# **Information Literacy Assessment 2014-2015**

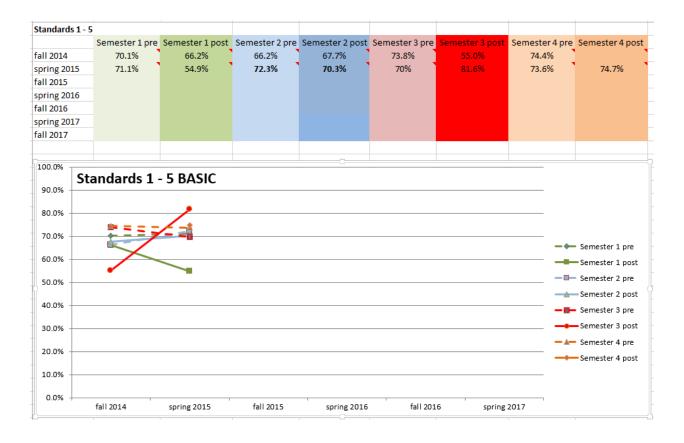
The Information Literacy Assessment (ILA) is composed of two parts, each with two assessment points. The BASIC is for general education students. First semester freshmen are assessed to establish the baseline, and forth semester sophomores are assessed to measure general education IL skills. Part two of the assessment is the CAPSTONE, which is administered to fifth semester juniors to establish a baseline score, and to eighth semester seniors. In reality, it is difficult to impossible to assess at each of these four optimal points. Instead, we assess in classes that are willing and have time to take an in-class assessment. As a result, the sample of 185 students assessed during the 2014/15 academic year represents students at all course levels. In order to analyze the results, a determination was made as to the semester each student was in at the time the assessment was taken. This information was obtained through BERT. The results were plotted by semester.

In an attempt to achieve randomness, entire classes were assessed. Unfortunately, adequate randomness was not achieved. Since the classes tended to be associated with various disciplines, noticeable score differentials showed up from class to class. For example, One FYS 100 class was filled with freshmen in the Computer Forensics and Quality Assurance program. The majority of these *freshmen* scored 70% and above on the *Pre-Test*, which is given before IL instruction is offered. Another FYS 100 class was taught by a librarian. The average score for the eight second semester *Post-Tested freshmen* in this class was 78%. These classes skewed the results for the BASIC ILA upward.

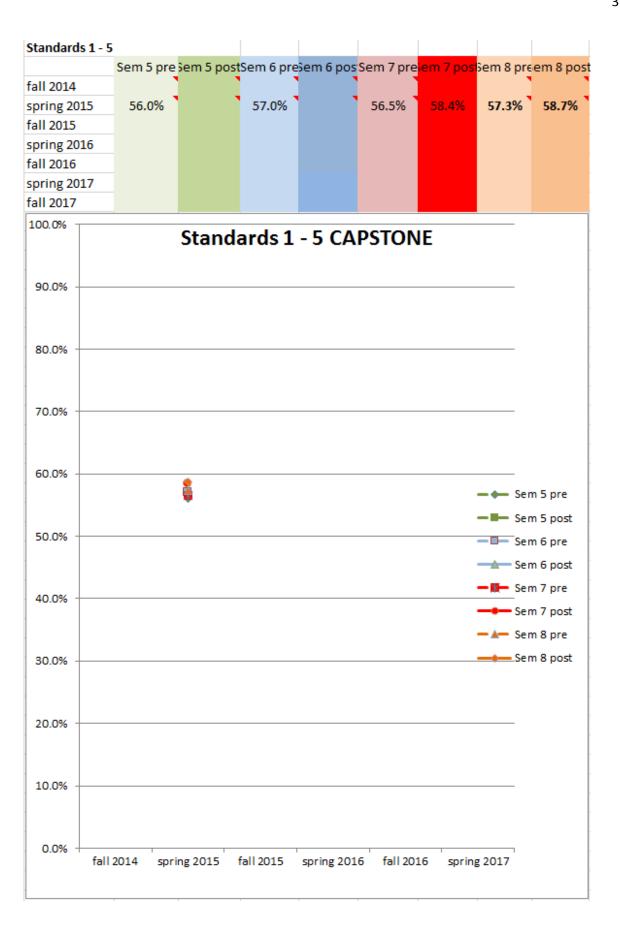
The CAPSTONE assessment was given in two capstone classes. One was Communication Disorders and the other Computer Sciences. The scores averaged about 50%. Nevertheless, seniors who were tested in other classes tended to score higher. The low results in Communication Disorders and Computer Sciences skewed the results for the CAPSTONE downward. What this shows is that students who major in disciplines that are not integrated with the library tend not to achieve scores as high as programs that integrate with the library and information literacy instruction. These results provide additional support to something long known to librarians, that the more students are required to use library resources, the higher their information literacy attainment.

