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

for

Grand Valley State University

Administration: GVSU 2006/07

Report Date: June 2007

www.ProjectSAILS.org

Replace this page with Table of Contents page, which is the last page in this file.

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 have been 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 142 whole items in American English. Each student answers 40 items from the item bank and 5 items that are in development. For most items, test takers are instructed to select the one best answer (see item #1 in Appendix D for an example). Appendix D contains all of the test items.

For some items, test takers are instructed to select more than one correct response ("Choose all that apply." See item #12 in Appendix D for an example). For these types of items, all possible responses are analyzed separately. This analysis of individual responses increases the "item count" to 173, as compared with the 142 whole items in the item bank.

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 E 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	24
Selecting Finding Tools	16
Searching	28
Using Finding Tool Features	7
Retrieving Sources	13
Evaluating Sources	17
Documenting Sources	13
Understanding Economic, Legal, and Social Issues	24

ACRL Standards	Number of Items
Standard 1: Determines the nature and extent of the information needed	31
Standard 2: Accesses needed information effectively and efficiently	63
Standard 3: Evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system	19
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	29

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 Grand Valley State University, along with profiles for other institutions of the same type (Masters), 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

	GVSU (n=440)		Institution Type: Masters (n=4,447)		All Institutions (n=29,698)	
Characteristics	n	%	n	%	n	%
Class Standing						
Freshman	304	69.1	1,923	43.2	15,754	53.0
Sophomore	24	5.5	665	15.0	5,606	18.9
Junior	6	1.4	659	14.8	3,427	11.5
Senior	102	23.2	1,115	25.1	4,069	13.7
Other	4	0.9	75	1.7	724	2.4
Not reported	0	0.0	10	0.2	118	0.4
Student Major						
Agriculture/Environmental Studies	0	0.0	18	0.4	426	1.4
Architecture	0	0.0	1	0.0	157	0.5
Business	66	15.0	981	22.1	4,262	14.4
Communications/Journalism	26	5.9	175	3.9	1,339	4.5
Education	42	9.5	381	8.6	2,108	7.1
Engineering/Computer Science	7	1.6	197	4.4	2,674	9.0
General Studies	1	0.2	1	0.0	159	0.5
Health Sciences	73	16.6	313	7.0	2,424	8.2
History	14	3.2	110	2.5	396	1.3
Humanities	6	1.4	357	8.0	2,920	9.8
Law	7	1.6	40	0.9	419	1.4
Military/Naval Science	0	0.0	0	0.0	7	0.0
Performing & Fine Arts	10	2.3	268	6.0	862	2.9
Science/Math	23	5.2	302	6.8	1,831	6.2
Social Sciences/Psychology	27	6.1	572	12.9	3,362	11.3
Other	57	13.0	571	12.8	3,933	13.2
Undecided	81	18.4	145	3.3	2,054	6.9
Not reported	0	0.0	4,432	0.3	365	1.2

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 F 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 Grand Valley State University performed better than the institution-type benchmark on the following SAILS Skill Sets:

Searching
Understanding Economic, Legal, and Social Issues

Students at Grand Valley State University performed about the same as the institution-type benchmark on the following SAILS Skill Sets:

Developing a Research Strategy
Selecting Finding Tools
Using Finding Tool Features
Retrieving Sources
Evaluating Sources
Documenting Sources

To identify which skill sets were easier and which were more difficult for Grand Valley State University students, below are the skill sets ordered by performance, from best to worst.

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

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 significantly different from each other, see whether the ranges of scores overlap. Ranges of scores that do overlap are not significantly different from each other; those that do NOT overlap are significantly different.

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

	Grand Valley State University	Institution Type: Masters	All Institutions
SAILS Skill Sets			
Developing a Research Strategy	593 ±8	593 ±2	597 ±1
Selecting Finding Tools	569 ±11	560 ±3	560 ±1
Searching	566 ±9	547 ±3	552 ±1
Using Finding Tool Features	641 ±16	643 ±5	648 ±2
Retrieving Sources	596 ±16	579 ±6	577 ±2
Evaluating Sources	610 ±9	606 ±3	610 ±1
Documenting Sources	604 ±15	590 ±5	596 ±2
Understanding Economic, Legal, and Social Issues	564 ±8	551 ±3	556 ±1

B. Within Skill Sets

This section reports in detail the performance of Grand Valley State University 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.

1. SAILS Skill Set: Developing a Research Strategy

Summary of Results

Grand Valley State University Compared to Other Masters Institutions, by Demographic Characteristics

Students at Grand Valley State University performed about the same as the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Freshman, Sophomore, Senior
Major:	Business, Communications/Journalism, Education, Health Sciences, History, Performing & Fine Arts, Science/Math, Social Sciences/Psychology, Other, Undecided

Demographic Groups within Grand Valley State University Compared to the GVSU Overall Performance on This Skill Set

Within Grand Valley State University, the following groups performed better than the GVSU-average-student benchmark:

Class Standing:	Senior

Within Grand Valley State University, the following groups performed about the same as the GVSU-average-student benchmark:

Class Standing:	Freshman, Sophomore
Major:	Business, Communications/Journalism, Education, Health Sciences, History, Performing & Fine Arts, Science/Math, Social Sciences/Psychology, Other, Undecided

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 significantly different from each other, see whether the ranges of scores overlap. Ranges of scores that do overlap are not significantly different from each other; those that do NOT overlap are significantly different.

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

	Grand Valley State University	Institution Type: Masters	All Institutions
Overall	593 ±8	593 ±2	597 ±1
Class Standing			
Freshman	584 ±9	582 ±4	591 ±1
Sophomore	572 ±27	584 ±6	593 ±2
Senior	628 ±17	613 ±5	617 ±3
Majors			
Business	590 ±22	583 ±5	584 ±3
Communications / Journalism	588 ±34	599 ±13	600 ±5
Education	576 ±22	592 ±8	595 ±4
Health Sciences	593 ±18	586 ±9	591 ±3
History	616 ±63	622 ±16	628 ±9
Performing & Fine Arts	611 ±51	589 ±9	605 ±6
Science / Math	606 ±38	593 ±10	608 ±4
Social Sciences / Psychology	627 ±33	603 ±7	608 ±3
Other	585 ±22	587 ±7	593 ±3
Undecided	586 ±17	583 ±13	596 ±4

Detailed Results - Chart

The chart on the following pages compare the average student performance at your institution to the average for your institution type, 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 significantly different from each other, see whether the ranges of scores, represented by the boxes, overlap. Ranges of scores (boxes) that do overlap are not significantly different from each other; those that do NOT overlap are significantly different.

