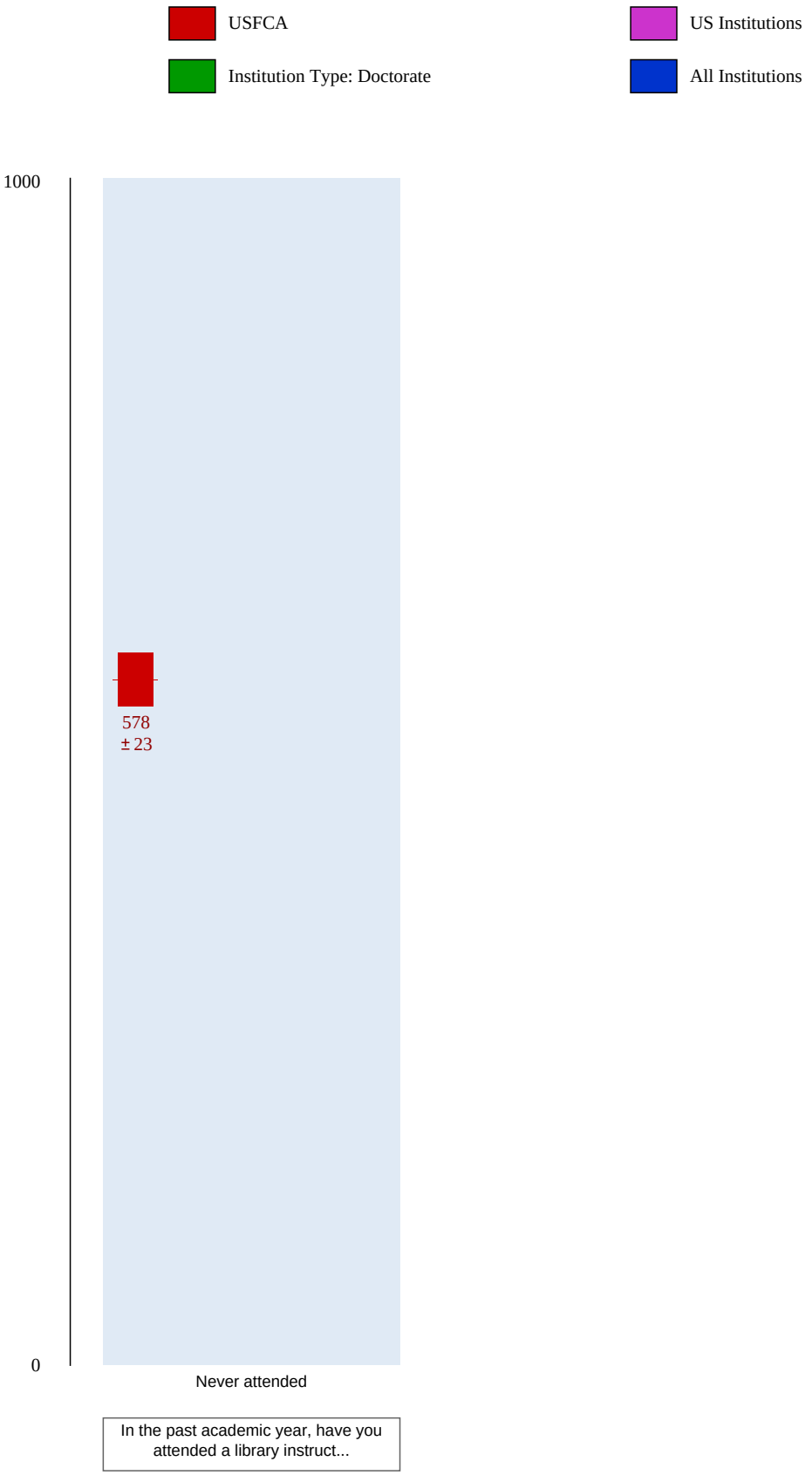

Figure 3.7 Objectives and Outcomes for Skill Set: Selecting Finding Tools

The numbering refers to the ACRL documents: the first digit is the ACRL standard, the second is the ACRL performance indicator, the third is the ACRL outcome, and the fourth is the ACRL objective.

1.1.3.2 Demonstrates when it is appropriate to use a general and subject-specific information source (e.g., to provide an overview, to give ideas on terminology).

2.1.3.4 Distinguishes among indexes, online databases, and collections of online databases, as well as gateways to different databases and collections.

2.1.3.5 Selects appropriate tools (e.g., indexes, online databases) for research on a particular topic.

2.1.3.6 Identifies the differences between freely available Internet search tools and subscription or fee-based databases.

2.1.3.8 Determines the period of time covered by a particular source.

2.1.3.9 Identifies the types of sources that are indexed in a particular database or index (e.g., an index that covers newspapers or popular periodicals versus a more specialized index to find scholarly literature).

2.2.6.1 Locates major print bibliographic and reference sources appropriate to the discipline of a research topic.

2.3.1.2 Identifies research sources, regardless of format, that are appropriate to a particular discipline or research need.

2.3.1.4 Uses different research sources (e.g., catalogs and indexes) to find different types of information (e.g., books and periodical articles).

2.3.2.2 Explains the difference between the library catalog and a periodical index.

2.3.2.3 Describes the different scopes of coverage found in different periodical indexes.

3.4.5.3 Determines when some topics may be too recent to be covered by some standard tools (e.g., a periodicals index) and when information on the topic retrieved by less authoritative tools (e.g., a Web search engine) may not be reliable.

3.6.3 Seeks expert opinion through a variety of mechanisms (e.g., interviews, email, listservs)

3. SAILS Skill Set: Searching

Summary of Results

University of San Francisco Compared to Other Doctorate Institutions, by Demographic Characteristics

Students at University of San Francisco performed better than the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Senior
Major:	Social Sciences/Psychology

Students at University of San Francisco performed about the same as the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Freshman
Major:	Business/Management, Nursing/Health Sciences, Science/Math

Demographic Groups within University of San Francisco Compared to the USFCA Overall Performance on This Skill Set

Within University of San Francisco, the following groups performed about the same as the USFCA-average-student benchmark:

Class Standing:	Freshman, Senior
Major:	Business/Management, Nursing/Health Sciences, Science/Math, Social Sciences/Psychology

Detailed Results - Data Table

Scores are placed on a scale that ranges from 0 to 1000. In the following table, the average score for each group is reported. Standard errors above and below the score are indicated with ±. The accuracy of the average score calculation is affected by sample size and variability. Small samples or large variability can reduce the accuracy of the score calculation. In those cases, the standard error is larger. (Standard error is the combination of sampling error and measurement error.) Where we are able to measure the score with a high degree of accuracy, the standard error is small.

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To determine whether two groups are meaningfully different from each other, see whether the ranges of scores overlap. Ranges of scores that do overlap are not meaningfully different from each other; those that do NOT overlap are meaningfully different.

Figure 3.8 Data Table for Skill Set: Searching

	University of San Francisco	Institution Type: Doctorate	US Institutions	All Institutions
Overall	560 ±10	541 ±3	494 ±1	494 ±1
Class Standing				
Freshman	555 ±14	542 ±4	479 ±1	479 ±1
Senior	564 ±13	532 ±5	507 ±1	506 ±1
Majors				
Business / Management	548 ±22	528 ±7	498 ±1	497 ±1
Nursing / Health Sciences	554 ±19	555 ±8	498 ±2	498 ±2
Science / Math	559 ±22	543 ±7	518 ±3	520 ±3
Social Sciences / Psychology	592 ±23	537 ±8	499 ±2	498 ±2

CUSTOM DEMOGRAPHICS QUESTIONS

In the past academic year, have you attended a library instruction session with a Gleeson librarian?	
1 (one) Session	574 ±20
2 (two) Sessions	574 ±18
3+ (three or more) Sessions	Insufficient data
Never attended	546 ±14

Detailed Results - Chart

The chart on the following pages compare the average student performance at your institution to the average for your institution type, for the same country, and the average for all institutions.

Charts may also include indicators of performance by class standing, major, and custom demographics.

On the left side of each chart (the vertical axis), the scale ranges from 0 to 1000. Average scores for each group (cohort) are shown on the chart. Use the color key to identify each group.

Each box on the chart shows the average score for that group plus the standard error. The accuracy of the average score calculation is affected by sample size and variability. Small samples or large variability can reduce the accuracy of the score calculation. In those cases, the standard error is larger. (Standard error is the combination of sampling error and measurement error.) Where we are able to measure the score with a high degree of accuracy, the standard error is small.

On the chart, the bigger boxes show larger standard error. The upper and lower boundaries of each box can be calculated by adding and subtracting the standard error to the score. For example, a score of 525 with a standard error of ± 5 has a box that ranges from 530 to 520. The true group average score falls in the range of 530 to 520.

To determine whether two groups are meaningfully different from each other, see whether the ranges of scores, represented by the boxes, overlap. Ranges of scores (boxes) that do overlap are not meaningfully different from each other; those that do NOT overlap are meaningfully different.

For example,

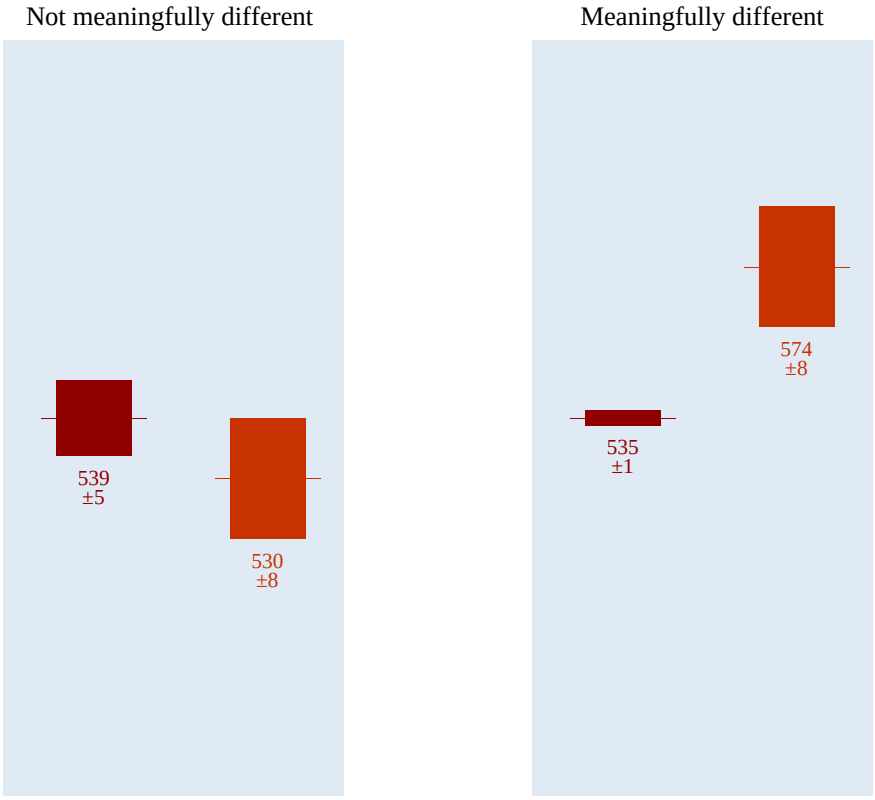

Figure 3.9 Chart for Skill Set: Searching

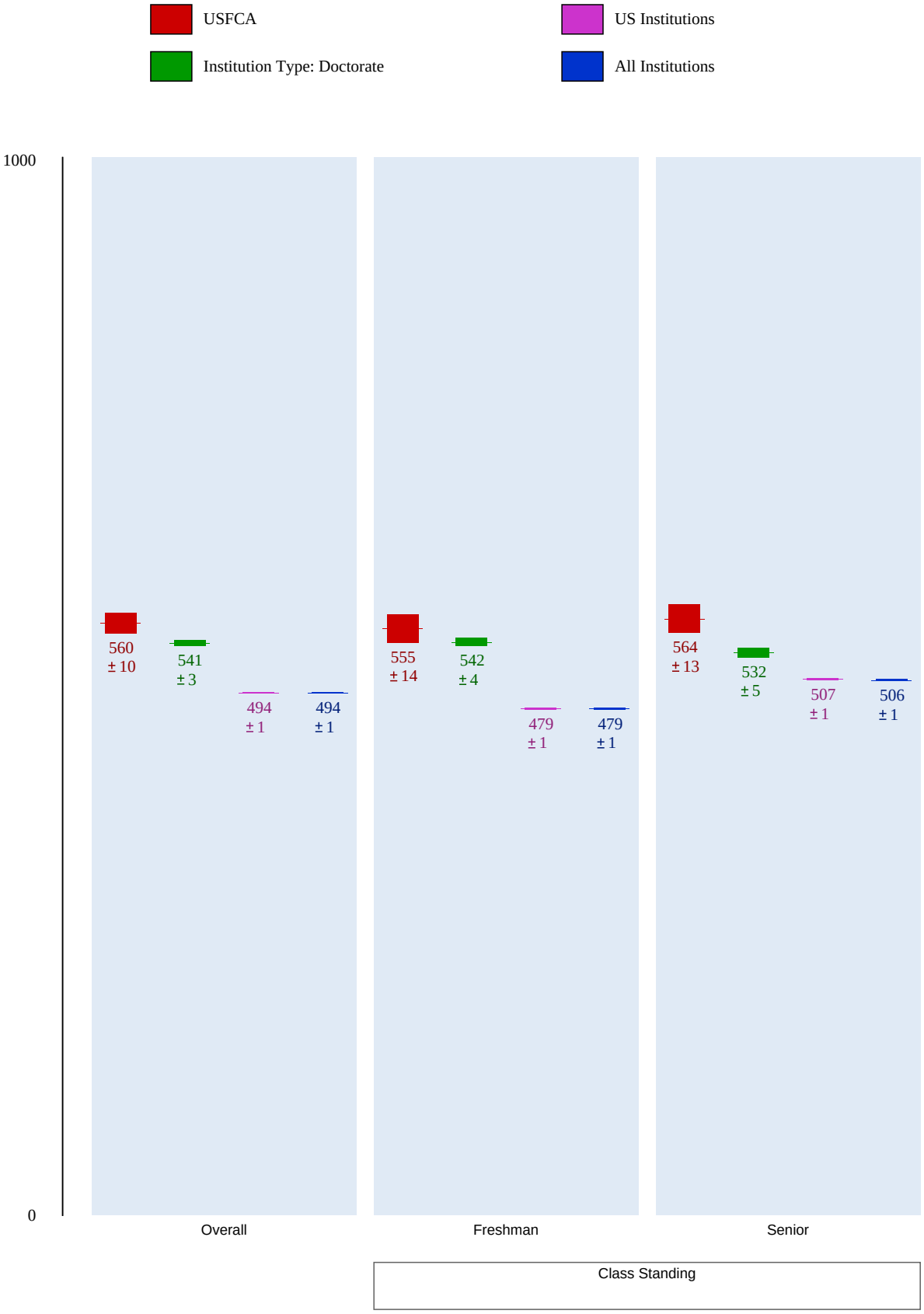

Figure 3.9 (continued) Chart for Skill Set: Searching

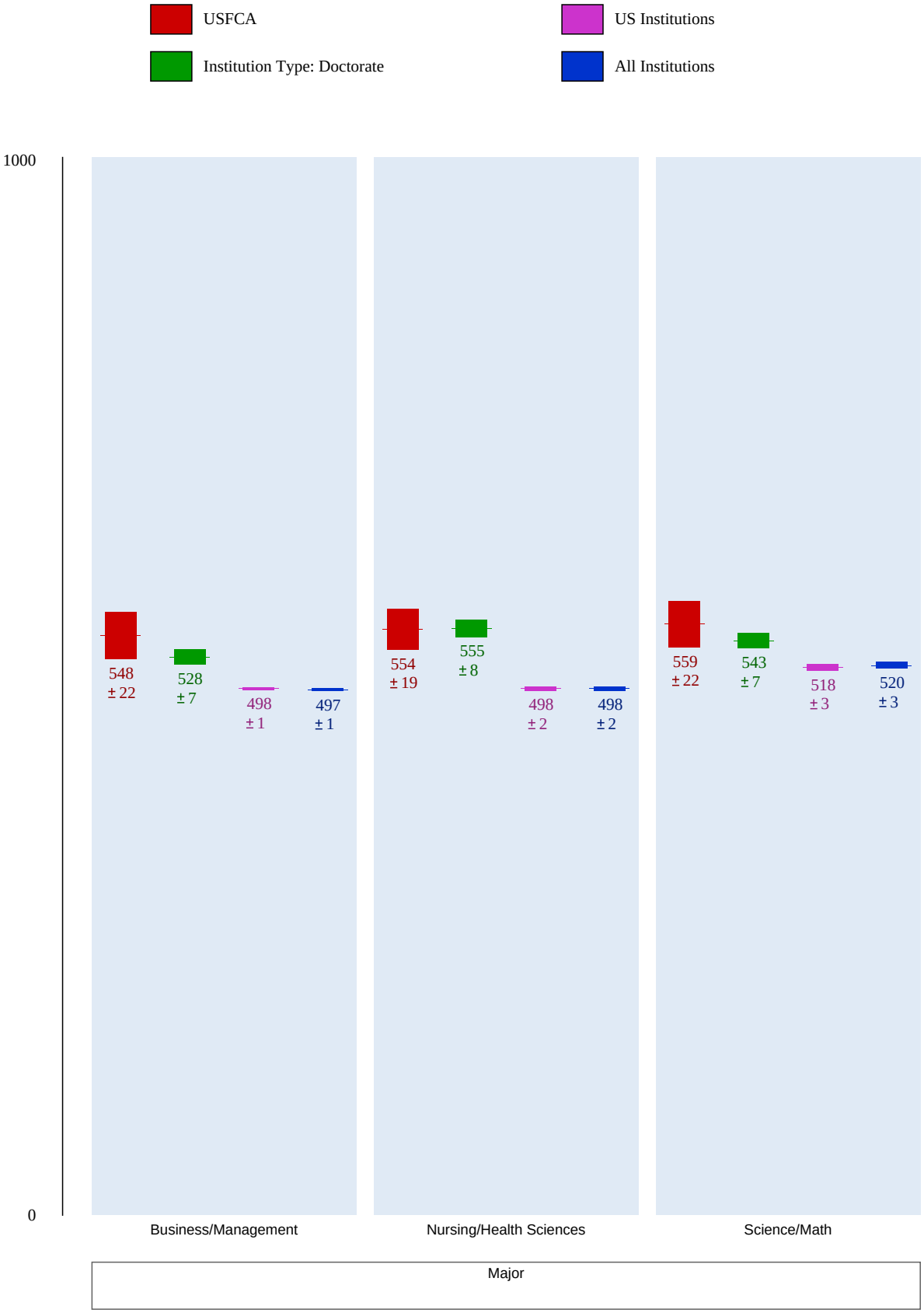

Figure 3.9 (continued) Chart for Skill Set: Searching

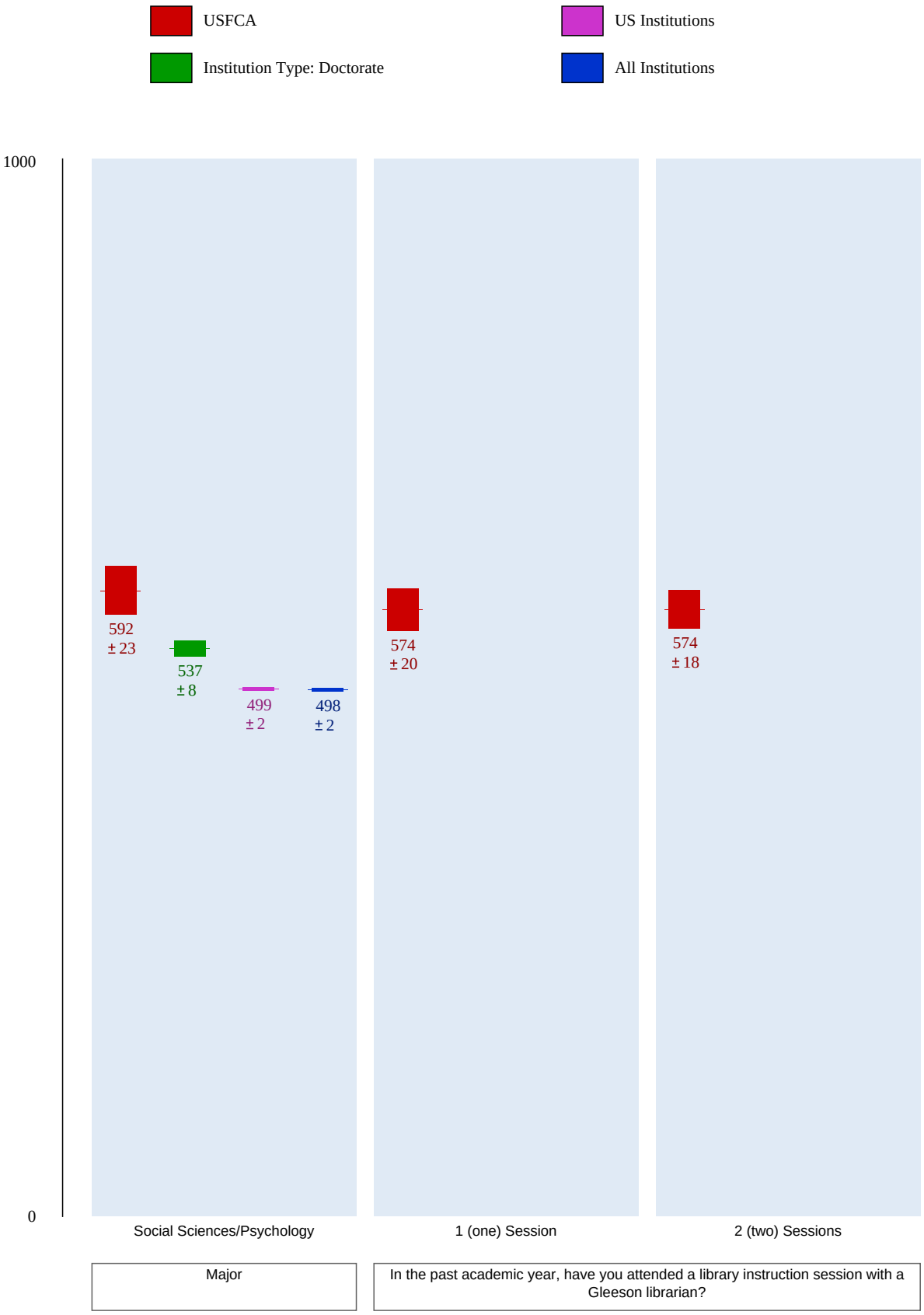

Figure 3.9 (continued) Chart for Skill Set: Searching

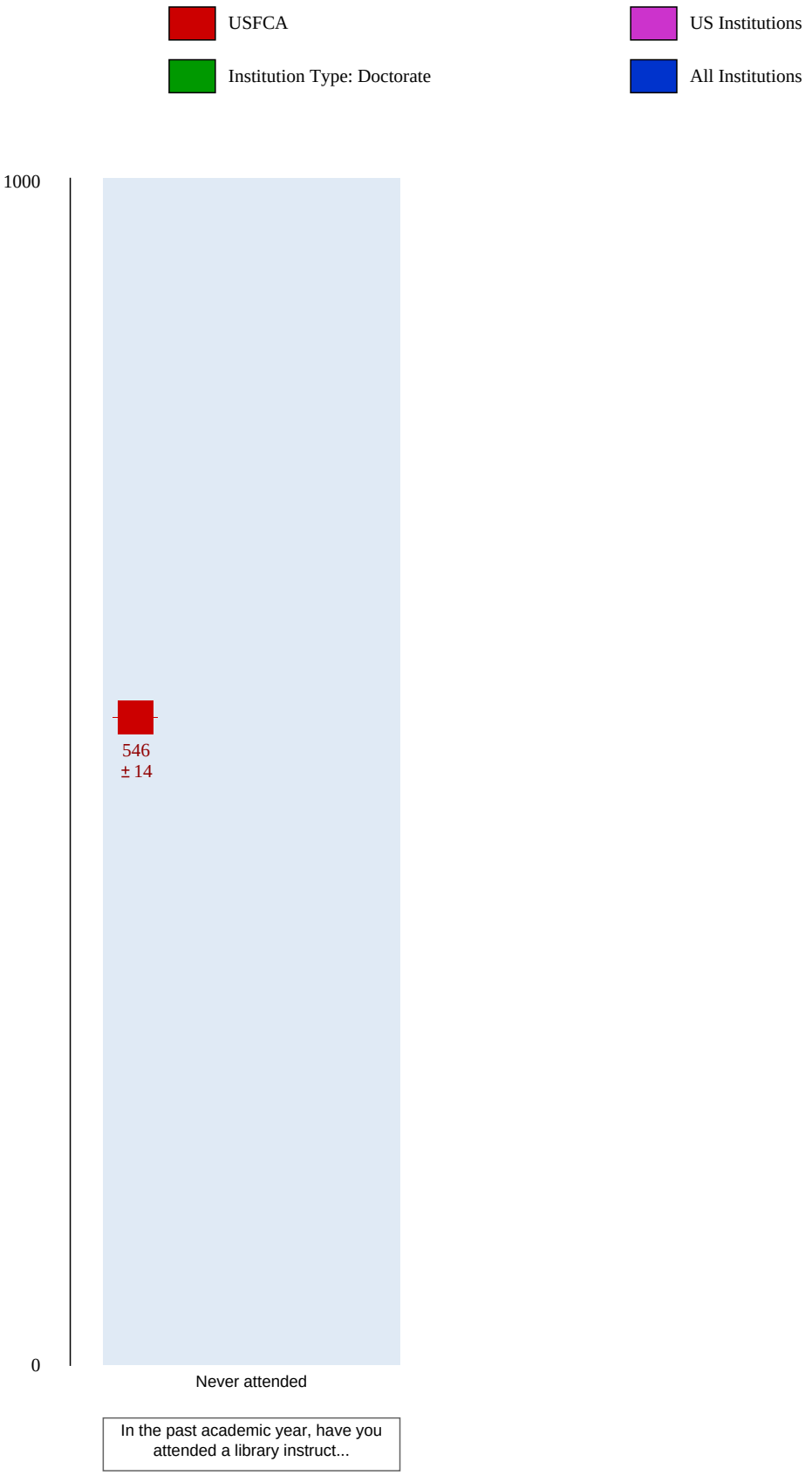

Figure 3.10 Objectives and Outcomes for Skill Set: Searching

The numbering refers to the ACRL documents: the first digit is the ACRL standard, the second is the ACRL performance indicator, the third is the ACRL outcome, and the fourth is the ACRL objective.

1.1.5.1 Lists terms that may be useful for locating information on a topic.

1.1.5.2 Identifies and uses appropriate general or subject-specific sources to discover terminology related to an information need.

1.2.2.2 Finds sources that provide relevant subject field- and discipline-related terminology.

1.2.2.3 Uses relevant subject- and discipline-related terminology in the information research process.

2.2.2.3 Identifies alternate terminology, including synonyms, broader or narrower words and phrases that describe a topic.

2.2.3.2 Explains what controlled vocabulary is and why it is used.

2.2.3.4 Identifies when and where controlled vocabulary is used in a bibliographic record, and then successfully searches for additional information using that vocabulary.

2.2.4.1 Demonstrates when it is appropriate to search a particular field (e.g., title, author, subject).

2.2.4.2 Demonstrates an understanding of the concept of Boolean logic and constructs a search statement using Boolean operators.

2.2.4.3 Demonstrates an understanding of the concept of proximity searching and constructs a search statement using proximity operators.

2.2.4.4 Demonstrates an understanding of the concept of nesting and constructs a search using nested words or phrases.

2.2.4.6 Demonstrates an understanding of the concept of keyword searching and uses it appropriately and effectively.

2.2.4.7 Demonstrates an understanding of the concept of truncation and uses it appropriately and effectively.

2.2.5.3 Narrows or broadens questions and search terms to retrieve the appropriate quantity of information, using search techniques such as Boolean logic, limiting, and field searching.

2.4.1.1 Determines if the quantity of citations retrieved is adequate, too extensive, or insufficient for the information need.

2.4.1.3 Assesses the relevance of information found by examining elements of the citation such as title, abstract, subject headings, source, and date of publication.