The following pages show tables and graphs that indicate average scores for the BASIC and CAPSTONE ILA. It is important to note that results are recorded by semester. A 4 post result shows forth semester sophomore post-test scores (not senior level scores). The ILA BASIC graph shows little change in scores between pre- and post-tested students within any given semester, but the table shows an increasing trend in BASIC information literacy skills and knowledge from semester to semester. Due to the small numbers in some of the samples, validity of the results must be confirmed over time. Where ten or more students are represented, the percentage is in bold font. The average freshman is scoring 70% or better by the end of the second semester and the average forth semester sophomore is scoring about 80% (out of a

sample of only seven students). The Degree Qualifications Profile (DQP) requires that every student score 70% or better upon graduation.



The CAPSTONE chart on the next page has been stretched along the vertical access in order to differentiate the remarkably tight range of scores from fifth semester juniors to eighth semester seniors (regardless of pre- or post-testing). These scores are likely skewed downward because most come from only two classes, Communication Disorders and Computer Science, neither of which are integrated closely with the library. The eighth semester pre-test has a sample of ten students. The eighth semester post-test has a sample of forty students. Spring 2015 was the first semester in which the CAPSTONE was given.



Why are post-test results usually a little lower than pre-test results? Why are BASIC scores higher than expected in the second semester? Why do average scores show little movement from one semester to the next for the CAPSTONE ILA? These and other questions present themselves when the graphs are considered. Knowing the back story sheds light on these apparent anomalies. In a typical pre-test/post-test scenario, students are tested on a set of IL skills and principles, then they receive information literacy instruction which covers the items in the pretest. After the instruction is completed, they are post-tested. This methodology is not being used at Marshall. Librarians do not instruct to the test, therefore, many items on the BASIC and CAPSTONE versions of the ILA are not covered in any particular set of classes. The instruction may reference items in the IL Rubric, but is *not focused* on the rubric. Instead, librarians instruct to the needs of the class assignment and the particular research that students will be engaging in. This is done according to sound teaching practices that show students will not learn unless the instruction is relevant to them. The Information Literacy Rubric, to which the ILA is tied, covers ACRL Standards, which are a comprehensive list of IL skills, principles and learning outcomes. Library instruction usually covers some, but certainly not all, of the items in the IL Rubric. Preand post-test should be understood as pre- or post-instruction testing. Some classes are tested pre-instruction and other classes are tested post-instruction. No classes were pre- and post-tested.

Because there is no teaching to the test, it is not surprising that there is little, or sometimes negative, movement in the results between pre- and post-instruction testing. This lack of movement in the scores affirms that there is no teaching to the test. Test results, therefore, reflect what students actually know and can do. This also explains why the scores trend upward from semester to semester. Juniors and seniors scored, on average, 82.7% on the BASIC ILA (not shown on the graphs, but recorded on another document in this report. The upward trend in scores shows that students are learning information literacy in class, on their own and from friends and other sources until graduation. There is little doubt that homework assignments that require use of library resources are an important avenue to increase information literacy. This appears to be supported by relatively low CAPSTONE ILA scores in Computer Science and Communication Disorders. Those disciplines have not had active library liaison support in the past, and perhaps less need to integrate with library resources.