For example,

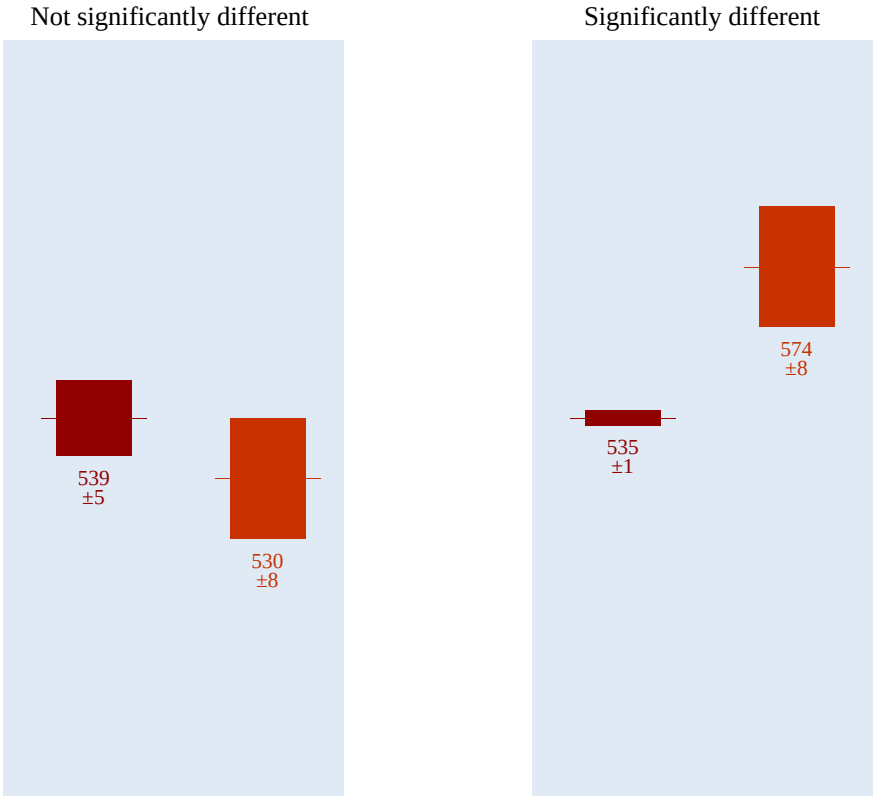


Figure 3.3 Chart for Skill Set: Developing a Research Strategy

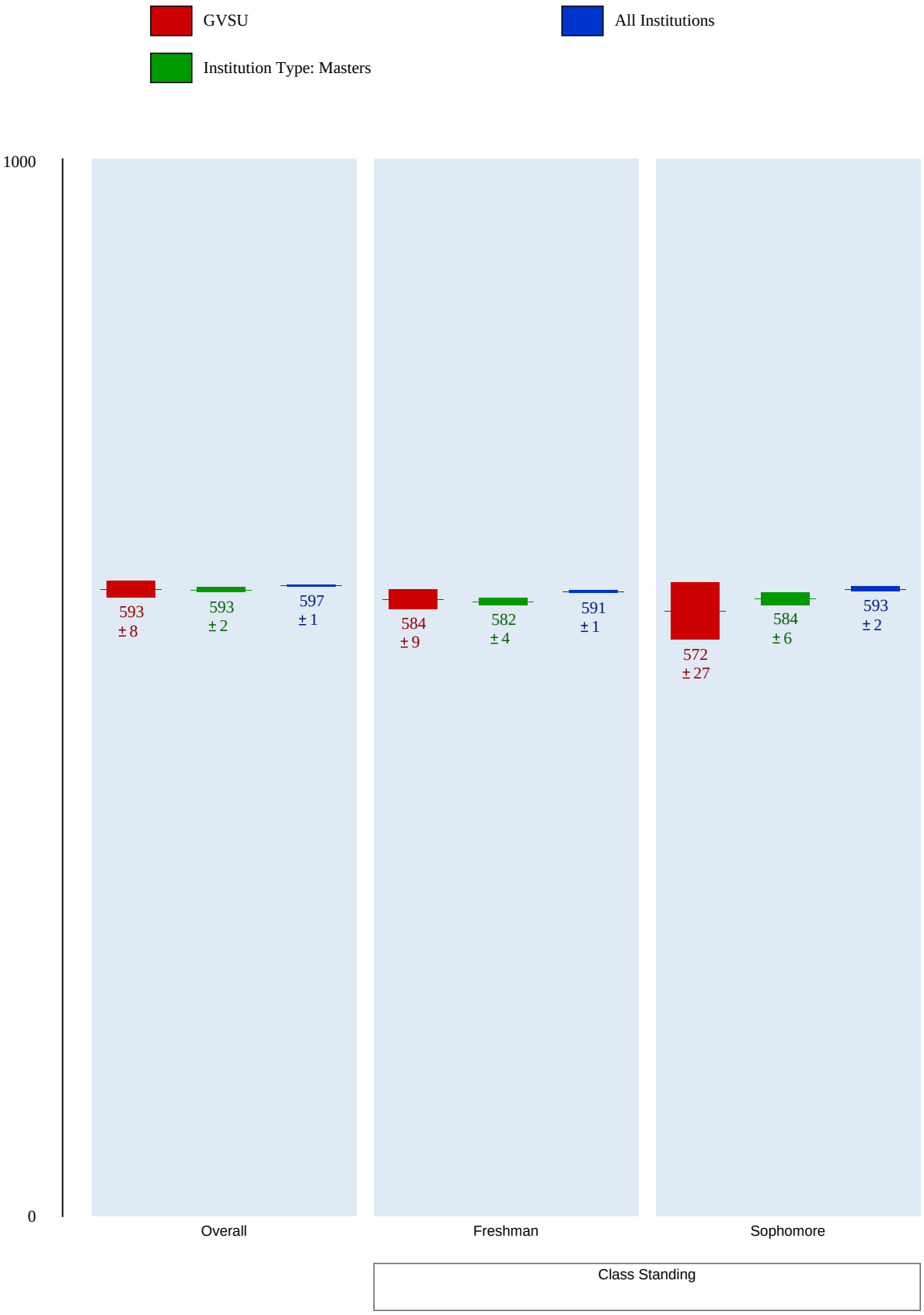


Figure 3.3 (continued) Chart for Skill Set: Developing a Research Strategy

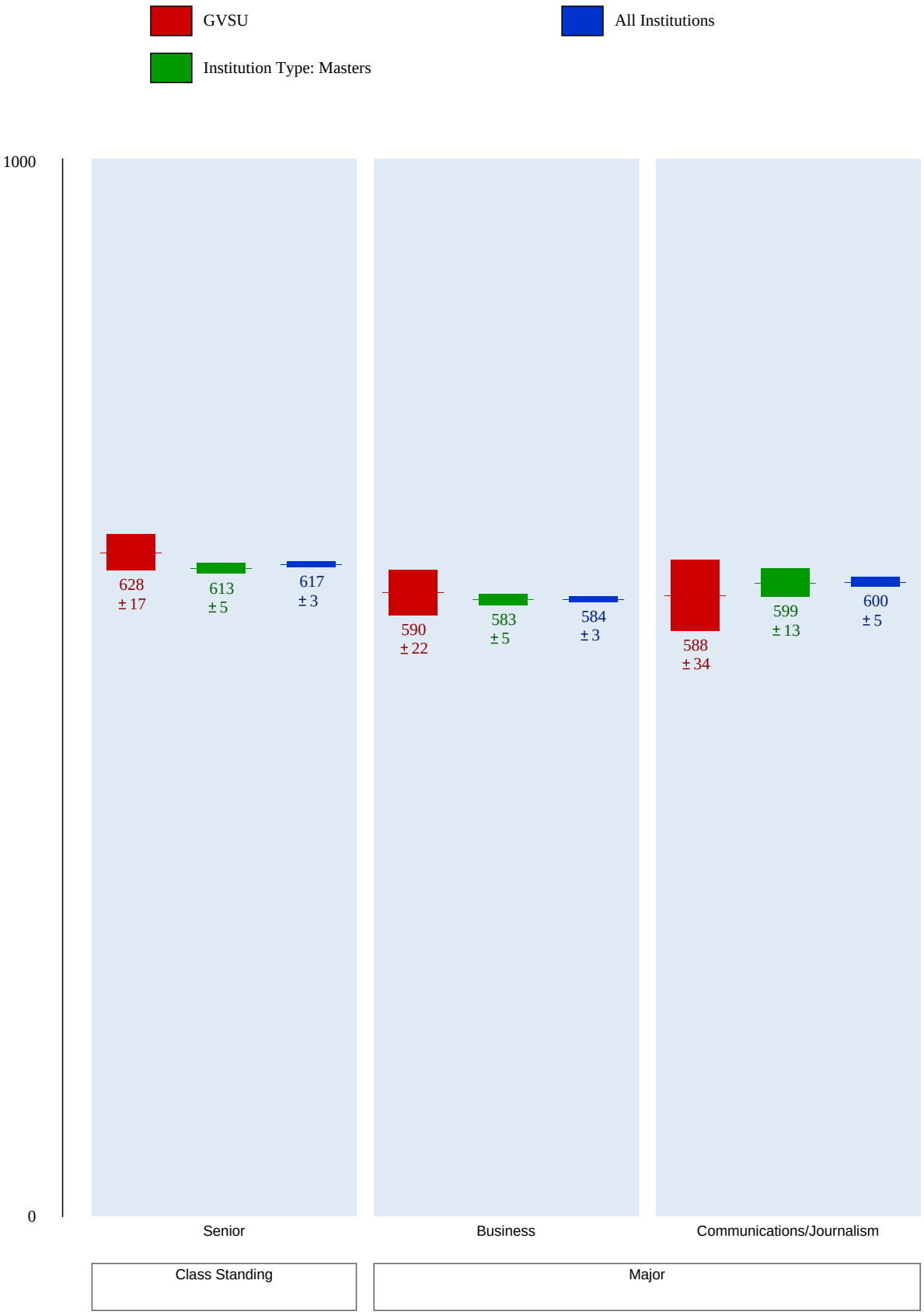


Figure 3.3 (continued) Chart for Skill Set: Developing a Research Strategy

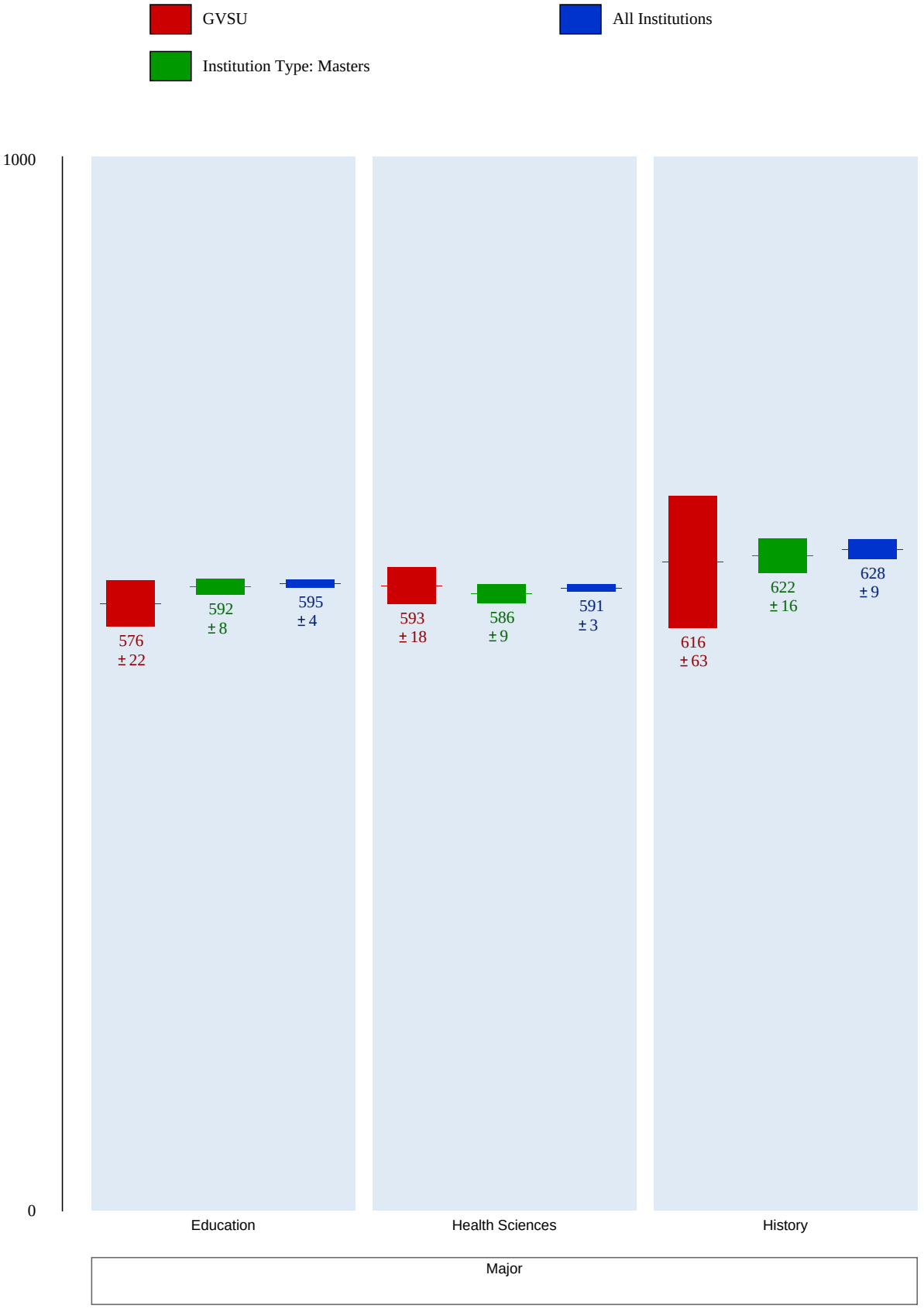


Figure 3.3 (continued) Chart for Skill Set: Developing a Research Strategy

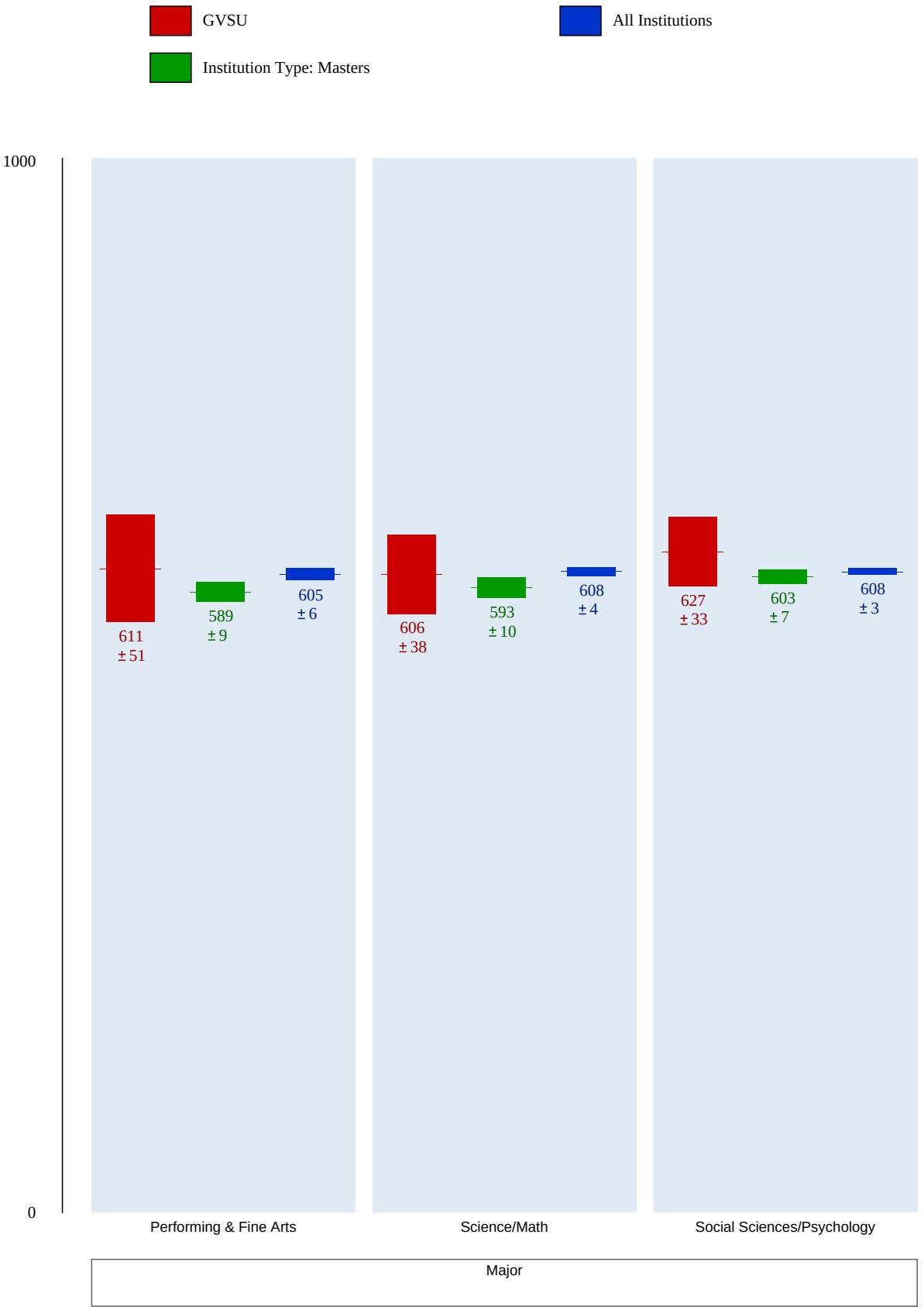


Figure 3.3 (continued) Chart for Skill Set: Developing a Research Strategy

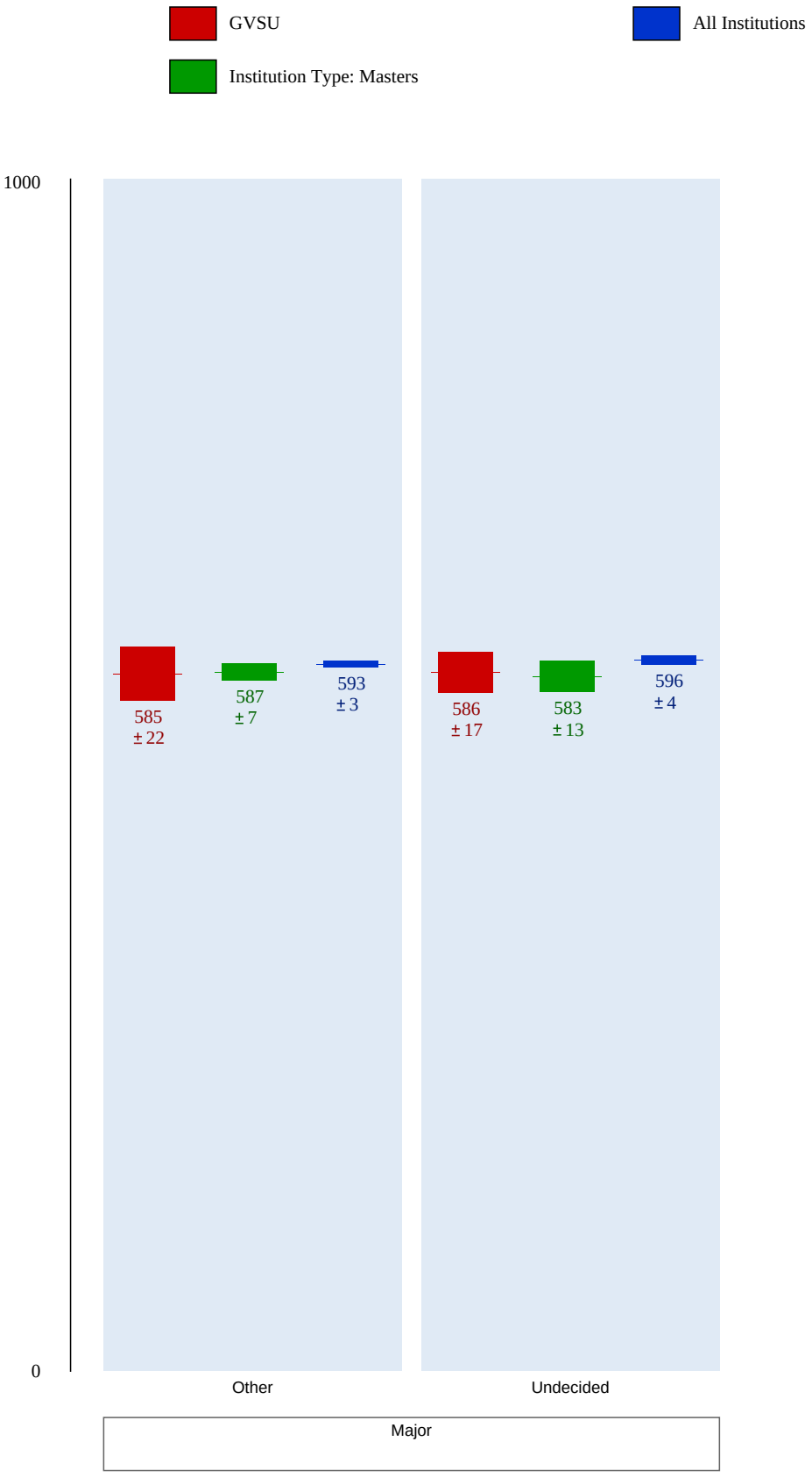


Figure 3.4 Objectives and Outcomes for Skill Set: Developing a Research Strategy

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.

1.1.4.5 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.

1.2.2.1 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.

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. SAILS Skill Set: Selecting Finding Tools

Summary of Results

Grand Valley State University Compared to Other Masters Institutions, by Demographic Characteristics

Students at Grand Valley State University performed better than the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Senior

Students at Grand Valley State University performed about the same as the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Freshman, Sophomore
Major:	Business, Communications/Journalism, Education, Health Sciences, History, Performing & Fine Arts, Science/Math, Social Sciences/Psychology, Other, Undecided

Demographic Groups within Grand Valley State University Compared to the GVSU Overall Performance on This Skill Set

Within Grand Valley State University, the following groups performed better than the GVSU-average-student benchmark:

Class Standing:	Senior

Within Grand Valley State University, the following groups performed about the same as the GVSU-average-student benchmark:

Class Standing:	Freshman, Sophomore
Major:	Business, Communications/Journalism, Education, Health Sciences, History, Performing & Fine Arts, Science/Math, Social Sciences/Psychology, Other, Undecided

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 significantly different from each other, see whether the ranges of scores overlap. Ranges of scores that do overlap are not significantly different from each other; those that do NOT overlap are significantly different.

Figure 3.5 Data Table for Skill Set: Selecting Finding Tools

	Grand Valley State University	Institution Type: Masters	All Institutions
Overall	569 ±11	560 ±3	560 ±1
Class Standing			
Freshman	556 ±13	548 ±5	553 ±2
Sophomore	574 ±46	552 ±8	559 ±3
Senior	611 ±22	581 ±7	581 ±4
Majors			
Business	552 ±23	551 ±7	550 ±3
Communications / Journalism	586 ±62	563 ±16	563 ±6
Education	554 ±37	566 ±12	557 ±5
Health Sciences	560 ±30	552 ±12	556 ±4
History	624 ±69	586 ±26	583 ±12
Performing & Fine Arts	585 ±81	551 ±12	570 ±7
Science / Math	581 ±54	561 ±13	568 ±5
Social Sciences / Psychology	609 ±45	570 ±10	570 ±4
Other	563 ±30	550 ±9	555 ±3
Undecided	567 ±23	559 ±19	558 ±5

Detailed Results - Chart

The chart on the following pages compare the average student performance at your institution to the average for your institution type, 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 significantly different from each other, see whether the ranges of scores, represented by the boxes, overlap. Ranges of scores (boxes) that do overlap are not significantly different from each other; those that do NOT overlap are significantly different.

For example,

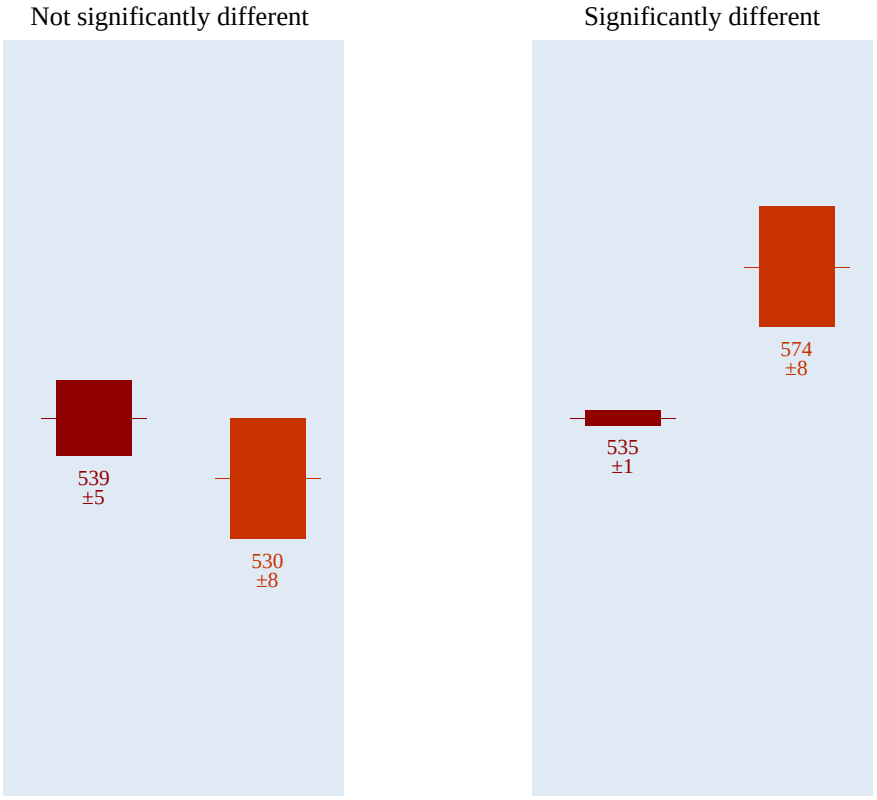


Figure 3.6 Chart for Skill Set: Selecting Finding Tools

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

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

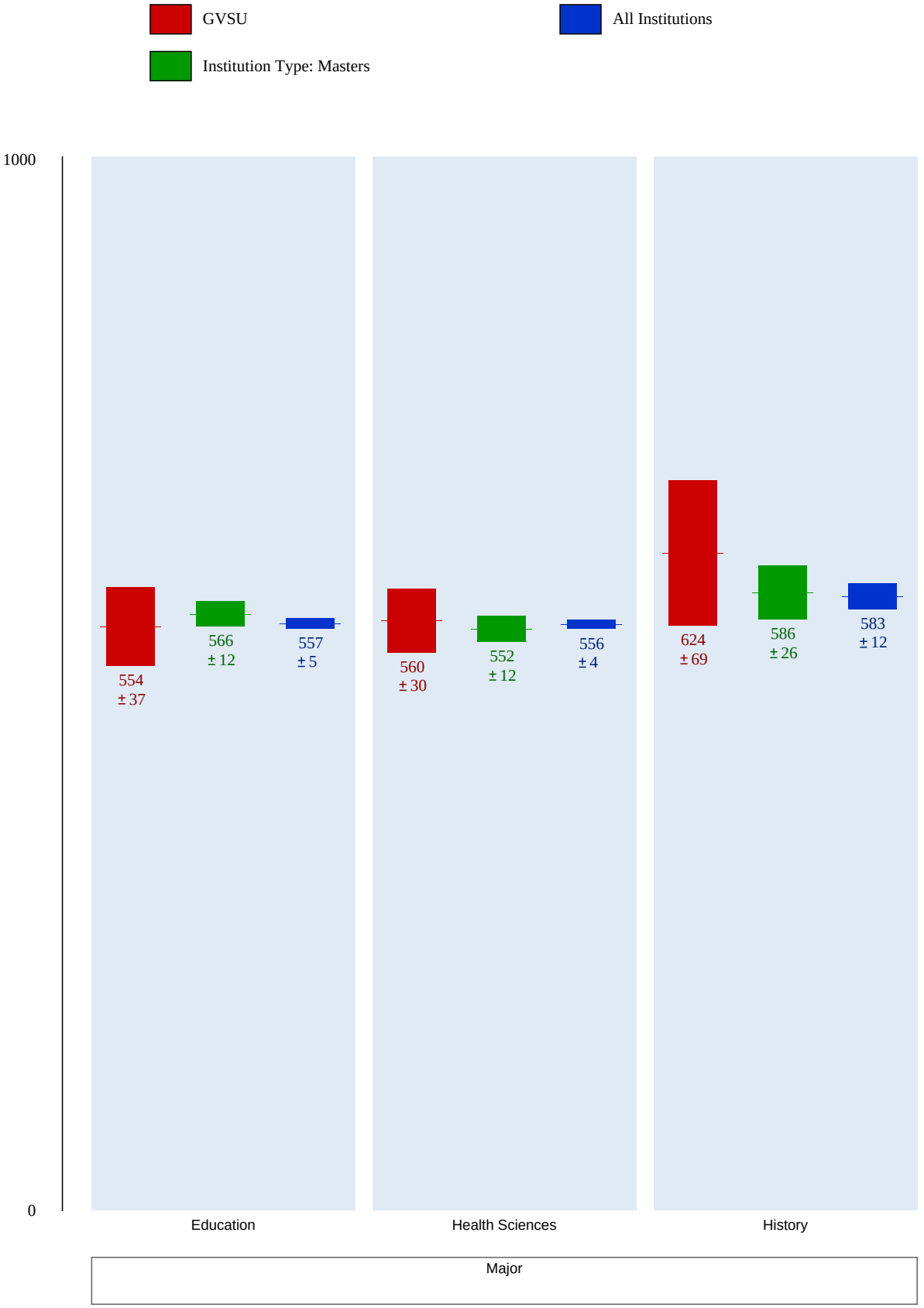


Figure 3.6 (continued) Chart for Skill Set: Selecting Finding Tools

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

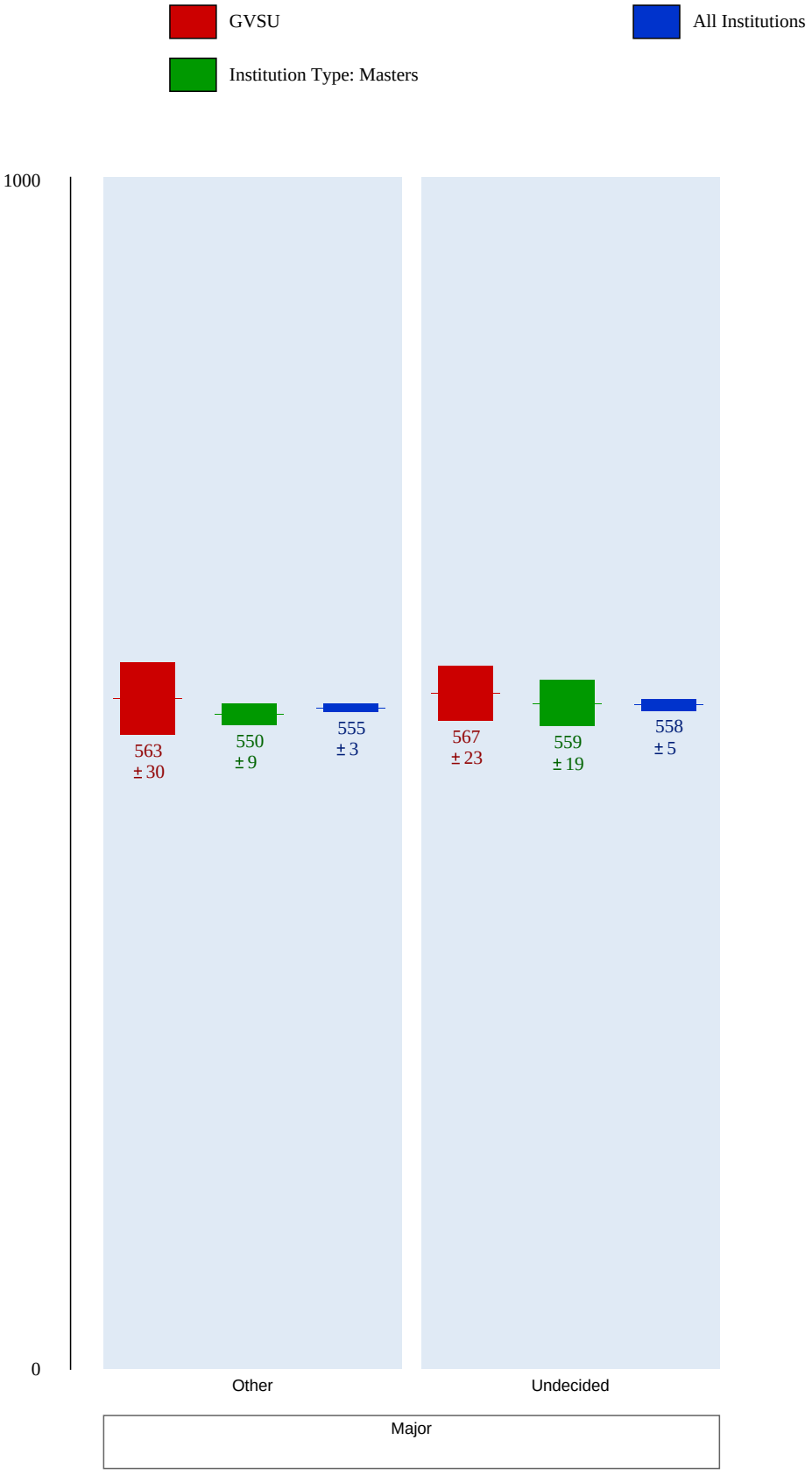


Figure 3.7 Objectives and Outcomes for Skill Set: Selecting Finding Tools

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.

2.3.1.4 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.

2.5.1 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)

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

Grand Valley State University Compared to Other Masters Institutions, by Demographic Characteristics

Students at Grand Valley State University performed better than the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Freshman, Senior
Major:	Business

Students at Grand Valley State University performed about the same as the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Sophomore
Major:	Communications/Journalism, Education, Health Sciences, History, Performing & Fine Arts, Science/Math, Social Sciences/Psychology, Other, Undecided

Demographic Groups within Grand Valley State University Compared to the GVSU Overall Performance on This Skill Set

Within Grand Valley State University, the following groups performed better than the GVSU-average-student benchmark:

Class Standing:	Senior

Within Grand Valley State University, the following groups performed about the same as the GVSU-average-student benchmark:

Class Standing:	Freshman, Sophomore
Major:	Business, Communications/Journalism, Education, Health Sciences, History, Performing & Fine Arts, Science/Math, Social Sciences/Psychology, Other, Undecided

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 significantly different from each other, see whether the ranges of scores overlap. Ranges of scores that do overlap are not significantly different from each other; those that do NOT overlap are significantly different.

Figure 3.8 Data Table for Skill Set: Searching

	Grand Valley State University	Institution Type: Masters	All Institutions
Overall	566 ±9	547 ±3	552 ±1
Class Standing			
Freshman	553 ±10	534 ±4	544 ±1
Sophomore	561 ±40	540 ±7	548 ±3
Senior	606 ±18	570 ±6	578 ±3
Majors			
Business	566 ±20	536 ±6	541 ±3
Communications / Journalism	569 ±44	547 ±14	555 ±5
Education	569 ±27	545 ±9	548 ±4
Health Sciences	555 ±20	547 ±10	554 ±4
History	607 ±43	571 ±16	568 ±9
Performing & Fine Arts	582 ±48	541 ±10	557 ±7
Science / Math	578 ±44	562 ±12	571 ±5
Social Sciences / Psychology	591 ±45	562 ±8	559 ±3
Other	568 ±28	538 ±8	544 ±3
Undecided	549 ±23	553 ±16	550 ±4

Detailed Results - Chart

The chart on the following pages compare the average student performance at your institution to the average for your institution type, 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 significantly different from each other, see whether the ranges of scores, represented by the boxes, overlap. Ranges of scores (boxes) that do overlap are not significantly different from each other; those that do NOT overlap are significantly different.