3.4.5.2 Determines when a single search strategy may not fit a topic precisely enough to retrieve sufficient relevant information.

3.7.2.1 Demonstrates how searches may be limited or expanded by modifying search terminology or logic.

3.7.3.1 Examines footnotes and bibliographies from retrieved items to locate additional sources.

4. SAILS Skill Set: Using Finding Tool Features

Summary of Results

University of San Francisco Compared to Other Doctorate Institutions, by Demographic Characteristics

Students at University of San Francisco performed about the same as the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Freshman, Senior
Major:	Business/Management, Nursing/Health Sciences, Science/Math, Social Sciences/Psychology

Demographic Groups within University of San Francisco Compared to the USFCA Overall Performance on This Skill Set

Within University of San Francisco, the following groups performed about the same as the USFCA-average-student benchmark:

Class Standing:	Freshman, Senior
Major:	Business/Management, Nursing/Health Sciences, Science/Math, Social Sciences/Psychology

Detailed Results - Data Table

Scores are placed on a scale that ranges from 0 to 1000. In the following table, the average score for each group is reported. Standard errors above and below the score are indicated with ±. The accuracy of the average score calculation is affected by sample size and variability. Small samples or large variability can reduce the accuracy of the score calculation. In those cases, the standard error is larger. (Standard error is the combination of sampling error and measurement error.) Where we are able to measure the score with a high degree of accuracy, the standard error is small.

The true group average score falls between two numbers. Those numbers can be calculated by adding and subtracting the standard error to the reported score. For example, a reported score of 525 with a standard error of ± 5 has a range from 530 to 520. The true group average score falls in the range of 530 to 520.

To determine whether two groups are meaningfully different from each other, see whether the ranges of scores overlap. Ranges of scores that do overlap are not meaningfully different from each other; those that do NOT overlap are meaningfully different.

Figure 3.11 Data Table for Skill Set: Using Finding Tool Features

	University of San Francisco	Institution Type: Doctorate	US Institutions	All Institutions
Overall	563 ±14	561 ±4	517 ±1	517 ±1
Class Standing				
Freshman	578 ±23	559 ±6	506 ±1	506 ±1
Senior	552 ±17	554 ±6	530 ±1	530 ±1
Majors				
Business / Management	546 ±37	553 ±10	517 ±2	517 ±2
Nursing / Health Sciences	587 ±22	563 ±10	524 ±2	524 ±2
Science / Math	581 ±39	568 ±10	543 ±4	543 ±4
Social Sciences / Psychology	535 ±30	544 ±10	522 ±2	522 ±2

CUSTOM DEMOGRAPHICS QUESTIONS

In the past academic year, have you attended a library instruction session with a Gleeson librarian?	
1 (one) Session	534 ±27
2 (two) Sessions	582 ±23
3+ (three or more) Sessions	Insufficient data
Never attended	575 ±23

Detailed Results - Chart

The chart on the following pages compare the average student performance at your institution to the average for your institution type, for the same country, and the average for all institutions.

Charts may also include indicators of performance by class standing, major, and custom demographics.

On the left side of each chart (the vertical axis), the scale ranges from 0 to 1000. Average scores for each group (cohort) are shown on the chart. Use the color key to identify each group.

Each box on the chart shows the average score for that group plus the standard error. The accuracy of the average score calculation is affected by sample size and variability. Small samples or large variability can reduce the accuracy of the score calculation. In those cases, the standard error is larger. (Standard error is the combination of sampling error and measurement error.) Where we are able to measure the score with a high degree of accuracy, the standard error is small.

On the chart, the bigger boxes show larger standard error. The upper and lower boundaries of each box can be calculated by adding and subtracting the standard error to the score. For example, a score of 525 with a standard error of ± 5 has a box that ranges from 530 to 520. The true group average score falls in the range of 530 to 520.

To determine whether two groups are meaningfully different from each other, see whether the ranges of scores, represented by the boxes, overlap. Ranges of scores (boxes) that do overlap are not meaningfully different from each other; those that do NOT overlap are meaningfully different.

For example,

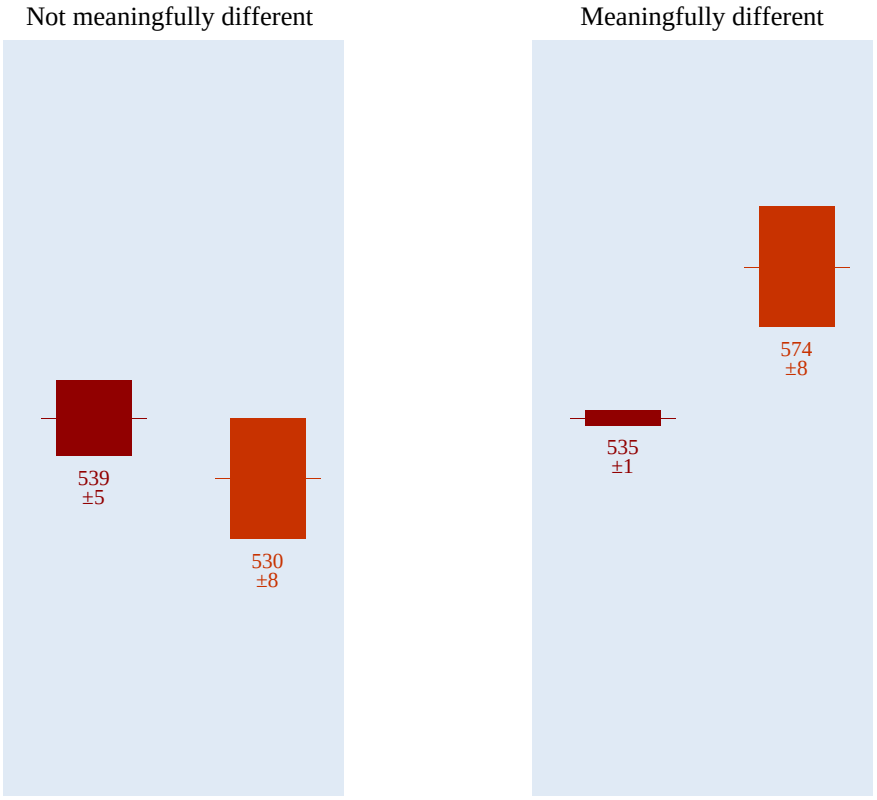

Figure 3.12 Chart for Skill Set: Using Finding Tool Features

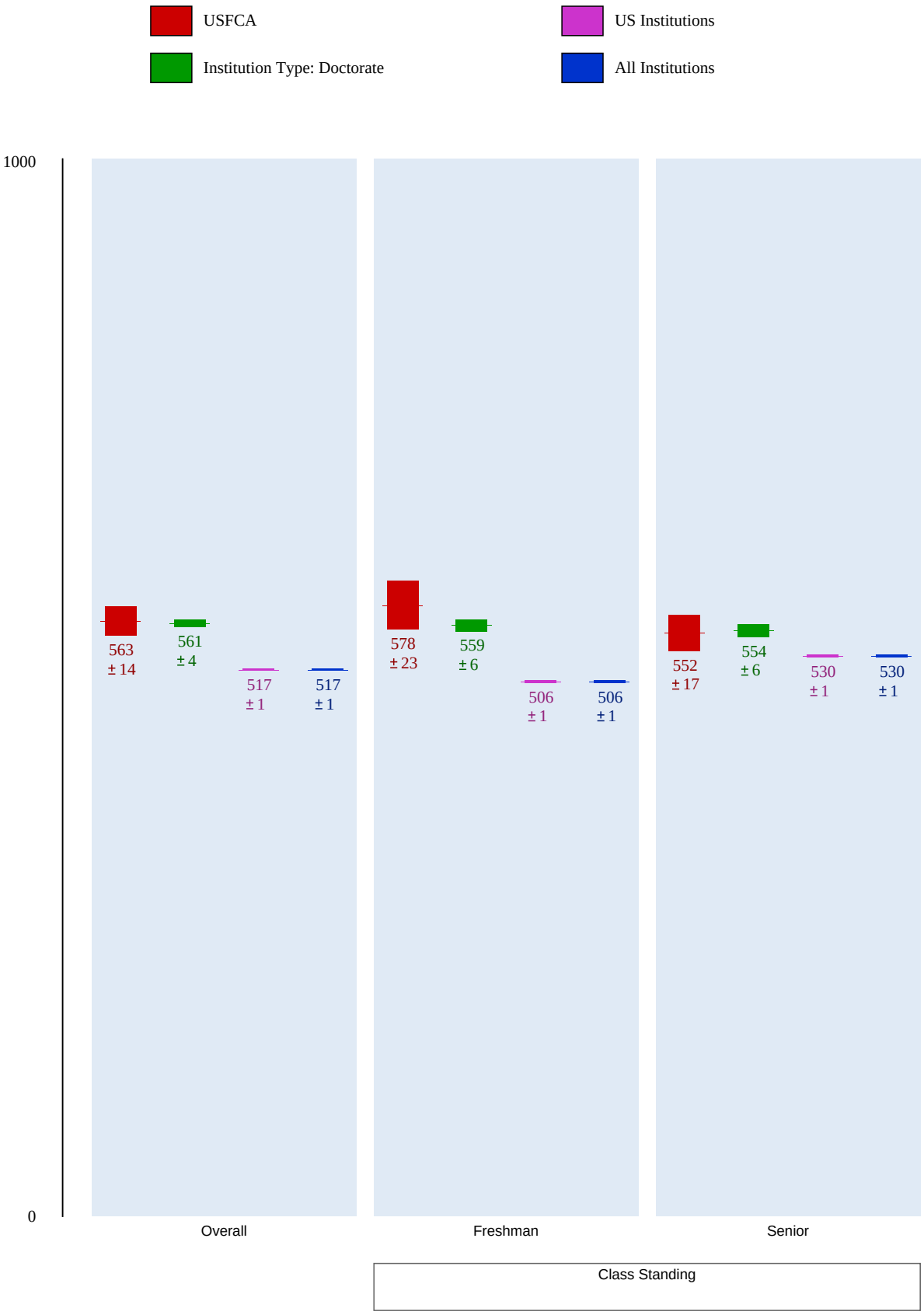

Figure 3.12 (continued) Chart for Skill Set: Using Finding Tool Features

Figure 3.12 (continued) Chart for Skill Set: Using Finding Tool Features

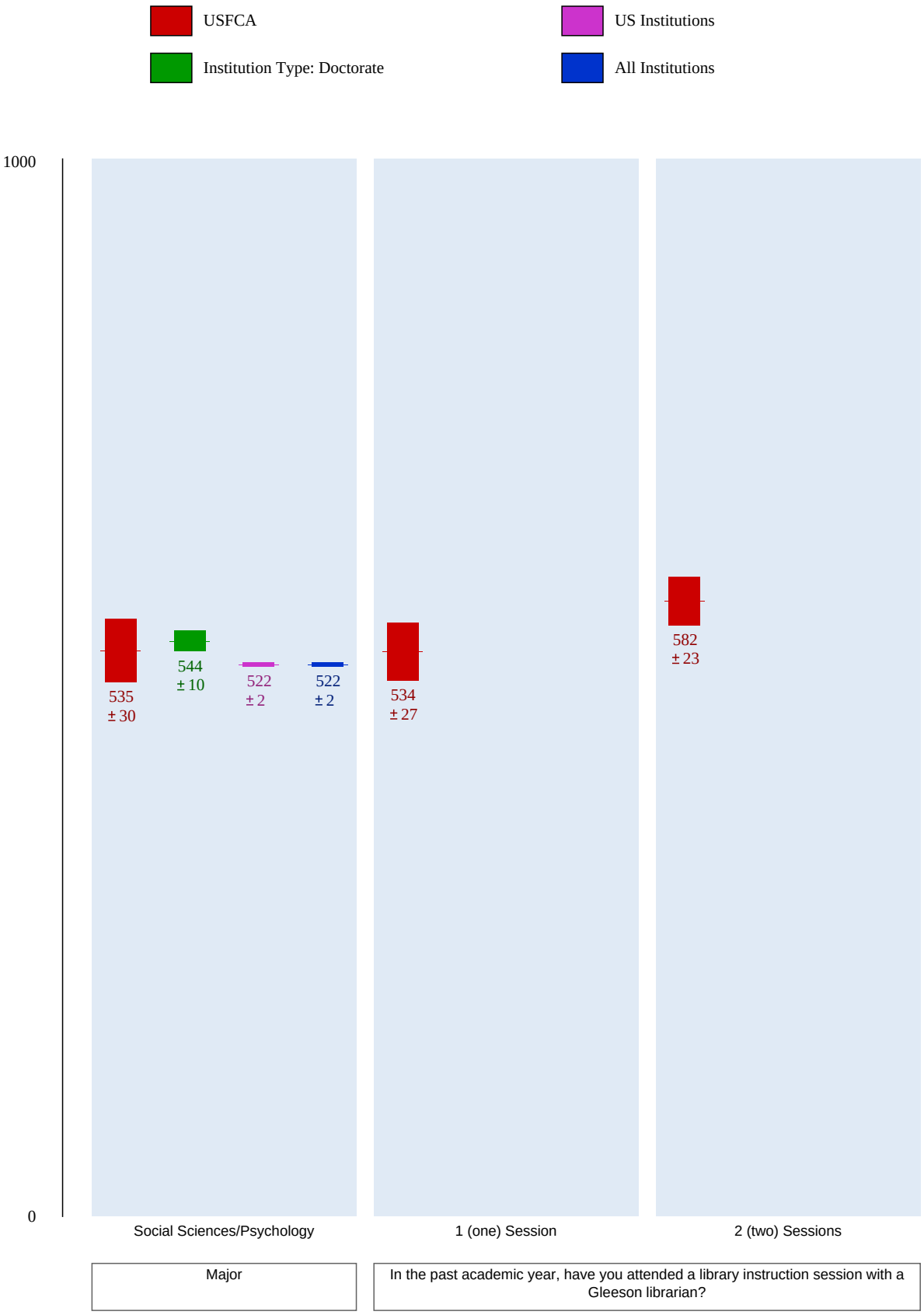

Figure 3.12 (continued) Chart for Skill Set: Using Finding Tool Features

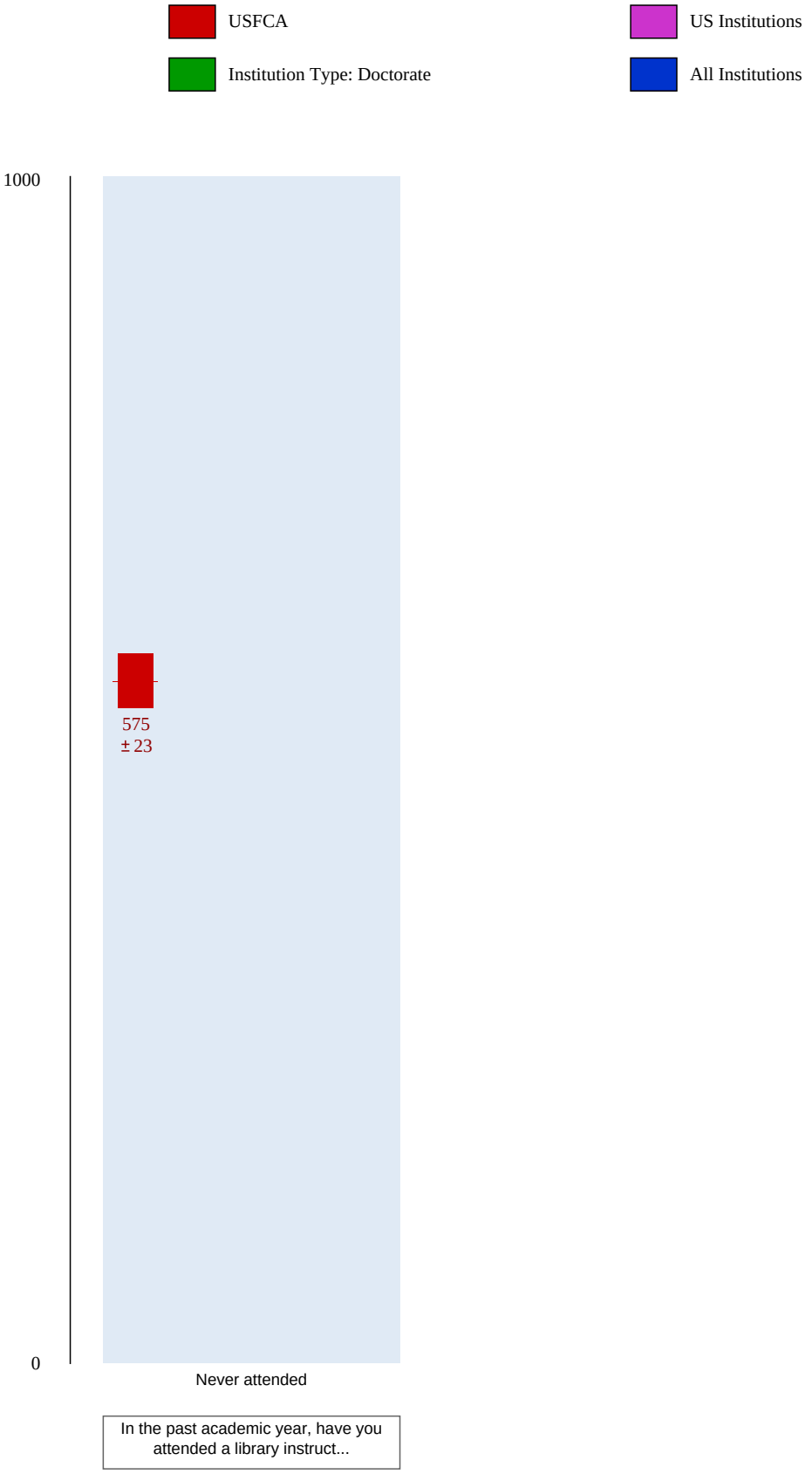

Figure 3.13 Objectives and Outcomes for Skill Set: Using Finding Tool Features

The numbering refers to the ACRL documents: the first digit is the ACRL standard, the second is the ACRL performance indicator, the third is the ACRL outcome, and the fourth is the ACRL objective.

2.1.3.1 Describes the structure and components of the system or tool being used, regardless of format (e.g., index, thesaurus, type of information retrieved by the system).

2.1.3.2 Identifies the source of help within a given information retrieval system and uses it effectively.

2.1.3.3 Identifies what types of information are contained in a particular system (e.g., all branch libraries are included in the catalog; not all databases are full text; catalogs, periodical databases, and Web sites may be included in a gateway).

2.1.3.7 Identifies and uses search language and protocols (e.g., Boolean, adjacency) appropriate to the retrieval system.

2.1.4.2 Determines appropriate means for recording or saving the desired information (e.g., printing, saving to disc, photocopying, taking notes).

2.2.5.1 Uses help screens and other user aids to understand the particular search structures and commands of an information retrieval system.

2.2.5.2 Demonstrates an awareness of the fact that there may be separate interfaces for basic and advanced searching in retrieval systems.

2.2.6.4 Uses effectively the organizational structure of a typical book (e.g., indexes, tables of contents, user's instructions, legends, cross-references) in order to locate pertinent information in it.

2.3.1.5 Describes search functionality common to most databases regardless of differences in the search interface (e.g., Boolean logic capability, field structure, keyword searching, relevancy ranking).

2.3.1.6 Uses effectively the organizational structure and access points of print research sources (e.g., indexes, bibliographies) to retrieve pertinent information from those sources.

2.5.1 Selects among various technologies the most appropriate one for the task of extracting the needed information (e.g., copy/paste software functions, photocopier, scanner, audio/visual equipment, or exploratory instruments)

5. SAILS Skill Set: Retrieving Sources

Summary of Results

University of San Francisco Compared to Other Doctorate Institutions, by Demographic Characteristics

Students at University of San Francisco performed better than the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Senior
Major:	Science/Math, Social Sciences/Psychology

Students at University of San Francisco performed about the same as the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Freshman
Major:	Business/Management, Nursing/Health Sciences

Demographic Groups within University of San Francisco Compared to the USFCA Overall Performance on This Skill Set

Within University of San Francisco, the following groups performed about the same as the USFCA-average-student benchmark:

Class Standing:	Freshman, Senior
Major:	Nursing/Health Sciences, Science/Math, Social Sciences/Psychology

Within University of San Francisco, the following groups performed worse than the USFCA-average-student benchmark:

Major:	Business/Management

Detailed Results - Data Table

Scores are placed on a scale that ranges from 0 to 1000. In the following table, the average score for each group is reported. Standard errors above and below the score are indicated with ±. The accuracy of the average score calculation is affected by sample size and variability. Small samples or large variability can reduce the accuracy of the score calculation. In those cases, the standard error is larger. (Standard error is the combination of sampling error and measurement error.) Where we are able to measure the score with a high degree of accuracy, the standard error is small.

The true group average score falls between two numbers. Those numbers can be calculated by adding and subtracting the standard error to the reported score. For example, a reported score of 525 with a standard error of ± 5 has a range from 530 to 520. The true group average score falls in the range of 530 to 520.

To determine whether two groups are meaningfully different from each other, see whether the ranges of scores overlap. Ranges of scores that do overlap are not meaningfully different from each other; those that do NOT overlap are meaningfully different.

Figure 3.14 Data Table for Skill Set: Retrieving Sources

	University of San Francisco	Institution Type: Doctorate	US Institutions	All Institutions
Overall	579 ±15	553 ±4	499 ±1	499 ±1
Class Standing				
Freshman	558 ±24	549 ±6	480 ±1	481 ±1
Senior	596 ±20	549 ±7	517 ±1	517 ±1
Majors				
Business / Management	518 ±35	532 ±11	498 ±2	498 ±2
Nursing / Health Sciences	603 ±27	587 ±11	512 ±3	512 ±3
Science / Math	634 ±46	559 ±11	524 ±4	525 ±4
Social Sciences / Psychology	602 ±39	551 ±11	510 ±2	510 ±2

CUSTOM DEMOGRAPHICS QUESTIONS

In the past academic year, have you attended a library instruction session with a Gleeson librarian?	
1 (one) Session	580 ±28
2 (two) Sessions	583 ±30
3+ (three or more) Sessions	Insufficient data
Never attended	572 ±25

Detailed Results - Chart

The chart on the following pages compare the average student performance at your institution to the average for your institution type, for the same country, and the average for all institutions.

Charts may also include indicators of performance by class standing, major, and custom demographics.

On the left side of each chart (the vertical axis), the scale ranges from 0 to 1000. Average scores for each group (cohort) are shown on the chart. Use the color key to identify each group.

Each box on the chart shows the average score for that group plus the standard error. The accuracy of the average score calculation is affected by sample size and variability. Small samples or large variability can reduce the accuracy of the score calculation. In those cases, the standard error is larger. (Standard error is the combination of sampling error and measurement error.) Where we are able to measure the score with a high degree of accuracy, the standard error is small.

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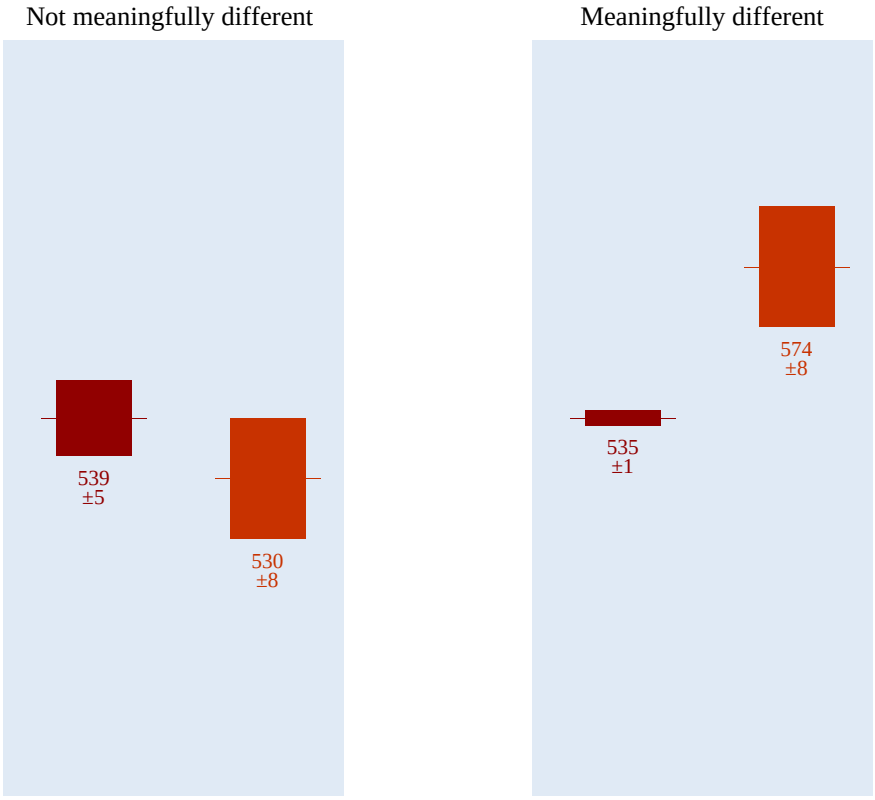