In order to increase ILA CAPSTONE scores, it will be important to understand which concepts and test questions are least understood. These should be addressed whenever possible, even in Gen. Ed. classes. Some BASIC ILA questions are included in the CAPSTONE ILA and vice versa. One question involves the procedure required to aggregate results to find useful articles on various topics of scientific research. Students must identify scholarly terminology used in the research they need, and place these terms in the *abstract field* of a search. This was the most missed question in the BASIC ILA. Interestingly, when twenty-two seniors took the CAPSTONE ILA as a pre-test, twenty-one of the students (95%) answered this question correctly. In the post-test, 70% of forty students answered correctly. This is probably the best unexpected result. Unfortunately, when capstone seniors were asked if they had ever set up an IDS (Inter-Library Loan) account, 63% had not. This probably indicates that they had no need because they were finding plenty of adequate information in the resources available to them. It also suggests that they are not bothering to find the *best* resources, in some cases.

The DQP requires an exit score of 70% on the ILA. On average, this has been achieved in the BASIC ILA, but not in the CAPSTONE, where pre- and post-test scores for seniors averaged 58.3%. *Seniors* who took the BASIC ILA scored 80.2%, on average. When BASIC and CAPSTONE results are averaged together, seniors are scoring 69.2%. Senior BASIC scores ought to be included in the final results since the entire IL Rubric should be mastered by graduation day.

Average scores show that the DQP minimum of 70% is almost being met. Unfortunately, a less positive picture emerges when we look at results student by student. Adding pre- and post-test results for the 4<sup>th</sup> semester BASIC ILA shows six students scored 70% and higher and two scored below 70%. In the CAPSTONE ILA, forty-five students scored below 70% and only five scored 70% or higher.

The following shows the number of students who scored below 70% and those who scored 70% or above on the BASIC pre/post-test in semesters 1-8. (A small sample of 8 students in the 4<sup>th</sup> semester indicates that 75% are achieving 70% proficiency or better on the BASIC IL Assessment. The sample is so small that pre- and post-test results have been averaged together.)

### 2014-2015 Academic Year BASIC

Pre-Test	(avg score below 70%)	(avg score 70% and above)
1 1↓ 2↑	63.6%	73.9%
2 7↓ 12↑	64.3%	76.2%
3 5↓ 3↑		
4 <mark>2↓ 5↑</mark>	66.1%	77.6%
5 0↓ 3↑		83.5%
6 0↓ 2↑		85.7%
7 1↓ 2↑	54.7%	93.3%
8 1↓ 6↑	64.1%	82.8%
Post-Test		
1 7↓ 5↑	54.5%	73.5%
2 21↓ 27↑	61.1%	76.4%
3 1↓ 2↑	66.9%	88.9%
4 <mark>0↓ 1↑</mark>		74.7%
5 0↓ 1↑		91.4%

6 0↓ 3↑	85.3%
7	

8 -- --

### 2014-2015 Academic Year CAPSTONE

The following shows the number of students who scored below 70% and those who scored 70% or above on the CAPSTONE pre/post-test in semesters 1-8. (Results for Pre- and Post-test are almost identical. Adding them together we have a good sized sample of 50 students. Only 5 achieved a score of 70% or above, which is only 10% of the students.)