For example,

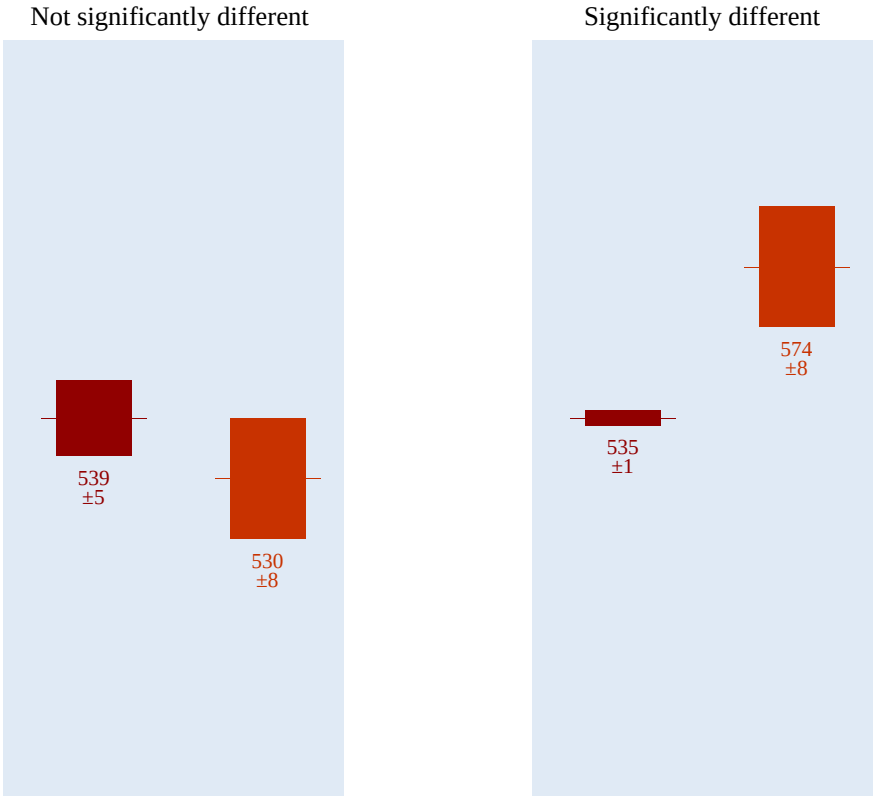


Figure 3.9 Chart for Skill Set: Searching

Figure 3.9 (continued) Chart for Skill Set: Searching

Figure 3.9 (continued) Chart for Skill Set: Searching

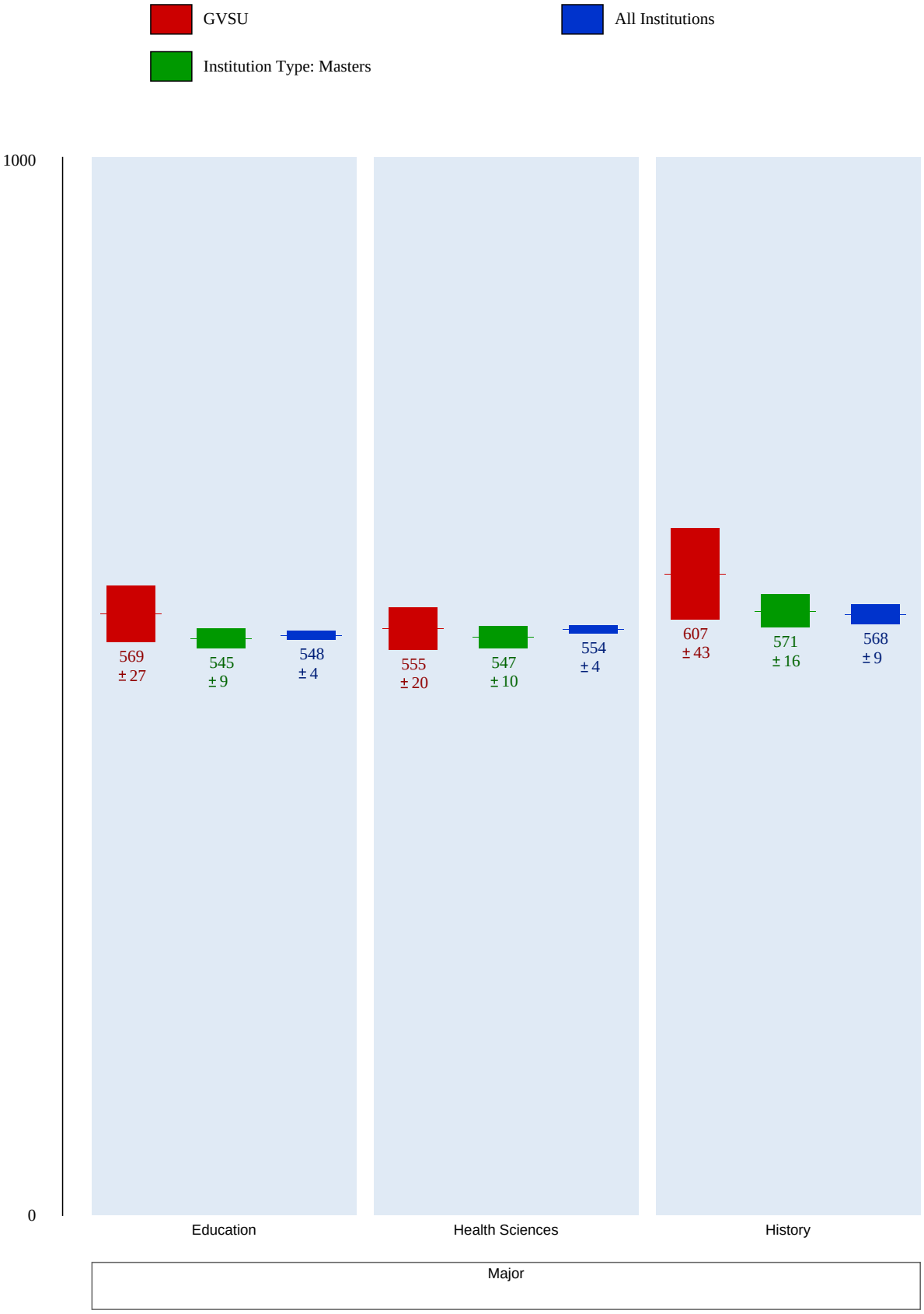


Figure 3.9 (continued) Chart for Skill Set: Searching

Figure 3.9 (continued) Chart for Skill Set: Searching

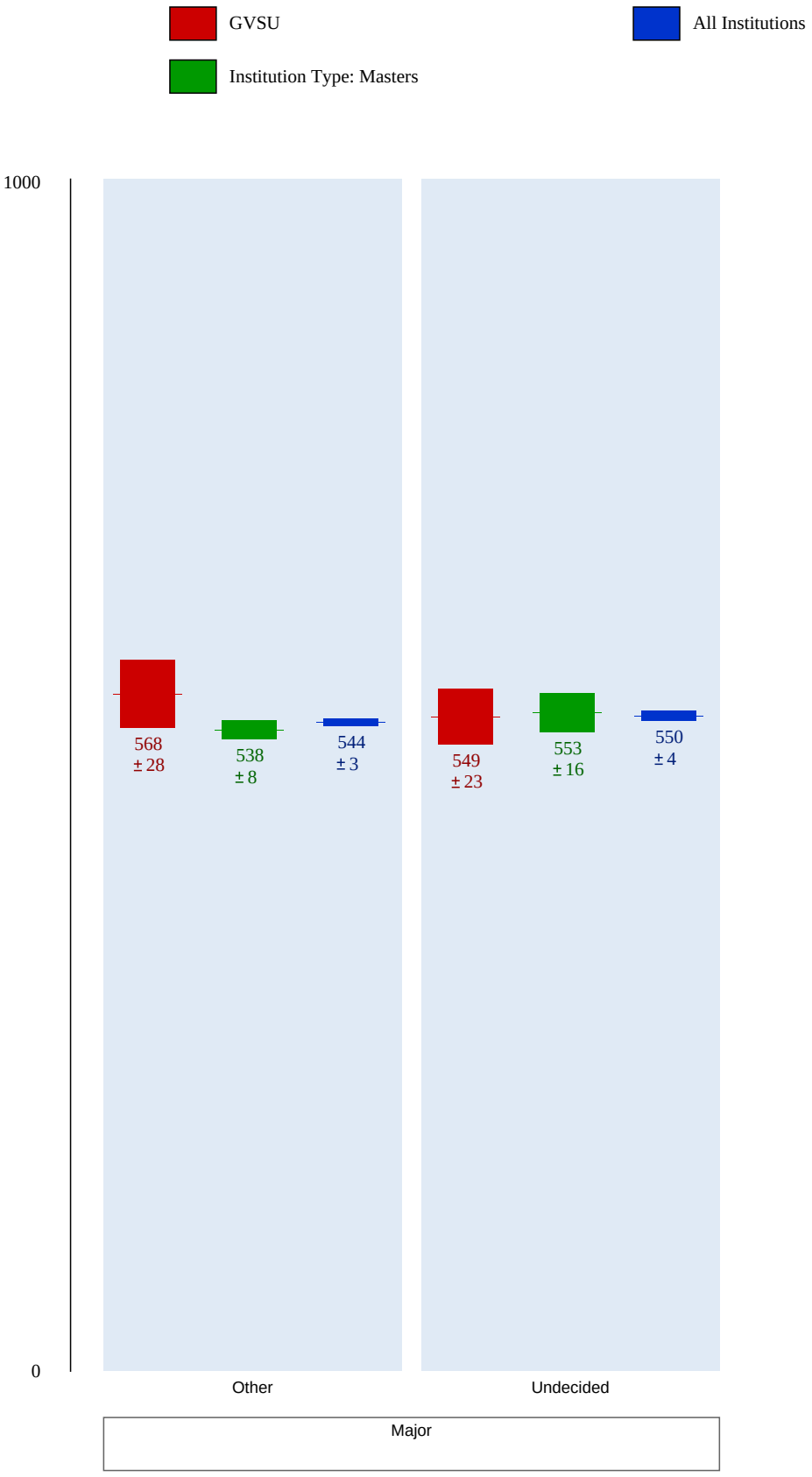


Figure 3.10 Objectives and Outcomes for Skill Set: Searching

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.

2.2.3.2 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

Grand Valley State University Compared to Other Masters Institutions, by Demographic Characteristics

Students at Grand Valley State University performed about the same as the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Freshman, Sophomore, Senior
Major:	Business, Communications/Journalism, Education, Health Sciences, History, Performing & Fine Arts, Science/Math, Social Sciences/Psychology, Other, Undecided

Demographic Groups within Grand Valley State University Compared to the GVSU Overall Performance on This Skill Set

Within Grand Valley State University, the following groups performed about the same as the GVSU-average-student benchmark:

Class Standing:	Freshman, Sophomore, Senior
Major:	Business, Communications/Journalism, Education, Health Sciences, History, Performing & Fine Arts, Science/Math, Social Sciences/Psychology, Other, Undecided

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 significantly different from each other, see whether the ranges of scores overlap. Ranges of scores that do overlap are not significantly different from each other; those that do NOT overlap are significantly different.

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

	Grand Valley State University	Institution Type: Masters	All Institutions
Overall	641 ±16	643 ±5	648 ±2
Class Standing			
Freshman	636 ±19	634 ±7	640 ±3
Sophomore	609 ±84	631 ±13	643 ±5
Senior	669 ±34	660 ±10	667 ±5
Majors			
Business	636 ±40	635 ±10	639 ±5
Communications / Journalism	569 ±67	639 ±24	650 ±9
Education	698 ±46	658 ±17	653 ±7
Health Sciences	648 ±39	645 ±20	648 ±7
History	623 ±97	647 ±29	655 ±16
Performing & Fine Arts	651 ±169	646 ±22	652 ±12
Science / Math	643 ±77	650 ±18	658 ±8
Social Sciences / Psychology	664 ±61	639 ±14	650 ±6
Other	635 ±48	640 ±13	641 ±6
Undecided	614 ±36	628 ±28	642 ±7

Detailed Results - Chart

The chart on the following pages compare the average student performance at your institution to the average for your institution type, 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 significantly different from each other, see whether the ranges of scores, represented by the boxes, overlap. Ranges of scores (boxes) that do overlap are not significantly different from each other; those that do NOT overlap are significantly different.

For example,

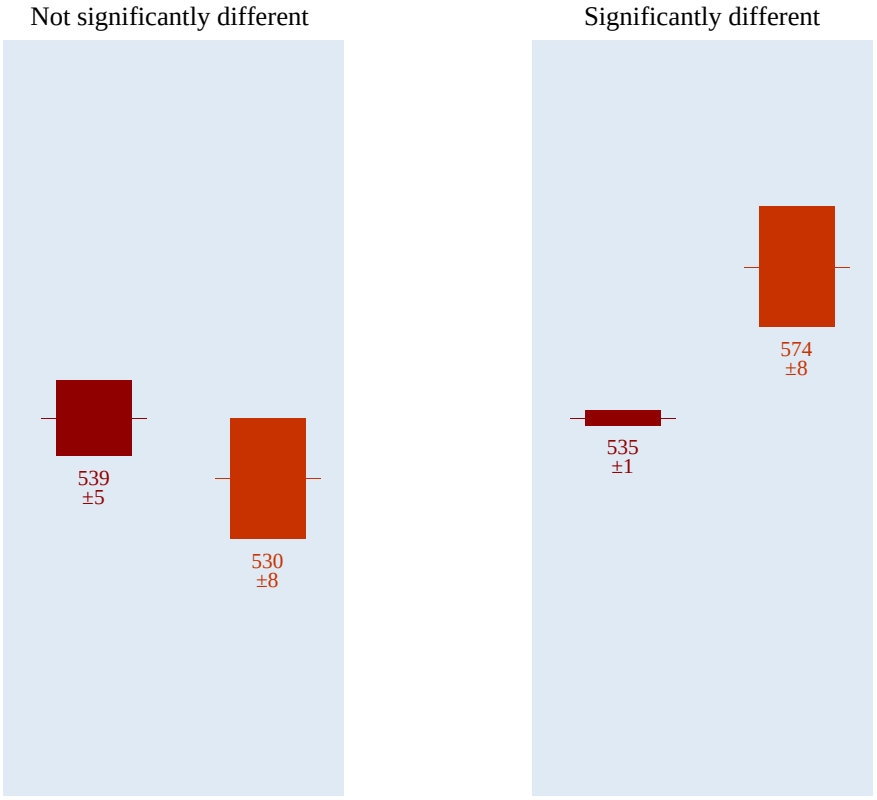


Figure 3.12 Chart for Skill Set: Using Finding Tool Features

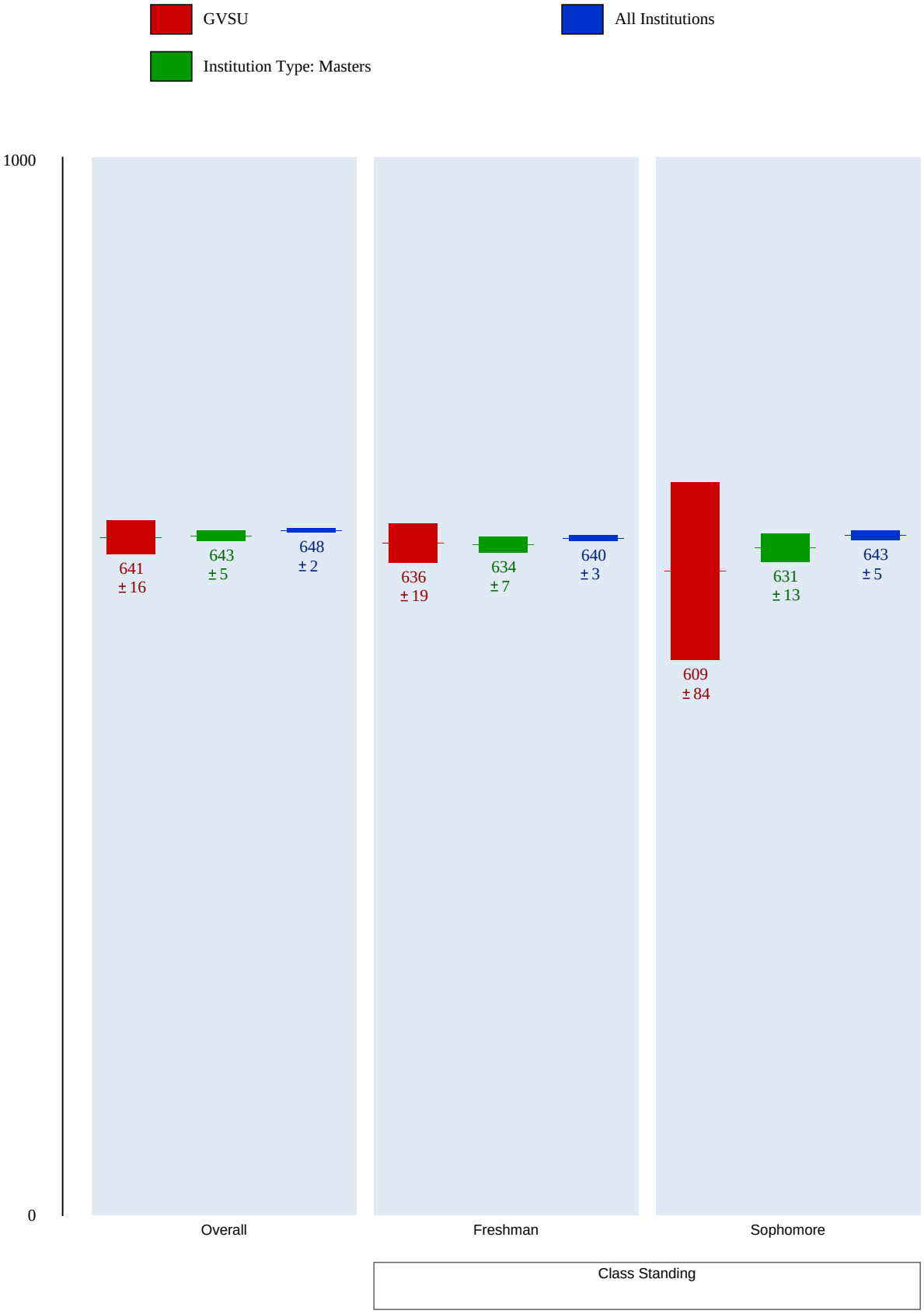


Figure 3.12 (continued) Chart for Skill Set: Using Finding Tool Features

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

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

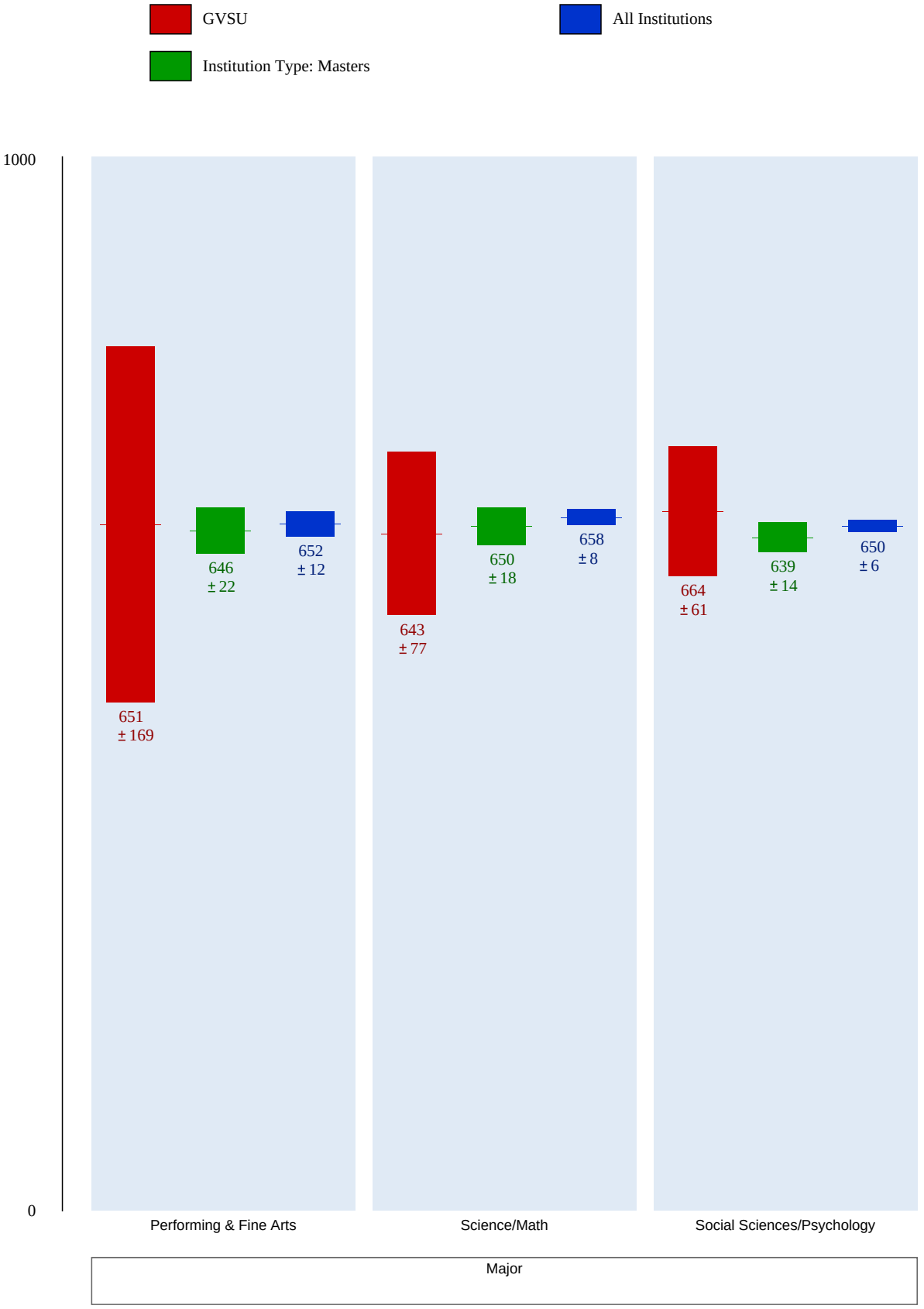


Figure 3.12 (continued) Chart for Skill Set: Using Finding Tool Features

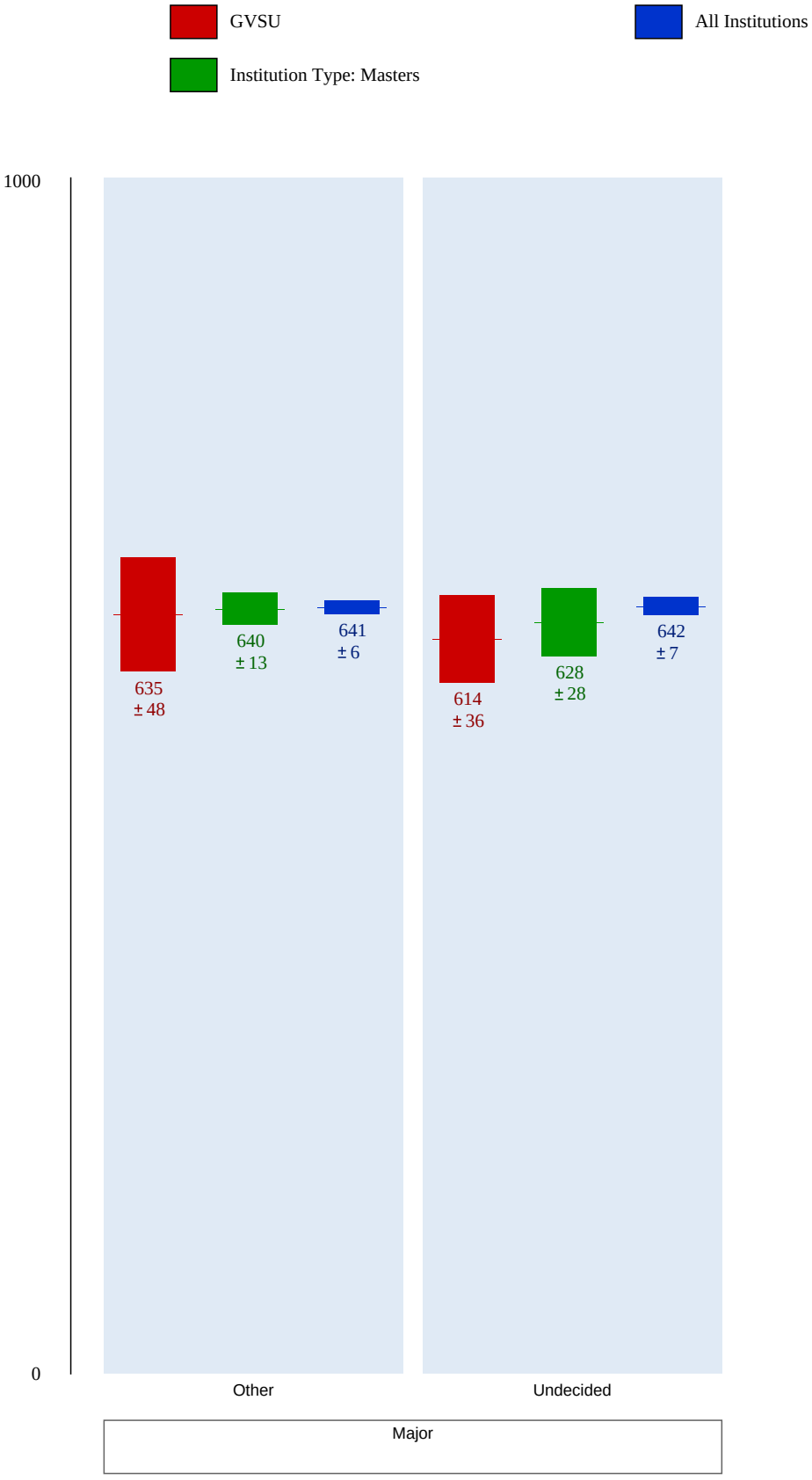


Figure 3.13 Objectives and Outcomes for Skill Set: Using Finding Tool Features

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.

2.1.4.2 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).

5. SAILS Skill Set: Retrieving Sources

Summary of Results

Grand Valley State University Compared to Other Masters Institutions, by Demographic Characteristics

Students at Grand Valley State University performed about the same as the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Freshman, Sophomore, Senior
Major:	Business, Communications/Journalism, Education, Health Sciences, History, Performing & Fine Arts, Science/Math, Social Sciences/Psychology, Other, Undecided

Demographic Groups within Grand Valley State University Compared to the GVSU Overall Performance on This Skill Set

Within Grand Valley State University, the following groups performed better than the GVSU-average-student benchmark:

Class Standing:	Senior

Within Grand Valley State University, the following groups performed about the same as the GVSU-average-student benchmark:

Class Standing:	Freshman, Sophomore
Major:	Business, Communications/Journalism, Education, Health Sciences, History, Performing & Fine Arts, Science/Math, Social Sciences/Psychology, Other, Undecided

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 significantly different from each other, see whether the ranges of scores overlap. Ranges of scores that do overlap are not significantly different from each other; those that do NOT overlap are significantly different.

Figure 3.14 Data Table for Skill Set: Retrieving Sources

	Grand Valley State University	Institution Type: Masters	All Institutions
Overall	596 ±16	579 ±6	577 ±2
Class Standing			
Freshman	580 ±18	556 ±8	558 ±3
Sophomore	577 ±60	568 ±14	571 ±5
Senior	657 ±40	616 ±12	633 ±6
Majors			
Business	589 ±35	564 ±12	556 ±6
Communications / Journalism	574 ±63	572 ±26	578 ±11
Education	604 ±48	591 ±19	585 ±8
Health Sciences	595 ±39	581 ±22	583 ±8
History	658 ±135	634 ±40	626 ±20
Performing & Fine Arts	602 ±89	549 ±20	581 ±13
Science / Math	624 ±88	600 ±20	603 ±9
Social Sciences / Psychology	632 ±68	591 ±17	593 ±7
Other	576 ±47	564 ±17	567 ±6
Undecided	577 ±33	579 ±25	559 ±8

Detailed Results - Chart

The chart on the following pages compare the average student performance at your institution to the average for your institution type, 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 significantly different from each other, see whether the ranges of scores, represented by the boxes, overlap. Ranges of scores (boxes) that do overlap are not significantly different from each other; those that do NOT overlap are significantly different.