Figure 3.15 Chart for Skill Set: Retrieving Sources

Figure 3.15 (continued) Chart for Skill Set: Retrieving Sources

Figure 3.15 (continued) Chart for Skill Set: Retrieving Sources

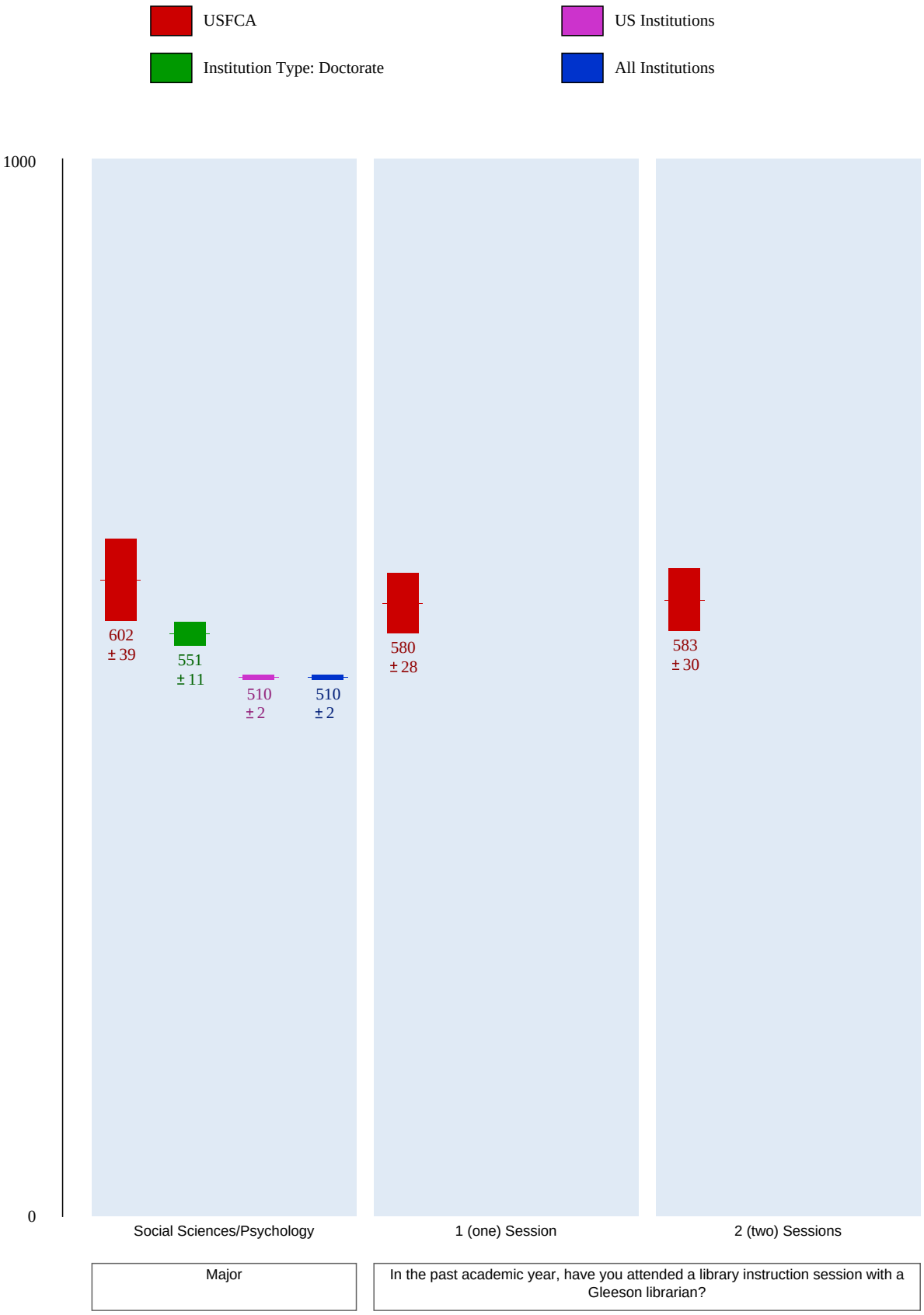

Figure 3.15 (continued) Chart for Skill Set: Retrieving Sources

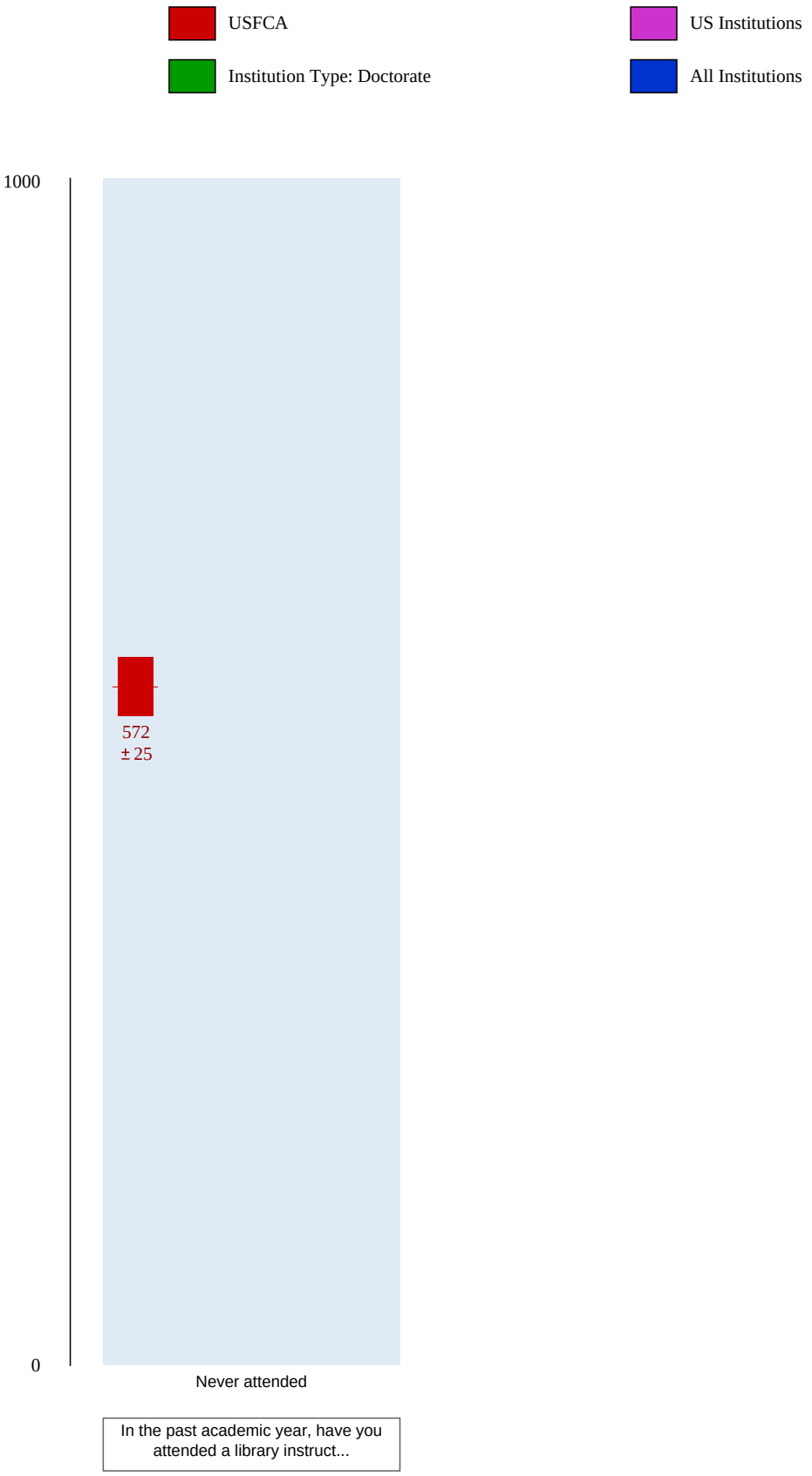

Figure 3.16 Objectives and Outcomes for Skill Set: Retrieving Sources

The numbering refers to the ACRL documents: the first digit is the ACRL standard, the second is the ACRL performance indicator, the third is the ACRL outcome, and the fourth is the ACRL objective.

1.2.6 Realizes that information may need to be constructed with raw data from primary sources

1.3.1.1 Determines if material is available immediately.

1.3.1.2 Uses available services appropriately to obtain desired materials or alternative sources.

1.3.3.2 Demonstrates a general knowledge of how to obtain information that is not available immediately.

1.3.3.3 Acts appropriately to obtain information within the time frame required.

2.2.6.3 Demonstrates an understanding of the fact that items may be grouped together by subject in order to facilitate browsing.

2.3.1.1 Describes some materials that are not available online or in digitized formats and must be accessed in print or other formats (e.g., microform, video, audio).

2.3.2.1 Uses call number systems effectively (e.g., demonstrates how a call number assists in locating the corresponding item in the library).

2.3.3.1 Retrieves a document in print or electronic form.

2.3.3.2 Describes various retrieval methods for information not available locally.

2.3.3.4 Initiates an interlibrary loan request by filling out and submitting a form either online or in person.

6. SAILS Skill Set: Evaluating Sources

Summary of Results

University of San Francisco Compared to Other Doctorate Institutions, by Demographic Characteristics

Students at University of San Francisco performed better than the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Senior
Major:	Nursing/Health Sciences, Science/Math

Students at University of San Francisco performed about the same as the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Freshman
Major:	Business/Management, Social Sciences/Psychology

Demographic Groups within University of San Francisco Compared to the USFCA Overall Performance on This Skill Set

Within University of San Francisco, the following groups performed about the same as the USFCA-average-student benchmark:

Class Standing:	Freshman, Senior
Major:	Business/Management, Nursing/Health Sciences, Science/Math, Social Sciences/Psychology

Detailed Results - Data Table

Scores are placed on a scale that ranges from 0 to 1000. In the following table, the average score for each group is reported. Standard errors above and below the score are indicated with ±. The accuracy of the average score calculation is affected by sample size and variability. Small samples or large variability can reduce the accuracy of the score calculation. In those cases, the standard error is larger. (Standard error is the combination of sampling error and measurement error.) Where we are able to measure the score with a high degree of accuracy, the standard error is small.

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To determine whether two groups are meaningfully different from each other, see whether the ranges of scores overlap. Ranges of scores that do overlap are not meaningfully different from each other; those that do NOT overlap are meaningfully different.

Figure 3.17 Data Table for Skill Set: Evaluating Sources

	University of San Francisco	Institution Type: Doctorate	US Institutions	All Institutions
Overall	565 ±13	540 ±3	489 ±1	489 ±1
Class Standing				
Freshman	555 ±19	537 ±5	473 ±1	473 ±1
Senior	573 ±17	537 ±5	505 ±1	504 ±1
Majors				
Business / Management	532 ±24	525 ±8	492 ±1	491 ±1
Nursing / Health Sciences	567 ±22	532 ±9	491 ±2	491 ±2
Science / Math	617 ±46	558 ±9	519 ±4	519 ±3
Social Sciences / Psychology	563 ±29	540 ±8	498 ±2	498 ±2

CUSTOM DEMOGRAPHICS QUESTIONS

In the past academic year, have you attended a library instruction session with a Gleeson librarian?	
1 (one) Session	594 ±25
2 (two) Sessions	536 ±22
3+ (three or more) Sessions	Insufficient data
Never attended	574 ±21

Detailed Results - Chart

The chart on the following pages compare the average student performance at your institution to the average for your institution type, for the same country, and the average for all institutions.

Charts may also include indicators of performance by class standing, major, and custom demographics.

On the left side of each chart (the vertical axis), the scale ranges from 0 to 1000. Average scores for each group (cohort) are shown on the chart. Use the color key to identify each group.

Each box on the chart shows the average score for that group plus the standard error. The accuracy of the average score calculation is affected by sample size and variability. Small samples or large variability can reduce the accuracy of the score calculation. In those cases, the standard error is larger. (Standard error is the combination of sampling error and measurement error.) Where we are able to measure the score with a high degree of accuracy, the standard error is small.

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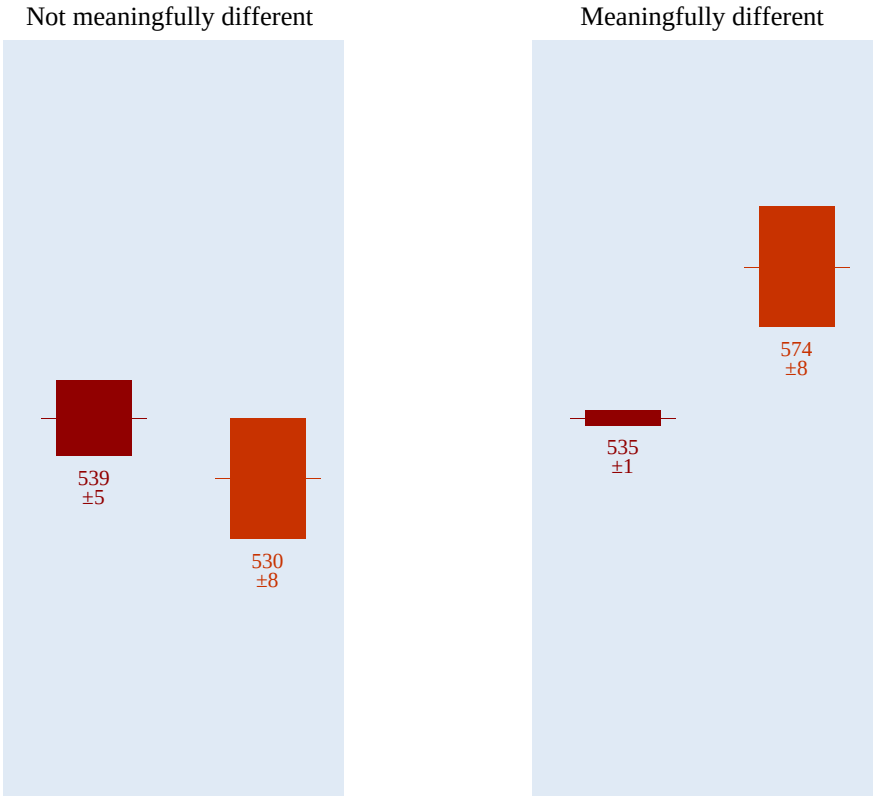

Figure 3.18 Chart for Skill Set: Evaluating Sources

Figure 3.18 (continued) Chart for Skill Set: Evaluating Sources

Figure 3.18 (continued) Chart for Skill Set: Evaluating Sources

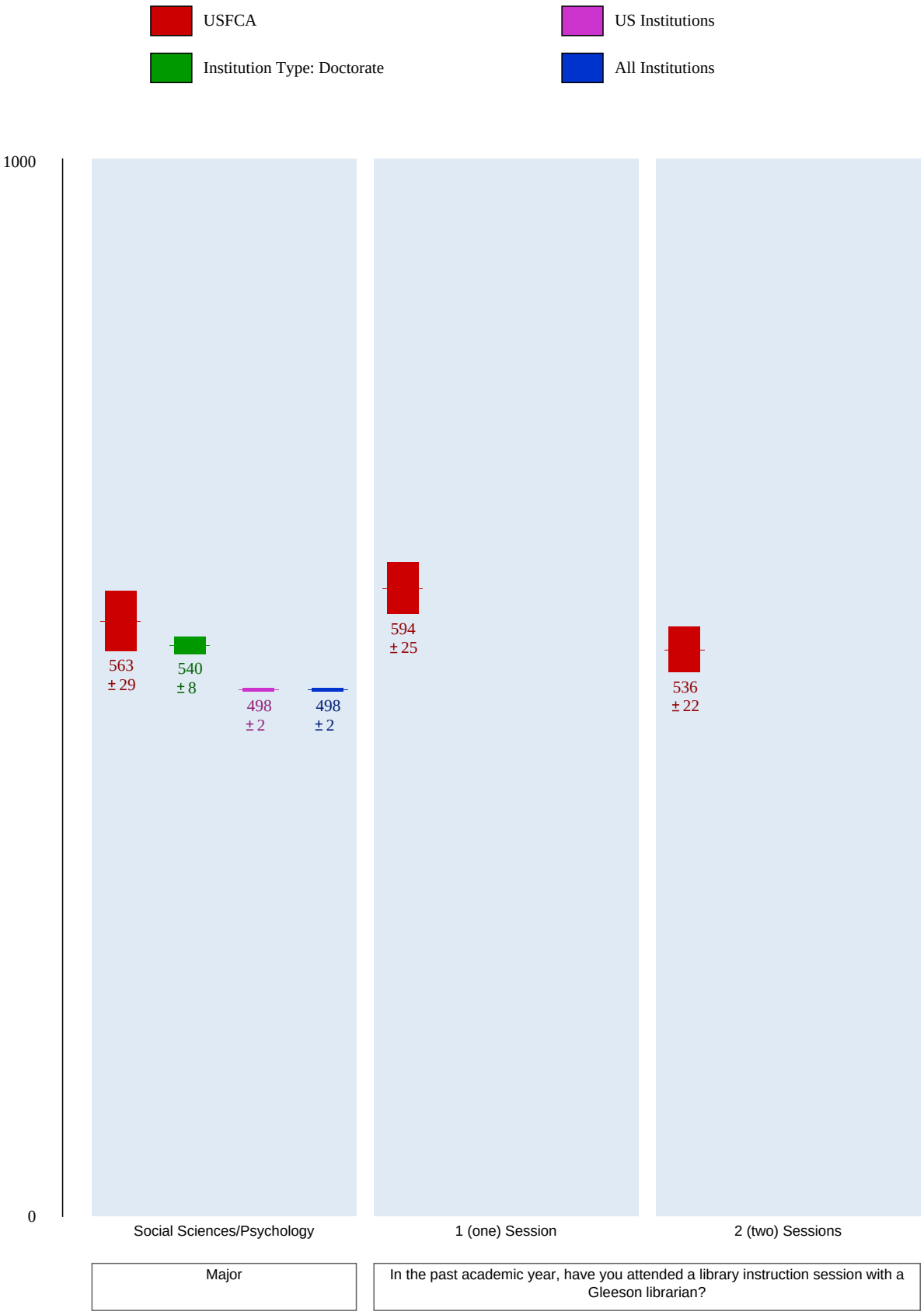

Figure 3.18 (continued) Chart for Skill Set: Evaluating Sources

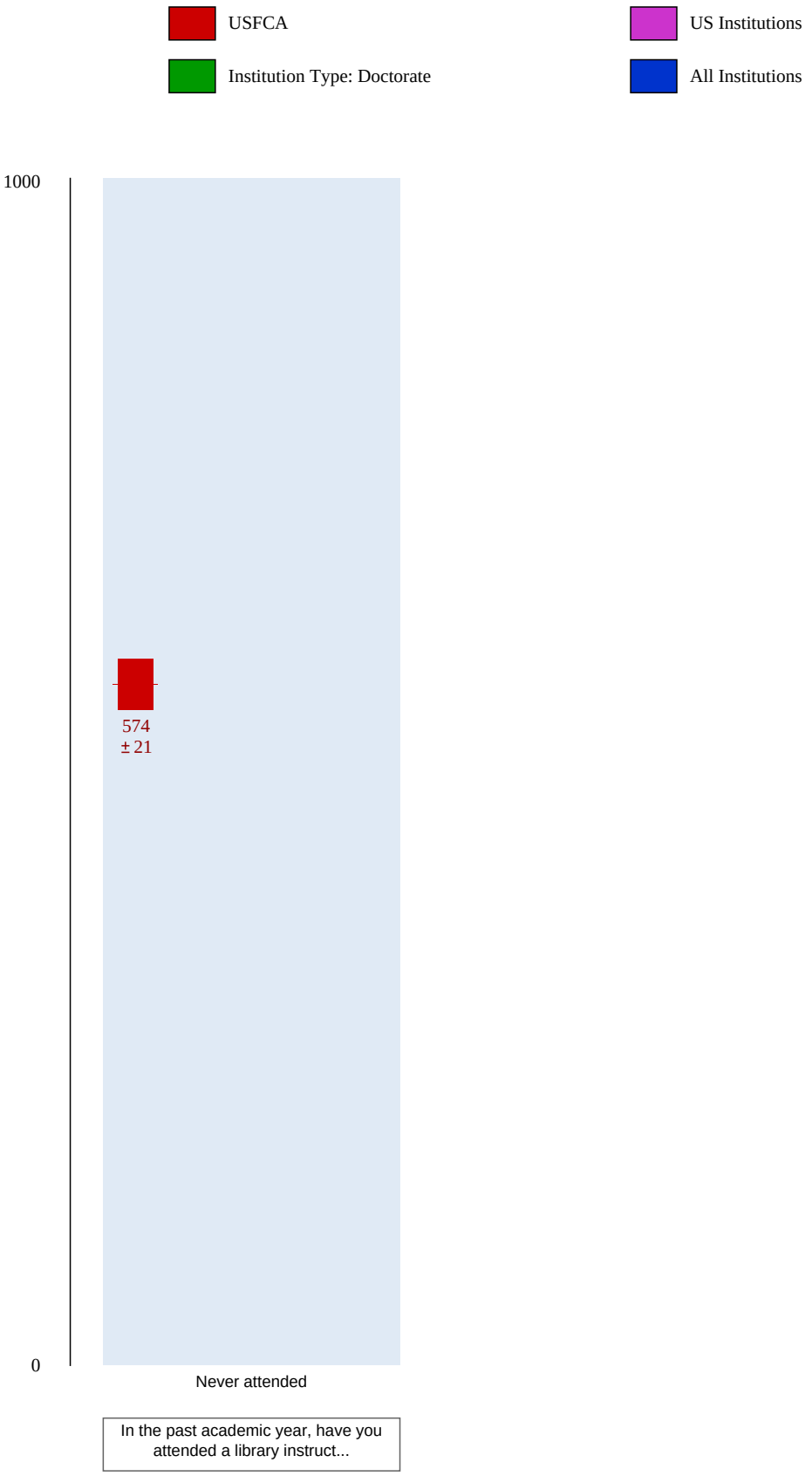

Figure 3.19 Objectives and Outcomes for Skill Set: Evaluating Sources

The numbering refers to the ACRL documents: the first digit is the ACRL standard, the second is the ACRL performance indicator, the third is the ACRL outcome, and the fourth is the ACRL objective.

1.2.4.1 Distinguishes characteristics of information provided for different audiences.

1.4.2.3 Lists various criteria, such as currency, which influence information choices. (See also 2.4. and 3.2.)

2.1.4.1 Selects appropriate information sources (i.e., primary, secondary or tertiary sources) and determines their relevance for the current information need.

2.4.1.2 Evaluates the quality of the information retrieved using criteria such as authorship, point of view/bias, date written, citations, etc.

2.4.1.4 Determines the relevance of an item to the information need in terms of its depth of coverage, language, and time frame.

3.2.1.1 Locates and examines critical reviews of information sources using available resources and technologies.

3.2.1.2 Investigates an author's qualifications and reputation through reviews or biographical sources.

3.2.1.3 Investigates validity and accuracy by consulting sources identified through bibliographic references.

3.2.1.8 Demonstrates an understanding that other sources may provide additional information to either confirm or question point of view or bias.

3.2.3.1 Demonstrates an understanding that information in any format reflects an author's, sponsor's, and/or publisher's point of view.

3.2.3.2 Demonstrates an understanding that some information and information sources may present a one-sided view and may express opinions rather than facts.

3.2.3.3 Demonstrates an understanding that some information and sources may be designed to trigger emotions, conjure stereotypes, or promote support for a particular viewpoint or group.

3.2.3.5 Searches for independent verification or corroboration of the accuracy and completeness of the data or representation of facts presented in an information source.

3.4.7.2 Distinguishes among various information sources in terms of established evaluation criteria (e.g., content, authority, currency).

7. SAILS Skill Set: Documenting Sources

Summary of Results

University of San Francisco Compared to Other Doctorate Institutions, by Demographic Characteristics

Students at University of San Francisco performed better than the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Freshman
Major:	Science/Math, Social Sciences/Psychology

Students at University of San Francisco performed about the same as the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Senior
Major:	Business/Management

Students at University of San Francisco performed worse than the institution-type benchmark on this skill set for the following demographic groups:

Major:	Nursing/Health Sciences

Demographic Groups within University of San Francisco Compared to the USFCA Overall Performance on This Skill Set

Within University of San Francisco, the following groups performed about the same as the USFCA-average-student benchmark:

Class Standing:	Freshman, Senior
Major:	Science/Math, Social Sciences/Psychology

Within University of San Francisco, the following groups performed worse than the USFCA-average-student benchmark:

Major:	Business/Management, Nursing/Health Sciences

Detailed Results - Data Table

Scores are placed on a scale that ranges from 0 to 1000. In the following table, the average score for each group is reported. Standard errors above and below the score are indicated with ±. The accuracy of the average score calculation is affected by sample size and variability. Small samples or large variability can reduce the accuracy of the score calculation. In those cases, the standard error is larger. (Standard error is the combination of sampling error and measurement error.) Where we are able to measure the score with a high degree of accuracy, the standard error is small.

The true group average score falls between two numbers. Those numbers can be calculated by adding and subtracting the standard error to the reported score. For example, a reported score of 525 with a standard error of ± 5 has a range from 530 to 520. The true group average score falls in the range of 530 to 520.

To determine whether two groups are meaningfully different from each other, see whether the ranges of scores overlap. Ranges of scores that do overlap are not meaningfully different from each other; those that do NOT overlap are meaningfully different.

Figure 3.20 Data Table for Skill Set: Documenting Sources

	University of San Francisco	Institution Type: Doctorate	US Institutions	All Institutions
Overall	546 ±17	525 ±4	459 ±1	459 ±1
Class Standing				
Freshman	551 ±24	510 ±6	436 ±1	437 ±1
Senior	542 ±23	533 ±7	482 ±1	482 ±1
Majors				
Business / Management	488 ±35	492 ±10	454 ±2	454 ±2
Nursing / Health Sciences	493 ±29	534 ±12	465 ±3	465 ±3
Science / Math	597 ±55	515 ±11	507 ±4	508 ±4
Social Sciences / Psychology	594 ±39	537 ±11	463 ±2	463 ±2

CUSTOM DEMOGRAPHICS QUESTIONS

In the past academic year, have you attended a library instruction session with a Gleeson librarian?	
1 (one) Session	572 ±34
2 (two) Sessions	487 ±28
3+ (three or more) Sessions	Insufficient data
Never attended	582 ±27

Detailed Results - Chart

The chart on the following pages compare the average student performance at your institution to the average for your institution type, for the same country, and the average for all institutions.

Charts may also include indicators of performance by class standing, major, and custom demographics.

On the left side of each chart (the vertical axis), the scale ranges from 0 to 1000. Average scores for each group (cohort) are shown on the chart. Use the color key to identify each group.

Each box on the chart shows the average score for that group plus the standard error. The accuracy of the average score calculation is affected by sample size and variability. Small samples or large variability can reduce the accuracy of the score calculation. In those cases, the standard error is larger. (Standard error is the combination of sampling error and measurement error.) Where we are able to measure the score with a high degree of accuracy, the standard error is small.

On the chart, the bigger boxes show larger standard error. The upper and lower boundaries of each box can be calculated by adding and subtracting the standard error to the score. For example, a score of 525 with a standard error of ± 5 has a box that ranges from 530 to 520. The true group average score falls in the range of 530 to 520.

To determine whether two groups are meaningfully different from each other, see whether the ranges of scores, represented by the boxes, overlap. Ranges of scores (boxes) that do overlap are not meaningfully different from each other; those that do NOT overlap are meaningfully different.