Pre-Test	(avg score below 70%)	(avg score 70% and above)
1		
2 0↓ 1↑		81.1%
3		
4		
5 1↓ 0↑	56.0%	
6 3↓ 1↑	52%	72.8%
7 5↓ 1↑	52%	76.8%
8 <mark>9↓ 1↑</mark>	61.7%	81.8%
Post-Test		
1 1↓ 0↑	40.94%	
2		
3		
4		
5		
6		
7 2↓ 0↑	58.4%	
8 <mark>36↓ 4↑</mark>	55.5%	73.6%

One way to raise these scores would be to take advantage of any opportunities that allow Instruction Librarians to cover frequently missed questions in class. These IL Rubrics show results for BASIC and CAPSTONE. Questions answered correctly <50% are in red; 50% <70% in yellow;  $\geq 70\%$  in green.

# Information Literacy (Adapted from the Information Literacy Value Rubric; AAC & U) BASIC

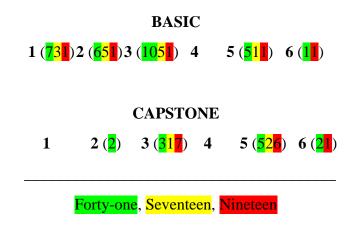
	Baseline (freshman)	Emerging (freshman and sophomore)	Acceptable (sophomore and junior)	Capstone Level (Exemplary) (senior)
Determines the Nature and Extent of the Information Needed	1.1. defines1 and articulates2 the need for information 1.1.c; 1.1.c	1.2. identifies1 a variety of types and formats of potential sources for information 1.2.c;1.2.c; 1.2.c; 1.2.cd; 1.2.d;	1.4. evaluates5 and revises5 the nature and extent of the information need	1.3. assesses5 the costs and benefits of acquiring the needed information
Accesses the Needed Information Effectively and Efficiently	2.3. (selects3 and) retrieves (implements3 a retrieval of) information online or in person using a variety of methods 2.3.a; 2.3.a; 2.3.a; 2.3.b; 2.3.c; 2.3.a	2.2. constructs6 and implements3 effectively-designed search strategies 2.2.d; 2.2.d	2.1. selects3 the most appropriate investigative methods or information retrieval systems for accessing the needed information  2.4. revises5 the search strategy if necessary.	2.3. retrieves (implements3 a retrieval of) information online or in person using a variety of methods 2.3.a;2.3.a  2.5. collects6 and arranges6 the information and its sources
Evaluates Information and its Sources Critically and Incorporates Selected Information into His or Her Knowledge Base and Value System	3.1. briefly describes2 the main ideas to be extracted from the information gathered 3.1.a	3.2. articulates2 and applies3 initial criteria for evaluating5 both the information and its sources 3.2.a; 3.2.a; 3.2.a; 3.2.a; 3.2.a; 3.7. determines5 whether the initial query should be revised 3.7.b;	3.3. synthesizes6 main ideas to construct new concepts.  3.4. compares5 new knowledge with prior knowledge to determine5 the value added, contradictions, or other unique characteristics of the information	3.5. determines5 whether the new knowledge has an impact on the individual's value system and takes steps to integrate6 differences 3.6. validates5 understanding and interpretation of the information through discourse with other individuals, subject-area experts, or practitioners
Individually, or as a Member of a Group, Uses Information Effectively to Accomplish a Specific Purpose	4.1. applies3 new and prior information to the planning and creation of a particular product or performance	4.1. applies3 new and prior information to the planning and creation of a particular product or performance	4.2. revises5 the development process for the product or performance	4.3. produces6/performs6 the product or performance effectively to others
Understands Many of the Economic, Legal, and Social Issues Surrounding the Use of Information and Accesses and Uses Information Ethically and Legally	5.3. identifies1 and reports2 the use of information sources in communicating the product or performance (5.2.f & 5.3);5.2.f	5.3. identifies and reports2 the use of information sources in communicating the product or performance	5.2. employs3 laws, regulations, institutional policies, and etiquette related to the access and use of information resources 5.2.f	5.1. evaluates5 and applies3 many of the ethical, legal and socioeconomic issues surrounding information and information technology