For example,

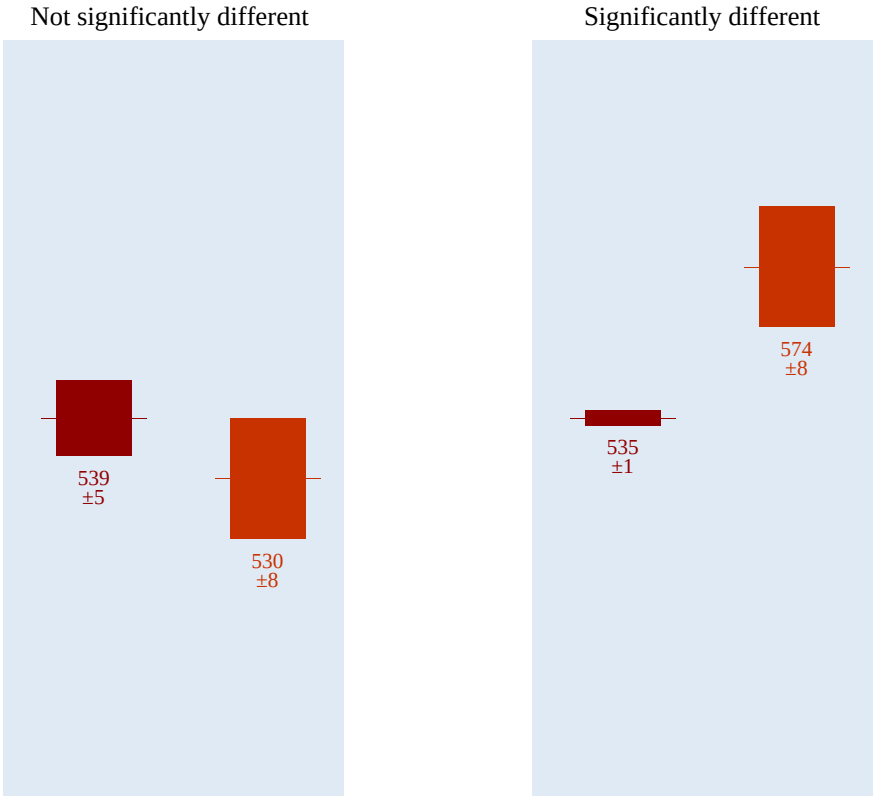


Figure 3.15 Chart for Skill Set: Retrieving Sources

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

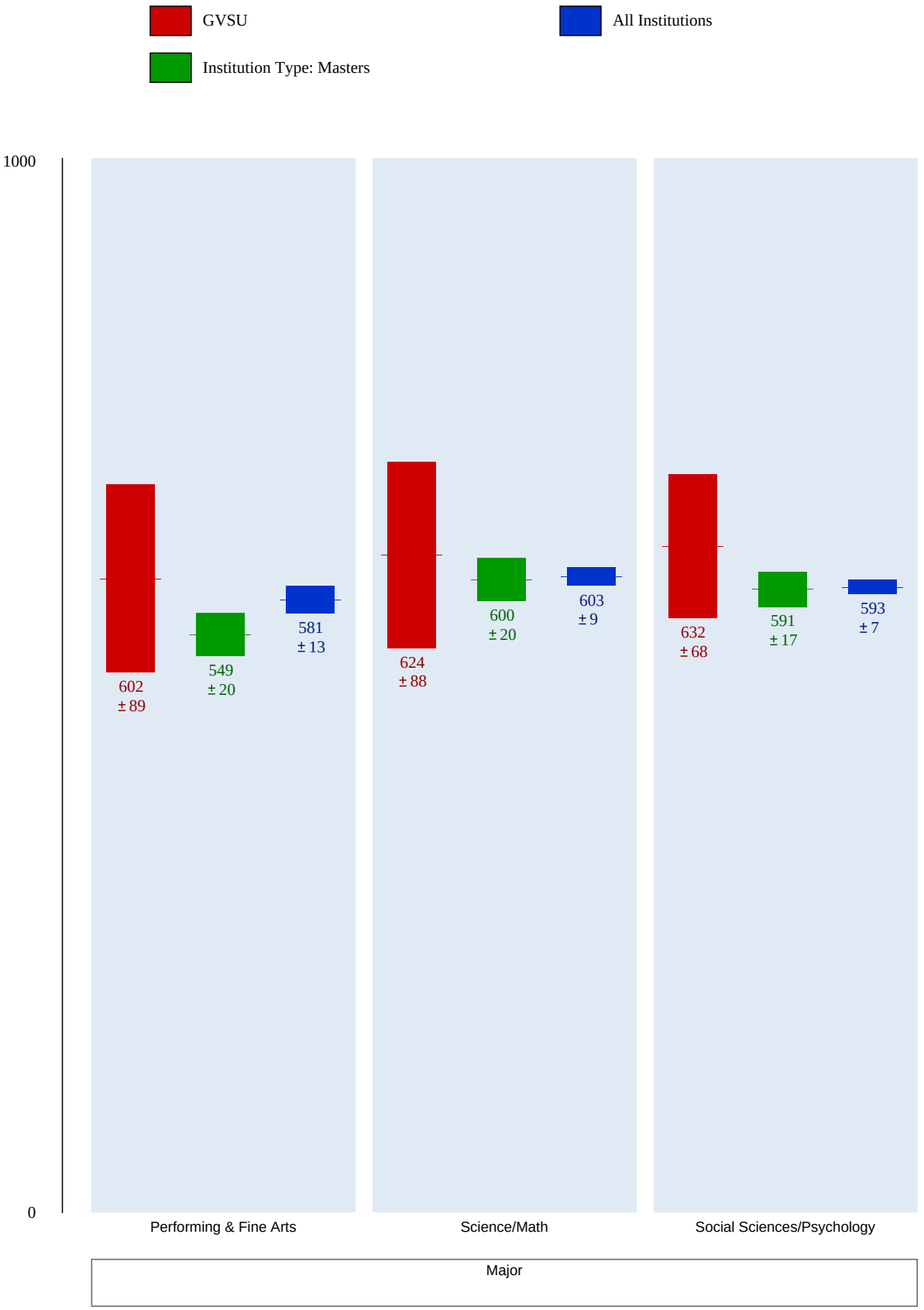


Figure 3.15 (continued) Chart for Skill Set: Retrieving Sources

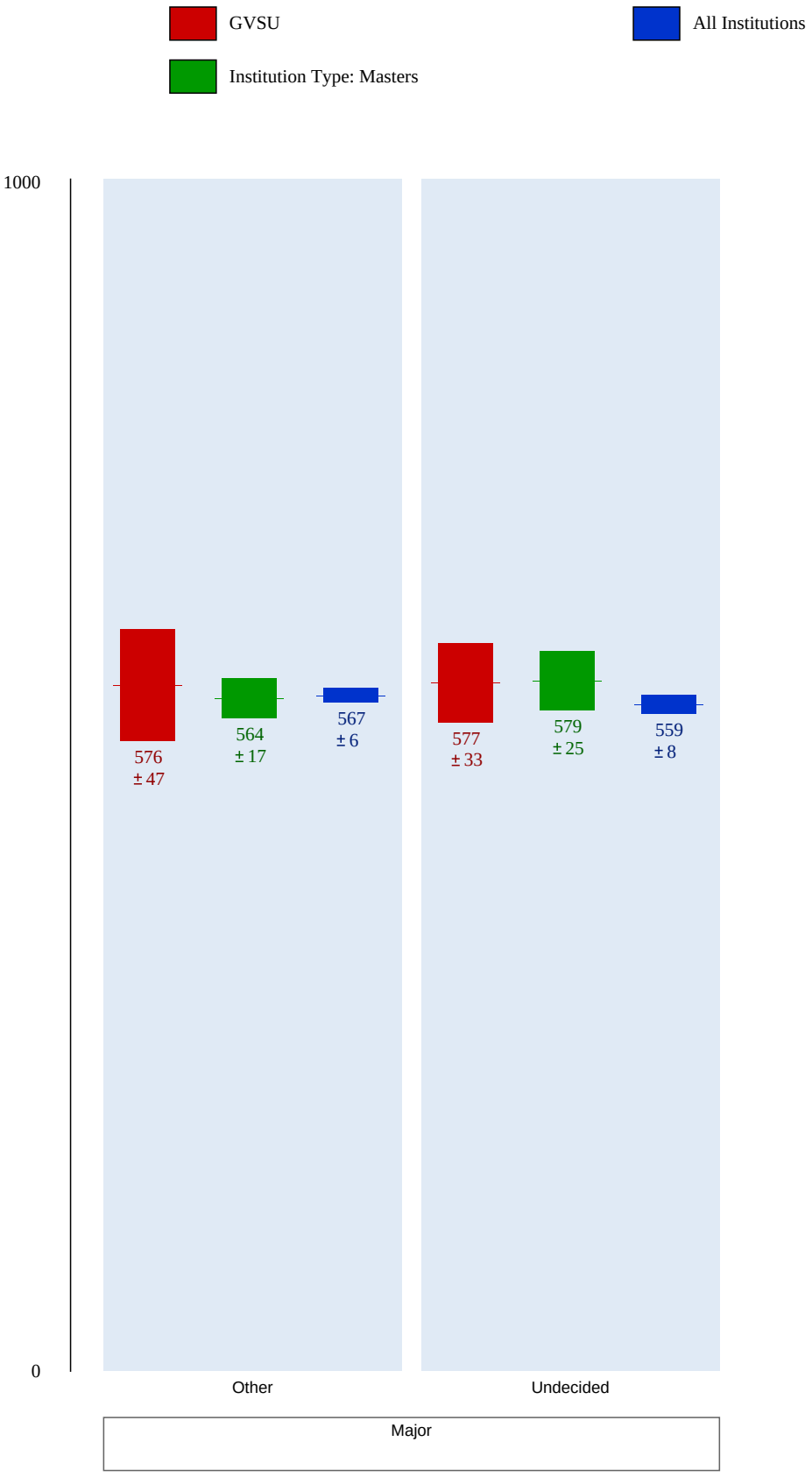


Figure 3.16 Objectives and Outcomes for Skill Set: Retrieving Sources

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.

1.3.1.1 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.

2.3.1.1 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

Grand Valley State University Compared to Other Masters Institutions, by Demographic Characteristics

Students at Grand Valley State University performed about the same as the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Freshman, Sophomore, Senior
Major:	Business, Communications/Journalism, Education, Health Sciences, History, Performing & Fine Arts, Science/Math, Social Sciences/Psychology, Other, Undecided

Demographic Groups within Grand Valley State University Compared to the GVSU Overall Performance on This Skill Set

Within Grand Valley State University, the following groups performed better than the GVSU-average-student benchmark:

Class Standing:	Senior

Within Grand Valley State University, the following groups performed about the same as the GVSU-average-student benchmark:

Class Standing:	Freshman, Sophomore
Major:	Business, Communications/Journalism, Education, Health Sciences, History, Performing & Fine Arts, Science/Math, Social Sciences/Psychology, Other, Undecided

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 significantly different from each other, see whether the ranges of scores overlap. Ranges of scores that do overlap are not significantly different from each other; those that do NOT overlap are significantly different.

Figure 3.17 Data Table for Skill Set: Evaluating Sources

	Grand Valley State University	Institution Type: Masters	All Institutions
Overall	610 ±9	606 ±3	610 ±1
Class Standing			
Freshman	600 ±11	592 ±4	602 ±2
Sophomore	570 ±35	598 ±8	609 ±3
Senior	645 ±18	629 ±6	634 ±3
Majors			
Business	606 ±22	601 ±6	601 ±3
Communications / Journalism	613 ±47	619 ±17	615 ±5
Education	597 ±32	602 ±10	606 ±4
Health Sciences	608 ±21	602 ±11	608 ±4
History	653 ±53	636 ±21	640 ±10
Performing & Fine Arts	630 ±51	603 ±12	612 ±7
Science / Math	649 ±46	607 ±11	619 ±5
Social Sciences / Psychology	625 ±39	612 ±8	620 ±4
Other	604 ±25	598 ±8	606 ±3
Undecided	601 ±20	601 ±15	609 ±4

Detailed Results - Chart

The chart on the following pages compare the average student performance at your institution to the average for your institution type, 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 significantly different from each other, see whether the ranges of scores, represented by the boxes, overlap. Ranges of scores (boxes) that do overlap are not significantly different from each other; those that do NOT overlap are significantly different.