For example,

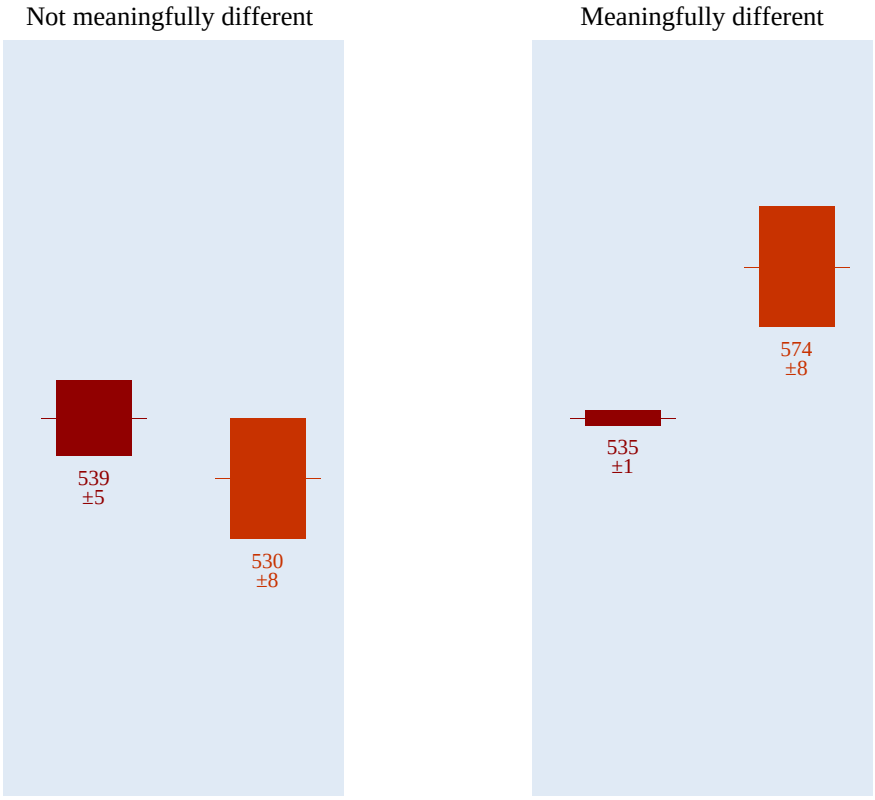

Figure 3.21 Chart for Skill Set: Documenting Sources

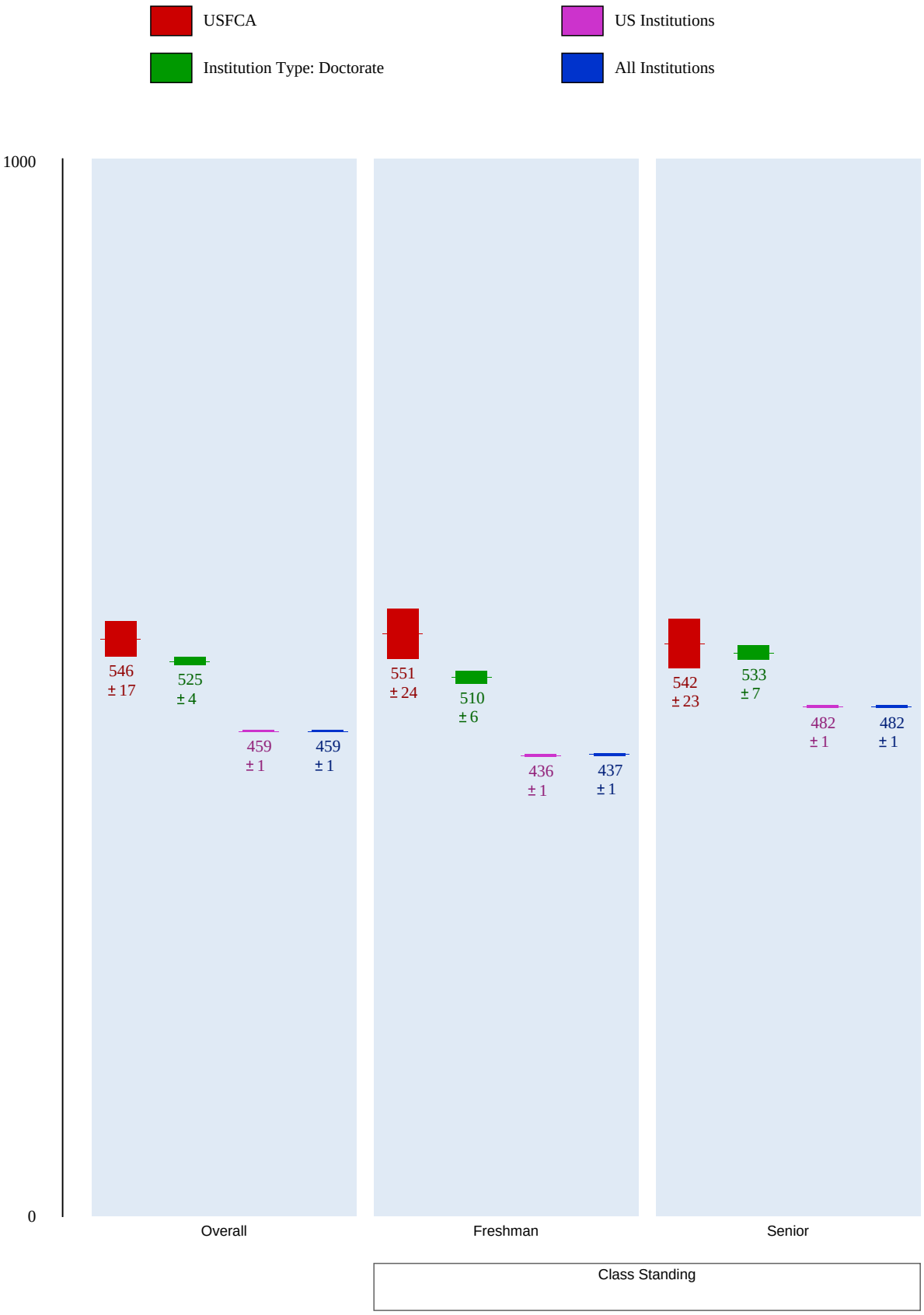

Figure 3.21 (continued) Chart for Skill Set: Documenting Sources

Figure 3.21 (continued) Chart for Skill Set: Documenting Sources

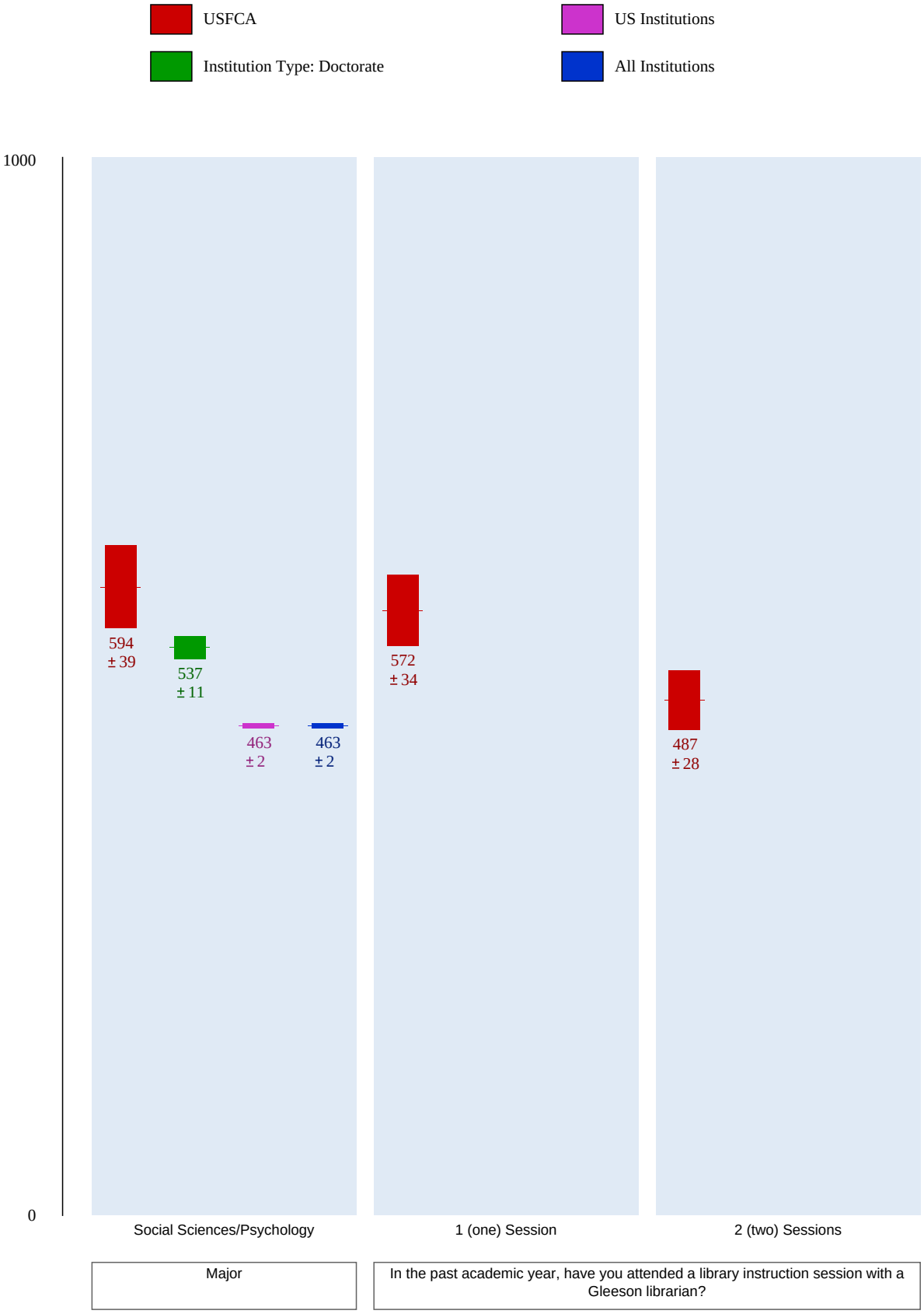

Figure 3.21 (continued) Chart for Skill Set: Documenting Sources

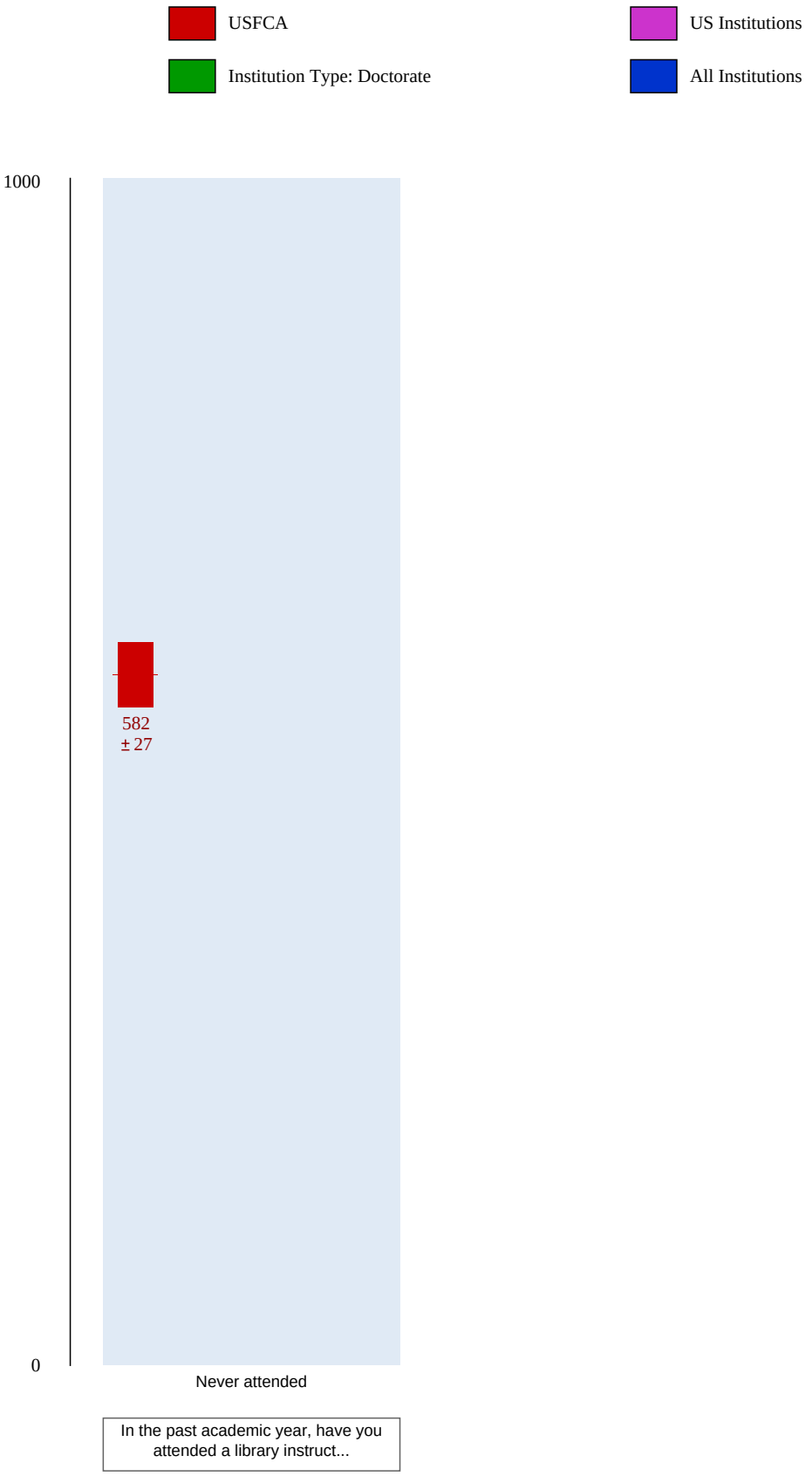

Figure 3.22 Objectives and Outcomes for Skill Set: Documenting Sources

The numbering refers to the ACRL documents: the first digit is the ACRL standard, the second is the ACRL performance indicator, the third is the ACRL outcome, and the fourth is the ACRL objective.

2.3.1.3 Recognizes the format of an information source (e.g., book, chapter in a book, periodical article) from its citation. (See also 2.3.2.)

2.3.2.4 Distinguishes among citations to identify various types of materials (e.g., books, periodical articles, essays in anthologies). (See also 2.3.1.)

2.5.3.1 Identifies different types of information sources cited in a research tool.

2.5.3.3 Demonstrates an understanding that different disciplines may use different citation styles.

5.3.1.2 Identifies citation elements for information sources in different formats (e.g., book, article, television program, Web page, interview).

5.3.1.3 Demonstrates an understanding that there are different documentation styles, published or accepted by various groups

5.3.1.5 Describes when the format of the source cited may dictate a certain citation style.

5.3.1.7 Locates information about documentation styles either in print or electronically, e.g., through the library's Web site.

5.3.1.8 Recognizes that consistency of citation format is important, especially if a course instructor has not required a particular style.

8. SAILS Skill Set: Understanding Economic, Legal, and Social Issues

Summary of Results

University of San Francisco Compared to Other Doctorate Institutions, by Demographic Characteristics

Students at University of San Francisco performed better than the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Freshman, Senior

Students at University of San Francisco performed about the same as the institution-type benchmark on this skill set for the following demographic groups:

Major:	Business/Management, Nursing/Health Sciences, Science/Math, Social Sciences/Psychology

Demographic Groups within University of San Francisco Compared to the USFCA Overall Performance on This Skill Set

Within University of San Francisco, the following groups performed about the same as the USFCA-average-student benchmark:

Class Standing:	Freshman, Senior
Major:	Nursing/Health Sciences, Science/Math, Social Sciences/Psychology

Within University of San Francisco, the following groups performed worse than the USFCA-average-student benchmark:

Major:	Business/Management

Detailed Results - Data Table

Scores are placed on a scale that ranges from 0 to 1000. In the following table, the average score for each group is reported. Standard errors above and below the score are indicated with ±. The accuracy of the average score calculation is affected by sample size and variability. Small samples or large variability can reduce the accuracy of the score calculation. In those cases, the standard error is larger. (Standard error is the combination of sampling error and measurement error.) Where we are able to measure the score with a high degree of accuracy, the standard error is small.

The true group average score falls between two numbers. Those numbers can be calculated by adding and subtracting the standard error to the reported score. For example, a reported score of 525 with a standard error of ± 5 has a range from 530 to 520. The true group average score falls in the range of 530 to 520.

To determine whether two groups are meaningfully different from each other, see whether the ranges of scores overlap. Ranges of scores that do overlap are not meaningfully different from each other; those that do NOT overlap are meaningfully different.

Figure 3.23 Data Table for Skill Set: Understanding Economic, Legal, and Social Issues

	University of San Francisco	Institution Type: Doctorate	US Institutions	All Institutions
Overall	582 ±14	546 ±3	497 ±1	497 ±1
Class Standing				
Freshman	584 ±21	540 ±5	479 ±1	479 ±1
Senior	581 ±18	542 ±6	515 ±1	515 ±1
Majors				
Business / Management	525 ±32	538 ±10	505 ±2	505 ±2
Nursing / Health Sciences	592 ±22	562 ±11	494 ±2	494 ±2
Science / Math	566 ±41	542 ±9	517 ±4	518 ±4
Social Sciences / Psychology	560 ±34	540 ±9	503 ±2	503 ±2

CUSTOM DEMOGRAPHICS QUESTIONS

In the past academic year, have you attended a library instruction session with a Gleeson librarian?	
1 (one) Session	583 ±29
2 (two) Sessions	566 ±27
3+ (three or more) Sessions	Insufficient data
Never attended	596 ±20

Detailed Results - Chart

The chart on the following pages compare the average student performance at your institution to the average for your institution type, for the same country, and the average for all institutions.

Charts may also include indicators of performance by class standing, major, and custom demographics.

On the left side of each chart (the vertical axis), the scale ranges from 0 to 1000. Average scores for each group (cohort) are shown on the chart. Use the color key to identify each group.

Each box on the chart shows the average score for that group plus the standard error. The accuracy of the average score calculation is affected by sample size and variability. Small samples or large variability can reduce the accuracy of the score calculation. In those cases, the standard error is larger. (Standard error is the combination of sampling error and measurement error.) Where we are able to measure the score with a high degree of accuracy, the standard error is small.

On the chart, the bigger boxes show larger standard error. The upper and lower boundaries of each box can be calculated by adding and subtracting the standard error to the score. For example, a score of 525 with a standard error of ± 5 has a box that ranges from 530 to 520. The true group average score falls in the range of 530 to 520.

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For example,

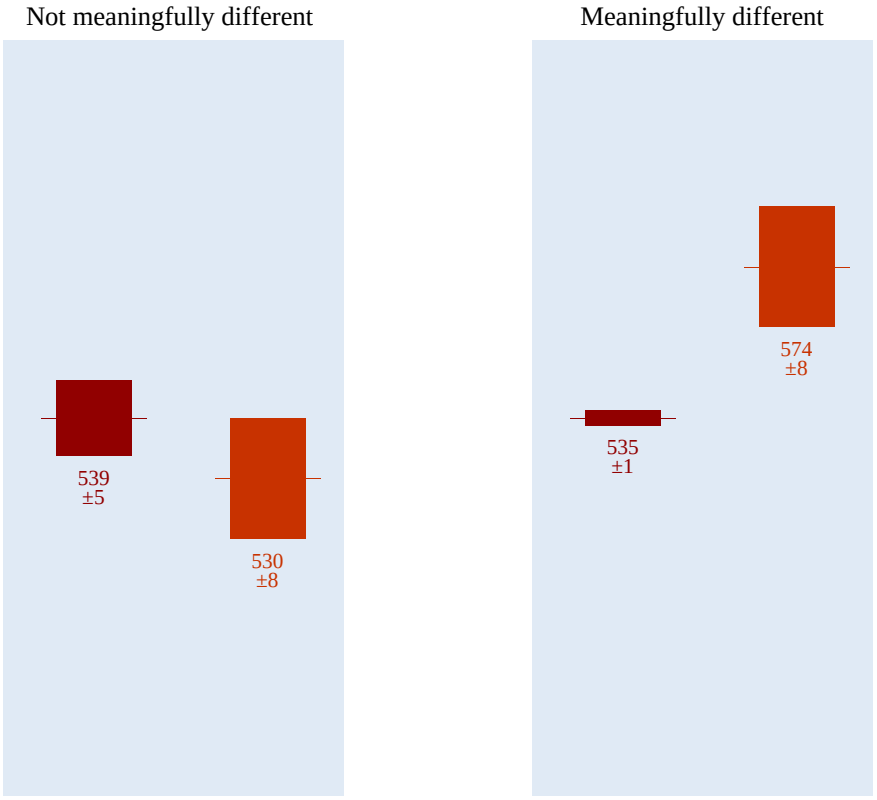

Figure 3.24 Chart for Skill Set: Understanding Economic, Legal, and Social Issues

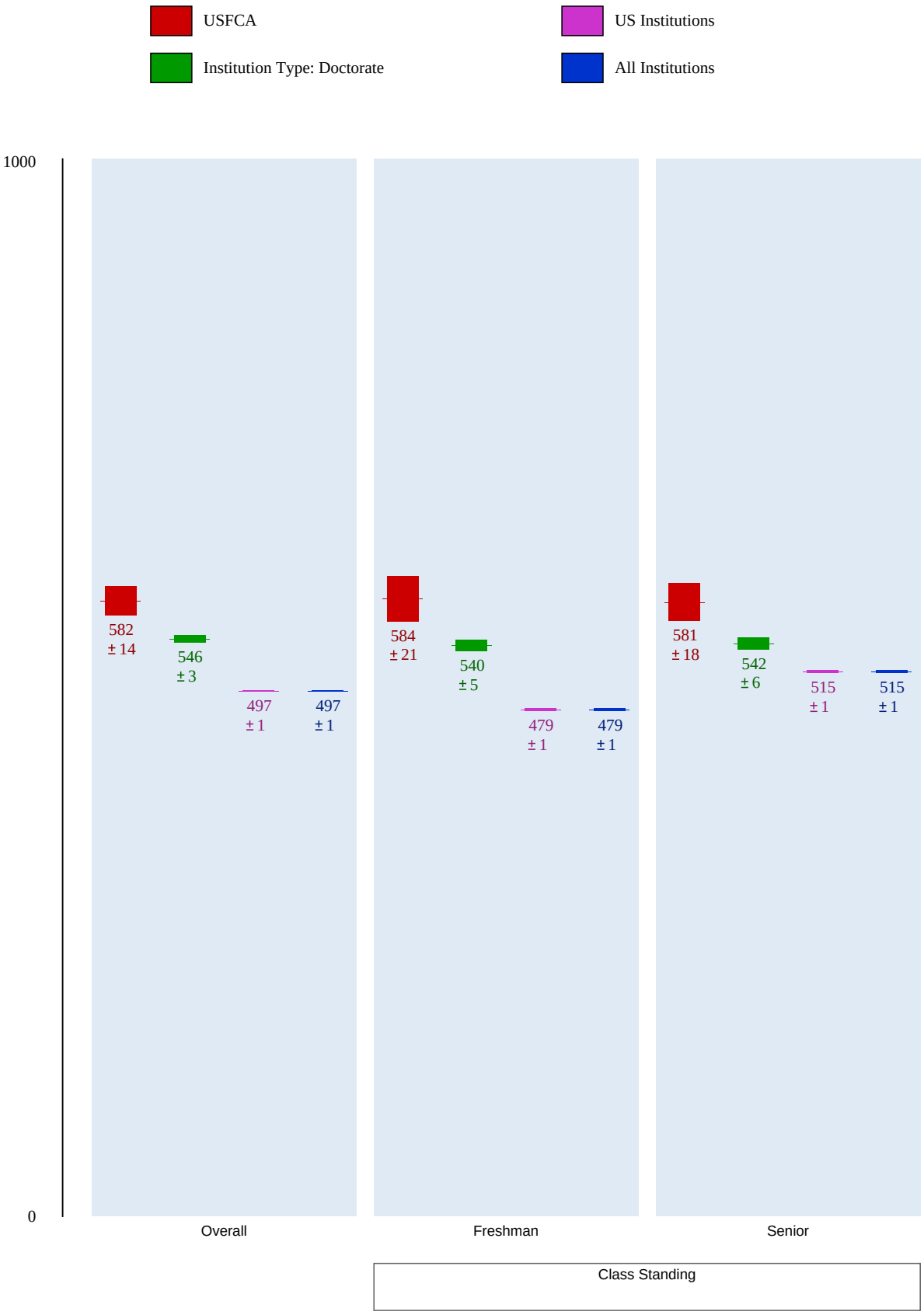

Figure 3.24 (continued) Chart for Skill Set: Understanding Economic, Legal, and Social Issues

Figure 3.24 (continued) Chart for Skill Set: Understanding Economic, Legal, and Social Issues

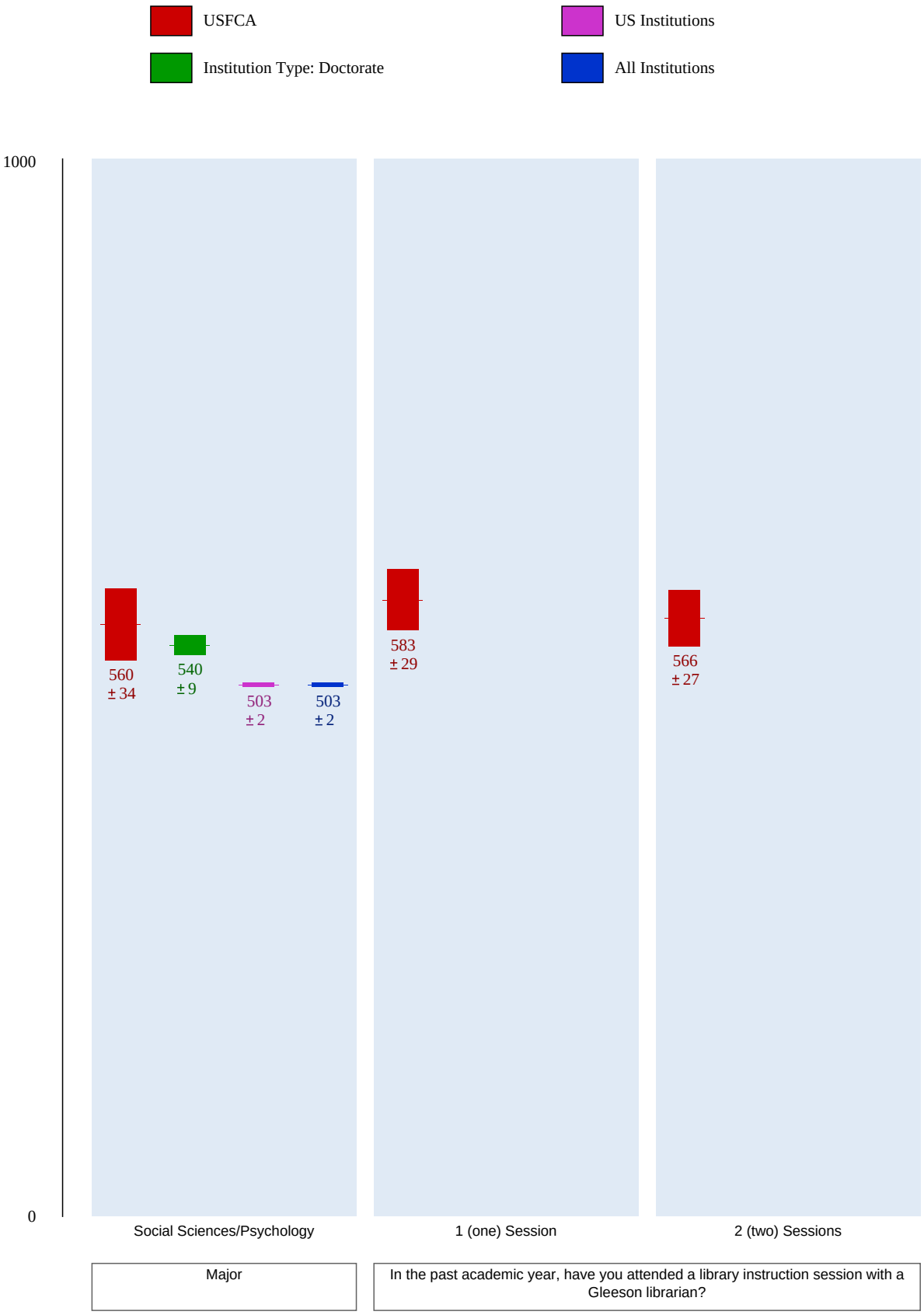

Figure 3.24 (continued) Chart for Skill Set: Understanding Economic, Legal, and Social Issues

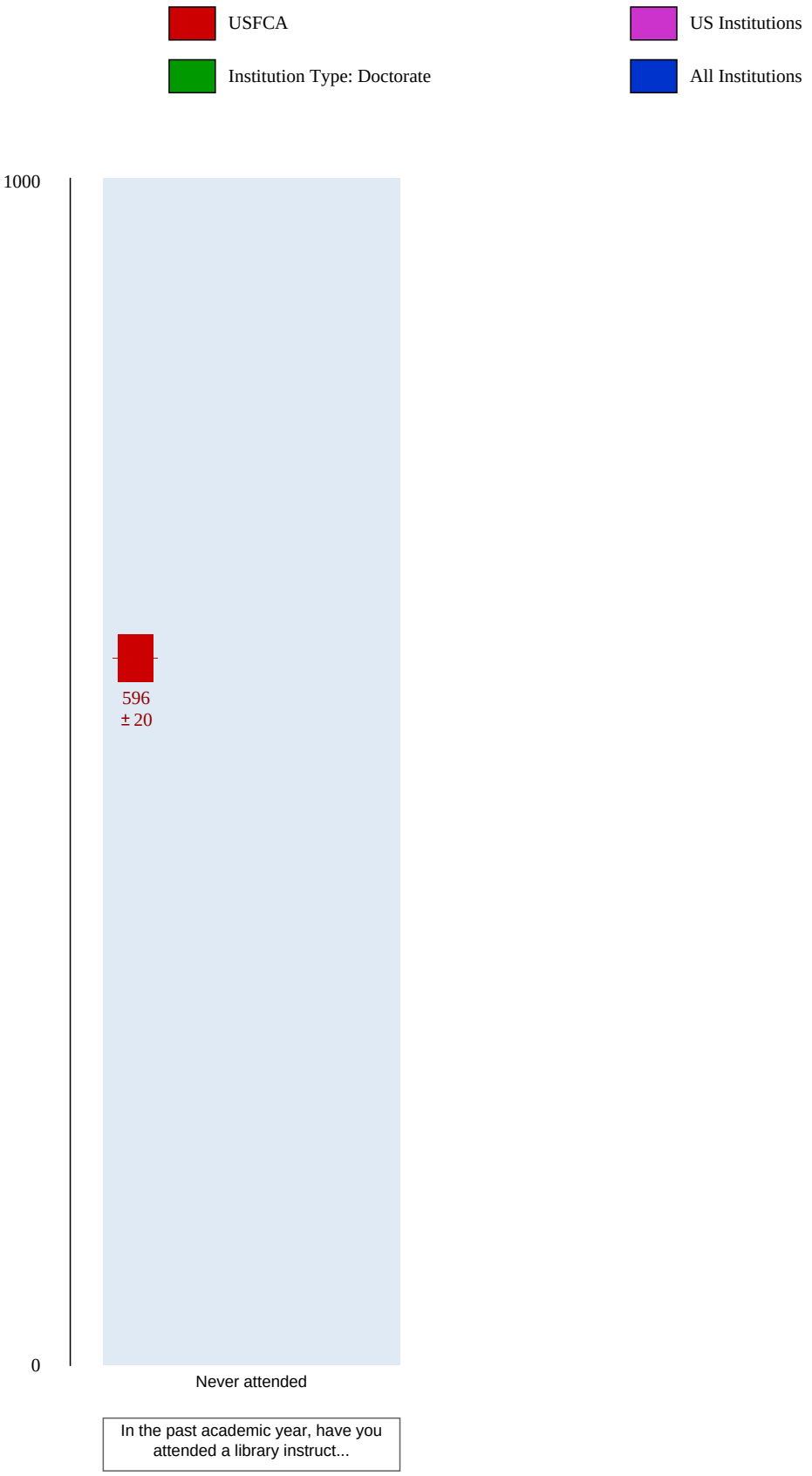

Figure 3.25 Objectives and Outcomes for Skill Set: Understanding Economic, Legal, and Social Issues

The numbering refers to the ACRL documents: the first digit is the ACRL standard, the second is the ACRL performance indicator, the third is the ACRL outcome, and the fourth is the ACRL objective.