For example,

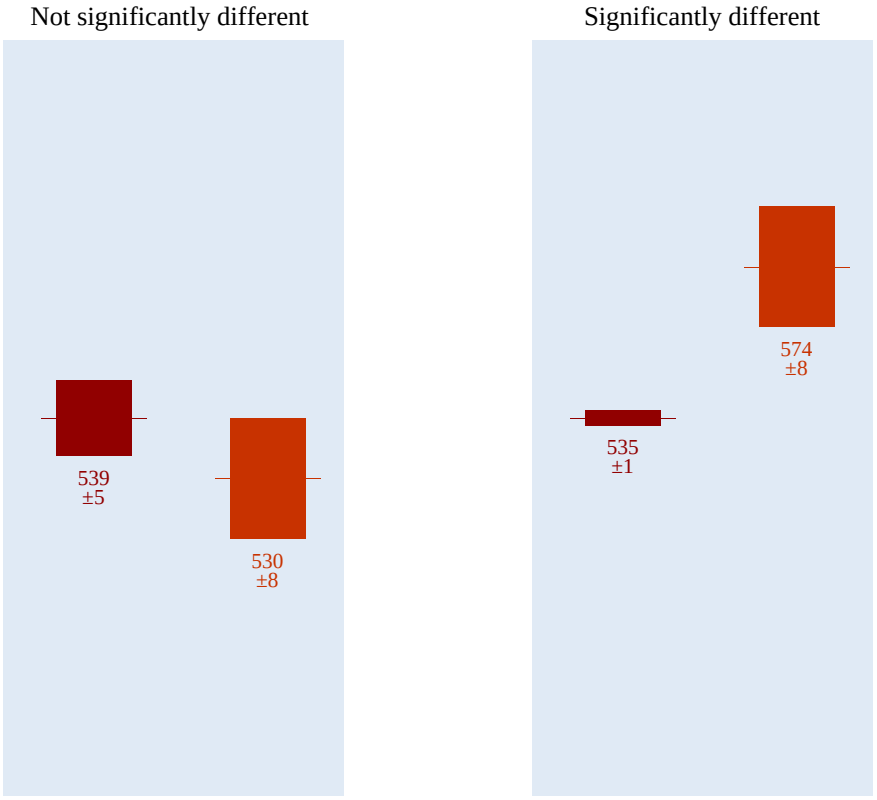


Figure 3.18 Chart for Skill Set: Evaluating Sources

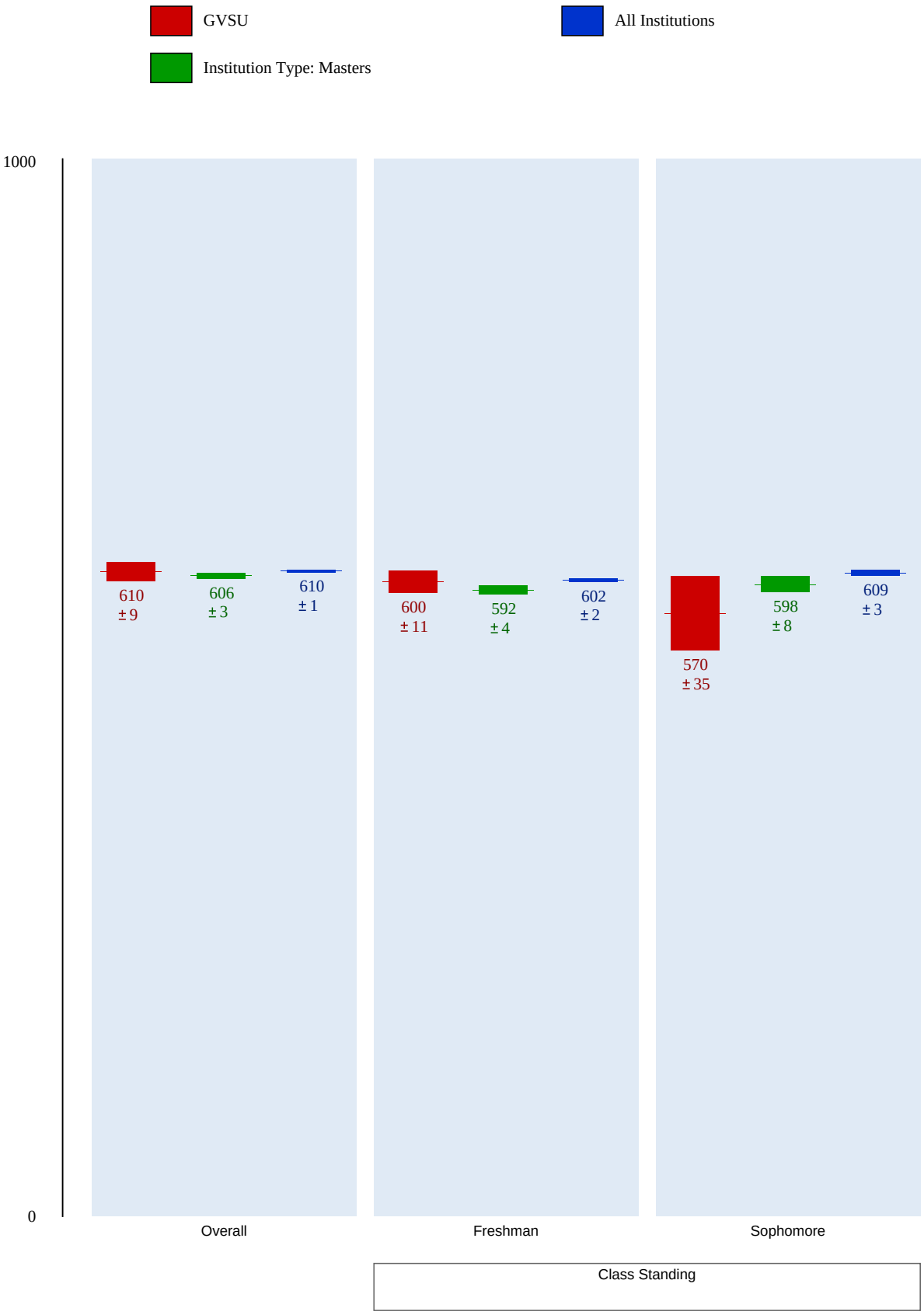


Figure 3.18 (continued) Chart for Skill Set: Evaluating Sources

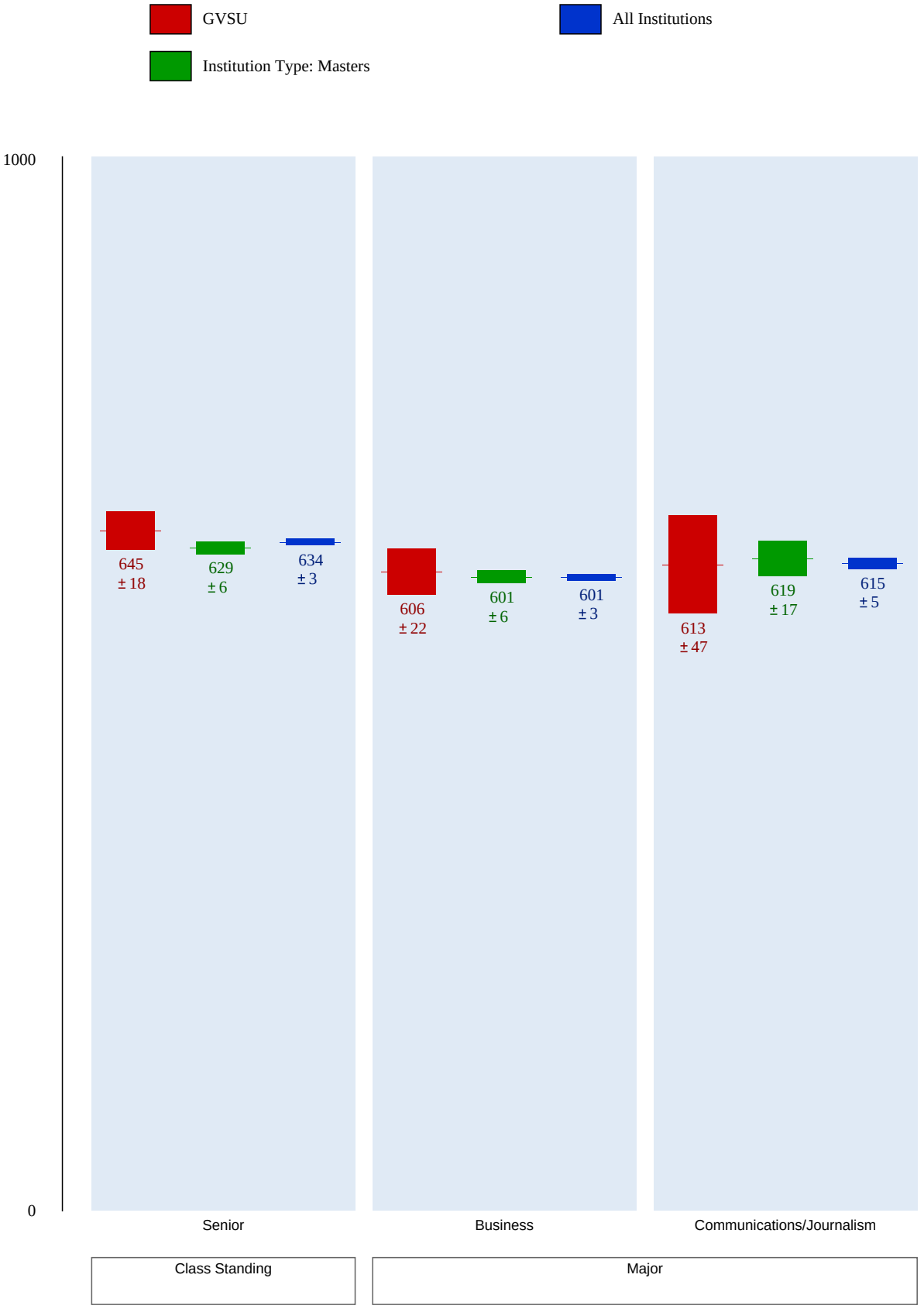


Figure 3.18 (continued) Chart for Skill Set: Evaluating Sources

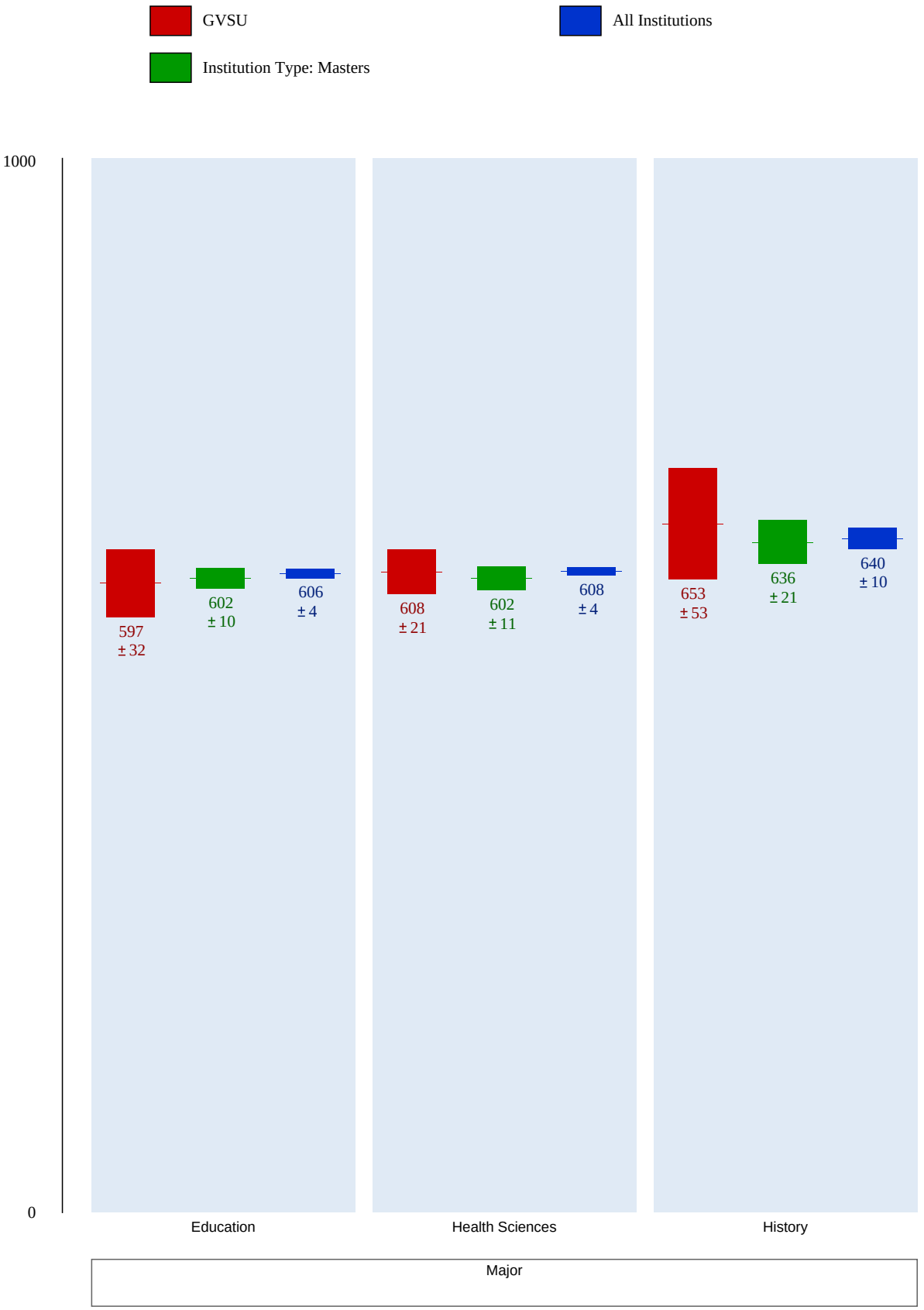


Figure 3.18 (continued) Chart for Skill Set: Evaluating Sources

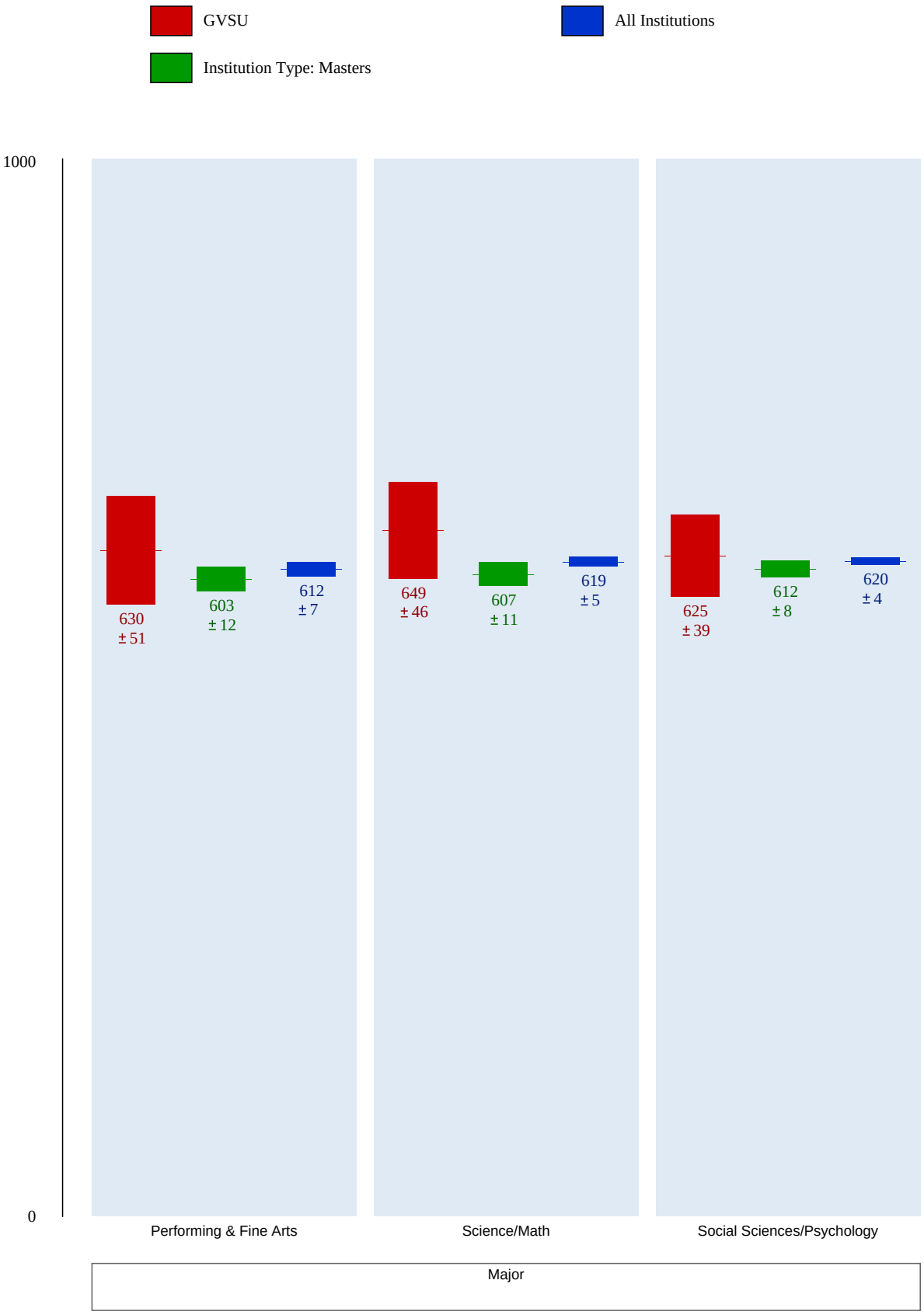


Figure 3.18 (continued) Chart for Skill Set: Evaluating Sources

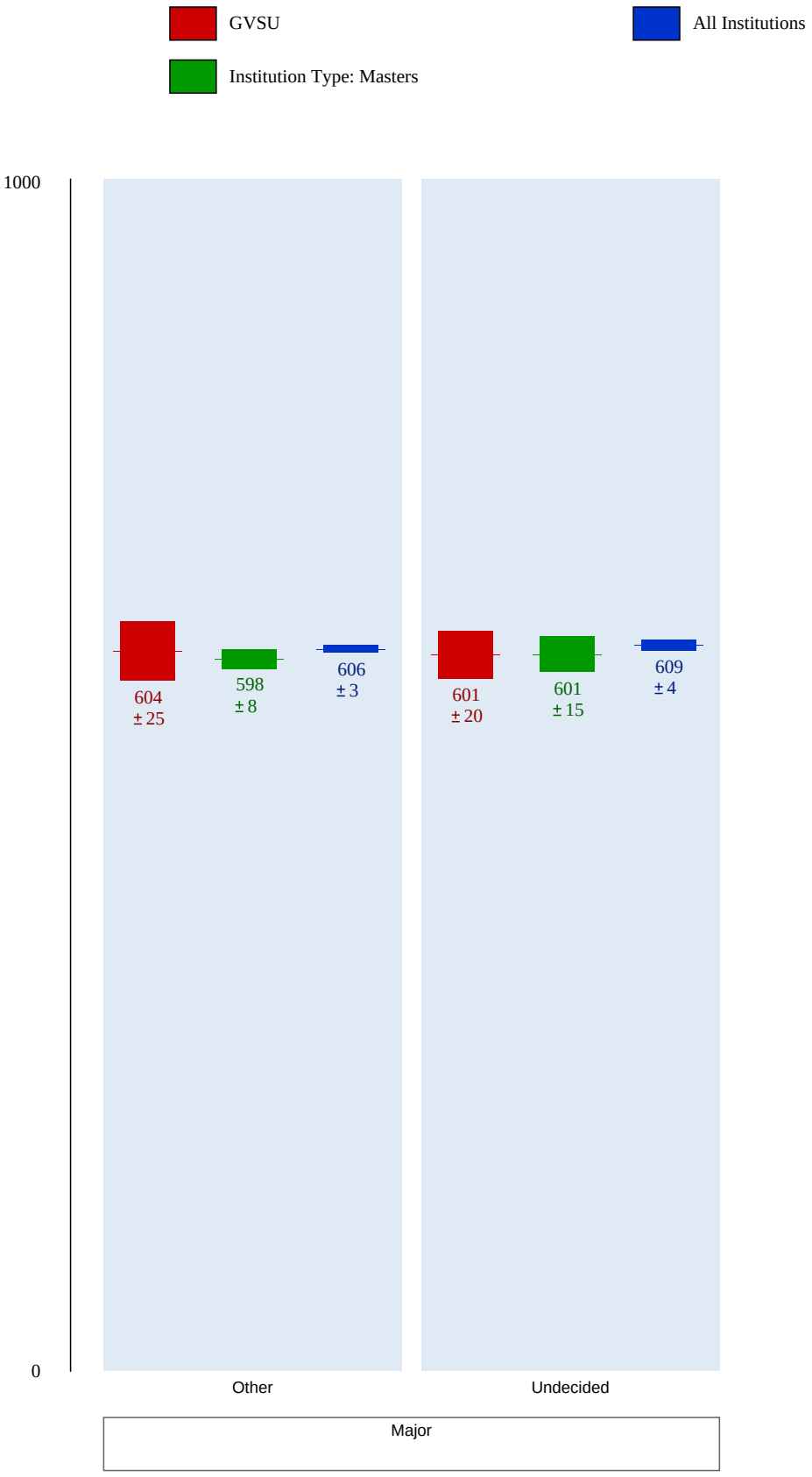


Figure 3.19 Objectives and Outcomes for Skill Set: Evaluating Sources

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.

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

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.

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

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

3.2.3.2 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.

3.4.7.1 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).

7. SAILS Skill Set: Documenting Sources

Summary of Results

Grand Valley State University Compared to Other Masters Institutions, by Demographic Characteristics

Students at Grand Valley State University performed better than the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Senior

Students at Grand Valley State University performed about the same as the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Freshman, Sophomore
Major:	Business, Communications/Journalism, Education, Health Sciences, History, Performing & Fine Arts, Science/Math, Social Sciences/Psychology, Other, Undecided

Demographic Groups within Grand Valley State University Compared to the GVSU Overall Performance on This Skill Set

Within Grand Valley State University, the following groups performed better than the GVSU-average-student benchmark:

Class Standing:	Senior

Within Grand Valley State University, the following groups performed about the same as the GVSU-average-student benchmark:

Class Standing:	Freshman, Sophomore
Major:	Business, Communications/Journalism, Education, Health Sciences, History, Performing & Fine Arts, Science/Math, Social Sciences/Psychology, Other, Undecided

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 significantly different from each other, see whether the ranges of scores overlap. Ranges of scores that do overlap are not significantly different from each other; those that do NOT overlap are significantly different.

Figure 3.20 Data Table for Skill Set: Documenting Sources

	Grand Valley State University	Institution Type: Masters	All Institutions
Overall	604 ±15	590 ±5	596 ±2
Class Standing			
Freshman	579 ±15	568 ±6	582 ±2
Sophomore	572 ±73	581 ±12	593 ±4
Senior	684 ±33	624 ±10	635 ±5
Majors			
Business	597 ±27	583 ±9	579 ±5
Communications / Journalism	584 ±76	597 ±24	606 ±9
Education	594 ±39	588 ±15	597 ±7
Health Sciences	585 ±37	585 ±17	592 ±6
History	655 ±79	645 ±26	644 ±15
Performing & Fine Arts	642 ±75	575 ±20	610 ±11
Science / Math	598 ±93	604 ±18	618 ±7
Social Sciences / Psychology	655 ±66	607 ±13	613 ±5
Other	604 ±45	573 ±12	591 ±5
Undecided	599 ±34	571 ±23	584 ±7

Detailed Results - Chart

The chart on the following pages compare the average student performance at your institution to the average for your institution type, 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 significantly different from each other, see whether the ranges of scores, represented by the boxes, overlap. Ranges of scores (boxes) that do overlap are not significantly different from each other; those that do NOT overlap are significantly different.

For example,

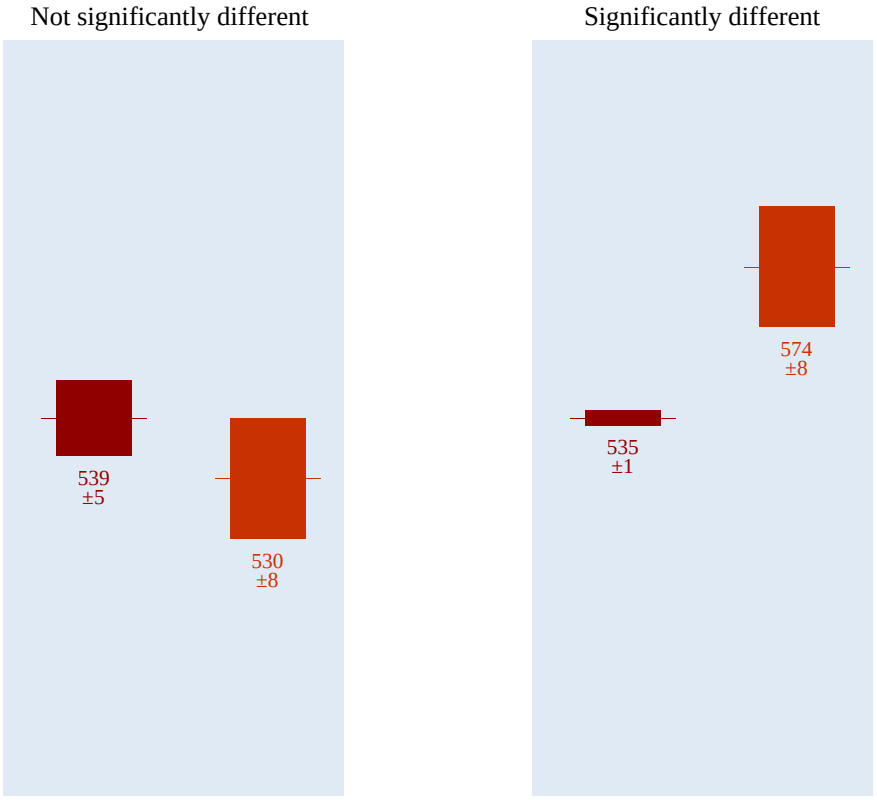


Figure 3.21 Chart for Skill Set: Documenting Sources

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 3.21 (continued) Chart for Skill Set: Documenting Sources

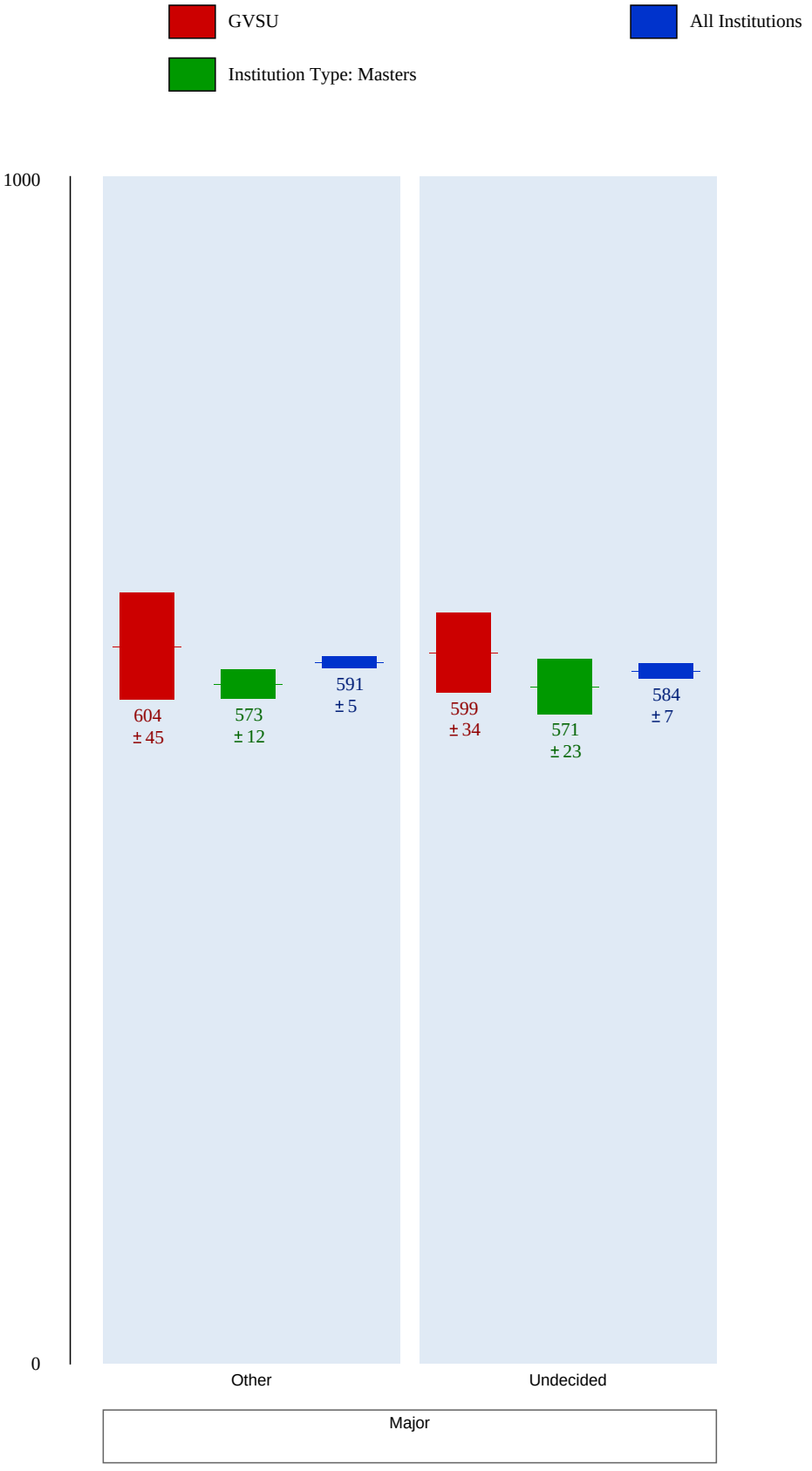


Figure 3.22 Objectives and Outcomes for Skill Set: Documenting Sources

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).

5.3.1.7 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

Grand Valley State University Compared to Other Masters Institutions, by Demographic Characteristics

Students at Grand Valley State University performed better than the institution-type benchmark on this skill set for the following demographic groups:

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

Students at Grand Valley State University performed about the same as the institution-type benchmark on this skill set for the following demographic groups:

Class Standing:	Sophomore
Major:	Business, Communications/Journalism, Education, Health Sciences, History, Performing & Fine Arts, Science/Math, Other, Undecided

Demographic Groups within Grand Valley State University Compared to the GVSU Overall Performance on This Skill Set

Within Grand Valley State University, the following groups performed better than the GVSU-average-student benchmark:

Class Standing:	Senior

Within Grand Valley State University, the following groups performed about the same as the GVSU-average-student benchmark:

Class Standing:	Freshman, Sophomore
Major:	Business, Communications/Journalism, Education, Health Sciences, History, Performing & Fine Arts, Science/Math, Social Sciences/Psychology, Other, Undecided

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 significantly different from each other, see whether the ranges of scores overlap. Ranges of scores that do overlap are not significantly different from each other; those that do NOT overlap are significantly different.

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

	Grand Valley State University	Institution Type: Masters	All Institutions
Overall	564 ±8	551 ±3	556 ±1
Class Standing			
Freshman	555 ±9	542 ±4	551 ±1
Sophomore	555 ±27	547 ±6	554 ±2
Senior	593 ±20	568 ±5	576 ±3
Majors			
Business	567 ±20	547 ±5	549 ±3
Communications / Journalism	566 ±36	552 ±14	559 ±5
Education	554 ±32	548 ±9	549 ±4
Health Sciences	565 ±19	542 ±9	546 ±3
History	567 ±57	565 ±18	578 ±9
Performing & Fine Arts	573 ±50	556 ±11	566 ±6
Science / Math	565 ±30	554 ±9	565 ±4
Social Sciences / Psychology	591 ±28	553 ±7	561 ±3
Other	562 ±22	546 ±7	552 ±3
Undecided	550 ±15	552 ±12	556 ±4

Detailed Results - Chart

The chart on the following pages compare the average student performance at your institution to the average for your institution type, 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 significantly different from each other, see whether the ranges of scores, represented by the boxes, overlap. Ranges of scores (boxes) that do overlap are not significantly different from each other; those that do NOT overlap are significantly different.

For example,

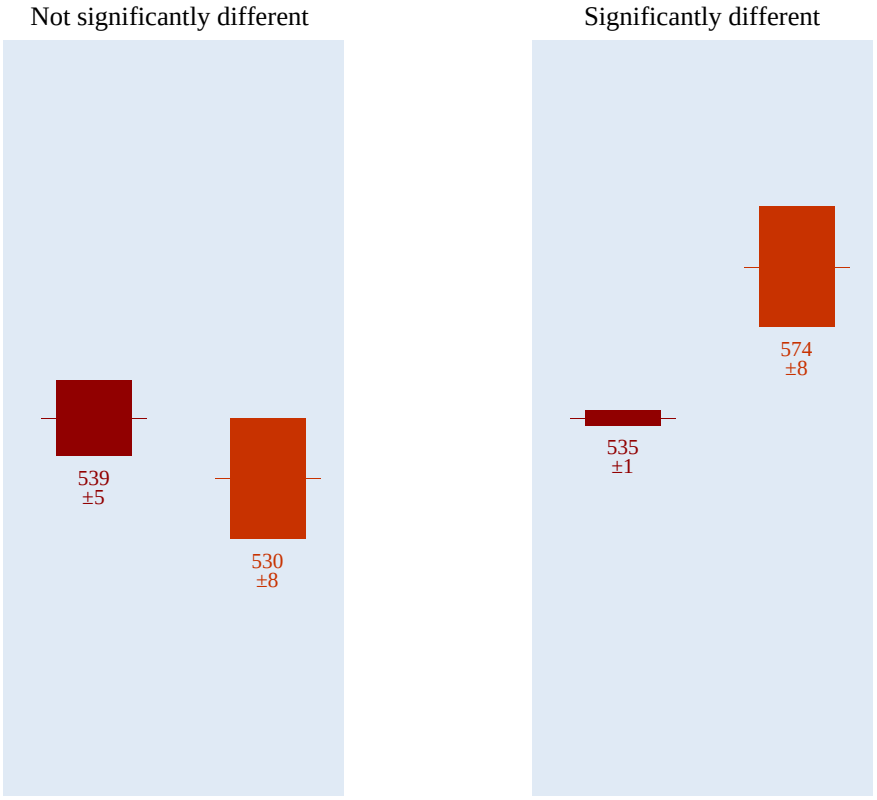


Figure 3.24 Chart for Skill Set: Understanding Economic, Legal, and Social Issues

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

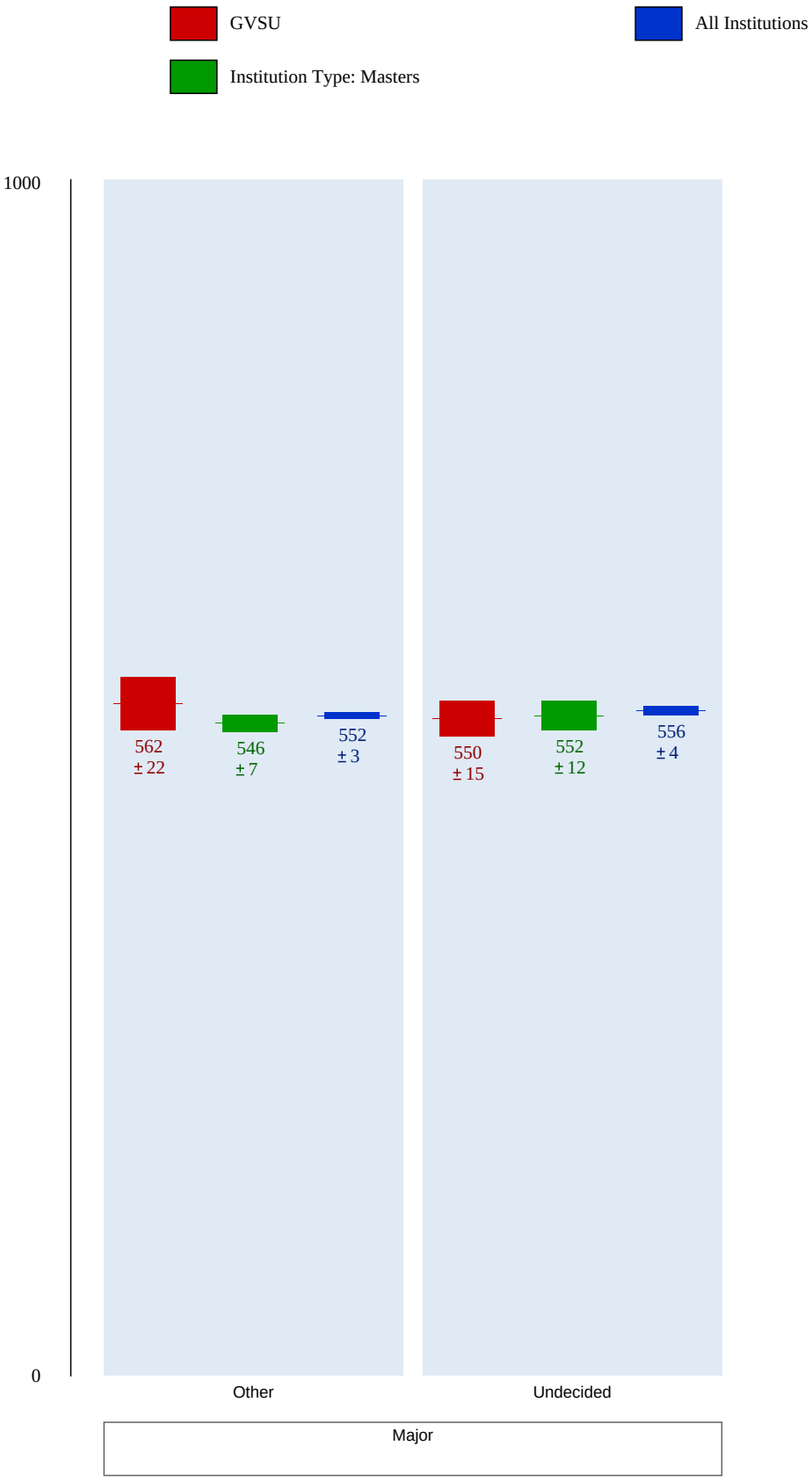


Figure 3.25 Objectives and Outcomes for Skill Set: Understanding Economic, Legal, and Social Issues

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.

5.1.2.4 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

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 Grand Valley State University performed better than than the 'institution-type' benchmark on Standards 2 (Accesses Needed Information Effectively and Efficiently), and 5 (Understands Many of the Economic, Legal, and Social Issues Surrounding the Use of Information and Accesses and Uses Information Ethically and Legally).

Students at Grand Valley State University performed about the same as as the 'institution-type' benchmark on Standards 1 (Determines the Nature and Extent of the Information Needed), and 3 (Evaluates Information and Its Sources Critically and Incorporates Selected Information Into His or Her Knowledge Base and Value System).

Detailed Results - Data Table

Figure 4.1 shows the average student performance at your institution, along with the average for your institution type, 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.

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 significantly different from each other, see whether the ranges of scores overlap. Ranges of scores that do overlap are not significantly different from each other; those that do NOT overlap are significantly different.

Figure 4.1 Data Table for ACRL Standards

	Grand Valley State University	Institution Type: Masters	All Institutions
ACRL Standard			
Standard 1: Determines the Nature and Extent of the Information Needed	592 ±8	587 ±3	592 ±1
Standard 2: Accesses Needed Information Effectively and Efficiently	585 ±7	574 ±2	576 ±1
Standard 3: Evaluates Information and Its Sources Critically and Incorporates Selected Information Into His or Her Knowledge Base and Value System	586 ±9	584 ±3	589 ±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	564 ±7	553 ±2	558 ±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, 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.

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

For example,

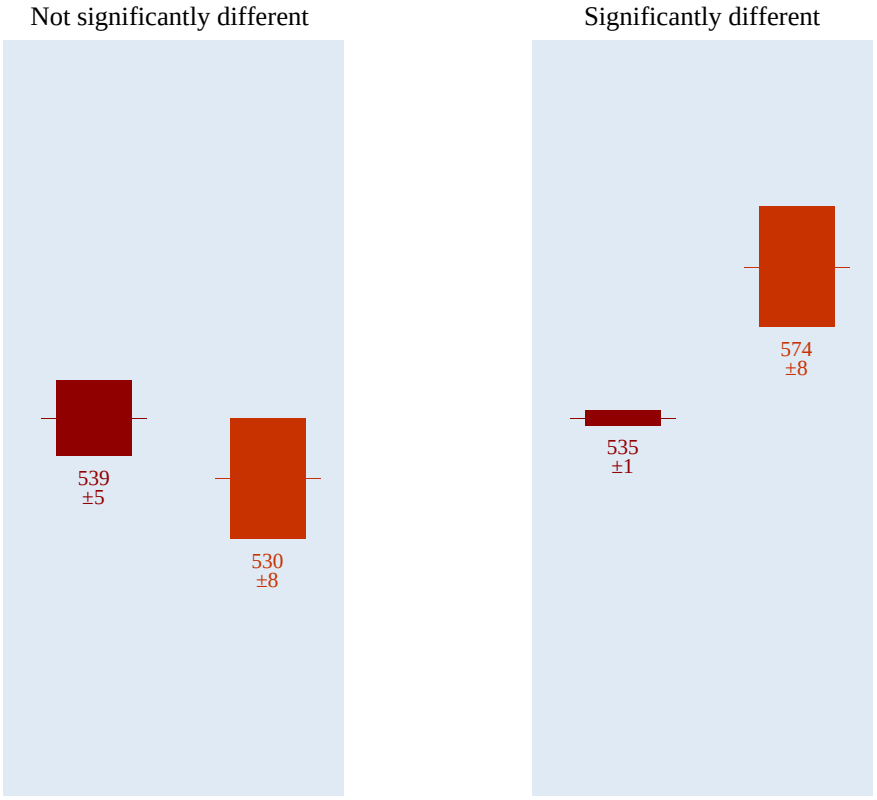
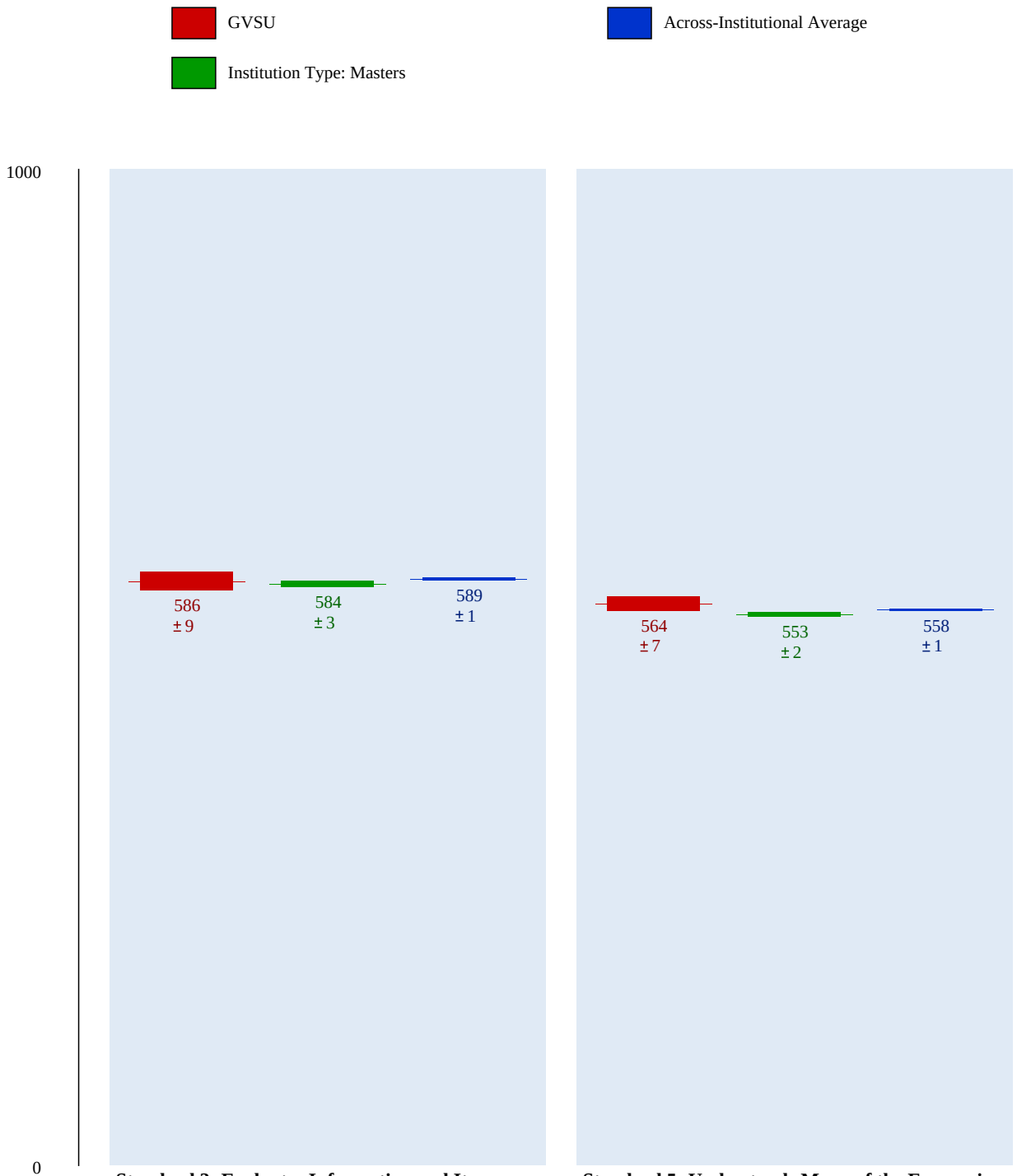


Figure 4.2 Chart for ACRL Standards

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.

1.1.3.2 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).

1.1.4.5 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.

1.2.2.1 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.

1.3.1.1 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 4.4 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.

2.1.3.4 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.

2.1.4.1 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.

2.2.2.4 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.

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.

2.2.6.4 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).

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

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

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).

2.3.2.1 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.

2.3.2.4 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.

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

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.

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.

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

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

3.2.3.2 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.

3.4.5.2 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.

3.4.7.1 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).

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.

5.1.2.4 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

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).

5.3.1.7 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 is located at Kent State University in Ohio. Since development began in 2000, the project has 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 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 what role, if any, information literacy plays in student success and retention.

The Project SAILS team consists of experts in librarianship, measurement and evaluation, and web programming:

Julie A. Gedeon
Evaluation and Measurement for SAILS
Coordinator of Assessment for Libraries and Media Services, Kent State University

Carolyn J. Radcliff
Project Administrator for SAILS
Reference and Instruction Librarian for Libraries and Media Services, Kent State University

Jeffrey T. Remley
Web Programmer for SAILS
Multimedia Designer for Libraries and Media Services, Kent State University

Joseph A. Salem
Test Development and Data Analysis for SAILS
Head of Reference and Government Information Services for Libraries and Media Services, Kent State University

Richard A. Wiggins
Web Programmer for SAILS
Web Programmer for Libraries and Media Services, Kent State University

For more information, go to the Project SAILS web site: www.ProjectSAILS.org

APPENDIX B

List of Institutions in the All-Institutions Benchmark

	Institution	Location	Type of Institution
1.	Alberta, University of	Edmonton, Alberta	Doctorate
2.	American University	Washington, D.C.	Doctorate
3.	Arizona, University of	Phoenix, Arizona	Doctorate
4.	Auburn University	Auburn, Alabama	Doctorate
5.	Berea College	Berea, Kentucky	Baccalaureate - Liberal Arts
6.	Boston University	Boston, Massachusetts	Doctorate
7.	Brigham Young University	Provo, Utah	Doctorate
8.	Carnegie Mellon University	Pittsburgh, Pennsylvania	Doctorate
9.	Case Western Reserve University	Cleveland, Ohio	Doctorate
10.	Central Florida, University of	Orlando, FL	Doctorate
11.	Chadron State College	Chadron, Nebraska	Masters
12.	Chandler-Gilbert Community College	Chandler, Arizona	Associates
13.	College of Charleston	Charleston, South Carolina	Masters
14.	Cottey College	Nevada, Missouri	Associates
15.	Denison University	Granville, Ohio	Baccalaureate - Liberal Arts
16.	Duquesne University	Pittsburgh, Pennsylvania	Doctorate
17.	Emporia State University	Emporia, Kansas	Masters
18.	Fisher College	Boston, Massachusetts	Associates
19.	Florida International University	Miami, Florida	Doctorate
20.	Gettysburg College	Gettysburg, Pennsylvania	Baccalaureate - Liberal Arts
21.	Glendale Community College	Glendale, Arizona	Associates
22.	Grand Valley State University	Allendale, MI	Masters
23.	Grand View College	Des Moines, IA	Baccalaureate - Liberal Arts
24.	Guelph, University of	Guelph, Ontario	Doctorate
25.	Harold Washington College	Chicago, Illinois	Associates
26.	Harrisburg Area Community College	Harrisburg, Pennsylvania	Associates
27.	Hunter College	New York, New York	Masters
28.	Indiana University of Pennsylvania	Indiana, Pennsylvania	Doctorate
29.	Jackson State University	Jackson, MS	Doctorate
30.	Jefferson Community & Technical College	Louisville, Kentucky	Associates
31.	Kansas State University	Manhattan, Kansas	Doctorate
32.	Kent State University - Kent Campus	Kent, OH	Doctorate
33.	Kent State University - Stark Campus	Canton, Ohio	Associates
34.	Kutztown University	Kutztown, Pennsylvania	Masters
35.	Mansfield University	Mansfield, Pennsylvania	Masters
36.	Marshall University	Huntington, West Virginia	Doctorate
37.	McMaster University	Hamilton, Ontario	Doctorate
38.	Memorial University of Newfoundland	St. John's, Newfoundland	Doctorate
39.	Miami University	Miami, Ohio	Doctorate
40.	Michigan, University of	Ann Arbor, MI	Doctorate

	Institution	Location	Type of Institution
41.	Nebraska at Lincoln, University of	Lincoln, Nebraska	Doctorate
42.	New Brunswick, University of	Fredericton, New Brunswick	Doctorate
43.	North Carolina at Greensboro, University of	Greensboro, North Carolina	Doctorate
44.	Notre Dame, University of	Notre Dame, Indiana	Doctorate
45.	Oakton Community College	Des Plaines, IL	Associates
46.	Oberlin College	Oberlin, Ohio	Baccalaureate - Liberal Arts
47.	Ohio University	Athens, Ohio	Doctorate
48.	Oregon State University	Corvallis, Oregon	Doctorate
49.	Pace University	Pleasantville, New York	Doctorate
50.	Palm Beach Community College	Lake Worth, Florida	Associates
51.	Phoenix College	Phoenix, Arizona	Associates
52.	Pittsburgh, University of	Pittsburgh, Pennsylvania	Doctorate
53.	Polk Community College	Winter Haven, Florida	Associates
54.	Ramapo College of New Jersey	Mahwah, New Jersey	Baccalaureate - Liberal Arts
55.	Rio Salado College	Tempe, Arizona	Associates
56.	Robert Morris University	Moon Township, Pennsylvania	Masters
57.	Rutgers University	New Brunswick, New Jersey	Doctorate
58.	Saint Mary's College	Notre Dame, Indiana	Baccalaureate - General
59.	Samford University	Birmingham, Alabama	Doctorate
60.	San Jose State University	San Jose, California	Masters
61.	School of Visual Arts	New York, New York	Masters
62.	Scottsdale Community College	Scottsdale, Arizona	Associates
63.	Seattle Pacific University	Seattle, Washington	Masters
64.	South Florida, University of	Tampa, Florida	Doctorate
65.	Southern California, University of	Los Angeles, California	Doctorate
66.	St. Ambrose University	Davenport, Iowa	Masters
67.	SUNY Geneseo	Geneseo, New York	Baccalaureate - Liberal Arts
68.	Tennessee, Knoxville, University of	Knoxville, Tennessee	Doctorate
69.	Texas A&M University - Kingsville	Kingsville, Texas	Doctorate
70.	Texas at Austin, University of	Austin, Texas	Doctorate
71.	Thomas College	Waterville, Maine	Masters
72.	Trinity University	San Antonio, Texas	Masters
73.	Valencia Community College	Orlando, Florida	Associates
74.	Vanderbilt University	Nashville, TN	Doctorate
75.	Villanova University	Villanova, Pennsylvania	Masters
76.	Virgin Islands, University of	Kingshill, Virgin Islands	Masters
77.	Washburn University	Topeka, Kansas	Masters
78.	Washington State University	Pullman, Washington	Doctorate
79.	Wayne State University	Detroit, MI	Doctorate
80.	Western Ontario, University of	London, Ontario	Doctorate
81.	Wisconsin, University of	Duluth, WI	Doctorate
82.	York University	Toronto, Ontario	Doctorate
83.	Youngstown State University	Youngstown, Ohio	Masters

APPENDIX C

Test-Taker Profiles for Each Administration

		Alberta Phase 3 Spring 2005 (n=402)		American University Phase 3 Spring 2005 (n=148)		Arizona Phase 3 Spring 2005 (n=298)		Auburn University Phase 3 Spring 2005 (n=509)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	14	3.5	70	47.3	209	70.1	193	37.9
	Sophomore	23	5.7	59	39.9	58	19.5	114	22.4
	Junior	330	82.1	16	10.8	16	5.4	100	19.6
	Senior	8	2.0	3	2.0	7	2.3	100	19.6
	Other	21	5.2	0	0.0	7	2.3	2	0.4
	Not Reported	6	1.5	0	0.0	1	0.3	0	0.0
Student Major	Agriculture/Environmental Studies	1	0.2	0	0.0	0	0.0	20	3.9
	Architecture	0	0.0	0	0.0	0	0.0	13	2.6
	Business	0	0.0	10	6.8	4	1.3	80	15.7
	Communications/Journalism	0	0.0	19	12.8	1	0.3	11	2.2
	Education	348	86.6	0	0.0	0	0.0	34	6.7
	Engineering/Computer Science	22	5.5	0	0.0	246	82.6	90	17.7
	General Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Health Sciences	0	0.0	0	0.0	2	0.7	12	2.4
	History	0	0.0	4	2.7	0	0.0	10	2.0
	Humanities	1	0.2	6	4.1	3	1.0	129	25.3
	Law	3	0.7	2	1.4	3	1.0	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	18	4.5	20	13.5	15	5.0	0	0.0
	Science/Math	0	0.0	4	2.7	0	0.0	18	3.5
	Social Sciences/Psychology	0	0.0	4	2.7	21	7.0	29	5.7
	Other	3	0.7	79	53.4	2	0.7	63	12.4
	Undecided	0	0.0	0	0.0	0	0.0	0	0.0
	Not Reported	6	1.5	0	0.0	1	0.3	0	0.0

		Berea College Phase 3 Spring 2005 (n=199)		Boston University Phase 3 Spring 2005 (n=963)		Brigham Young University Phase 3 Spring 2005 (n=113)		Brigham Young University 2007 Winter FYW Spring 2007 (n=221)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	82	41.2	963	100.0	47	41.6	140	63.3
	Sophomore	45	22.6	0	0.0	17	15.0	58	26.2
	Junior	25	12.6	0	0.0	23	20.4	18	8.1
	Senior	45	22.6	0	0.0	26	23.0	4	1.8
	Other	2	1.0	0	0.0	0	0.0	1	0.5
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Agriculture/Environmental Studies	0	0.0	1	0.1	0	0.0	3	1.4
	Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business	24	12.1	67	7.0	8	7.1	15	6.8
	Communications/Journalism	2	1.0	72	7.5	2	1.8	7	3.2
	Education	2	1.0	25	2.6	9	8.0	21	9.5
	Engineering/Computer Science	0	0.0	161	16.7	9	8.0	16	7.2
	General Studies	0	0.0	0	0.0	0	0.0	1	0.5
	Health Sciences	7	3.5	36	3.7	4	3.5	16	7.2
	History	2	1.0	6	0.6	2	1.8	6	2.7
	Humanities	8	4.0	38	3.9	17	15.0	9	4.1
	Law	1	0.5	8	0.8	1	0.9	1	0.5
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	5	2.5	167	17.3	15	13.3	23	10.4
	Science/Math	1	0.5	29	3.0	6	5.3	16	7.2
	Social Sciences/Psychology	2	1.0	182	18.9	13	11.5	19	8.6
	Other	16	8.0	161	16.7	27	23.9	17	7.7
	Undecided	129	64.8	0	0.0	0	0.0	51	23.1
	Not Reported	0	0.0	10	1.0	0	0.0	0	0.0

		Carnegie Mellon University 2006-07 Undergrads		Case Western Reserve University Phase 3		Central Florida nursing majors 2007		Chadron State College Director of Library	
		Fall 2006		Spring 2005		Spring 2007		Fall 2006	
		(n=362)		(n=108)		(n=113)		(n=50)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	123	34.0	3	2.8	0	0.0	16	32.0
	Sophomore	96	26.5	22	20.4	0	0.0	17	34.0
	Junior	72	19.9	26	24.1	106	93.8	9	18.0
	Senior	71	19.6	42	38.9	7	6.2	7	14.0
	Other	0	0.0	15	13.9	0	0.0	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	1	2.0
Student Major	Agriculture/Environmental Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Architecture	13	3.6	0	0.0	0	0.0	0	0.0
	Business	25	6.9	9	8.3	0	0.0	10	20.0
	Communications/Journalism	0	0.0	0	0.0	0	0.0	0	0.0
	Education	0	0.0	0	0.0	0	0.0	9	18.0
	Engineering/Computer Science	142	39.2	32	29.6	0	0.0	1	2.0
	General Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Health Sciences	0	0.0	4	3.7	113	100.0	3	6.0
	History	5	1.4	0	0.0	0	0.0	5	10.0
	Humanities	13	3.6	10	9.3	0	0.0	1	2.0
	Law	0	0.0	1	0.9	0	0.0	2	4.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	20	5.5	8	7.4	0	0.0	6	12.0
	Science/Math	17	4.7	7	6.5	0	0.0	5	10.0
	Social Sciences/Psychology	83	22.9	23	21.3	0	0.0	1	2.0
	Other	27	7.5	14	13.0	0	0.0	3	6.0
	Undecided	17	4.7	0	0.0	0	0.0	3	6.0
	Not Reported	0	0.0	0	0.0	0	0.0	1	2.0