5.1.1 Identifies and discusses issues related to privacy and security in both the print and electronic environments

5.1.2.1 Demonstrates an understanding that not all information on the Web is free, i.e., some Web-based databases require users to pay a fee or to subscribe in order to retrieve full text or other content.

5.1.2.2 Demonstrates awareness that the library pays for access to databases, information tools, full-text resources, etc., and may use the Web to deliver them to its clientele.

5.1.2.3 Describes how the terms of subscriptions or licenses may limit their use to a particular clientele or location.

5.1.3 Identifies and discusses issues related to censorship and freedom of speech

5.1.4 Demonstrates an understanding of intellectual property, copyright, and fair use of copyrighted material

5.2.1 Participates in electronic discussions following accepted practices (e.g. "Netiquette")

5.2.5 Legally obtains, stores, and disseminates text, data, images, or sounds

5.2.6 Demonstrates an understanding of what constitutes plagiarism and does not represent work attributable to others as his/her own

5.2.7 Demonstrates an understanding of institutional policies related to human subjects research

4. RESULTS BY ACRL STANDARDS

Results are presented on the following pages for the outcomes and objectives arranged within the original ACRL standards. The Summary of Results is followed by Detailed Results - Data Table; Detailed Results - Chart; and ACRL Objectives Measured by the Standard.

Summary of Results

Students at University of San Francisco performed better than than the 'institution-type' benchmark on Standards 1 (Determines the Nature and Extent of the Information Needed), 2 (Accesses Needed Information Effectively and Efficiently), 3 (Evaluates Information and Its Sources Critically and Incorporates Selected Information Into His or Her Knowledge Base and Value System), and 5 (Understands Many of the Economic, Legal, and Social Issues Surrounding the Use of Information and Accesses and Uses Information Ethically and Legally).

Detailed Results - Data Table

Figure 4.1 shows the average student performance at your institution, along with the average for your institution type, for the same country, and the average for all institutions.

The average score for each group is reported as a number placed on a scale that ranges from 0 to 1000. Standard errors above and below the score are indicated with ±. The accuracy of the average score calculation is affected by sample size and variability. Small samples or large variability can reduce the accuracy of the score calculation. In those cases, the standard error is larger. (Standard error is the combination of sampling error and measurement error.) Where we are able to measure the score with a high degree of accuracy, the standard error is small.

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To determine whether two groups are meaningfully different from each other, see whether the ranges of scores overlap. Ranges of scores that do overlap are not meaningfully different from each other; those that do NOT overlap are meaningfully different.

Figure 4.1 Data Table for ACRL Standards

	USFCA	Institution Type: Doctorate	US Institutions	All Institutions
ACRL Standard				
Standard 1: Determines the Nature and Extent of the Information Needed	574 ±10	552 ±2	511 ±1	511 ±1
Standard 2: Accesses Needed Information Effectively and Efficiently	555 ±7	541 ±2	499 ±0	499 ±0
Standard 3: Evaluates Information and Its Sources Critically and Incorporates Selected Information Into His or Her Knowledge Base and Value System	562 ±12	539 ±3	486 ±1	486 ±1
Standard 5: Understands Many of the Economic, Legal, and Social Issues Surrounding the Use of Information and Accesses and Uses Information Ethically and Legally	579 ±12	545 ±3	490 ±1	490 ±1

Detailed Results - Chart

Figure 4.2 is a chart that compares the average student performance at your institution to the average for your institution type, for the same country, and the average for all institutions.

On the left side of the chart (the vertical axis), the scale ranges from 0 to 1000. Average scores for each group (cohort) are shown on the chart. Use the color key to identify each group.

Each box on the chart shows the average score for that group plus the standard error. The accuracy of the average score calculation is affected by sample size and variability. Small samples or large variability can reduce the accuracy of the score calculation. In those cases, the standard error is larger. (Standard error is the combination of sampling error and measurement error.) Where we are able to measure the score with a high degree of accuracy, the standard error is small.

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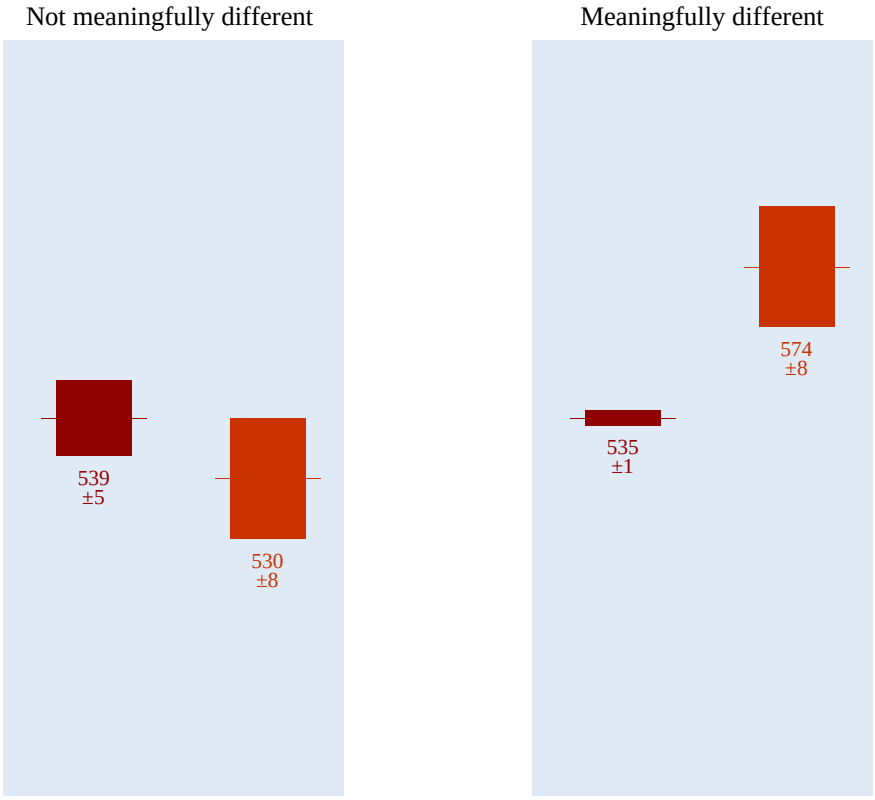


Figure 4.2 Chart for ACRL Standards

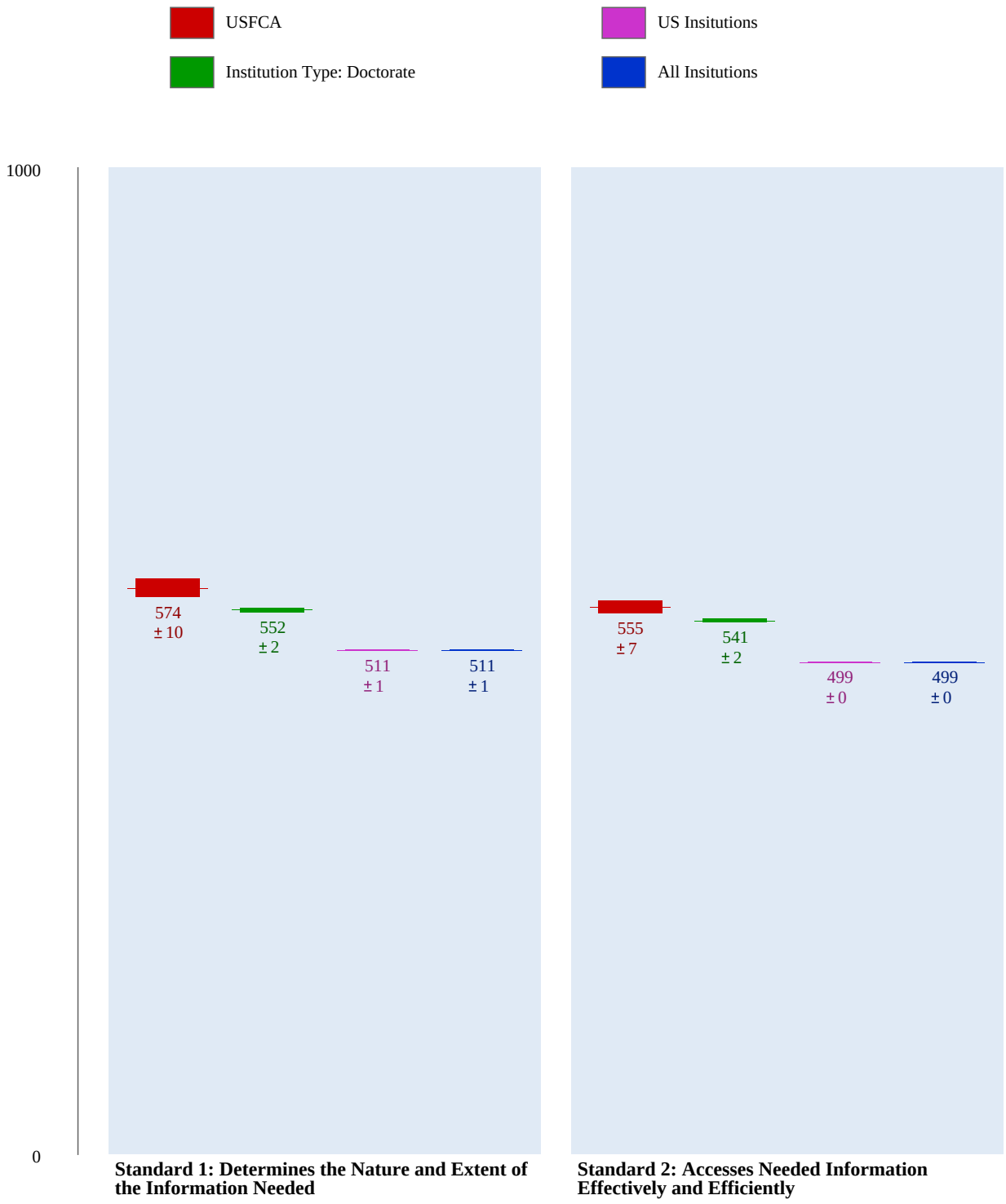
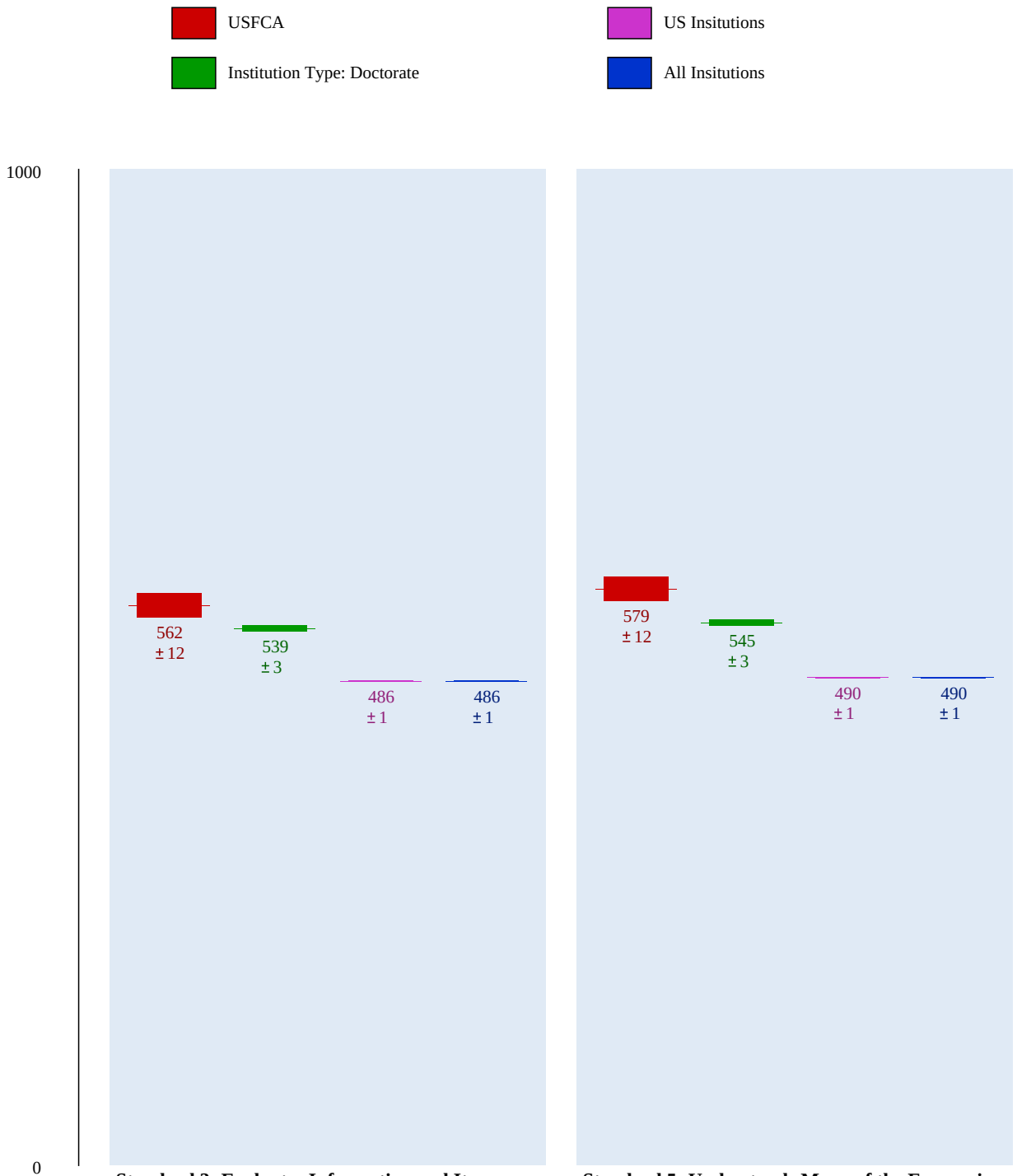


Figure 4.2 (continued) Chart for ACRL Standards



Standard 3: Evaluates Information and Its Sources Critically and Incorporates Selected Information Into His or Her Knowledge Base and Value System

Standard 5: Understands Many of the Economic, Legal, and Social Issues Surrounding the Use of Information and Accesses and Uses Information Ethically and Legally

Figure 4.3 Objectives and Outcomes from ACRL Standard 1 Measured by the SAILS Test

Standard 1: Determines the Nature and Extent of the Information Needed.

The numbering refers to the ACRL documents: the first digit is the ACRL standard, the second is the ACRL performance indicator, the third is the ACRL outcome, and the fourth is the ACRL objective.

1.1.1 Confers with instructors and participates in class discussions, peer workgroups and electronic discussions to identify a research topic, or other information need

1.1.3.2 Demonstrates when it is appropriate to use a general and subject-specific information source (e.g., to provide an overview, to give ideas on terminology).

1.1.4.1 Identifies an initial question that might be too broad or narrow, as well as one that is probably manageable.

1.1.4.3 Narrows a broad topic and broadens a narrow one by modifying the scope or direction of the question.

1.1.4.4 Demonstrates an understanding of how the desired end product (i.e., the required depth of investigation and analysis) will play a role in determining the need for information.

1.1.4.5 Uses background information sources effectively to gain an initial understanding of the topic.

1.1.4.6 Consults with the course instructor and librarians to develop a manageable focus for the topic.

1.1.5.1 Lists terms that may be useful for locating information on a topic.

1.1.5.2 Identifies and uses appropriate general or subject-specific sources to discover terminology related to an information need.

1.1.5.3 Decides when a research topic has multiple facets or may need to be put into a broader context.

1.2.1.2 Defines the "invisible college" (e.g., personal contacts, listservs specific to a discipline or subject) and describes its value.

1.2.2.1 Names the three major disciplines of knowledge (humanities, social sciences, sciences) and some subject fields that comprise each discipline.

1.2.2.2 Finds sources that provide relevant subject field- and discipline-related terminology.

1.2.2.3 Uses relevant subject- and discipline-related terminology in the information research process.

1.2.2.4 Describes how the publication cycle in a particular discipline or subject field affects the researcher's access to information.

1.2.3.1 Identifies various formats in which information is available.

1.2.4.1 Distinguishes characteristics of information provided for different audiences.

1.2.5.1 Describes how various fields of study define primary and secondary sources differently.

1.2.5.2 Identifies characteristics of information that make an item a primary or secondary source in a given field.

1.2.6 Realizes that information may need to be constructed with raw data from primary sources

1.3.1.1 Determines if material is available immediately.

1.3.1.2 Uses available services appropriately to obtain desired materials or alternative sources.

1.3.3.2 Demonstrates a general knowledge of how to obtain information that is not available immediately.

1.3.3.3 Acts appropriately to obtain information within the time frame required.

1.4.1.1 Identifies a research topic that may require revision, based on the amount of information found (or not found).

1.4.1.2 Identifies a topic that may need to be modified, based on the content of information found.

Figure 4.3 (continued) Objectives and Outcomes from ACRL Standard 1 Measured by the SAILS Test

1.4.1.3 Decides when it is and is not necessary to abandon a topic depending on the success (or failure) of an initial search for information.

1.4.2.3 Lists various criteria, such as currency, which influence information choices. (See also 2.4. and 3.2.)

Figure 4.4 Objectives and Outcomes from ACRL Standard 2 Measured by the SAILS Test

Standard 2: Accesses Needed Information Effectively and Efficiently.

The numbering refers to the ACRL documents: the first digit is the ACRL standard, the second is the ACRL performance indicator, the third is the ACRL outcome, and the fourth is the ACRL objective.

2.1.3.1 Describes the structure and components of the system or tool being used, regardless of format (e.g., index, thesaurus, type of information retrieved by the system).

2.1.3.2 Identifies the source of help within a given information retrieval system and uses it effectively.

2.1.3.3 Identifies what types of information are contained in a particular system (e.g., all branch libraries are included in the catalog; not all databases are full text; catalogs, periodical databases, and Web sites may be included in a gateway).

2.1.3.4 Distinguishes among indexes, online databases, and collections of online databases, as well as gateways to different databases and collections.

2.1.3.5 Selects appropriate tools (e.g., indexes, online databases) for research on a particular topic.

2.1.3.6 Identifies the differences between freely available Internet search tools and subscription or fee-based databases.

2.1.3.7 Identifies and uses search language and protocols (e.g., Boolean, adjacency) appropriate to the retrieval system.

2.1.3.8 Determines the period of time covered by a particular source.

2.1.3.9 Identifies the types of sources that are indexed in a particular database or index (e.g., an index that covers newspapers or popular periodicals versus a more specialized index to find scholarly literature).

2.1.4.1 Selects appropriate information sources (i.e., primary, secondary or tertiary sources) and determines their relevance for the current information need.

2.1.4.2 Determines appropriate means for recording or saving the desired information (e.g., printing, saving to disc, photocopying, taking notes).

2.2.1.1 Describes a general process for searching for information.

2.2.2.3 Identifies alternate terminology, including synonyms, broader or narrower words and phrases that describe a topic.

2.2.2.4 Identifies keywords that describe an information source (e.g., book, journal article, magazine article, Web site).

2.2.3.2 Explains what controlled vocabulary is and why it is used.

2.2.3.4 Identifies when and where controlled vocabulary is used in a bibliographic record, and then successfully searches for additional information using that vocabulary.

2.2.4.1 Demonstrates when it is appropriate to search a particular field (e.g., title, author, subject).

2.2.4.2 Demonstrates an understanding of the concept of Boolean logic and constructs a search statement using Boolean operators.

2.2.4.3 Demonstrates an understanding of the concept of proximity searching and constructs a search statement using proximity operators.

2.2.4.4 Demonstrates an understanding of the concept of nesting and constructs a search using nested words or phrases.

2.2.4.6 Demonstrates an understanding of the concept of keyword searching and uses it appropriately and effectively.

Figure 4.4 (continued) Objectives and Outcomes from ACRL Standard 2 Measured by the SAILS Test

2.2.4.7 Demonstrates an understanding of the concept of truncation and uses it appropriately and effectively.

2.2.5.1 Uses help screens and other user aids to understand the particular search structures and commands of an information retrieval system.

2.2.5.2 Demonstrates an awareness of the fact that there may be separate interfaces for basic and advanced searching in retrieval systems.

2.2.5.3 Narrows or broadens questions and search terms to retrieve the appropriate quantity of information, using search techniques such as Boolean logic, limiting, and field searching.

2.2.6.1 Locates major print bibliographic and reference sources appropriate to the discipline of a research topic.

2.2.6.3 Demonstrates an understanding of the fact that items may be grouped together by subject in order to facilitate browsing.

2.2.6.4 Uses effectively the organizational structure of a typical book (e.g., indexes, tables of contents, user's instructions, legends, cross-references) in order to locate pertinent information in it.

2.3.1.1 Describes some materials that are not available online or in digitized formats and must be accessed in print or other formats (e.g., microform, video, audio).

2.3.1.2 Identifies research sources, regardless of format, that are appropriate to a particular discipline or research need.

2.3.1.3 Recognizes the format of an information source (e.g., book, chapter in a book, periodical article) from its citation. (See also 2.3.2.)

2.3.1.4 Uses different research sources (e.g., catalogs and indexes) to find different types of information (e.g., books and periodical articles).

2.3.1.5 Describes search functionality common to most databases regardless of differences in the search interface (e.g., Boolean logic capability, field structure, keyword searching, relevancy ranking).

2.3.1.6 Uses effectively the organizational structure and access points of print research sources (e.g., indexes, bibliographies) to retrieve pertinent information from those sources.

2.3.2.1 Uses call number systems effectively (e.g., demonstrates how a call number assists in locating the corresponding item in the library).

2.3.2.2 Explains the difference between the library catalog and a periodical index.

2.3.2.3 Describes the different scopes of coverage found in different periodical indexes.

2.3.2.4 Distinguishes among citations to identify various types of materials (e.g., books, periodical articles, essays in anthologies). (See also 2.3.1.)

2.3.3.1 Retrieves a document in print or electronic form.

2.3.3.2 Describes various retrieval methods for information not available locally.

2.3.3.3 Identifies the appropriate service point or resource for the particular information need.

2.3.3.4 Initiates an interlibrary loan request by filling out and submitting a form either online or in person.

2.3.3.5 Uses the Web site of an institution, library, organization or community to locate information about specific services.

2.4.1.1 Determines if the quantity of citations retrieved is adequate, too extensive, or insufficient for the information need.

2.4.1.2 Evaluates the quality of the information retrieved using criteria such as authorship, point of view/bias, date written, citations, etc.

2.4.1.3 Assesses the relevance of information found by examining elements of the citation such as title, abstract, subject headings, source, and date of publication.

Figure 4.4 (continued) Objectives and Outcomes from ACRL Standard 2 Measured by the SAILS Test

2.4.1.4 Determines the relevance of an item to the information need in terms of its depth of coverage, language, and time frame.

2.5.1 Selects among various technologies the most appropriate one for the task of extracting the needed information (e.g., copy/paste software functions, photocopier, scanner, audio/visual equipment, or exploratory instruments)

2.5.3.1 Identifies different types of information sources cited in a research tool.

2.5.3.3 Demonstrates an understanding that different disciplines may use different citation styles.

2.5.5 Uses various technologies to manage the information selected and organized

Figure 4.5 Objectives and Outcomes from ACRL Standard 3 Measured by the SAILS Test

Standard 3: Evaluates Information and Its Sources Critically and Incorporates Selected Information Into His or Her Knowledge Base and Value System.

The numbering refers to the ACRL documents: the first digit is the ACRL standard, the second is the ACRL performance indicator, the third is the ACRL outcome, and the fourth is the ACRL objective.

3.2.1.1 Locates and examines critical reviews of information sources using available resources and technologies.

3.2.1.2 Investigates an author's qualifications and reputation through reviews or biographical sources.

3.2.1.3 Investigates validity and accuracy by consulting sources identified through bibliographic references.

3.2.1.8 Demonstrates an understanding that other sources may provide additional information to either confirm or question point of view or bias.

3.2.3.1 Demonstrates an understanding that information in any format reflects an author's, sponsor's, and/or publisher's point of view.

3.2.3.2 Demonstrates an understanding that some information and information sources may present a one-sided view and may express opinions rather than facts.

3.2.3.3 Demonstrates an understanding that some information and sources may be designed to trigger emotions, conjure stereotypes, or promote support for a particular viewpoint or group.

3.2.3.5 Searches for independent verification or corroboration of the accuracy and completeness of the data or representation of facts presented in an information source.

3.4.1 Determines whether information satisfies the research or other information need

3.4.5.2 Determines when a single search strategy may not fit a topic precisely enough to retrieve sufficient relevant information.

3.4.5.3 Determines when some topics may be too recent to be covered by some standard tools (e.g., a periodicals index) and when information on the topic retrieved by less authoritative tools (e.g., a Web search engine) may not be reliable.

3.4.7.2 Distinguishes among various information sources in terms of established evaluation criteria (e.g., content, authority, currency).

3.6.3 Seeks expert opinion through a variety of mechanisms (e.g., interviews, email, listservs)

3.7.2.1 Demonstrates how searches may be limited or expanded by modifying search terminology or logic.

3.7.3.1 Examines footnotes and bibliographies from retrieved items to locate additional sources.

Figure 4.6 Objectives and Outcomes from ACRL Standard 5 Measured by the SAILS Test

Standard 5: Understands Many of the Economic, Legal, and Social Issues Surrounding the Use of Information and Accesses and Uses Information Ethically and Legally.

The numbering refers to the ACRL documents: the first digit is the ACRL standard, the second is the ACRL performance indicator, the third is the ACRL outcome, and the fourth is the ACRL objective.

5.1.1	Identifies and discusses issues related to privacy and security in both the print and electronic environments
5.1.2.1	Demonstrates an understanding that not all information on the Web is free, i.e., some Web-based databases require users to pay a fee or to subscribe in order to retrieve full text or other content.
5.1.2.2	Demonstrates awareness that the library pays for access to databases, information tools, full-text resources, etc., and may use the Web to deliver them to its clientele.
5.1.2.3	Describes how the terms of subscriptions or licenses may limit their use to a particular clientele or location.
5.1.3	Identifies and discusses issues related to censorship and freedom of speech
5.1.4	Demonstrates an understanding of intellectual property, copyright, and fair use of copyrighted material
5.2.1	Participates in electronic discussions following accepted practices (e.g. "Netiquette")
5.2.5	Legally obtains, stores, and disseminates text, data, images, or sounds
5.2.6	Demonstrates an understanding of what constitutes plagiarism and does not represent work attributable to others as his/her own
5.2.7	Demonstrates an understanding of institutional policies related to human subjects research
5.3.1.2	Identifies citation elements for information sources in different formats (e.g., book, article, television program, Web page, interview).
5.3.1.3	Demonstrates an understanding that there are different documentation styles, published or accepted by various groups
5.3.1.5	Describes when the format of the source cited may dictate a certain citation style.
5.3.1.7	Locates information about documentation styles either in print or electronically, e.g., through the library's Web site.
5.3.1.8	Recognizes that consistency of citation format is important, especially if a course instructor has not required a particular style.

APPENDIX A

About Project SAILS

Project SAILS began when a team of librarians at Kent State University identified a need to measure information literacy skills of students. The need emerged where the demand for increased accountability, the call for continual assessment, and the growing information literacy movement met. Several important questions arose: Does information literacy affect student success? Where do students learn their information literacy skills? What role does the library play in information literacy levels of students? Are the resources allocated to library instruction worthwhile for the university? Answers to these questions require intensive and careful investigation. And the investigation must begin with the answer to a seemingly simple question: How information literate are our students?