		Chandler-Gilbert Community College Phase 3 Spring 2005 (n=453)		College of Charleston Phase 3 Spring 2005 (n=237)		Cottey College Assessment Day 2007 Spring 2007 (n=171)		Denison University Phase 3 Spring 2005 (n=254)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	295	65.1	159	67.1	94	55.0	250	98.4
	Sophomore	78	17.2	26	11.0	75	43.9	4	1.6
	Junior	15	3.3	15	6.3	0	0.0	0	0.0
	Senior	1	0.2	37	15.6	0	0.0	0	0.0
	Other	21	4.6	0	0.0	0	0.0	0	0.0
	Not Reported	43	9.5	0	0.0	2	1.2	0	0.0
Student Major	Agriculture/Environmental Studies	2	0.4	0	0.0	0	0.0	8	3.1
	Architecture	3	0.7	0	0.0	0	0.0	0	0.0
	Business	53	11.7	50	21.1	0	0.0	0	0.0
	Communications/Journalism	14	3.1	12	5.1	0	0.0	11	4.3
	Education	60	13.2	9	3.8	0	0.0	2	0.8
	Engineering/Computer Science	38	8.4	1	0.4	0	0.0	0	0.0
	General Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Health Sciences	1	0.2	0	0.0	0	0.0	0	0.0
	History	0	0.0	5	2.1	0	0.0	10	3.9
	Humanities	57	12.6	12	5.1	0	0.0	100	39.4
	Law	18	4.0	12	5.1	0	0.0	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	167	36.9	104	43.9	0	0.0	6	2.4
	Science/Math	0	0.0	4	1.7	0	0.0	13	5.1
	Social Sciences/Psychology	0	0.0	14	5.9	0	0.0	55	21.7
	Other	3	0.7	14	5.9	0	0.0	49	19.3
	Undecided	1	0.2	0	0.0	0	0.0	0	0.0
	Not Reported	36	7.9	0	0.0	171	100.0	0	0.0

		Duquesne University Phase 3 Spring 2005 (n=910)		Emporia State University Phase 3 Spring 2005 (n=213)		Fisher College 2006 Fall -- English Fall 2006 (n=22)		Florida International University Phase 3 Spring 2005 (n=193)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	837	92.0	157	73.7	21	95.5	20	10.4
	Sophomore	58	6.4	26	12.2	1	4.5	11	5.7
	Junior	11	1.2	12	5.6	0	0.0	52	26.9
	Senior	1	0.1	14	6.6	0	0.0	82	42.5
	Other	2	0.2	4	1.9	0	0.0	28	14.5
	Not Reported	1	0.1	0	0.0	0	0.0	0	0.0
Student Major	Agriculture/Environmental Studies	1	0.1	0	0.0	0	0.0	0	0.0
	Architecture	0	0.0	0	0.0	0	0.0	2	1.0
	Business	200	22.0	29	13.6	7	31.8	12	6.2
	Communications/Journalism	29	3.2	0	0.0	0	0.0	37	19.2
	Education	90	9.9	44	20.7	1	4.5	15	7.8
	Engineering/Computer Science	18	2.0	2	0.9	0	0.0	16	8.3
	General Studies	0	0.0	0	0.0	1	4.5	0	0.0
	Health Sciences	264	29.0	13	6.1	1	4.5	46	23.8
	History	16	1.8	2	0.9	0	0.0	0	0.0
	Humanities	105	11.5	55	25.8	5	22.7	21	10.9
	Law	1	0.1	1	0.5	0	0.0	6	3.1
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	61	6.7	1	0.5	5	22.7	11	5.7
	Science/Math	41	4.5	7	3.3	0	0.0	3	1.6
	Social Sciences/Psychology	44	4.8	25	11.7	0	0.0	3	1.6
	Other	39	4.3	34	16.0	2	9.1	21	10.9
	Undecided	0	0.0	0	0.0	0	0.0	0	0.0
	Not Reported	1	0.1	0	0.0	0	0.0	0	0.0

		Gettysburg College Phase 3 Spring 2005 (n=411)		Glendale Community College Phase 3 Spring 2005 (n=594)		Grand Valley State University GVSU 2006/07 Spring 2007 (n=440)		Grand View College 2006 Fall Faass Fall 2006 (n=18)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	406	98.8	499	84.0	304	69.1	18	100.0
	Sophomore	3	0.7	71	12.0	24	5.5	0	0.0
	Junior	0	0.0	10	1.7	6	1.4	0	0.0
	Senior	1	0.2	4	0.7	102	23.2	0	0.0
	Other	0	0.0	10	1.7	4	0.9	0	0.0
	Not Reported	1	0.2	0	0.0	0	0.0	0	0.0
Student Major	Agriculture/Environmental Studies	1	0.2	1	0.2	0	0.0	0	0.0
	Architecture	0	0.0	12	2.0	0	0.0	1	5.6
	Business	1	0.2	70	11.8	66	15.0	4	22.2
	Communications/Journalism	0	0.0	10	1.7	26	5.9	3	16.7
	Education	5	1.2	67	11.3	42	9.5	0	0.0
	Engineering/Computer Science	0	0.0	35	5.9	7	1.6	1	5.6
	General Studies	0	0.0	0	0.0	1	0.2	0	0.0
	Health Sciences	0	0.0	56	9.4	73	16.6	6	33.3
	History	0	0.0	0	0.0	14	3.2	0	0.0
	Humanities	3	0.7	91	15.3	6	1.4	0	0.0
	Law	4	1.0	4	0.7	7	1.6	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	35	8.5	116	19.5	57	13.0	1	5.6
	Science/Math	2	0.5	14	2.4	10	2.3	0	0.0
	Social Sciences/Psychology	1	0.2	18	3.0	23	5.2	2	11.1
	Other	1	0.2	27	4.5	27	6.1	0	0.0
	Undecided	357	86.9	73	12.3	81	18.4	0	0.0
	Not Reported	1	0.2	0	0.0	0	0.0	0	0.0

		Grand View College 2006 Fall Freshmen Fall 2006 (n=83)		Grand View College 2006 Fall Seniors Fall 2006 (n=111)		Guelph, University of Guelph Winter 2007 Spring 2007 (n=126)		Harold Washington College Phase 3 Spring 2005 (n=777)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	75	90.4	1	0.9	96	76.2	270	34.7
	Sophomore	4	4.8	1	0.9	5	4.0	305	39.3
	Junior	3	3.6	22	19.8	3	2.4	90	11.6
	Senior	1	1.2	87	78.4	22	17.5	23	3.0
	Other	0	0.0	0	0.0	0	0.0	88	11.3
	Not Reported	0	0.0	0	0.0	0	0.0	1	0.1
Student Major	Agriculture/Environmental Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Architecture	6	7.2	12	10.8	0	0.0	16	2.1
	Business	14	16.9	15	13.5	1	0.8	110	14.2
	Communications/Journalism	6	7.2	6	5.4	0	0.0	6	0.8
	Education	7	8.4	15	13.5	0	0.0	126	16.2
	Engineering/Computer Science	2	2.4	2	1.8	0	0.0	70	9.0
	General Studies	0	0.0	5	4.5	93	73.8	0	0.0
	Health Sciences	23	27.7	21	18.9	0	0.0	1	0.1
	History	0	0.0	0	0.0	1	0.8	0	0.0
	Humanities	1	1.2	5	4.5	5	4.0	80	10.3
	Law	0	0.0	1	0.9	0	0.0	54	6.9
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	3	3.6	4	3.6	5	4.0	301	38.7
	Science/Math	0	0.0	3	2.7	1	0.8	0	0.0
	Social Sciences/Psychology	6	7.2	7	6.3	2	1.6	0	0.0
	Other	8	9.6	15	13.5	6	4.8	5	0.6
	Undecided	7	8.4	0	0.0	12	9.5	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	8	1.0

		Harrisburg Area Community College Phase 3 Spring 2005 (n=427)		Hunter College English 120 Spring 2007 (n=195)		Hunter College Seniors Spring 2007 (n=201)		Hunter College Transfer Students Spring 2007 (n=200)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	268	62.8	81	41.5	3	1.5	22	11.0
	Sophomore	150	35.1	66	33.8	5	2.5	67	33.5
	Junior	3	0.7	45	23.1	16	8.0	83	41.5
	Senior	0	0.0	3	1.5	177	88.1	28	14.0
	Other	3	0.7	0	0.0	0	0.0	0	0.0
	Not Reported	3	0.7	0	0.0	0	0.0	0	0.0
Student Major	Agriculture/Environmental Studies	0	0.0	2	1.0	2	1.0	5	2.5
	Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business	0	0.0	11	5.6	18	9.0	12	6.0
	Communications/Journalism	4	0.9	6	3.1	13	6.5	14	7.0
	Education	3	0.7	0	0.0	0	0.0	0	0.0
	Engineering/Computer Science	46	10.8	2	1.0	5	2.5	2	1.0
	General Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Health Sciences	51	11.9	35	17.9	19	9.5	36	18.0
	History	0	0.0	5	2.6	6	3.0	11	5.5
	Humanities	53	12.4	9	4.6	34	16.9	15	7.5
	Law	0	0.0	0	0.0	0	0.0	0	0.0
	Military/Naval Science	7	1.6	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	225	52.7	16	8.2	20	10.0	23	11.5
	Science/Math	11	2.6	4	2.1	10	5.0	12	6.0
	Social Sciences/Psychology	11	2.6	36	18.5	24	11.9	20	10.0
	Other	10	2.3	32	16.4	49	24.4	33	16.5
	Undecided	0	0.0	37	19.0	1	0.5	17	8.5
	Not Reported	6	1.4	0	0.0	0	0.0	0	0.0

		Indiana University of Pennsylvania Phase 3 Spring 2005 (n=40)		Jackson State University SAILS At JSU Spring 2007 (n=186)		Jefferson Community & Technical College 2006-Fall Pilot Fall 2006 (n=19)		Jefferson Community & Technical College Spring2007 Spring 2007 (n=51)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	7	17.5	63	33.9	16	84.2	31	60.8
	Sophomore	10	25.0	50	26.9	2	10.5	10	19.6
	Junior	7	17.5	37	19.9	1	5.3	4	7.8
	Senior	13	32.5	34	18.3	0	0.0	4	7.8
	Other	0	0.0	0	0.0	0	0.0	2	3.9
	Not Reported	3	7.5	2	1.1	0	0.0	0	0.0
Student Major	Agriculture/Environmental Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business	6	15.0	29	15.6	3	15.8	7	13.7
	Communications/Journalism	5	12.5	11	5.9	0	0.0	0	0.0
	Education	5	12.5	50	26.9	1	5.3	1	2.0
	Engineering/Computer Science	5	12.5	3	1.6	0	0.0	1	2.0
	General Studies	0	0.0	6	3.2	0	0.0	3	5.9
	Health Sciences	1	2.5	8	4.3	3	15.8	14	27.5
	History	0	0.0	0	0.0	0	0.0	0	0.0
	Humanities	1	2.5	0	0.0	1	5.3	1	2.0
	Law	0	0.0	8	4.3	0	0.0	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	1	2.5	15	8.1	5	26.3	9	17.6
	Science/Math	1	2.5	5	2.7	0	0.0	3	5.9
	Social Sciences/Psychology	2	5.0	12	6.5	0	0.0	4	7.8
	Other	10	25.0	34	18.3	1	5.3	0	0.0
	Undecided	0	0.0	4	2.2	5	26.3	8	15.7
	Not Reported	3	7.5	1	0.5	0	0.0	0	0.0

		Kansas State University Phase 3 Spring 2005 (n=612)		Kansas State University Fall 2006 (n=932)		Kent State University - Kent Campus Senior Testing 07 Spring 2007 (n=111)		Kent State University - Stark Campus Phase 3 Spring 2005 (n=113)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	350	57.2	853	91.5	0	0.0	47	41.6
	Sophomore	260	42.5	62	6.7	0	0.0	17	15.0
	Junior	0	0.0	10	1.1	5	4.5	23	20.4
	Senior	0	0.0	4	0.4	106	95.5	26	23.0
	Other	1	0.2	3	0.3	0	0.0	0	0.0
	Not Reported	1	0.2	0	0.0	0	0.0	0	0.0
Student Major	Agriculture/Environmental Studies	44	7.2	70	7.5	0	0.0	0	0.0
	Architecture	18	2.9	10	1.1	1	0.9	0	0.0
	Business	110	18.0	163	17.5	4	3.6	8	7.1
	Communications/Journalism	15	2.5	27	2.9	50	45.0	2	1.8
	Education	55	9.0	93	10.0	8	7.2	9	8.0
	Engineering/Computer Science	88	14.4	158	17.0	0	0.0	9	8.0
	General Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Health Sciences	45	7.4	60	6.4	2	1.8	4	3.5
	History	4	0.7	5	0.5	1	0.9	2	1.8
	Humanities	100	16.3	6	0.6	4	3.6	17	15.0
	Law	0	0.0	7	0.8	0	0.0	1	0.9
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	57	9.3	68	7.3	8	7.2	15	13.3
	Science/Math	16	2.6	21	2.3	3	2.7	6	5.3
	Social Sciences/Psychology	11	1.8	45	4.8	8	7.2	13	11.5
	Other	48	7.8	67	7.2	22	19.8	27	23.9
	Undecided	0	0.0	132	14.2	0	0.0	0	0.0
	Not Reported	1	0.2	0	0.0	0	0.0	0	0.0

		Kutztown University Phase 3 Spring 2005 (n=169)		Mansfield University Phase 3 Spring 2005 (n=275)		Marshall University Phase 3 Spring 2005 (n=233)		McMaster University Bus1Win2007 Spring 2007 (n=468)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	169	100.0	4	1.5	232	99.6	384	82.1
	Sophomore	0	0.0	32	11.6	1	0.4	73	15.6
	Junior	0	0.0	104	37.8	0	0.0	10	2.1
	Senior	0	0.0	129	46.9	0	0.0	1	0.2
	Other	0	0.0	6	2.2	0	0.0	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Agriculture/Environmental Studies	2	1.2	0	0.0	1	0.4	0	0.0
	Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business	24	14.2	18	6.5	6	2.6	428	91.5
	Communications/Journalism	4	2.4	14	5.1	49	21.0	1	0.2
	Education	43	25.4	42	15.3	30	12.9	0	0.0
	Engineering/Computer Science	9	5.3	9	3.3	6	2.6	31	6.6
	General Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Health Sciences	1	0.6	4	1.5	9	3.9	0	0.0
	History	1	0.6	26	9.5	3	1.3	0	0.0
	Humanities	10	5.9	30	10.9	23	9.9	0	0.0
	Law	3	1.8	1	0.4	2	0.9	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	30	17.8	22	8.0	64	27.5	0	0.0
	Science/Math	7	4.1	18	6.5	12	5.2	0	0.0
	Social Sciences/Psychology	13	7.7	35	12.7	10	4.3	4	0.9
	Other	20	11.8	56	20.4	17	7.3	0	0.0
	Undecided	0	0.0	0	0.0	0	0.0	4	0.9
	Not Reported	2	1.2	0	0.0	1	0.4	0	0.0

		Memorial University of Newfoundland 2006 Fall First Year		Miami University Phase 3		Michigan Fall 2006		Nebraska at Lincoln Phase 3	
		Fall 2006		Spring 2005		Fall 2006		Spring 2005	
		(n=204)		(n=481)		(n=102)		(n=116)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	187	91.7	73	15.2	0	0.0	4	3.4
	Sophomore	2	1.0	106	22.0	0	0.0	24	20.7
	Junior	1	0.5	148	30.8	4	3.9	31	26.7
	Senior	0	0.0	148	30.8	97	95.1	55	47.4
	Other	14	6.9	6	1.2	1	1.0	2	1.7
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Agriculture/Environmental Studies	0	0.0	10	2.1	0	0.0	1	0.9
	Architecture	0	0.0	12	2.5	0	0.0	1	0.9
	Business	15	7.4	128	26.6	0	0.0	12	10.3
	Communications/Journalism	0	0.0	32	6.7	0	0.0	66	56.9
	Education	12	5.9	35	7.3	0	0.0	2	1.7
	Engineering/Computer Science	26	12.7	59	12.3	0	0.0	2	1.7
	General Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Health Sciences	8	3.9	3	0.6	0	0.0	4	3.4
	History	4	2.0	15	3.1	3	2.9	1	0.9
	Humanities	29	14.2	43	8.9	20	19.6	7	6.0
	Law	0	0.0	1	0.2	0	0.0	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	22	10.8	3	0.6	6	5.9	9	7.8
	Science/Math	0	0.0	5	1.0	0	0.0	4	3.4
	Social Sciences/Psychology	40	19.6	79	16.4	37	36.3	3	2.6
	Other	3	1.5	56	11.6	36	35.3	4	3.4
	Undecided	44	21.6	0	0.0	0	0.0	0	0.0
	Not Reported	1	0.5	0	0.0	0	0.0	0	0.0

		New Brunswick Phase 3 Spring 2005 (n=154)		North Carolina at Greensboro Phase 3 Spring 2005 (n=198)		Notre Dame Phase 3 Spring 2005 (n=341)		Oakton Community College 2007 Spring Gen Ed Spring 2007 (n=497)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	122	79.2	27	13.6	237	69.5	270	54.3
	Sophomore	19	12.3	27	13.6	0	0.0	227	45.7
	Junior	3	1.9	78	39.4	0	0.0	0	0.0
	Senior	3	1.9	60	30.3	103	30.2	0	0.0
	Other	1	0.6	5	2.5	0	0.0	0	0.0
	Not Reported	6	3.9	1	0.5	1	0.3	0	0.0
Student Major	Agriculture/Environmental Studies	0	0.0	0	0.0	0	0.0	1	0.2
	Architecture	0	0.0	0	0.0	1	0.3	4	0.8
	Business	0	0.0	60	30.3	109	32.0	78	15.7
	Communications/Journalism	0	0.0	5	2.5	1	0.3	5	1.0
	Education	3	1.9	35	17.7	1	0.3	24	4.8
	Engineering/Computer Science	2	1.3	10	5.1	13	3.8	10	2.0
	General Studies	0	0.0	0	0.0	0	0.0	16	3.2
	Health Sciences	0	0.0	5	2.5	0	0.0	187	37.6
	History	0	0.0	5	2.5	0	0.0	9	1.8
	Humanities	18	11.7	15	7.6	4	1.2	1	0.2
	Law	1	0.6	0	0.0	2	0.6	6	1.2
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	125	81.2	8	4.0	22	6.5	30	6.0
	Science/Math	0	0.0	10	5.1	0	0.0	10	2.0
	Social Sciences/Psychology	1	0.6	7	3.5	0	0.0	21	4.2
	Other	2	1.3	37	18.7	0	0.0	17	3.4
	Undecided	0	0.0	0	0.0	187	54.8	74	14.9
	Not Reported	2	1.3	1	0.5	1	0.3	4	0.8

		Oberlin College Phase 3 Spring 2005 (n=299)		Ohio University Phase 3 Spring 2005 (n=60)		Ohio University 2007 Spring Seniors Spring 2007 (n=50)		Oregon State University Phase 3 Spring 2005 (n=1,196)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	294	98.3	12	20.0	0	0.0	551	46.1
	Sophomore	5	1.7	8	13.3	0	0.0	439	36.7
	Junior	0	0.0	15	25.0	0	0.0	31	2.6
	Senior	0	0.0	24	40.0	50	100.0	159	13.3
	Other	0	0.0	1	1.7	0	0.0	6	0.5
	Not Reported	0	0.0	0	0.0	0	0.0	9	0.8
Student Major	Agriculture/Environmental Studies	6	2.0	0	0.0	3	6.0	72	6.0
	Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business	1	0.3	5	8.3	24	48.0	208	17.4
	Communications/Journalism	1	0.3	12	20.0	15	30.0	2	0.2
	Education	2	0.7	5	8.3	0	0.0	4	0.3
	Engineering/Computer Science	5	1.7	2	3.3	6	12.0	191	16.0
	General Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Health Sciences	0	0.0	1	1.7	0	0.0	12	1.0
	History	0	0.0	2	3.3	0	0.0	15	1.3
	Humanities	26	8.7	12	20.0	0	0.0	61	5.1
	Law	22	7.4	0	0.0	0	0.0	22	1.8
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	202	67.6	3	5.0	1	2.0	194	16.2
	Science/Math	7	2.3	1	1.7	0	0.0	28	2.3
	Social Sciences/Psychology	0	0.0	6	10.0	1	2.0	72	6.0
	Other	4	1.3	11	18.3	0	0.0	302	25.3
	Undecided	0	0.0	0	0.0	0	0.0	0	0.0
	Not Reported	23	7.7	0	0.0	0	0.0	13	1.1

		Pace University Phase 3 Spring 2005 (n=122)		Pace University Spring 2007 (n=139)		Palm Beach Community College Phase 3 Spring 2005 (n=290)		Phoenix College Phase 3 Spring 2005 (n=166)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	3	2.5	4	2.9	203	70.0	119	71.7
	Sophomore	18	14.8	90	64.7	81	27.9	29	17.5
	Junior	6	4.9	34	24.5	1	0.3	3	1.8
	Senior	91	74.6	11	7.9	2	0.7	1	0.6
	Other	3	2.5	0	0.0	3	1.0	12	7.2
	Not Reported	1	0.8	0	0.0	0	0.0	2	1.2
Student Major	Agriculture/Environmental Studies	1	0.8	2	1.4	0	0.0	0	0.0
	Architecture	0	0.0	0	0.0	1	0.3	3	1.8
	Business	54	44.3	77	55.4	8	2.8	10	6.0
	Communications/Journalism	7	5.7	7	5.0	2	0.7	0	0.0
	Education	12	9.8	3	2.2	2	0.7	4	2.4
	Engineering/Computer Science	1	0.8	3	2.2	3	1.0	5	3.0
	General Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Health Sciences	6	4.9	5	3.6	2	0.7	26	15.7
	History	0	0.0	0	0.0	0	0.0	0	0.0
	Humanities	6	4.9	3	2.2	231	79.7	62	37.3
	Law	2	1.6	2	1.4	4	1.4	17	10.2
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	9	7.4	8	5.8	34	11.7	32	19.3
	Science/Math	4	3.3	3	2.2	1	0.3	0	0.0
	Social Sciences/Psychology	5	4.1	3	2.2	1	0.3	1	0.6
	Other	14	11.5	18	12.9	0	0.0	0	0.0
	Undecided	0	0.0	5	3.6	0	0.0	0	0.0
	Not Reported	1	0.8	0	0.0	1	0.3	6	3.6

		Pittsburgh Phase 3 Spring 2005 (n=187)		Pittsburgh Engineering 11 2006 Fall 2006 (n=373)		Pittsburgh Fall06 CGS PubSpking Fall 2006 (n=20)		Pittsburgh IAS Fall 2006 Fall 2006 (n=583)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	87	46.5	371	99.5	4	20.0	582	99.8
	Sophomore	48	25.7	2	0.5	3	15.0	0	0.0
	Junior	31	16.6	0	0.0	7	35.0	0	0.0
	Senior	17	9.1	0	0.0	5	25.0	0	0.0
	Other	3	1.6	0	0.0	1	5.0	1	0.2
	Not Reported	1	0.5	0	0.0	0	0.0	0	0.0
Student Major	Agriculture/Environmental Studies	1	0.5	0	0.0	0	0.0	4	0.7
	Architecture	0	0.0	0	0.0	0	0.0	5	0.9
	Business	9	4.8	0	0.0	0	0.0	14	2.4
	Communications/Journalism	8	4.3	0	0.0	4	20.0	18	3.1
	Education	3	1.6	0	0.0	0	0.0	16	2.7
	Engineering/Computer Science	89	47.6	372	99.7	0	0.0	11	1.9
	General Studies	0	0.0	0	0.0	3	15.0	1	0.2
	Health Sciences	0	0.0	0	0.0	4	20.0	79	13.6
	History	0	0.0	0	0.0	0	0.0	15	2.6
	Humanities	16	8.6	0	0.0	0	0.0	19	3.3
	Law	0	0.0	0	0.0	1	5.0	7	1.2
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	53	28.3	0	0.0	2	10.0	69	11.8
	Science/Math	0	0.0	0	0.0	0	0.0	4	0.7
	Social Sciences/Psychology	0	0.0	0	0.0	0	0.0	101	17.3
	Other	7	3.7	0	0.0	5	25.0	42	7.2
	Undecided	0	0.0	1	0.3	1	5.0	178	30.5
	Not Reported	1	0.5	0	0.0	0	0.0	0	0.0

		Pittsburgh Master the Univ 2006		Pittsburgh CGS Spring 2007		Pittsburgh Comm 2007 post-test		Pittsburgh Comm Sp2007 pre-test	
		Fall 2006		Spring 2007		Spring 2007		Spring 2007	
		(n=23)		(n=143)		(n=50)		(n=201)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	12	52.2	21	14.7	19	38.0	74	36.8
	Sophomore	2	8.7	34	23.8	18	36.0	81	40.3
	Junior	4	17.4	31	21.7	8	16.0	34	16.9
	Senior	0	0.0	34	23.8	4	8.0	11	5.5
	Other	5	21.7	23	16.1	1	2.0	1	0.5
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Agriculture/Environmental Studies	0	0.0	1	0.7	1	2.0	0	0.0
	Architecture	0	0.0	0	0.0	1	2.0	1	0.5
	Business	0	0.0	7	4.9	0	0.0	12	6.0
	Communications/Journalism	0	0.0	11	7.7	29	58.0	102	50.7
	Education	0	0.0	3	2.1	0	0.0	0	0.0
	Engineering/Computer Science	0	0.0	4	2.8	2	4.0	6	3.0
	General Studies	4	17.4	18	12.6	0	0.0	0	0.0
	Health Sciences	1	4.3	11	7.7	0	0.0	7	3.5
	History	0	0.0	0	0.0	2	4.0	5	2.5
	Humanities	3	13.0	10	7.0	3	6.0	4	2.0
	Law	1	4.3	7	4.9	1	2.0	3	1.5
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	5	21.7	33	23.1	1	2.0	13	6.5
	Science/Math	0	0.0	0	0.0	0	0.0	1	0.5
	Social Sciences/Psychology	1	4.3	11	7.7	0	0.0	1	0.5
	Other	2	8.7	16	11.2	2	4.0	10	5.0
	Undecided	6	26.1	11	7.7	8	16.0	36	17.9
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		Polk Community College Nursing 1 2006 Fall 2006 (n=87)		Ramapo College of New Jersey 2006 Fall Freshmen Spring 2007 (n=232)		Rio Salado College Phase 3 Spring 2005 (n=521)		Robert Morris University Phase 3 Spring 2005 (n=394)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	0	0.0	230	99.1	128	24.6	41	10.4
	Sophomore	0	0.0	2	0.9	139	26.7	196	49.7
	Junior	0	0.0	0	0.0	60	11.5	115	29.2
	Senior	0	0.0	0	0.0	37	7.1	38	9.6
	Other	87	100.0	0	0.0	157	30.1	2	0.5
	Not Reported	0	0.0	0	0.0	0	0.0	2	0.5
Student Major	Agriculture/Environmental Studies	0	0.0	0	0.0	1	0.2	4	1.0
	Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business	0	0.0	57	24.6	83	15.9	206	52.3
	Communications/Journalism	0	0.0	0	0.0	4	0.8	39	9.9
	Education	0	0.0	8	3.4	105	20.2	32	8.1
	Engineering/Computer Science	0	0.0	7	3.0	51	9.8	18	4.6
	General Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Health Sciences	87	100.0	18	7.8	1	0.2	24	6.1
	History	0	0.0	15	6.5	0	0.0	0	0.0
	Humanities	0	0.0	1	0.4	105	20.2	10	2.5
	Law	0	0.0	5	2.2	21	4.0	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	0	0.0	27	11.6	143	27.4	0	0.0
	Science/Math	0	0.0	0	0.0	0	0.0	19	4.8
	Social Sciences/Psychology	0	0.0	22	9.5	0	0.0	6	1.5
	Other	0	0.0	13	5.6	2	0.4	34	8.6
	Undecided	0	0.0	59	25.4	0	0.0	0	0.0
	Not Reported	0	0.0	0	0.0	5	1.0	2	0.5

		Rutgers University Phase 3 Spring 2005 (n=100)		Saint Mary's College Phase 3 Spring 2005 (n=285)		Samford University Phase 3 Spring 2005 (n=385)		San Jose State University Phase 3 Spring 2005 (n=195)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	99	99.0	284	99.6	328	85.2	27	13.8
	Sophomore	1	1.0	1	0.4	18	4.7	1	0.5
	Junior	0	0.0	0	0.0	16	4.2	102	52.3
	Senior	0	0.0	0	0.0	20	5.2	42	21.5
	Other	0	0.0	0	0.0	1	0.3	23	11.8
	Not Reported	0	0.0	0	0.0	2	0.5	0	0.0
Student Major	Agriculture/Environmental Studies	2	2.0	0	0.0	0	0.0	1	0.5
	Architecture	0	0.0	2	0.7	0	0.0	0	0.0
	Business	11	11.0	33	11.6	34	8.8	134	68.7
	Communications/Journalism	5	5.0	16	5.6	45	11.7	1	0.5
	Education	2	2.0	24	8.4	34	8.8	0	0.0
	Engineering/Computer Science	0	0.0	5	1.8	5	1.3	1	0.5
	General Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Health Sciences	0	0.0	1	0.4	53	13.8	4	2.1
	History	0	0.0	0	0.0	9	2.3	8	4.1
	Humanities	5	5.0	47	16.5	26	6.8	8	4.1
	Law	2	2.0	25	8.8	5	1.3	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	70	70.0	124	43.5	99	25.7	21	10.8
	Science/Math	0	0.0	0	0.0	24	6.2	4	2.1
	Social Sciences/Psychology	0	0.0	0	0.0	18	4.7	2	1.0
	Other	0	0.0	5	1.8	30	7.8	11	5.6
	Undecided	3	3.0	0	0.0	0	0.0	0	0.0
	Not Reported	0	0.0	3	1.1	3	0.8	0	0.0

		School of Visual Arts Phase 3 Spring 2005 (n=161)		Scottsdale Community College Spring 2007 Sample Spring 2007 (n=250)		Seattle Pacific University Phase 3 Spring 2005 (n=324)		South Florida Phase 3 Spring 2005 (n=401)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	140	87.0	60	24.0	0	0.0	33	8.2
	Sophomore	16	9.9	109	43.6	1	0.3	135	33.7
	Junior	0	0.0	37	14.8	12	3.7	133	33.2
	Senior	1	0.6	18	7.2	285	88.0	83	20.7
	Other	4	2.5	26	10.4	25	7.7	8	2.0
	Not Reported	0	0.0	0	0.0	1	0.3	9	2.2
Student Major	Agriculture/Environmental Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Architecture	0	0.0	5	2.0	0	0.0	0	0.0
	Business	0	0.0	29	11.6	74	22.8	39	9.7
	Communications/Journalism	0	0.0	18	7.2	8	2.5	180	44.9
	Education	0	0.0	17	6.8	36	11.1	9	2.2
	Engineering/Computer Science	0	0.0	4	1.6	2	0.6	4	1.0
	General Studies	0	0.0	5	2.0	0	0.0	0	0.0
	Health Sciences	0	0.0	14	5.6	0	0.0	0	0.0
	History	0	0.0	2	0.8	22	6.8	0	0.0
	Humanities	0	0.0	4	1.6	72	22.2	10	2.5
	Law	0	0.0	4	1.6	1	0.3	31	7.7
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	21	13.0	85	34.0	3	0.9	106	26.4
	Science/Math	140	87.0	8	3.2	9	2.8	0	0.0
	Social Sciences/Psychology	0	0.0	10	4.0	8	2.5	0	0.0
	Other	0	0.0	15	6.0	88	27.2	13	3.2
	Undecided	0	0.0	30	12.0	0	0.0	0	0.0
	Not Reported	0	0.0	0	0.0	1	0.3	9	2.2

		Southern California Phase 3 Spring 2005 (n=232)		St. Ambrose University Phase 3 Spring 2005 (n=197)		SUNY Geneseo February/March Spring 2007 (n=199)		SUNY Geneseo Spring 2007 INTD 105 Spring 2007 (n=261)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	64	27.6	139	70.6	47	23.6	242	92.7
	Sophomore	142	61.2	21	10.7	52	26.1	17	6.5
	Junior	20	8.6	24	12.2	57	28.6	2	0.8
	Senior	5	2.2	13	6.6	41	20.6	0	0.0
	Other	0	0.0	0	0.0	2	1.0	0	0.0
	Not Reported	1	0.4	0	0.0	0	0.0	0	0.0
Student Major	Agriculture/Environmental Studies	2	0.9	0	0.0	0	0.0	1	0.4
	Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business	25	10.8	27	13.7	18	9.0	39	14.9
	Communications/Journalism	24	10.3	14	7.1	8	4.0	16	6.1
	Education	0	0.0	40	20.3	48	24.1	24	9.2
	Engineering/Computer Science	27	11.6	5	2.5	2	1.0	1	0.4
	General Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Health Sciences	2	0.9	25	12.7	3	1.5	6	2.3
	History	5	2.2	0	0.0	6	3.0	15	5.7
	Humanities	11	4.7	3	1.5	8	4.0	1	0.4
	Law	0	0.0	3	1.5	2	1.0	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	42	18.1	22	11.2	27	13.6	30	11.5
	Science/Math	38	16.4	4	2.0	1	0.5	6	2.3
	Social Sciences/Psychology	18	7.8	24	12.2	43	21.6	68	26.1
	Other	36	15.5	30	15.2	22	11.1	24	9.2
	Undecided	0	0.0	0	0.0	11	5.5	30	11.5
	Not Reported	2	0.9	0	0.0	0	0.0	0	0.0

		Tennessee, Knoxville Phase 3 Spring 2005 (n=543)		Texas A&M University - Kingsville Phase 3 Spring 2005 (n=432)		Texas A&M University - Kingsville Spring 2007 (n=110)		Texas at Austin Phase 3 Spring 2005 (n=980)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	327	60.2	214	49.5	28	25.5	97	9.9
	Sophomore	126	23.2	42	9.7	17	15.5	207	21.1
	Junior	53	9.8	75	17.4	27	24.5	246	25.1
	Senior	31	5.7	97	22.5	38	34.5	430	43.9
	Other	4	0.7	4	0.9	0	0.0	0	0.0
	Not Reported	2	0.4	0	0.0	0	0.0	0	0.0
Student Major	Agriculture/Environmental Studies	20	3.7	87	20.1	24	21.8	0	0.0
	Architecture	9	1.7	0	0.0	0	0.0	0	0.0
	Business	27	5.0	44	10.2	0	0.0	82	8.4
	Communications/Journalism	9	1.7	6	1.4	25	22.7	0	0.0
	Education	5	0.9	0	0.0	1	0.9	34	3.5
	Engineering/Computer Science	19	3.5	51	11.8	25	22.7	0	0.0
	General Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Health Sciences	0	0.0	44	10.2	10	9.1	0	0.0
	History	0	0.0	9	2.1	0	0.0	58	5.9
	Humanities	10	1.8	26	6.0	4	3.6	347	35.4
	Law	1	0.2	0	0.0	0	0.0	1	0.1
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	20	3.7	2	0.5	10	9.1	11	1.1
	Science/Math	1	0.2	17	3.9	0	0.0	0	0.0
	Social Sciences/Psychology	5	0.9	49	11.3	10	9.1	0	0.0
	Other	26	4.8	97	22.5	0	0.0	447	45.6
	Undecided	389	71.6	0	0.0	1	0.9	0	0.0
	Not Reported	2	0.4	0	0.0	0	0.0	0	0.0

		Thomas College Fall2006 Fall 2006 (n=189)		Thomas College EH112 Spring2007 Spring 2007 (n=91)		Trinity University Phase 3 Spring 2005 (n=100)		Valencia Community College Phase 3 Spring 2005 (n=946)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	124	65.6	78	85.7	24	24.0	762	80.5
	Sophomore	8	4.2	7	7.7	24	24.0	154	16.3
	Junior	13	6.9	1	1.1	32	32.0	5	0.5
	Senior	43	22.8	0	0.0	20	20.0	1	0.1
	Other	1	0.5	0	0.0	0	0.0	16	1.7
	Not Reported	0	0.0	5	5.5	0	0.0	8	0.8
Student Major	Agriculture/Environmental Studies	1	0.5	0	0.0	1	1.0	1	0.1
	Architecture	1	0.5	0	0.0	0	0.0	1	0.1
	Business	46	24.3	15	16.5	42	42.0	128	13.5
	Communications/Journalism	0	0.0	0	0.0	11	11.0	19	2.0
	Education	11	5.8	8	8.8	3	3.0	50	5.3
	Engineering/Computer Science	14	7.4	6	6.6	5	5.0	105	11.1
	General Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Health Sciences	0	0.0	0	0.0	0	0.0	110	11.6
	History	0	0.0	0	0.0	5	5.0	0	0.0
	Humanities	0	0.0	0	0.0	5	5.0	295	31.2
	Law	1	0.5	3	3.3	0	0.0	42	4.4
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	95	50.3	45	49.5	15	15.0	129	13.6
	Science/Math	0	0.0	0	0.0	0	0.0	17	1.8
	Social Sciences/Psychology	1	0.5	1	1.1	4	4.0	21	2.2
	Other	14	7.4	6	6.6	9	9.0	2	0.2
	Undecided	4	2.1	2	2.2	0	0.0	0	0.0
	Not Reported	1	0.5	5	5.5	0	0.0	26	2.7

		Vanderbilt University 2007 Spring Pilot		Villanova University Phase 3		Virgin Islands Phase 3		Washburn University Phase 3	
		Spring 2007		Spring 2005		Spring 2005		Spring 2005	
		(n=102)		(n=285)		(n=207)		(n=43)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	31	30.4	98	34.4	176	85.0	1	2.3
	Sophomore	29	28.4	23	8.1	14	6.8	4	9.3
	Junior	21	20.6	19	6.7	8	3.9	17	39.5
	Senior	21	20.6	145	50.9	4	1.9	19	44.2
	Other	0	0.0	0	0.0	4	1.9	2	4.7
	Not Reported	0	0.0	0	0.0	1	0.5	0	0.0
Student Major	Agriculture/Environmental Studies	1	1.0	0	0.0	0	0.0	0	0.0
	Architecture	0	0.0	0	0.0	0	0.0	0	0.0
	Business	2	2.0	55	19.3	57	27.5	2	4.7
	Communications/Journalism	2	2.0	0	0.0	1	0.5	8	18.6
	Education	9	8.8	2	0.7	27	13.0	10	23.3
	Engineering/Computer Science	13	12.7	55	19.3	21	10.1	1	2.3
	General Studies	0	0.0	0	0.0	0	0.0	0	0.0
	Health Sciences	3	2.9	24	8.4	18	8.7	4	9.3
	History	3	2.9	0	0.0	0	0.0	0	0.0
	Humanities	7	6.9	39	13.7	6	2.9	3	7.0
	Law	1	1.0	6	2.1	0	0.0	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	21	20.6	15	5.3	40	19.3	6	14.0
	Science/Math	10	9.8	0	0.0	4	1.9	0	0.0
	Social Sciences/Psychology	11	10.8	21	7.4	24	11.6	1	2.3
	Other	14	13.7	68	23.9	6	2.9	8	18.6
	Undecided	5	4.9	0	0.0	0	0.0	0	0.0
	Not Reported	0	0.0	0	0.0	3	1.4	0	0.0

		Washington State University Phase 3 Spring 2005 (n=148)		Wayne State University WSU 2006-2007 Spring 2007 (n=190)		Western Ontario Phase 3 Spring 2005 (n=1,727)		Wisconsin Comm-A Inventory Fall 2006 (n=29)	
	Characteristics	n	%	n	%	n	%	n	%
Class Standing	Freshman	0	0.0	109	57.4	402	23.3	27	93.1
	Sophomore	0	0.0	45	23.7	579	33.5	2	6.9
	Junior	11	7.4	20	10.5	394	22.8	0	0.0
	Senior	97	65.5	16	8.4	348	20.2	0	0.0
	Other	40	27.0	0	0.0	4	0.2	0	0.0
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0
Student Major	Agriculture/Environmental Studies	0	0.0	0	0.0	5	0.3	4	13.8
	Architecture	0	0.0	0	0.0	2	0.1	0	0.0
	Business	0	0.0	32	16.8	202	11.7	5	17.2
	Communications/Journalism	0	0.0	11	5.8	49	2.8	0	0.0
	Education	0	0.0	16	8.4	33	1.9	3	10.3
	Engineering/Computer Science	0	0.0	5	2.6	69	4.0	2	6.9
	General Studies	0	0.0	2	1.1	0	0.0	0	0.0
	Health Sciences	147	99.3	37	19.5	386	22.4	3	10.3
	History	0	0.0	1	0.5	0	0.0	0	0.0
	Humanities	0	0.0	0	0.0	120	6.9	1	3.4
	Law	0	0.0	8	4.2	1	0.1	0	0.0
	Military/Naval Science	0	0.0	0	0.0	0	0.0	0	0.0
	Performing & Fine Arts	0	0.0	17	8.9	18	1.0	2	6.9
	Science/Math	0	0.0	15	7.9	115	6.7	0	0.0
	Social Sciences/Psychology	1	0.7	13	6.8	198	11.5	1	3.4
	Other	0	0.0	13	6.8	529	30.6	1	3.4
	Undecided	0	0.0	20	10.5	0	0.0	7	24.1
	Not Reported	0	0.0	0	0.0	0	0.0	0	0.0

		York University Phase 3 Spring 2005 (n=281)		Youngstown State University Phase 3 Spring 2005 (n=281)	
	Characteristics	n	%	n	%
Class Standing	Freshman	64	22.8	160	56.9
	Sophomore	106	37.7	87	31.0
	Junior	54	19.2	26	9.3
	Senior	53	18.9	8	2.8
	Other	4	1.4	0	0.0
	Not Reported	0	0.0	0	0.0
Student Major	Agriculture/Environmental Studies	4	1.4	0	0.0
	Architecture	0	0.0	0	0.0
	Business	67	23.8	85	30.2
	Communications/Journalism	0	0.0	4	1.4
	Education	0	0.0	23	8.2
	Engineering/Computer Science	13	4.6	31	11.0
	General Studies	0	0.0	0	0.0
	Health Sciences	14	5.0	30	10.7
	History	10	3.6	0	0.0
	Humanities	29	10.3	39	13.9
	Law	3	1.1	0	0.0
	Military/Naval Science	0	0.0	0	0.0
	Performing & Fine Arts	20	7.1	9	3.2
	Science/Math	11	3.9	11	3.9
	Social Sciences/Psychology	16	5.7	19	6.8
	Other	91	32.4	30	10.7
	Undecided	3	1.1	0	0.0
	Not Reported	0	0.0	0	0.0

APPENDIX E

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

Skill Set: Developing a Research Strategy

24 items: 12, 50, 63, 67, 69, 76, 84, 95, 99, 101, 147, 148, 158, 191, 198, 203, 210, 215, 237, 238, 239, 255, 256, 236

Skill Set: Selecting Finding Tools

16 items: 1, 3, 19, 22, 64, 139, 142, 155, 224, 209, 232, 141, 77, 257, 204, 140

Skill Set: Searching

28 items: 7, 8, 14, 21, 24, 28, 32, 39, 43, 53, 59, 73, 88, 90, 108, 154, 196, 205, 218, 228, 230, 242, 245, 247, 251, 252, 262, 263

Skill Set: Using Finding Tool Features

7 items: 42, 58, 62, 71, 259, 260, 261

Skill Set: Retrieving Sources

13 items: 25, 29, 30, 68, 93, 104, 106, 192, 194, 195, 214, 216, 229

Skill Set: Evaluating Sources

17 items: 9, 18, 20, 27, 83, 87, 91, 92, 124, 150, 202, 206, 207, 213, 227, 233, 265

Skill Set: Documenting Sources

13 items: 40, 44, 49, 60, 111, 123, 156, 193, 197, 199, 212, 220, 234

Skill Set: Understanding Economic, Legal, and Social Issues

24 items: 75, 80, 81, 112, 113, 114, 115, 117, 118, 119, 122, 132, 133, 134, 136, 152, 153, 200, 201, 211, 221, 222, 120, 271

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

31 items: 9, 20, 27, 30, 43, 50, 63, 64, 68, 69, 73, 76, 84, 93, 95, 99, 101, 104, 106, 147, 148, 158, 191, 198, 205, 210, 215, 236, 242, 255, 256

Standard 2: Accesses Needed Information Effectively and Efficiently

63 items: 1, 3, 7, 8, 12, 14, 19, 21, 22, 24, 25, 29, 32, 39, 40, 42, 44, 49, 53, 58, 59, 60, 62, 67, 71, 88, 90, 108, 139, 140, 141, 142, 150, 154, 155, 156, 192, 193, 194, 195, 196, 197, 199, 203, 204, 214, 216, 224, 228, 229, 230, 237, 238, 239, 245, 247, 251, 252, 257, 259, 260, 261, 262

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

19 items: 18, 28, 77, 83, 87, 91, 92, 124, 202, 206, 207, 209, 213, 218, 227, 232, 233, 263, 265

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

29 items: 75, 80, 81, 111, 112, 113, 114, 115, 117, 118, 119, 120, 122, 123, 132, 133, 134, 136, 152, 153, 200, 201, 211, 212, 220, 221, 222, 234, 271

APPENDIX F

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

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.

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.

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.
95

1.1.4.6 Consults with the course instructor and librarians to develop a manageable focus for the topic.
256

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.
43

1.1.5.2 Identifies and uses appropriate general or subject-specific sources to discover terminology related to an information need.
205

1.1.5.3 Decides when a research topic has multiple facets or may need to be put into a broader context.
255

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.

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.
69, 76, 84, 210

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.
50

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.
9, 20, 27

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.
99, 101

1.2.5.2 Identifies characteristics of information that make an item a primary or secondary source in a given field.
147, 148, 158, 236

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

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.
68

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).
191, 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.

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.)

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).

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.
19

2.1.3.5 Selects appropriate tools (e.g., indexes, online databases) for research on a particular topic.
3

2.1.3.6 Identifies the differences between freely available Internet search tools and subscription or fee-based databases.
139, 140, 141, 142, 155

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).

2.1.3.10 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).
261

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.
67

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.

2.2.2.4 Identifies keywords that describe an information source (e.g., book, journal article, magazine article, Web site).
237, 238, 239

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.
53, 245

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).
7, 21

2.2.4.2 Demonstrates an understanding of the concept of Boolean logic and constructs a search statement using Boolean operators.
24, 32, 39, 154, 247

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.
8, 251

2.2.4.7 Demonstrates an understanding of the concept of truncation and uses it appropriately and effectively.
252

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.
230, 262

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.

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.

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.

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.)
156

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).
58, 260

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 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.
1, 22

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.)
40, 44, 49, 60

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.
12

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.
203

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.

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.
88, 90

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.

2.4.2 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)
204, 224

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.
193, 197

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

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.
213

3.2.1.2 Investigates an author's qualifications and reputation through reviews or biographical sources.
206, 233

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

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.
202

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, 207

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.

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, 265

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.
83

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

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.
77

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).
18

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)
209, 232

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.
263

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.
211

5.1.2.3 Describes how the terms of subscriptions or licenses may limit their use to a particular clientele or location.
222

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).
75, 81

5.1.3 Identifies and discusses issues related to censorship and freedom of speech
122, 133, 134

5.1.4 Demonstrates an understanding of intellectual property, copyright, and fair use of copyrighted material
80, 115, 117, 132, 152, 271

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")
201, 221

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, 113, 114, 118

5.2.6 Demonstrates an understanding of what constitutes plagiarism and does not represent work attributable to others as his/her own
119, 153

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).
111, 212, 234

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

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.

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.
220

5.3.1.8 Recognizes that consistency of citation format is important, especially if a course instructor has not required a particular style.
123

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

Table of Contents