To answer that basic question, the project team created the Standardized Assessment of Information Literacy Skills (SAILS). Over the course of six years, the team, in close collaboration with its partners, developed a test that:

- is valid and reliable
- is based on the Information Literacy Competency Standards for Higher Education, published by the Association of College and Research Libraries
- is comprised of carefully written and tested items
- is easy to administer on a large scale
- offers internal and external benchmarking
- results in data reports that clearly describe performance of groups of students

The information provided by the SAILS test, coupled with knowledge of and interpretation by the local institution, will allow librarians to investigate the larger questions about the effect of information literacy on student success. 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, and assess and demonstrate the effects of changes in their instructional programs. Librarians will be able to clarify for themselves and their institutions the role that information literacy plays in student success and retention.

Project SAILS was created at Kent State University in the state of Ohio in the United States. The project received significant support from Kent State University, the Association of Research Libraries, the Ohio Board of Regents, the Institute of Museum and Library Services, and the many colleges and universities that have participated in the project. Project SAILS is now licensed by Kent State University to Carrick Enterprises, a company created by the original developers of SAILS.

For more information, please visit our web site: https://www.ProjectSAILS.org

APPENDIX B

List of Institutions in the All-Institutions Benchmark

	Institution	Country	Type of Institution
1.	Abilene Christian University	US	Masters
2.	Ashford University	US	Baccalaureate - General
3.	Baker University	US	Doctorate
4.	Baldwin-Wallace College	US	Masters
5.	Bowie State University	US	Baccalaureate - General
6.	Butler County Community College	US	Associates
7.	California State Polytechnic University, Pomona	US	Doctorate
8.	California State University, Fresno	US	Masters
9.	California State University, Los Angeles	US	Masters
10.	Central Methodist University	US	Baccalaureate - Liberal Arts
11.	Central Wyoming College	US	Associates
12.	CETYS University	MX	Masters
13.	Curry College	US	Baccalaureate - Liberal Arts
14.	East Central University	US	Baccalaureate - Liberal Arts
15.	Eckerd College	US	Baccalaureate - Liberal Arts
16.	Harrisburg University of Science and Technology	US	Masters
17.	Johnson & Wales University	US	Baccalaureate - General
18.	Kaiser Permanente School of Allied Health Sciences	US	Baccalaureate - General
19.	Loyola University	US	Doctorate
20.	Lynchburg College	US	Doctorate
21.	Manchester Community College	US	Associates
22.	Molloy College	US	Masters
23.	Mount St. Mary's University	US	Masters
24.	Northern State University	US	Masters
25.	Palm Beach State College	US	Associates
26.	Patrick Henry College	US	Baccalaureate - Liberal Arts
27.	Pepperdine University Library	US	Doctorate
28.	Pikeville College	US	Baccalaureate - Liberal Arts
29.	Samford University	US	Masters
30.	St. Johns River State College	US	Baccalaureate - General
31.	The Culinary Institute of America	US	Baccalaureate - General
32.	The University of Utah	US	Doctorate
33.	Thomas College	US	Masters
34.	Thomas Edison State College	US	Masters
35.	University of Lethbridge	CA	Doctorate
36.	University of Maine at Farmington	US	Baccalaureate - Liberal Arts
37.	University of Montevallo	US	Masters
38.	University of San Francisco	US	Doctorate
39.	University of Tennessee at Martin	US	Baccalaureate - General
40.	University of Valley Forge	US	Masters

	Institution	Country	Type of Institution
41.	University of Virgin Islands	VI	Masters
42.	Valencia Community College	US	Associates
43.	William Jessup University	US	Baccalaureate - Liberal Arts
44.	Wor-Wic Community College	US	Associates

APPENDIX C

Test-Taker Profiles for Each Administration

		Abilene Christian University Cornerstone Fall 15 Fall 2015		Abilene Christian University Capstone 2015-16 Spring 2016		Ashford University ENG122 Fall 2015 Fall 2015		Ashford University GEN499 Fall 2015 Fall 2015	
		(n=561)		(n=346)		(n=2,768)		(n=2,918)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	550	98.0	1	0.3	1,676	60.5	4	0.1
	Sophomore	10	1.8	0	0.0	520	18.8	33	1.1
	Junior	1	0.2	31	9.0	336	12.1	334	11.4
	Senior	0	0.0	313	90.5	55	2.0	2,478	84.9
	Other	0	0.0	1	0.3	181	6.5	69	2.4
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	16	2.9	15	4.3	13	0.5	20	0.7
	Art History/Architecture	9	1.6	1	0.3	4	0.1	1	0.0
	Business/Management	91	16.2	104	30.1	756	27.3	878	30.1
	Communications	15	2.7	5	1.4	36	1.3	51	1.7
	Education	33	5.9	9	2.6	406	14.7	522	17.9
	Computer Science	40	7.1	15	4.3	9	0.3	6	0.2
	General Studies	1	0.2	1	0.3	21	0.8	24	0.8
	Nursing/Health Sciences	127	22.6	70	20.2	265	9.6	271	9.3
	History	7	1.2	4	1.2	24	0.9	32	1.1
	Humanities	11	2.0	14	4.0	24	0.9	39	1.3
	Politics	0	0.0	0	0.0	81	2.9	59	2.0
	Military/Naval Science	0	0.0	0	0.0	12	0.4	8	0.3
	Performing & Fine Arts	23	4.1	28	8.1	6	0.2	9	0.3
	Science/Math	64	11.4	40	11.6	8	0.3	10	0.3
	Social Sciences/Psychology	47	8.4	23	6.6	366	13.2	499	17.1
	Other	45	8.0	17	4.9	692	25.0	481	16.5
	Undecided	32	5.7	0	0.0	45	1.6	8	0.3
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		Ashford University ENG122 Spring 2016 Spring 2016 (n=2,607)		Ashford University GEN499 Spring 2016 Spring 2016 (n=2,447)		Ashford University ENG122 Fall 2016 Fall 2016 (n=3,877)		Ashford University GEN499 Fall 2016 Fall 2016 (n=2,503)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	1,609	61.7	8	0.3	2,540	65.5	2	0.1
	Sophomore	509	19.5	25	1.0	650	16.8	28	1.1
	Junior	296	11.4	197	8.1	388	10.0	279	11.1
	Senior	38	1.5	2,169	88.6	57	1.5	2,127	85.0
	Other	155	5.9	48	2.0	242	6.2	67	2.7
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	14	0.5	20	0.8	25	0.6	29	1.2
	Art History/Architecture	2	0.1	2	0.1	5	0.1	0	0.0
	Business/Management	702	26.9	716	29.3	1,009	26.0	753	30.1
	Communications	33	1.3	52	2.1	49	1.3	61	2.4
	Education	415	15.9	407	16.6	659	17.0	414	16.5
	Computer Science	11	0.4	6	0.2	19	0.5	7	0.3
	General Studies	23	0.9	13	0.5	38	1.0	22	0.9
	Nursing/Health Sciences	204	7.8	234	9.6	281	7.2	223	8.9
	History	20	0.8	19	0.8	25	0.6	34	1.4
	Humanities	14	0.5	31	1.3	27	0.7	37	1.5
	Politics	96	3.7	49	2.0	123	3.2	59	2.4
	Military/Naval Science	18	0.7	7	0.3	21	0.5	8	0.3
	Performing & Fine Arts	12	0.5	12	0.5	13	0.3	6	0.2
	Science/Math	8	0.3	4	0.2	12	0.3	6	0.2
	Social Sciences/Psychology	378	14.5	423	17.3	576	14.9	453	18.1
	Other	620	23.8	451	18.4	935	24.1	388	15.5
	Undecided	37	1.4	1	0.0	60	1.5	3	0.1
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		Ashford University ENG122 Spring 2017 Spring 2017 (n=2,423)		Ashford University GEN499 Spring 2017 Spring 2017 (n=1,492)		Ashford University ENG122 Fall 2017 Fall 2017 (n=1,980)		Ashford University GEN499 Fall 2017 Fall 2017 (n=1,286)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	1,514	62.5	2	0.1	1,225	61.9	5	0.4
	Sophomore	438	18.1	15	1.0	373	18.8	21	1.6
	Junior	259	10.7	139	9.3	194	9.8	130	10.1
	Senior	34	1.4	1,312	87.9	25	1.3	1,094	85.1
	Other	178	7.3	24	1.6	163	8.2	36	2.8
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	14	0.6	14	0.9	11	0.6	11	0.9
	Art History/Architecture	0	0.0	1	0.1	0	0.0	0	0.0
	Business/Management	654	27.0	477	32.0	492	24.8	355	27.6
	Communications	45	1.9	25	1.7	19	1.0	23	1.8
	Education	461	19.0	225	15.1	346	17.5	204	15.9
	Computer Science	10	0.4	5	0.3	17	0.9	2	0.2
	General Studies	14	0.6	20	1.3	14	0.7	10	0.8
	Nursing/Health Sciences	177	7.3	117	7.8	179	9.0	99	7.7
	History	16	0.7	17	1.1	13	0.7	17	1.3
	Humanities	19	0.8	11	0.7	14	0.7	17	1.3
	Politics	66	2.7	37	2.5	65	3.3	27	2.1
	Military/Naval Science	10	0.4	5	0.3	13	0.7	8	0.6
	Performing & Fine Arts	6	0.2	2	0.1	9	0.5	4	0.3
	Science/Math	6	0.2	2	0.1	13	0.7	2	0.2
	Social Sciences/Psychology	299	12.3	226	15.1	252	12.7	192	14.9
	Other	588	24.3	304	20.4	467	23.6	312	24.3
	Undecided	38	1.6	4	0.3	56	2.8	3	0.2
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		Ashford University GEN103 Spring 2018		Ashford University GEN499 Spring 2018		Baker University 2015 Fall CASFreshme		Baldwin-Wallace College 2015 Freshman	
		Spring 2018		Spring 2018		Spring 2016		Fall 2015	
		(n=3,955)		(n=1,270)		(n=42)		(n=57)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	2,234	56.5	4	0.3	42	100.0	57	100.0
	Sophomore	636	16.1	21	1.7	0	0.0	0	0.0
	Junior	643	16.3	137	10.8	0	0.0	0	0.0
	Senior	133	3.4	1,076	84.7	0	0.0	0	0.0
	Other	309	7.8	32	2.5	0	0.0	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	21	0.5	8	0.6	0	0.0	0	0.0
	Art History/Architecture	1	0.0	0	0.0	0	0.0	0	0.0
	Business/Management	1,169	29.6	366	28.8	8	19.0	8	14.0
	Communications	80	2.0	31	2.4	2	4.8	0	0.0
	Education	751	19.0	222	17.5	8	19.0	3	5.3
	Computer Science	47	1.2	5	0.4	2	4.8	2	3.5
	General Studies	23	0.6	15	1.2	0	0.0	0	0.0
	Nursing/Health Sciences	313	7.9	72	5.7	10	23.8	6	10.5
	History	24	0.6	19	1.5	0	0.0	0	0.0
	Humanities	29	0.7	7	0.6	1	2.4	3	5.3
	Politics	82	2.1	24	1.9	0	0.0	0	0.0
	Military/Naval Science	14	0.4	4	0.3	0	0.0	0	0.0
	Performing & Fine Arts	8	0.2	5	0.4	2	4.8	6	10.5
	Science/Math	10	0.3	4	0.3	2	4.8	4	7.0
	Social Sciences/Psychology	510	12.9	176	13.9	0	0.0	6	10.5
	Other	840	21.2	307	24.2	5	11.9	8	14.0
	Undecided	33	0.8	5	0.4	2	4.8	11	19.3
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		Baldwin-Wallace College 2015 Seniors Fall 2015 (n=60)		Baldwin-Wallace College Psychology FR 15 Fall 2015 (n=42)		Baldwin-Wallace College Psychology SR 16 Spring 2016 (n=27)		Baldwin-Wallace College FR 2016FA Spring 2017 (n=60)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	0	0.0	42	100.0	0	0.0	60	100.0
	Sophomore	0	0.0	0	0.0	0	0.0	0	0.0
	Junior	0	0.0	0	0.0	0	0.0	0	0.0
	Senior	60	100.0	0	0.0	27	100.0	0	0.0
	Other	0	0.0	0	0.0	0	0.0	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	1	1.7	0	0.0	0	0.0	0	0.0
	Art History/Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business/Management	7	11.7	0	0.0	0	0.0	5	8.3
	Communications	4	6.7	0	0.0	0	0.0	1	1.7
	Education	5	8.3	0	0.0	0	0.0	2	3.3
	Computer Science	0	0.0	0	0.0	0	0.0	3	5.0
	General Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Nursing/Health Sciences	6	10.0	1	2.4	0	0.0	5	8.3
	History	1	1.7	0	0.0	0	0.0	1	1.7
	Humanities	6	10.0	0	0.0	0	0.0	5	8.3
	Politics	0	0.0	0	0.0	0	0.0	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	8	13.3	0	0.0	0	0.0	14	23.3
	Science/Math	7	11.7	0	0.0	0	0.0	6	10.0
	Social Sciences/Psychology	4	6.7	40	95.2	27	100.0	4	6.7
	Other	11	18.3	1	2.4	0	0.0	8	13.3
	Undecided	0	0.0	0	0.0	0	0.0	6	10.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		Baldwin-Wallace College SR16 FA16 Spring 2017 (n=57)		Baldwin-Wallace College 2017 FR Fall 2017 (n=49)		Baldwin-Wallace College 2017 SR Fall 2017 (n=49)		Bowie State University Fall2017-Spring 2018 Spring 2018 (n=128)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	0	0.0	49	100.0	0	0.0	62	48.4
	Sophomore	0	0.0	0	0.0	0	0.0	15	11.7
	Junior	0	0.0	0	0.0	0	0.0	6	4.7
	Senior	57	100.0	0	0.0	49	100.0	43	33.6
	Other	0	0.0	0	0.0	0	0.0	2	1.6
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	0	0.0	1	2.0	0	0.0	0	0.0
	Art History/Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business/Management	10	17.5	7	14.3	7	14.3	12	9.4
	Communications	3	5.3	0	0.0	2	4.1	12	9.4
	Education	6	10.5	1	2.0	2	4.1	3	2.3
	Computer Science	3	5.3	1	2.0	0	0.0	6	4.7
	General Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Nursing/Health Sciences	8	14.0	9	18.4	1	2.0	17	13.3
	History	0	0.0	0	0.0	0	0.0	1	0.8
	Humanities	2	3.5	0	0.0	1	2.0	1	0.8
	Politics	0	0.0	0	0.0	0	0.0	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	6	10.5	6	12.2	10	20.4	6	4.7
	Science/Math	5	8.8	6	12.2	7	14.3	2	1.6
	Social Sciences/Psychology	6	10.5	6	12.2	8	16.3	29	22.7
	Other	8	14.0	8	16.3	11	22.4	34	26.6
	Undecided	0	0.0	4	8.2	0	0.0	5	3.9
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		Butler County Community College Gen Ed Fall 16 Fall 2016 (n=100)		Butler County Community College Gen Ed Spring 17 Spring 2017 (n=99)		California State Polytechnic University, Pomona Initial WASC CPP Fall 2017 (n=45)		California State University, Fresno Fall 2015 Freshmen Fall 2015 (n=204)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	93	93.0	79	79.8	5	11.1	200	98.0
	Sophomore	4	4.0	14	14.1	1	2.2	3	1.5
	Junior	0	0.0	0	0.0	17	37.8	1	0.5
	Senior	0	0.0	0	0.0	22	48.9	0	0.0
	Other	3	3.0	6	6.1	0	0.0	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	0	0.0	0	0.0	2	4.4	12	5.9
	Art History/Architecture	0	0.0	0	0.0	1	2.2	0	0.0
	Business/Management	16	16.0	21	21.2	11	24.4	21	10.3
	Communications	3	3.0	1	1.0	0	0.0	0	0.0
	Education	2	2.0	8	8.1	3	6.7	17	8.3
	Computer Science	9	9.0	3	3.0	13	28.9	15	7.4
	General Studies	13	13.0	8	8.1	0	0.0	0	0.0
	Nursing/Health Sciences	13	13.0	13	13.1	0	0.0	46	22.5
	History	0	0.0	2	2.0	0	0.0	0	0.0
	Humanities	2	2.0	1	1.0	2	4.4	11	5.4
	Politics	0	0.0	0	0.0	0	0.0	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	3	3.0	3	3.0	0	0.0	0	0.0
	Science/Math	5	5.0	2	2.0	0	0.0	41	20.1
	Social Sciences/Psychology	8	8.0	14	14.1	5	11.1	19	9.3
	Other	21	21.0	20	20.2	8	17.8	0	0.0
	Undecided	5	5.0	3	3.0	0	0.0	22	10.8
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		California State University, Fresno SAILS Seniors 2016 Spring 2016 (n=314)		California State University, Fresno Fall 2016 Freshmen Fall 2016 (n=190)		California State University, Fresno SAILS Seniors 2017 Spring 2017 (n=224)		California State University, Fresno Fall 2017 Freshmen Spring 2018 (n=59)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	0	0.0	188	98.9	1	0.4	56	94.9
	Sophomore	1	0.3	2	1.1	1	0.4	3	5.1
	Junior	25	8.0	0	0.0	19	8.5	0	0.0
	Senior	279	88.9	0	0.0	200	89.3	0	0.0
	Other	9	2.9	0	0.0	3	1.3	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	19	6.1	8	4.2	19	8.5	6	10.2
	Art History/Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business/Management	55	17.5	26	13.7	34	15.2	11	18.6
	Communications	0	0.0	0	0.0	0	0.0	0	0.0
	Education	28	8.9	18	9.5	13	5.8	1	1.7
	Computer Science	15	4.8	22	11.6	14	6.3	4	6.8
	General Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Nursing/Health Sciences	61	19.4	34	17.9	56	25.0	12	20.3
	History	0	0.0	0	0.0	0	0.0	0	0.0
	Humanities	26	8.3	7	3.7	17	7.6	2	3.4
	Politics	0	0.0	0	0.0	0	0.0	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	0	0.0	0	0.0	0	0.0	0	0.0
	Science/Math	55	17.5	39	20.5	34	15.2	9	15.3
	Social Sciences/Psychology	54	17.2	20	10.5	33	14.7	11	18.6
	Other	0	0.0	0	0.0	0	0.0	0	0.0
	Undecided	1	0.3	16	8.4	4	1.8	3	5.1
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		California State University, Fresno SAILS Seniors 2018		California State University, Los Angeles Freshmen		California State University, Los Angeles Senior		Central Methodist University Fall 2015	
		Spring 2018		Spring 2016		Spring 2017		Fall 2015	
		(n=159)		(n=59)		(n=147)		(n=99)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	0	0.0	47	79.7	0	0.0	0	0.0
	Sophomore	1	0.6	6	10.2	2	1.4	2	2.0
	Junior	25	15.7	4	6.8	33	22.4	46	46.5
	Senior	132	83.0	1	1.7	103	70.1	51	51.5
	Other	1	0.6	1	1.7	9	6.1	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	9	5.7	0	0.0	0	0.0	0	0.0
	Art History/Architecture	12	7.5	1	1.7	0	0.0	0	0.0
	Business/Management	21	13.2	0	0.0	35	23.8	9	9.1
	Communications	0	0.0	3	5.1	0	0.0	1	1.0
	Education	9	5.7	2	3.4	2	1.4	17	17.2
	Computer Science	14	8.8	33	55.9	20	13.6	2	2.0
	General Studies	0	0.0	0	0.0	0	0.0	2	2.0
	Nursing/Health Sciences	25	15.7	0	0.0	1	0.7	19	19.2
	History	0	0.0	0	0.0	0	0.0	0	0.0
	Humanities	0	0.0	0	0.0	0	0.0	7	7.1
	Politics	0	0.0	0	0.0	6	4.1	3	3.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	7	7.1
	Performing & Fine Arts	0	0.0	12	20.3	4	2.7	1	1.0
	Science/Math	26	16.4	0	0.0	17	11.6	13	13.1
	Social Sciences/Psychology	26	16.4	1	1.7	32	21.8	7	7.1
	Other	17	10.7	7	11.9	30	20.4	11	11.1
	Undecided	0	0.0	0	0.0	0	0.0	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		Central Methodist University Spring 2016 Spring 2016		Central Methodist University Fall 2016 Spring 2017		Central Methodist University Spring 2017 Spring 2017		Central Methodist University Fall 2017 Spring 2018	
		(n=49)		(n=81)		(n=81)		(n=47)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	0	0.0	1	1.2	2	2.5	0	0.0
	Sophomore	2	4.1	1	1.2	7	8.6	1	2.1
	Junior	33	67.3	37	45.7	50	61.7	21	44.7
	Senior	14	28.6	41	50.6	22	27.2	25	53.2
	Other	0	0.0	1	1.2	0	0.0	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	0	0.0	1	1.2	0	0.0	0	0.0
	Art History/Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business/Management	8	16.3	5	6.2	17	21.0	7	14.9
	Communications	1	2.0	4	4.9	0	0.0	0	0.0
	Education	10	20.4	9	11.1	8	9.9	6	12.8
	Computer Science	1	2.0	5	6.2	3	3.7	0	0.0
	General Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Nursing/Health Sciences	4	8.2	13	16.0	13	16.0	10	21.3
	History	0	0.0	1	1.2	1	1.2	0	0.0
	Humanities	2	4.1	1	1.2	1	1.2	1	2.1
	Politics	0	0.0	3	3.7	2	2.5	1	2.1
	Military/Naval Science	4	8.2	2	2.5	3	3.7	5	10.6
	Performing & Fine Arts	2	4.1	3	3.7	1	1.2	3	6.4
	Science/Math	6	12.2	21	25.9	11	13.6	2	4.3
	Social Sciences/Psychology	2	4.1	3	3.7	8	9.9	4	8.5
	Other	9	18.4	9	11.1	12	14.8	8	17.0
	Undecided	0	0.0	1	1.2	1	1.2	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		Central Wyoming College 2017 SpringGraduates Spring 2017 (n=118)		Central Wyoming College 2018 Spring SAILS Spring 2018 (n=131)		CETYS University Campus Ensenada2 Fall 2017 (n=52)		CETYS University Campus Mexicali Fall 2017 (n=134)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	0	0.0	0	0.0	52	100.0	133	99.3
	Sophomore	90	76.3	131	100.0	0	0.0	0	0.0
	Junior	4	3.4	0	0.0	0	0.0	0	0.0
	Senior	20	16.9	0	0.0	0	0.0	0	0.0
	Other	4	3.4	0	0.0	0	0.0	1	0.7
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	8	6.8	4	3.1	0	0.0	0	0.0
	Art History/Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business/Management	10	8.5	8	6.1	16	30.8	32	23.9
	Communications	2	1.7	8	6.1	0	0.0	0	0.0
	Education	8	6.8	9	6.9	0	0.0	0	0.0
	Computer Science	3	2.5	2	1.5	31	59.6	74	55.2
	General Studies	1	0.8	1	0.8	0	0.0	0	0.0
	Nursing/Health Sciences	22	18.6	32	24.4	0	0.0	0	0.0
	History	1	0.8	0	0.0	0	0.0	0	0.0
	Humanities	3	2.5	1	0.8	0	0.0	0	0.0
	Politics	7	5.9	11	8.4	0	0.0	7	5.2
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	3	2.5	4	3.1	4	7.7	8	6.0
	Science/Math	8	6.8	13	9.9	0	0.0	0	0.0
	Social Sciences/Psychology	14	11.9	11	8.4	0	0.0	13	9.7
	Other	28	23.7	27	20.6	0	0.0	0	0.0
	Undecided	0	0.0	0	0.0	1	1.9	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		CETYS University Campus Tijuana		Curry College FYI (Not so Famous)		Curry College FYI GLives Spring 17		East Central University 2015 Fall UNIV 1001	
		Fall 2017		Fall 2016		Spring 2017		Fall 2015	
		(n=106)		(n=50)		(n=57)		(n=607)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	106	100.0	50	100.0	57	100.0	603	99.3
	Sophomore	0	0.0	0	0.0	0	0.0	4	0.7
	Junior	0	0.0	0	0.0	0	0.0	0	0.0
	Senior	0	0.0	0	0.0	0	0.0	0	0.0
	Other	0	0.0	0	0.0	0	0.0	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	0	0.0	0	0.0	0	0.0	13	2.1
	Art History/Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business/Management	30	28.3	14	28.0	14	24.6	83	13.7
	Communications	0	0.0	1	2.0	15	26.3	11	1.8
	Education	0	0.0	0	0.0	2	3.5	27	4.4
	Computer Science	63	59.4	1	2.0	0	0.0	69	11.4
	General Studies	0	0.0	0	0.0	0	0.0	2	0.3
	Nursing/Health Sciences	0	0.0	6	12.0	4	7.0	87	14.3
	History	0	0.0	0	0.0	4	7.0	4	0.7
	Humanities	0	0.0	0	0.0	0	0.0	10	1.6
	Politics	2	1.9	0	0.0	0	0.0	18	3.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	0	0.0	0	0.0	0	0.0	17	2.8
	Science/Math	0	0.0	0	0.0	0	0.0	62	10.2
	Social Sciences/Psychology	10	9.4	4	8.0	3	5.3	20	3.3
	Other	1	0.9	18	36.0	7	12.3	163	26.9
	Undecided	0	0.0	6	12.0	8	14.0	21	3.5
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		East Central University 2015 Fall UNIV 3001 Fall 2015 (n=138)		East Central University 2016 Fall UNIV 1001 Fall 2016 (n=569)		Eckerd College Freshman 2015 Fall 2015 (n=120)		Eckerd College Seniors 2015 Fall 2015 (n=93)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	0	0.0	566	99.5	117	97.5	0	0.0
	Sophomore	23	16.7	2	0.4	3	2.5	0	0.0
	Junior	72	52.2	1	0.2	0	0.0	1	1.1
	Senior	43	31.2	0	0.0	0	0.0	92	98.9
	Other	0	0.0	0	0.0	0	0.0	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	4	2.9	11	1.9	10	8.3	11	11.8
	Art History/Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business/Management	22	15.9	67	11.8	11	9.2	15	16.1
	Communications	7	5.1	14	2.5	3	2.5	7	7.5
	Education	14	10.1	50	8.8	0	0.0	0	0.0
	Computer Science	4	2.9	97	17.0	1	0.8	0	0.0
	General Studies	3	2.2	2	0.4	0	0.0	0	0.0
	Nursing/Health Sciences	14	10.1	64	11.2	0	0.0	0	0.0
	History	2	1.4	5	0.9	0	0.0	4	4.3
	Humanities	3	2.2	8	1.4	0	0.0	2	2.2
	Politics	3	2.2	7	1.2	0	0.0	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	5	3.6	7	1.2	5	4.2	1	1.1
	Science/Math	9	6.5	54	9.5	49	40.8	23	24.7
	Social Sciences/Psychology	7	5.1	22	3.9	16	13.3	18	19.4
	Other	41	29.7	134	23.6	7	5.8	12	12.9
	Undecided	0	0.0	27	4.7	18	15.0	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		Eckerd College SAILS 2016 Freshmen Fall 2016 (n=109)		Eckerd College SAILS 2016 Seniors Fall 2016 (n=81)		Eckerd College 2017 Freshmen Fall 2017 (n=102)		Eckerd College 2017 Seniors Fall 2017 (n=97)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	109	100.0	0	0.0	101	99.0	0	0.0
	Sophomore	0	0.0	0	0.0	0	0.0	0	0.0
	Junior	0	0.0	0	0.0	1	1.0	2	2.1
	Senior	0	0.0	81	100.0	0	0.0	95	97.9
	Other	0	0.0	0	0.0	0	0.0	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	15	13.8	10	12.3	16	15.7	17	17.5
	Art History/Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business/Management	10	9.2	11	13.6	8	7.8	16	16.5
	Communications	4	3.7	4	4.9	0	0.0	3	3.1
	Education	0	0.0	0	0.0	0	0.0	0	0.0
	Computer Science	1	0.9	1	1.2	2	2.0	4	4.1
	General Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Nursing/Health Sciences	0	0.0	0	0.0	0	0.0	0	0.0
	History	0	0.0	0	0.0	0	0.0	1	1.0
	Humanities	1	0.9	0	0.0	0	0.0	3	3.1
	Politics	0	0.0	0	0.0	0	0.0	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	5	4.6	4	4.9	4	3.9	4	4.1
	Science/Math	34	31.2	23	28.4	33	32.4	25	25.8
	Social Sciences/Psychology	13	11.9	17	21.0	6	5.9	17	17.5
	Other	10	9.2	11	13.6	17	16.7	7	7.2
	Undecided	16	14.7	0	0.0	16	15.7	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		Harrisburg University of Science and Technology SU2015-SP2016 Spring 2016		Johnson & Wales University JWU Spring 2016 Spring 2016		Johnson & Wales University JWU Spring 2017 Spring 2017		Kaiser Permanente School of Allied Health Sciences Admin Testing Spring 2017	
		(n=113)		(n=893)		(n=844)		(n=82)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	61	54.0	275	30.8	222	26.3	0	0.0
	Sophomore	5	4.4	161	18.0	182	21.6	0	0.0
	Junior	37	32.7	74	8.3	134	15.9	61	74.4
	Senior	9	8.0	375	42.0	305	36.1	2	2.4
	Other	1	0.9	8	0.9	1	0.1	19	23.2
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	2	1.8	1	0.1	10	1.2	0	0.0
	Art History/Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business/Management	3	2.7	229	25.6	247	29.3	0	0.0
	Communications	1	0.9	9	1.0	9	1.1	0	0.0
	Education	0	0.0	0	0.0	0	0.0	0	0.0
	Computer Science	41	36.3	23	2.6	6	0.7	0	0.0
	General Studies	0	0.0	6	0.7	4	0.5	0	0.0
	Nursing/Health Sciences	3	2.7	52	5.8	45	5.3	82	100.0
	History	0	0.0	0	0.0	1	0.1	0	0.0
	Humanities	0	0.0	4	0.4	2	0.2	0	0.0
	Politics	0	0.0	26	2.9	61	7.2	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	0	0.0	0	0.0	0	0.0	0	0.0
	Science/Math	41	36.3	4	0.4	6	0.7	0	0.0
	Social Sciences/Psychology	0	0.0	9	1.0	42	5.0	0	0.0
	Other	19	16.8	510	57.1	390	46.2	0	0.0
	Undecided	3	2.7	20	2.2	21	2.5	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		Kaiser Permanente School of Allied Health Sciences 2018 Info Lit Cohort Spring 2018		Loyola University Spring 2016		Loyola University Spring 2017		Lynchburg College Spring2016	
		(n=96)		(n=110)		(n=50)		(n=127)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	20	20.8	24	21.8	4	8.0	0	0.0
	Sophomore	1	1.0	26	23.6	9	18.0	0	0.0
	Junior	71	74.0	29	26.4	14	28.0	0	0.0
	Senior	0	0.0	31	28.2	23	46.0	126	99.2
	Other	4	4.2	0	0.0	0	0.0	1	0.8
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	0	0.0	0	0.0	5	10.0	2	1.6
	Art History/Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business/Management	0	0.0	6	5.5	0	0.0	12	9.4
	Communications	0	0.0	5	4.5	14	28.0	14	11.0
	Education	0	0.0	0	0.0	2	4.0	20	15.7
	Computer Science	0	0.0	0	0.0	1	2.0	3	2.4
	General Studies	0	0.0	1	0.9	0	0.0	0	0.0
	Nursing/Health Sciences	96	100.0	5	4.5	1	2.0	22	17.3
	History	0	0.0	7	6.4	3	6.0	0	0.0
	Humanities	0	0.0	13	11.8	5	10.0	10	7.9
	Politics	0	0.0	3	2.7	0	0.0	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	0	0.0	18	16.4	0	0.0	0	0.0
	Science/Math	0	0.0	9	8.2	0	0.0	7	5.5
	Social Sciences/Psychology	0	0.0	26	23.6	2	4.0	12	9.4
	Other	0	0.0	16	14.5	17	34.0	25	19.7
	Undecided	0	0.0	1	0.9	0	0.0	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		Lynchburg College Spring 2018		Manchester Community College MCC Fall 2015		Molloy College Fall2015		Mount St. Mary's University Fall Freshmen 2017	
		Spring 2018		Fall 2015		Fall 2015		Fall 2017	
		(n=114)		(n=500)		(n=121)		(n=276)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	0	0.0	458	91.6	121	100.0	274	99.3
	Sophomore	0	0.0	42	8.4	0	0.0	1	0.4
	Junior	1	0.9	0	0.0	0	0.0	0	0.0
	Senior	112	98.2	0	0.0	0	0.0	0	0.0
	Other	1	0.9	0	0.0	0	0.0	1	0.4
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	0	0.0	0	0.0	0	0.0	4	1.4
	Art History/Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business/Management	22	19.3	39	7.8	27	22.3	48	17.4
	Communications	7	6.1	9	1.8	2	1.7	12	4.3
	Education	6	5.3	12	2.4	5	4.1	22	8.0
	Computer Science	0	0.0	28	5.6	0	0.0	24	8.7
	General Studies	0	0.0	144	28.8	0	0.0	0	0.0
	Nursing/Health Sciences	19	16.7	42	8.4	39	32.2	15	5.4
	History	3	2.6	0	0.0	0	0.0	2	0.7
	Humanities	5	4.4	26	5.2	1	0.8	0	0.0
	Politics	1	0.9	0	0.0	2	1.7	10	3.6
	Military/Naval Science	0	0.0	0	0.0	1	0.8	0	0.0
	Performing & Fine Arts	2	1.8	22	4.4	15	12.4	5	1.8
	Science/Math	16	14.0	0	0.0	8	6.6	35	12.7
	Social Sciences/Psychology	13	11.4	15	3.0	1	0.8	15	5.4
	Other	20	17.5	86	17.2	17	14.0	52	18.8
	Undecided	0	0.0	77	15.4	3	2.5	32	11.6
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		Northern State University 2015 Freshmen Spring 2016 (n=65)		Northern State University 2015 Upperclassmen Spring 2016 (n=50)		Northern State University Freshman 2016 Spring 2017 (n=96)		Northern State University Freshman FY18 Spring 2018 (n=153)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	65	100.0	0	0.0	20	20.8	150	98.0
	Sophomore	0	0.0	1	2.0	7	7.3	3	2.0
	Junior	0	0.0	6	12.0	17	17.7	0	0.0
	Senior	0	0.0	43	86.0	50	52.1	0	0.0
	Other	0	0.0	0	0.0	2	2.1	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	5	7.7	3	6.0	0	0.0	1	0.7
	Art History/Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business/Management	0	0.0	5	10.0	4	4.2	44	28.8
	Communications	2	3.1	1	2.0	1	1.0	2	1.3
	Education	11	16.9	4	8.0	3	3.1	48	31.4
	Computer Science	0	0.0	0	0.0	0	0.0	2	1.3
	General Studies	2	3.1	0	0.0	0	0.0	0	0.0
	Nursing/Health Sciences	7	10.8	5	10.0	7	7.3	3	2.0
	History	2	3.1	1	2.0	15	15.6	5	3.3
	Humanities	1	1.5	1	2.0	1	1.0	1	0.7
	Politics	0	0.0	0	0.0	1	1.0	3	2.0
	Military/Naval Science	0	0.0	0	0.0	1	1.0	0	0.0
	Performing & Fine Arts	4	6.2	1	2.0	10	10.4	3	2.0
	Science/Math	19	29.2	28	56.0	24	25.0	7	4.6
	Social Sciences/Psychology	11	16.9	1	2.0	22	22.9	8	5.2
	Other	0	0.0	0	0.0	7	7.3	13	8.5
	Undecided	1	1.5	0	0.0	0	0.0	13	8.5
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		Northern State University Upperclass FY18 Spring 2018 (n=68)		Palm Beach State College Spring 2016 ENC1102 Spring 2016 (n=275)		Palm Beach State College Spring2017ENC 1102 Spring 2017 (n=243)		Patrick Henry College 2016SP Commencement Spring 2016 (n=60)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	2	2.9	179	65.1	164	67.5	0	0.0
	Sophomore	4	5.9	67	24.4	56	23.0	0	0.0
	Junior	16	23.5	9	3.3	0	0.0	0	0.0
	Senior	46	67.6	3	1.1	0	0.0	58	96.7
	Other	0	0.0	17	6.2	23	9.5	2	3.3
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	3	4.4	0	0.0	0	0.0	0	0.0
	Art History/Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business/Management	0	0.0	0	0.0	0	0.0	4	6.7
	Communications	1	1.5	0	0.0	0	0.0	5	8.3
	Education	25	36.8	0	0.0	0	0.0	0	0.0
	Computer Science	0	0.0	0	0.0	0	0.0	0	0.0
	General Studies	0	0.0	0	0.0	0	0.0	10	16.7
	Nursing/Health Sciences	0	0.0	0	0.0	0	0.0	0	0.0
	History	1	1.5	0	0.0	0	0.0	3	5.0
	Humanities	0	0.0	0	0.0	0	0.0	4	6.7
	Politics	2	2.9	0	0.0	0	0.0	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	2	3.3
	Performing & Fine Arts	3	4.4	0	0.0	0	0.0	0	0.0
	Science/Math	4	5.9	0	0.0	0	0.0	0	0.0
	Social Sciences/Psychology	20	29.4	0	0.0	0	0.0	32	53.3
	Other	9	13.2	0	0.0	0	0.0	0	0.0
	Undecided	0	0.0	0	0.0	0	0.0	0	0.0
	Not Reported	0	0.0	275	100.0	243	100.0	0	0.0

		Patrick Henry College 2016F Incoming Fall 2016 (n=55)		Patrick Henry College 2018Sp Commencing Spring 2018 (n=60)		Pepperdine University Library 2015 Fall Freshman Fall 2015 (n=246)		Pepperdine University Library 2015 Fall Senior Fall 2015 (n=179)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	52	94.5	0	0.0	246	100.0	0	0.0
	Sophomore	2	3.6	0	0.0	0	0.0	0	0.0
	Junior	1	1.8	0	0.0	0	0.0	0	0.0
	Senior	0	0.0	60	100.0	0	0.0	179	100.0
	Other	0	0.0	0	0.0	0	0.0	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Art History/Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business/Management	4	7.3	5	8.3	62	25.2	20	11.2
	Communications	5	9.1	5	8.3	37	15.0	32	17.9
	Education	0	0.0	0	0.0	0	0.0	0	0.0
	Computer Science	0	0.0	0	0.0	0	0.0	0	0.0
	General Studies	3	5.5	1	1.7	0	0.0	0	0.0
	Nursing/Health Sciences	0	0.0	0	0.0	0	0.0	0	0.0
	History	1	1.8	6	10.0	2	0.8	1	0.6
	Humanities	5	9.1	5	8.3	15	6.1	21	11.7
	Politics	0	0.0	0	0.0	0	0.0	0	0.0
	Military/Naval Science	21	38.2	13	21.7	0	0.0	0	0.0
	Performing & Fine Arts	0	0.0	0	0.0	16	6.5	8	4.5
	Science/Math	0	0.0	0	0.0	58	23.6	42	23.5
	Social Sciences/Psychology	16	29.1	25	41.7	22	8.9	39	21.8
	Other	0	0.0	0	0.0	9	3.7	16	8.9
	Undecided	0	0.0	0	0.0	25	10.2	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		Pikeville College Complete Eng. 2016		Pikeville College Grad 16		Pikeville College CompEng2017		Pikeville College Grads17	
		Spring 2016		Spring 2016		Spring 2017		Spring 2017	
		(n=195)		(n=193)		(n=71)		(n=190)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	60	30.8	0	0.0	16	22.5	0	0.0
	Sophomore	101	51.8	0	0.0	37	52.1	2	1.1
	Junior	30	15.4	2	1.0	16	22.5	2	1.1
	Senior	4	2.1	188	97.4	2	2.8	186	97.9
	Other	0	0.0	3	1.6	0	0.0	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	0	0.0	1	0.5	0	0.0	1	0.5
	Art History/Architecture	1	0.5	1	0.5	1	1.4	2	1.1
	Business/Management	32	16.4	31	16.1	11	15.5	36	18.9
	Communications	13	6.7	23	11.9	3	4.2	16	8.4
	Education	22	11.3	11	5.7	11	15.5	12	6.3
	Computer Science	3	1.5	4	2.1	1	1.4	2	1.1
	General Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Nursing/Health Sciences	23	11.8	12	6.2	3	4.2	21	11.1
	History	6	3.1	9	4.7	3	4.2	6	3.2
	Humanities	2	1.0	1	0.5	0	0.0	7	3.7
	Politics	10	5.1	4	2.1	3	4.2	1	0.5
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	0	0.0	0	0.0	1	1.4	0	0.0
	Science/Math	31	15.9	36	18.7	15	21.1	34	17.9
	Social Sciences/Psychology	24	12.3	46	23.8	8	11.3	38	20.0
	Other	26	13.3	14	7.3	10	14.1	14	7.4
	Undecided	2	1.0	0	0.0	1	1.4	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		Pikeville College Grads2018 Spring 2018 (n=214)		Samford University Samford Spring 2017 Spring 2017 (n=373)		St. Johns River State College Spring 2016 ENC 1102 Spring 2016 (n=77)		St. Johns River State College Spring 2017 ENC 1102 Spring 2017 (n=65)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	1	0.5	101	27.1	52	67.5	49	75.4
	Sophomore	3	1.4	81	21.7	14	18.2	11	16.9
	Junior	5	2.3	73	19.6	3	3.9	0	0.0
	Senior	204	95.3	117	31.4	0	0.0	1	1.5
	Other	1	0.5	1	0.3	8	10.4	4	6.2
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	0	0.0	0	0.0	0	0.0	1	1.5
	Art History/Architecture	2	0.9	3	0.8	1	1.3	1	1.5
	Business/Management	34	15.9	67	18.0	9	11.7	7	10.8
	Communications	14	6.5	23	6.2	2	2.6	2	3.1
	Education	15	7.0	21	5.6	7	9.1	4	6.2
	Computer Science	2	0.9	6	1.6	3	3.9	9	13.8
	General Studies	0	0.0	2	0.5	1	1.3	2	3.1
	Nursing/Health Sciences	36	16.8	92	24.7	11	14.3	8	12.3
	History	4	1.9	8	2.1	2	2.6	1	1.5
	Humanities	4	1.9	21	5.6	0	0.0	0	0.0
	Politics	6	2.8	2	0.5	0	0.0	1	1.5
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	0	0.0	21	5.6	2	2.6	2	3.1
	Science/Math	41	19.2	31	8.3	6	7.8	1	1.5
	Social Sciences/Psychology	37	17.3	27	7.2	1	1.3	1	1.5
	Other	19	8.9	43	11.5	9	11.7	9	13.8
	Undecided	0	0.0	6	1.6	23	29.9	16	24.6
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		St. Johns River State College Spring 2018 ENC 1102 Spring 2018 (n=86)		The Culinary Institute of America AOS Fall 2015 Fall 2015 (n=101)		The Culinary Institute of America BPS_spring2016 Spring 2016 (n=103)		The University of Utah Utah LEAP Program Spring 2018 (n=385)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	72	83.7	58	57.4	0	0.0	297	77.1
	Sophomore	8	9.3	43	42.6	1	1.0	39	10.1
	Junior	2	2.3	0	0.0	29	28.2	34	8.8
	Senior	0	0.0	0	0.0	73	70.9	11	2.9
	Other	4	4.7	0	0.0	0	0.0	4	1.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	1	1.2	0	0.0	0	0.0	2	0.5
	Art History/Architecture	0	0.0	0	0.0	0	0.0	2	0.5
	Business/Management	10	11.6	4	4.0	84	81.6	12	3.1
	Communications	1	1.2	0	0.0	0	0.0	1	0.3
	Education	6	7.0	0	0.0	0	0.0	3	0.8
	Computer Science	9	10.5	0	0.0	0	0.0	149	38.7
	General Studies	0	0.0	0	0.0	12	11.7	0	0.0
	Nursing/Health Sciences	12	14.0	0	0.0	0	0.0	44	11.4
	History	1	1.2	0	0.0	0	0.0	0	0.0
	Humanities	0	0.0	0	0.0	0	0.0	7	1.8
	Politics	2	2.3	0	0.0	0	0.0	2	0.5
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	5	5.8	0	0.0	0	0.0	7	1.8
	Science/Math	4	4.7	1	1.0	7	6.8	37	9.6
	Social Sciences/Psychology	1	1.2	0	0.0	0	0.0	37	9.6
	Other	12	14.0	96	95.0	0	0.0	23	6.0
	Undecided	22	25.6	0	0.0	0	0.0	59	15.3
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		Thomas College Fall 2015 Fall 2015 (n=201)		Thomas College Spring 2016 Spring 2016 (n=139)		Thomas College Fall 2016 Fall 2016 (n=219)		Thomas College Freshmen Spring 2017 Spring 2017 (n=66)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	191	95.0	119	85.6	209	95.4	66	100.0
	Sophomore	6	3.0	18	12.9	3	1.4	0	0.0
	Junior	3	1.5	2	1.4	7	3.2	0	0.0
	Senior	1	0.5	0	0.0	0	0.0	0	0.0
	Other	0	0.0	0	0.0	0	0.0	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Art History/Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business/Management	55	27.4	31	22.3	47	21.5	12	18.2
	Communications	2	1.0	5	3.6	7	3.2	3	4.5
	Education	27	13.4	10	7.2	30	13.7	11	16.7
	Computer Science	12	6.0	9	6.5	11	5.0	3	4.5
	General Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Nursing/Health Sciences	0	0.0	0	0.0	0	0.0	0	0.0
	History	0	0.0	0	0.0	0	0.0	0	0.0
	Humanities	1	0.5	0	0.0	0	0.0	0	0.0
	Politics	3	1.5	1	0.7	2	0.9	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	0	0.0	0	0.0	0	0.0	0	0.0
	Science/Math	0	0.0	0	0.0	0	0.0	0	0.0
	Social Sciences/Psychology	16	8.0	12	8.6	18	8.2	8	12.1
	Other	79	39.3	71	51.1	94	42.9	29	43.9
	Undecided	6	3.0	0	0.0	10	4.6	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		Thomas College Fall 2017 First Year		Thomas College Spring 2018 FY		Thomas Edison State College AY2016		Thomas Edison State College AY2017	
		Fall 2017		Spring 2018		Spring 2016		Spring 2017	
		(n=208)		(n=120)		(n=582)		(n=575)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	195	93.8	112	93.3	74	12.7	67	11.7
	Sophomore	8	3.8	2	1.7	50	8.6	59	10.3
	Junior	5	2.4	5	4.2	148	25.4	141	24.5
	Senior	0	0.0	0	0.0	168	28.9	150	26.1
	Other	0	0.0	1	0.8	142	24.4	158	27.5
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Art History/Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business/Management	47	22.6	41	34.2	96	16.5	69	12.0
	Communications	4	1.9	3	2.5	11	1.9	10	1.7
	Education	24	11.5	19	15.8	0	0.0	0	0.0
	Computer Science	13	6.3	12	10.0	118	20.3	181	31.5
	General Studies	2	1.0	1	0.8	7	1.2	13	2.3
	Nursing/Health Sciences	0	0.0	10	8.3	103	17.7	83	14.4
	History	0	0.0	1	0.8	1	0.2	0	0.0
	Humanities	0	0.0	0	0.0	4	0.7	3	0.5
	Politics	2	1.0	15	12.5	2	0.3	0	0.0
	Military/Naval Science	0	0.0	0	0.0	3	0.5	2	0.3
	Performing & Fine Arts	0	0.0	0	0.0	1	0.2	0	0.0
	Science/Math	0	0.0	1	0.8	22	3.8	27	4.7
	Social Sciences/Psychology	26	12.5	6	5.0	85	14.6	65	11.3
	Other	81	38.9	8	6.7	127	21.8	119	20.7
	Undecided	9	4.3	3	2.5	2	0.3	3	0.5
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		Thomas Edison State College AY2018 Spring 2018 (n=552)		University of Lethbridge Fall 2015 Post-Test Fall 2015 (n=84)		University of Lethbridge Fall 2015 Pre-Test Fall 2015 (n=87)		University of Maine at Farmington Senior 15-16 Spring 2016 (n=32)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	81	14.7	53	63.1	59	67.8	0	0.0
	Sophomore	37	6.7	22	26.2	18	20.7	0	0.0
	Junior	129	23.4	5	6.0	6	6.9	0	0.0
	Senior	144	26.1	1	1.2	1	1.1	32	100.0
	Other	161	29.2	3	3.6	3	3.4	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	1	0.2	0	0.0	0	0.0	0	0.0
	Art History/Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business/Management	70	12.7	9	10.7	10	11.5	0	0.0
	Communications	7	1.3	0	0.0	0	0.0	0	0.0
	Education	1	0.2	9	10.7	15	17.2	0	0.0
	Computer Science	142	25.7	0	0.0	0	0.0	0	0.0
	General Studies	11	2.0	3	3.6	1	1.1	0	0.0
	Nursing/Health Sciences	109	19.7	1	1.2	5	5.7	0	0.0
	History	4	0.7	0	0.0	0	0.0	0	0.0
	Humanities	4	0.7	4	4.8	5	5.7	0	0.0
	Politics	2	0.4	0	0.0	0	0.0	0	0.0
	Military/Naval Science	2	0.4	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	0	0.0	6	7.1	5	5.7	0	0.0
	Science/Math	32	5.8	28	33.3	23	26.4	0	0.0
	Social Sciences/Psychology	53	9.6	17	20.2	15	17.2	0	0.0
	Other	112	20.3	6	7.1	5	5.7	0	0.0
	Undecided	2	0.4	1	1.2	3	3.4	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	32	100.0

		University of Montevallo UM2015-2016 Spring 2016 (n=280)		University of Montevallo UM2015-2016 MASTERY Spring 2016 (n=351)		University of Montevallo UM2016-2017Found Spring 2017 (n=327)		University of Montevallo UM2016-2017 Mastery Spring 2017 (n=260)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	268	95.7	1	0.3	314	96.0	3	1.2
	Sophomore	10	3.6	17	4.8	9	2.8	4	1.5
	Junior	1	0.4	75	21.4	3	0.9	28	10.8
	Senior	0	0.0	255	72.6	1	0.3	222	85.4
	Other	1	0.4	3	0.9	0	0.0	3	1.2
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	0	0.0	0	0.0	1	0.3	0	0.0
	Art History/Architecture	0	0.0	0	0.0	1	0.3	0	0.0
	Business/Management	38	13.6	22	6.3	38	11.6	19	7.3
	Communications	15	5.4	10	2.8	20	6.1	32	12.3
	Education	38	13.6	55	15.7	40	12.2	15	5.8
	Computer Science	3	1.1	0	0.0	6	1.8	0	0.0
	General Studies	10	3.6	0	0.0	10	3.1	2	0.8
	Nursing/Health Sciences	8	2.9	13	3.7	18	5.5	8	3.1
	History	6	2.1	15	4.3	11	3.4	29	11.2
	Humanities	2	0.7	14	4.0	0	0.0	10	3.8
	Politics	3	1.1	0	0.0	0	0.0	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	47	16.8	51	14.5	57	17.4	11	4.2
	Science/Math	25	8.9	30	8.5	36	11.0	36	13.8
	Social Sciences/Psychology	30	10.7	66	18.8	18	5.5	60	23.1
	Other	43	15.4	75	21.4	48	14.7	37	14.2
	Undecided	12	4.3	0	0.0	23	7.0	1	0.4
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		University of Montevallo UM2017_2018Found Spring 2018 (n=361)		University of Montevallo UM2017_2018 Mastery Spring 2018 (n=296)		University of San Francisco 2017 Spring Seniors Spring 2017 (n=61)		University of San Francisco USF Spring 2018 Spring 2018 (n=120)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	342	94.7	1	0.3	0	0.0	52	43.3
	Sophomore	11	3.0	7	2.4	0	0.0	0	0.0
	Junior	4	1.1	44	14.9	0	0.0	0	0.0
	Senior	1	0.3	241	81.4	61	100.0	68	56.7
	Other	3	0.8	3	1.0	0	0.0	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	1	0.3	0	0.0	2	3.3	1	0.8
	Art History/Architecture	0	0.0	0	0.0	1	1.6	2	1.7
	Business/Management	57	15.8	41	13.9	21	34.4	25	20.8
	Communications	14	3.9	21	7.1	3	4.9	3	2.5
	Education	35	9.7	24	8.1	0	0.0	0	0.0
	Computer Science	6	1.7	0	0.0	3	4.9	6	5.0
	General Studies	12	3.3	0	0.0	0	0.0	0	0.0
	Nursing/Health Sciences	23	6.4	4	1.4	4	6.6	30	25.0
	History	6	1.7	16	5.4	0	0.0	1	0.8
	Humanities	0	0.0	11	3.7	7	11.5	7	5.8
	Politics	1	0.3	0	0.0	3	4.9	7	5.8
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	47	13.0	35	11.8	1	1.6	3	2.5
	Science/Math	42	11.6	13	4.4	7	11.5	12	10.0
	Social Sciences/Psychology	43	11.9	77	26.0	9	14.8	23	19.2
	Other	44	12.2	52	17.6	0	0.0	0	0.0
	Undecided	30	8.3	2	0.7	0	0.0	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		University of Tennessee at Martin Spring 2017		University of Valley Forge 2015-2016 Seniors		University of Valley Forge 2016-2017 Freshmen		University of Valley Forge 2017-2018 Seniors	
		Spring 2017		Spring 2016		Spring 2017		Spring 2018	
		(n=101)		(n=75)		(n=119)		(n=62)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	23	22.8	0	0.0	107	89.9	0	0.0
	Sophomore	8	7.9	0	0.0	12	10.1	0	0.0
	Junior	38	37.6	0	0.0	0	0.0	0	0.0
	Senior	32	31.7	75	100.0	0	0.0	62	100.0
	Other	0	0.0	0	0.0	0	0.0	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	5	5.0	0	0.0	0	0.0	0	0.0
	Art History/Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business/Management	46	45.5	6	8.0	17	14.3	4	6.5
	Communications	7	6.9	10	13.3	14	11.8	15	24.2
	Education	1	1.0	1	1.3	19	16.0	0	0.0
	Computer Science	2	2.0	0	0.0	0	0.0	0	0.0
	General Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Nursing/Health Sciences	6	5.9	0	0.0	0	0.0	0	0.0
	History	1	1.0	0	0.0	0	0.0	0	0.0
	Humanities	0	0.0	2	2.7	1	0.8	2	3.2
	Politics	0	0.0	0	0.0	0	0.0	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	4	4.0	10	13.3	14	11.8	9	14.5
	Science/Math	4	4.0	0	0.0	0	0.0	0	0.0
	Social Sciences/Psychology	18	17.8	14	18.7	28	23.5	13	21.0
	Other	6	5.9	32	42.7	26	21.8	19	30.6
	Undecided	1	1.0	0	0.0	0	0.0	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		University of Virgin Islands Fall 2016 Seniors Fall 2016 (n=107)		Valencia Community College 2016 SAILS Trial Spring 2016 (n=262)		William Jessup University 2015-16 SPS and TUG Spring 2016 (n=163)		Wor- Wic Community College Fall 2015 Fall 2015 (n=102)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	0	0.0	185	70.6	55	33.7	1	1.0
	Sophomore	0	0.0	53	20.2	24	14.7	53	52.0
	Junior	0	0.0	4	1.5	25	15.3	0	0.0
	Senior	94	87.9	0	0.0	58	35.6	0	0.0
	Other	13	12.1	20	7.6	1	0.6	48	47.1
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Environmental Studies	0	0.0	1	0.4	0	0.0	2	2.0
	Art History/Architecture	0	0.0	2	0.8	0	0.0	0	0.0
	Business/Management	30	28.0	45	17.2	56	34.4	11	10.8
	Communications	1	0.9	5	1.9	3	1.8	0	0.0
	Education	4	3.7	7	2.7	14	8.6	9	8.8
	Computer Science	4	3.7	23	8.8	2	1.2	4	3.9
	General Studies	0	0.0	31	11.8	0	0.0	29	28.4
	Nursing/Health Sciences	4	3.7	37	14.1	8	4.9	23	22.5
	History	0	0.0	2	0.8	1	0.6	0	0.0
	Humanities	0	0.0	2	0.8	4	2.5	0	0.0
	Politics	3	2.8	5	1.9	6	3.7	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	0	0.0	6	2.3	8	4.9	0	0.0
	Science/Math	10	9.3	10	3.8	4	2.5	2	2.0
	Social Sciences/Psychology	34	31.8	17	6.5	47	28.8	9	8.8
	Other	17	15.9	32	12.2	6	3.7	13	12.7
	Undecided	0	0.0	37	14.1	4	2.5	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		Wor- Wic Community College Spring 2016	
		Spring 2016	
		(n=276)	
	Characteristics	n	%
Class Standing	Freshman	0	0.0
	Sophomore	121	43.8
	Junior	0	0.0
	Senior	0	0.0
	Other	155	56.2
	Not Reported	0	0.0
Student Major	Environmental Studies	2	0.7
	Art History/Architecture	0	0.0
	Business/Management	29	10.5
	Communications	0	0.0
	Education	31	11.2
	Computer Science	21	7.6
	General Studies	52	18.8
	Nursing/Health Sciences	61	22.1
	History	0	0.0
	Humanities	0	0.0
	Politics	0	0.0
	Military/Naval Science	0	0.0
	Performing & Fine Arts	0	0.0
	Science/Math	8	2.9
	Social Sciences/Psychology	21	7.6
	Other	45	16.3
	Undecided	6	2.2
	Not Reported	0	0.0

APPENDIX D

SAILS Test Item Numbers for Each SAILS Skill Set Subscale and ACRL Standard Subscale

Skill Set: Developing a Research Strategy

32 items: 63, 95, 101, 147, 148, 198, 215, 239, 444, 451, 452, 529, 531, 532, 533, 548, 568, 569, 570, 571, 572, 601, 603, 614, 616, 617, 629, 633, 642, 643, 646, 641

Skill Set: Selecting Finding Tools

18 items: 19, 22, 64, 139, 142, 141, 257, 140, 519, 521, 522, 523, 545, 584, 602, 613, 623, 645

Skill Set: Searching

27 items: 14, 21, 28, 39, 59, 73, 90, 108, 196, 218, 228, 242, 247, 515, 541, 543, 561, 577, 578, 582, 587, 594, 604, 630, 635, 637, 639

Skill Set: Using Finding Tool Features

14 items: 42, 62, 71, 259, 525, 526, 527, 549, 520, 540, 579, 593, 640, 647

Skill Set: Retrieving Sources

15 items: 25, 29, 30, 93, 104, 106, 192, 194, 195, 214, 216, 229, 539, 524, 600

Skill Set: Evaluating Sources

21 items: 27, 87, 91, 92, 124, 150, 206, 227, 534, 535, 536, 537, 538, 558, 563, 609, 620, 624, 628, 631, 632

Skill Set: Documenting Sources

15 items: 44, 49, 60, 199, 512, 528, 557, 560, 583, 589, 619, 622, 625, 634, 636

Skill Set: Understanding Economic, Legal, and Social Issues

20 items: 112, 117, 118, 119, 122, 132, 136, 200, 120, 271, 516, 553, 554, 556, 573, 595, 597, 599, 638, 644

Standard 1: Determines the Nature and Extent of the Information Needed

39 items: 27, 30, 63, 64, 73, 93, 95, 101, 104, 106, 147, 148, 198, 215, 242, 451, 452, 524, 529, 531, 537, 568, 569, 570, 571, 572, 594, 600, 601, 603, 617, 624, 629, 632, 633, 637, 641, 642, 646

Standard 2: Accesses Needed Information Effectively and Efficiently

75 items: 14, 19, 21, 22, 25, 29, 39, 42, 44, 49, 59, 60, 62, 71, 90, 108, 139, 140, 141, 142, 150, 192, 194, 195, 196, 199, 214, 216, 228, 229, 239, 247, 257, 259, 444, 515, 519, 520, 521, 522, 523, 525, 526, 527, 532, 534, 535, 539, 540, 541, 543, 545, 548, 549, 561, 577, 578, 579, 582, 584, 587, 589, 593, 604, 613, 614, 616, 622, 625, 635, 636, 639, 640, 643, 647

Standard 3: Evaluates Information and Its Sources Critically and Incorporates Selected Information Into His or Her Knowledge Base and Value System

21 items: 28, 87, 91, 92, 124, 206, 218, 227, 533, 536, 538, 558, 563, 602, 609, 620, 623, 628, 630, 631, 645

Standard 5: Understands Many of the Economic, Legal, and Social Issues Surrounding the Use of Information and Accesses and Uses Information Ethically and Legally

27 items: 112, 117, 118, 119, 120, 122, 132, 136, 200, 271, 512, 516, 528, 553, 554, 556, 557, 560, 573, 583, 595, 597, 599, 619, 634, 638, 644

APPENDIX E

Association of College and Research Libraries Information Literacy Competency Standards for Higher Education Standards, Performance Indicators, and Outcomes

Objectives for Information Literacy Instruction: A Model Statement for Academic Librarians

Standard 1
The information literate student determines the nature and extent of the information needed.

Performance Indicators

1.1 The information literate student defines and articulates the need for information.

Outcomes

1.1.1 Confers with instructors and participates in class discussions, peer workgroups and electronic discussions to identify a research topic, or other information need

642

1.1.2 Develops a thesis statement and formulates questions based on the information need

1.1.3 Explores general information sources to increase familiarity with the topic.

Objectives

1.1.3.1 Describes the difference between general and subject-specific information sources.

1.1.3.2 Demonstrates when it is appropriate to use a general and subject-specific information source (e.g., to provide an overview, to give ideas on terminology).

Items

64

1.1.4 Defines or modifies the information need to achieve a manageable focus

1.1.4.1 Identifies an initial question that might be too broad or narrow, as well as one that is probably manageable.
617

1.1.4.2 Explains his/her reasoning regarding the manageability of a topic with reference to available information sources.

1.1.4.3 Narrows a broad topic and broadens a narrow one by modifying the scope or direction of the question.
603

1.1.4.4 Demonstrates an understanding of how the desired end product (i.e., the required depth of investigation and analysis) will play a role in determining the need for information.
529

1.1.4.5 Uses background information sources effectively to gain an initial understanding of the topic.
95

1.1.4.6 Consults with the course instructor and librarians to develop a manageable focus for the topic.
646

1.1.5 Identifies key concepts and terms that describe the information need

1.1.5.1 Lists terms that may be useful for locating information on a topic.
637

1.1.5.2 Identifies and uses appropriate general or subject-specific sources to discover terminology related to an information need.
594

1.1.5.3 Decides when a research topic has multiple facets or may need to be put into a broader context.
629

1.1.5.4 Identifies more specific concepts that comprise a research topic.

1.1.6 Recognizes that existing information can be combined with original thought, experimentation, and/or analysis to produce new information

1.2 The information literate student identifies a variety of types and formats of potential sources for information.

1.2.1 Knows how information is formally and informally produced, organized, and disseminated

1.2.1.1 Describes the publication cycle appropriate to the discipline of a research topic.

1.2.1.2 Defines the "invisible college" (e.g., personal contacts, listservs specific to a discipline or subject) and describes its value.
601

1.2.2 Recognizes that knowledge can be organized into disciplines that influence the way information is accessed

1.2.2.1 Names the three major disciplines of knowledge (humanities, social sciences, sciences) and some subject fields that comprise each discipline.
569, 570, 571, 572

1.2.2.2 Finds sources that provide relevant subject field- and discipline-related terminology.
73

1.2.2.3 Uses relevant subject- and discipline-related terminology in the information research process.
242

1.2.2.4 Describes how the publication cycle in a particular discipline or subject field affects the researcher's access to information.
63

1.2.3 Identifies the value and differences of potential resources in a variety of formats (e.g.,multimedia, database, website, data set, audio/visual, book)

1.2.3.1 Identifies various formats in which information is available.
568

1.2.3.2 Demonstrates how the format in which information appears may affect its usefulness for a particular information need.

1.2.4 Identifies the purpose and audience of potential resources (e.g., popular vs. scholarly, current vs. historical)

1.2.4.1 Distinguishes characteristics of information provided for different audiences.
27, 624, 632

1.2.4.2 Identifies the intent or purpose of an information source (this may require use of additional sources in order to develop an appropriate context).

1.2.5 Differentiates between primary and secondary sources, recognizing how their use and importance vary with each discipline

1.2.5.1 Describes how various fields of study define primary and secondary sources differently.
101, 633

1.2.5.2 Identifies characteristics of information that make an item a primary or secondary source in a given field.
147, 148, 451, 452, 641

1.2.6 Realizes that information may need to be constructed with raw data from primary sources
524

1.3 The information literate student considers the costs and benefits of acquiring the needed information.

1.3.1 Determines the availability of needed information and makes decisions on broadening the information seeking process beyond local resources (e.g., interlibrary loan; using resources at other locations; obtaining images, videos, text, or sound)

1.3.1.1 Determines if material is available immediately.
104, 106

1.3.1.2 Uses available services appropriately to obtain desired materials or alternative sources.
30

1.3.2 Considers the feasibility of acquiring a new language or skill (e.g., foreign or discipline-based) in order to gather needed information and to understand its context

1.3.3 Defines a realistic overall plan and timeline to acquire the needed information

1.3.3.1 Searches for and gathers information based on an informal, flexible plan.

1.3.3.2 Demonstrates a general knowledge of how to obtain information that is not available immediately.
93

1.3.3.3 Acts appropriately to obtain information within the time frame required.
600

1.4 The information literate student reevaluates the nature and extent of the information need.

1.4.1 Reviews the initial information need to clarify, revise, or refine the question

1.4.1.1 Identifies a research topic that may require revision, based on the amount of information found (or not found).
198

1.4.1.2 Identifies a topic that may need to be modified, based on the content of information found.
215

1.4.1.3 Decides when it is and is not necessary to abandon a topic depending on the success (or failure) of an initial search for information.
531

1.4.2 Describes criteria used to make information decisions and choices

1.4.2.1 Demonstrates how the intended audience influences information choices.

1.4.2.2 Demonstrates how the desired end product influences information choices (e.g., that visual aids or audio/visual material may be needed for an oral presentation).

1.4.2.3 Lists various criteria, such as currency, which influence information choices. (See also 2.4. and 3.2.)
537

Standard 2
The information literate student accesses needed information effectively and efficiently.

2.1 The information literate student selects the most appropriate investigative methods or information retrieval systems for accessing the needed information.

- 2.1.1 Identifies appropriate investigative methods (e.g., laboratory experiment, simulation, fieldwork)
- 2.1.2 Investigates benefits and applicability of various investigative methods
- 2.1.3 Investigates the scope, content, and organization of information retrieval systems
  - 2.1.3.1 Describes the structure and components of the system or tool being used, regardless of format (e.g., index, thesaurus, type of information retrieved by the system).
    526
  - 2.1.3.2 Identifies the source of help within a given information retrieval system and uses it effectively.
    525
  - 2.1.3.3 Identifies what types of information are contained in a particular system (e.g., all branch libraries are included in the catalog; not all databases are full text; catalogs, periodical databases, and Web sites may be included in a gateway).
    527
  - 2.1.3.4 Distinguishes among indexes, online databases, and collections of online databases, as well as gateways to different databases and collections.
    19
  - 2.1.3.5 Selects appropriate tools (e.g., indexes, online databases) for research on a particular topic.
    584
  - 2.1.3.6 Identifies the differences between freely available Internet search tools and subscription or fee-based databases.
    139, 140, 141, 142
  - 2.1.3.7 Identifies and uses search language and protocols (e.g., Boolean, adjacency) appropriate to the retrieval system.
    540
  - 2.1.3.8 Determines the period of time covered by a particular source.
    613
  - 2.1.3.9 Identifies the types of sources that are indexed in a particular database or index (e.g., an index that covers newspapers or popular periodicals versus a more specialized index to find scholarly literature).
    521
  - 2.1.3.10 Demonstrates when it is appropriate to use a single tool (e.g., using only a periodical index when only periodical articles are required).
  - 2.1.3.11 Distinguishes between full-text and bibliographic databases.
- 2.1.4 Selects efficient and effective approaches for accessing the information needed from the investigative method or information retrieval system
  - 2.1.4.1 Selects appropriate information sources (i.e., primary, secondary or tertiary sources) and determines their relevance for the current information need.
    150
  - 2.1.4.2 Determines appropriate means for recording or saving the desired information (e.g., printing, saving to disc, photocopying, taking notes).
    579
  - 2.1.4.3 Analyzes and interprets the information collected using a growing awareness of key terms and concepts to decide whether to search for additional information or to identify more accurately when the information need has been met.

2.2 The information literate student constructs and implements effectively-designed search strategies.

2.2.1 Develops a research plan appropriate to the investigative method

2.2.1.1 Describes a general process for searching for information.
643

2.2.1.2 Describes when different types of information (e.g., primary/secondary, background/specific) may be suitable for different purposes.

2.2.1.3 Gathers and evaluates information and appropriately modifies the research plan as new insights are gained.

2.2.2 Identifies keywords, synonyms and related terms for the information needed

2.2.2.1 Identifies keywords or phrases that represent a topic in general sources (e.g., library catalog, periodical index, online source) and in subject-specific sources.

2.2.2.2 Demonstrates an understanding that different terminology may be used in general sources and subject-specific sources.

2.2.2.3 Identifies alternate terminology, including synonyms, broader or narrower words and phrases that describe a topic.
543

2.2.2.4 Identifies keywords that describe an information source (e.g., book, journal article, magazine article, Web site).
239, 444, 616

2.2.3 Selects controlled vocabulary specific to the discipline or information retrieval source

2.2.3.1 Uses background sources (e.g., encyclopedias, handbooks, dictionaries, thesauri, textbooks) to identify discipline-specific terminology that describes a given topic.

2.2.3.2 Explains what controlled vocabulary is and why it is used.
14

2.2.3.3 Identifies search terms likely to be useful for a research topic in relevant controlled vocabulary lists.

2.2.3.4 Identifies when and where controlled vocabulary is used in a bibliographic record, and then successfully searches for additional information using that vocabulary.
577, 582

2.2.4 Constructs a search strategy using appropriate commands for the information retrieval system selected (e.g., Boolean operators, truncation, and proximity for search engines; internal organizers such as indexes for books)

2.2.4.1 Demonstrates when it is appropriate to search a particular field (e.g., title, author, subject).
21

2.2.4.2 Demonstrates an understanding of the concept of Boolean logic and constructs a search statement using Boolean operators.
39, 247, 541, 587

2.2.4.3 Demonstrates an understanding of the concept of proximity searching and constructs a search statement using proximity operators.
108

2.2.4.4 Demonstrates an understanding of the concept of nesting and constructs a search using nested words or phrases.
59

2.2.4.5 Demonstrates and understanding of the concept of browsing and uses an index that allows it.

2.2.4.6 Demonstrates an understanding of the concept of keyword searching and uses it appropriately and effectively.
561

2.2.4.7 Demonstrates an understanding of the concept of truncation and uses it appropriately and effectively.
515, 578

2.2.5 Implements the search strategy in various information retrieval systems using different user interfaces and search engines, with different command languages, protocols, and search parameters

2.2.5.1 Uses help screens and other user aids to understand the particular search structures and commands of an information retrieval system.
259

2.2.5.2 Demonstrates an awareness of the fact that there may be separate interfaces for basic and advanced searching in retrieval systems.
71

2.2.5.3 Narrows or broadens questions and search terms to retrieve the appropriate quantity of information, using search techniques such as Boolean logic, limiting, and field searching.
604, 639

2.2.5.4 Identifies and selects keywords and phrases to use when searching each source, recognizing that different sources may use different terminology for similar concepts.

2.2.5.5 Formulates and executes search strategies to match information needs with available resources.

2.2.5.6 Describes differences in searching for bibliographic records, abstracts, or full text in information sources.

2.2.6 Implements the search using investigative protocols appropriate to the discipline

2.2.6.1 Locates major print bibliographic and reference sources appropriate to the discipline of a research topic.
522

2.2.6.2 Locates and uses a specialized dictionary, encyclopedia, bibliography, or other common reference tool in print format for a given topic.

2.2.6.3 Demonstrates an understanding of the fact that items may be grouped together by subject in order to facilitate browsing.
539

2.2.6.4 Uses effectively the organizational structure of a typical book (e.g., indexes, tables of contents, user's instructions, legends, cross-references) in order to locate pertinent information in it.
42, 62

2.3 The information literate student retrieves information online or in person using a variety of methods.

2.3.1 Uses various search systems to retrieve information in a variety of formats

2.3.1.1 Describes some materials that are not available online or in digitized formats and must be accessed in print or other formats (e.g., microform, video, audio).
29

2.3.1.2 Identifies research sources, regardless of format, that are appropriate to a particular discipline or research need.
523

2.3.1.3 Recognizes the format of an information source (e.g., book, chapter in a book, periodical article) from its citation. (See also 2.3.2.)
589

2.3.1.4 Uses different research sources (e.g., catalogs and indexes) to find different types of information (e.g., books and periodical articles).
257

2.3.1.5 Describes search functionality common to most databases regardless of differences in the search interface (e.g., Boolean logic capability, field structure, keyword searching, relevancy ranking).
549, 640

2.3.1.6 Uses effectively the organizational structure and access points of print research sources (e.g., indexes, bibliographies) to retrieve pertinent information from those sources.
520

2.3.2 Uses various classification schemes and other systems (e.g., call number systems or indexes) to locate information resources within the library or to identify specific sites for physical exploration

2.3.2.1 Uses call number systems effectively (e.g., demonstrates how a call number assists in locating the corresponding item in the library).
25, 195, 216

2.3.2.2 Explains the difference between the library catalog and a periodical index.
22, 545

2.3.2.3 Describes the different scopes of coverage found in different periodical indexes.
519

2.3.2.4 Distinguishes among citations to identify various types of materials (e.g., books, periodical articles, essays in anthologies). (See also 2.3.1.)
44, 49, 60, 636

2.3.3 Uses specialized online or in person services available at the institution to retrieve information needed (e.g., interlibrary loan/document delivery, professional associations, institutional research offices, community resources, experts and practitioners

2.3.3.1 Retrieves a document in print or electronic form.
194, 229

2.3.3.2 Describes various retrieval methods for information not available locally.
192

2.3.3.3 Identifies the appropriate service point or resource for the particular information need.
548

2.3.3.4 Initiates an interlibrary loan request by filling out and submitting a form either online or in person.
214

2.3.3.5 Uses the Web site of an institution, library, organization or community to locate information about specific services.
614

2.3.4 Uses surveys, letters, interviews, and other forms of inquiry to retrieve primary information

2.4 The information literate student refines the search strategy if necessary.

2.4.1 Assesses the quantity, quality, and relevance of the search results to determine whether alternative information retrieval systems or investigative methods should be utilized

2.4.1.1 Determines if the quantity of citations retrieved is adequate, too extensive, or insufficient for the information need.
196, 228

2.4.1.2 Evaluates the quality of the information retrieved using criteria such as authorship, point of view/bias, date written, citations, etc.
534

2.4.1.3 Assesses the relevance of information found by examining elements of the citation such as title, abstract, subject headings, source, and date of publication.
90, 635

2.4.1.4 Determines the relevance of an item to the information need in terms of its depth of coverage, language, and time frame.
535

2.4.2 Identifies gaps in the information retrieved and determines if the search strategy should be revised

2.4.3 Repeats the search using the revised strategy as necessary

2.5 The information literate student extracts, records, and manages the information and its sources.

2.5.1 Selects among various technologies the most appropriate one for the task of extracting the needed information (e.g., copy/paste software functions, photocopier, scanner, audio/visual equipment, or exploratory instruments)
593, 647

2.5.2 Creates a system for organizing the information

2.5.3 Differentiates between the types of sources cited and understands the elements and correct syntax of a citation for a wide range of resources

2.5.3.1 Identifies different types of information sources cited in a research tool.
622, 625

2.5.3.2 Determines whether or not a cited item is available locally and, if so, can locate it.

2.5.3.3 Demonstrates an understanding that different disciplines may use different citation styles.
199

2.5.4 Records all pertinent citation information for future reference

2.5.5 Uses various technologies to manage the information selected and organized
532

Standard 3
The information literate student evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system.

3.1 The information literate student summarizes the main ideas to be extracted from the information gathered.

3.1.1 Reads the text and selects main ideas

3.1.2 Restates textual concepts in his/her own words and selects data accurately

3.1.3 Identifies verbatim material that can be then appropriately quoted

3.2 The information literate student articulates and applies initial criteria for evaluating both the information and its sources.

3.2.1 Examines and compares information from various sources in order to evaluate reliability, validity, accuracy, authority, timeliness, and point of view or bias

3.2.1.1 Locates and examines critical reviews of information sources using available resources and technologies.
558

3.2.1.2 Investigates an author's qualifications and reputation through reviews or biographical sources.
206, 609

3.2.1.3 Investigates validity and accuracy by consulting sources identified through bibliographic references.
536

3.2.1.4 Investigates qualifications and reputation of the publisher or issuing agency by consulting other information resources. (See also 3.4.5.)

3.2.1.5 Determines when the information was published (or knows where to look for a source's publication date).

3.2.1.6 Recognizes the importance of timeliness or date of publication to the value of the source.

3.2.1.7 Determines if the information retrieved is sufficiently current for the information need.

3.2.1.8 Demonstrates an understanding that other sources may provide additional information to either confirm or question point of view or bias.
124, 628

3.2.2 Analyzes the structure and logic of supporting arguments or methods

3.2.3 Recognizes prejudice, deception, or manipulation

3.2.3.1 Demonstrates an understanding that information in any format reflects an author's, sponsor's, and/or publisher's point of view.
538

3.2.3.2 Demonstrates an understanding that some information and information sources may present a one-sided view and may express opinions rather than facts.
87, 563, 631

3.2.3.3 Demonstrates an understanding that some information and sources may be designed to trigger emotions, conjure stereotypes, or promote support for a particular viewpoint or group.
91, 92

3.2.3.4 Applies evaluative criteria to information and its source (e.g., author's expertise, currency, accuracy, point of view, type of publication or information, sponsorship).

3.2.3.5 Searches for independent verification or corroboration of the accuracy and completeness of the data or representation of facts presented in an information source.
620

3.2.4 Recognizes the cultural, physical, or other context within which the information was created and understands the impact of context on interpreting the information

3.2.4.1 Describes how the age of a source or the qualities characteristic of the time in which it was created may impact its value.

3.2.4.2 Describes how the purpose for which information was created affects its usefulness.

3.2.4.3 Describes how cultural, geographic, or temporal contexts may unintentionally bias information.

3.3 The information literate student synthesizes main ideas to construct new concepts.

3.3.1 Recognizes interrelationships among concepts and combines them into potentially useful primary statements with supporting evidence

3.3.2 Extends initial synthesis, when possible, at a higher level of abstraction to construct new hypotheses that may require additional information

3.3.3 Utilizes computer and other technologies (e.g. spreadsheets, databases, multimedia, and audio or visual equipment) for studying the interaction of ideas and other phenomena

3.4 The information literate student compares new knowledge with prior knowledge to determine the value added, contradictions, or other unique characteristics of the information.

3.4.1 Determines whether information satisfies the research or other information need
533

3.4.2 Uses consciously selected criteria to determine whether the information contradicts or verifies information used from other sources

3.4.3 Draws conclusions based upon information gathered

3.4.4 Tests theories with discipline-appropriate techniques (e.g., simulators, experiments)

3.4.5 Determines probable accuracy by questioning the source of the data, the limitations of the information gathering tools or strategies, and the reasonableness of the conclusions

3.4.5.1 Describes how the reputation of the publisher affects the quality of the information source. (See also 3.2.1.).

3.4.5.2 Determines when a single search strategy may not fit a topic precisely enough to retrieve sufficient relevant information.
28

3.4.5.3 Determines when some topics may be too recent to be covered by some standard tools (e.g., a periodicals index) and when information on the topic retrieved by less authoritative tools (e.g., a Web search engine) may not be reliable.
623

3.4.5.4 Compares new information with own knowledge and other sources considered authoritative to determine if conclusions are reasonable.

3.4.6 Integrates new information with previous information or knowledge

3.4.7 Selects information that provides evidence for the topic

3.4.7.1 Describes why not all information sources are appropriate for all purposes (e.g., ERIC is not appropriate for all topics, such as business topics; the Web may not be appropriate for a local history topic).

3.4.7.2 Distinguishes among various information sources in terms of established evaluation criteria (e.g., content, authority, currency).
227

3.4.7.3 Applies established evaluation criteria to decide which information sources are most appropriate.

3.5 The information literate student determines whether the new knowledge has an impact on the individual's value system and takes steps to reconcile differences.

3.5.1 Investigates differing viewpoints encountered in the literature

3.5.2 Determines whether to incorporate or reject viewpoints encountered

3.6 The information literate student validates understanding and interpretation of the information through discourse with other individuals, subject-area experts, and/or practitioners.

3.6.1 Participates in classroom and other discussions

3.6.2 Participates in class-sponsored electronic communication forums designed to encourage discourse on the topic (e.g., email, bulletin boards, chat rooms)

3.6.3 Seeks expert opinion through a variety of mechanisms (e.g., interviews, email, listservs)
602, 645

3.7 The information literate student determines whether the initial query should be revised.

3.7.1 Determines if original information need has been satisfied or if additional information is needed

3.7.2 Reviews search strategy and incorporates additional concepts as necessary

3.7.2.1 Demonstrates how searches may be limited or expanded by modifying search terminology or logic.
218

3.7.3 Reviews information retrieval sources used and expands to include others as needed

3.7.3.1 Examines footnotes and bibliographies from retrieved items to locate additional sources.
630

3.7.3.2 Follows, retrieves and evaluates relevant online links to additional sources.

3.7.3.3 Incorporates new knowledge as elements of revised search strategy to gather additional information.

Standard 5
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.

5.1 The information literate student understands many of the ethical, legal and socio-economic issues surrounding information and information technology.

5.1.1 Identifies and discusses issues related to privacy and security in both the print and electronic environments

136

5.1.2 Identifies and discusses issues related to free vs. fee-based access to information

5.1.2.1 Demonstrates an understanding that not all information on the Web is free, i.e., some Web-based databases require users to pay a fee or to subscribe in order to retrieve full text or other content.
200

5.1.2.2 Demonstrates awareness that the library pays for access to databases, information tools, full-text resources, etc., and may use the Web to deliver them to its clientele.
556

5.1.2.3 Describes how the terms of subscriptions or licenses may limit their use to a particular clientele or location.
638

5.1.2.4 Describes the differences between the results of a search using a general Web search engine (e.g., Yahoo, Google) and a library-provided tool (e.g., Web-based article index, full-text electronic journal, Web-based library catalog).

5.1.3 Identifies and discusses issues related to censorship and freedom of speech

122, 597, 599

5.1.4 Demonstrates an understanding of intellectual property, copyright, and fair use of copyrighted material

117, 132, 271, 516, 554

5.2 The information literate student follows laws, regulations, institutional policies, and etiquette related to the access and use of information resources.

5.2.1 Participates in electronic discussions following accepted practices (e.g. "Netiquette")

595

5.2.2 Uses approved passwords and other forms of ID for access to information resources

5.2.3 Complies with institutional policies on access to information resources

5.2.4 Preserves the integrity of information resources, equipment, systems and facilities

5.2.5 Legally obtains, stores, and disseminates text, data, images, or sounds

112, 118, 553, 644

5.2.6 Demonstrates an understanding of what constitutes plagiarism and does not represent work attributable to others as his/her own

119, 573

5.2.7 Demonstrates an understanding of institutional policies related to human subjects research

120

5.3 The information literate student acknowledges the use of information sources in communicating the product or performance.

5.3.1 Selects an appropriate documentation style and uses it consistently to cite sources

5.3.1.1 Describes how to use a documentation style to record bibliographic information from an item retrieved through research.

5.3.1.2 Identifies citation elements for information sources in different formats (e.g., book, article, television program, Web page, interview).
557, 560, 583

5.3.1.3 Demonstrates an understanding that there are different documentation styles, published or accepted by various groups
528

5.3.1.4 Demonstrates an understanding that the appropriate documentation style may vary by discipline (e.g., MLA for English, University of Chicago for history, APA for psychology, CBE for biology)

5.3.1.5 Describes when the format of the source cited may dictate a certain citation style.
512

5.3.1.6 Uses correctly and consistently the citation style appropriate to a specific discipline.

5.3.1.7 Locates information about documentation styles either in print or electronically, e.g., through the library's Web site.
619

5.3.1.8 Recognizes that consistency of citation format is important, especially if a course instructor has not required a particular style.
634

5.3.2 Posts permission granted notices, as needed, for copyrighted material

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