# <u>Information Literacy (Adapted from the Information Literacy Value Rubric; AAC & U)</u> CAPSTONE

Determines the Nature and Extent of the Information Needed  Accesses the Needed Information Effectively and Efficiently  Evaluates Information and its Sources Critically and Incorporates Selected Information into His or Her Knowledge Base and Value	1.1. defines1 and articulates2 the need for information  2.3. (selects3 and) retrieves (implements3 a retrieval of) information online or in person using a variety of methods  3.1. briefly describes2 the main ideas to be extracted from the information gathered	Emerging (freshman and sophomore)  1.2. identifies 1 a variety of types and formats of potential sources for information  2.2. constructs 6 and implements 3 effectively-designed search strategies  3.2. articulates 2 and applies 3 initial criteria for evaluating 5 both the information and its sources	Acceptable (sophomore and junior)  1.4. evaluates5 and revises5 the nature and extent of the information need 1.4;1.4;1.4;1.4  2.1. selects3 the most appropriate investigative methods or information retrieval systems for accessing the needed information 2.1.c;2.1.c;2.1.c;2.1.cc;2.1.cc  2.4. revises5 the search strategy if necessary. 2.4.c  3.3. synthesizes6 main ideas to construct new concepts. 3.3.b;3.3.a  3.4. compares5 new knowledge with prior knowledge to determine5 the value	Capstone Level (Exemplary) (senior)  1.3. assesses5 the costs and benefits of acquiring the needed information 1.3.a;1.3.a  2.3. retrieves (implements3 a retrieval of) information online or in person using a variety of methods 2.3.d;2.3.a;2.3.a  2.5. collects6 and arranges6 the information and its sources 2.5.b  3.5. determines5 whether the new knowledge has an impact on the individual's value system and takes steps to integrate6 differences 3.6. validates5
System		3.7. determines5 whether the initial query should be revised	added, contradictions, or other unique characteristics of the information 8.4.defg; 3.4	understanding and interpretation of the information through discourse with other individuals, subject-area experts, or practitioners
Individually, or as a Member of a Group, Uses Information Effectively to Accomplish a Specific Purpose	4.1. applies3 new and prior information to the planning and creation of a particular product or performance	4.1. applies3 new and prior information to the planning and creation of a particular product or performance	4.2. revises5 the development process for the product or performance	4.3.  produces6/performs6  the product or performance effectively to others
Understands Many of the Economic, Legal, and Social Issues Surrounding the Use of Information and Accesses and Uses Information Ethically and Legally	5.3. identifies1 and reports2 the use of information sources in communicating the product or performance	5.3. identifies and reports2 the use of information sources in communicating the product or performance 5.3.a;(5.2.f&5.3);	5.2. employs3 laws, regulations, institutional policies, and etiquette related to the access and use of information resources 5.2.f;5.2.f	5.1. evaluates5 and applies3 many of the ethical, legal and socioeconomic issues surrounding information and information technology 5.1; (5.1&5.3f)

### **Bloom's Taxonomy Ranking**

Verbs used in the IL Rubric are assigned a number which corresponds to the six columns in Bloom's Taxonomy of Higher Order Thinking. Looking at the numbers associated with questions highlighted in green, it is possible to see how the "passing" scores align with Bloom's. Red items are < 50% correct, yellow shows 50% < 70% green is  $\ge 70\%$ .



### The ten most frequently missed questions on the BASIC ILA are:

3.7.b Revises the search strategy if necessary: You are researching the impact that wolves have on the environment. In your i... Multiple Choice(QS) 0.03 26.48% 68 2.65 4.45 0.54

You are researching the impact that wolves have on the environment. In your initial search query, you run a full-text search using the words wolves and environmental impact. You get thousands of hits, but after scanning the search results for about ten minutes, you find only one article that looks good for your paper. You read the abstract of this article and find that can is lupus is used to refer to wolves and trophic cascades is a phrase used to refer to their impact on the environment. In order to find additional scholarly articles like this one, you decide to change the words of your initial search query to can lupus and trophic cascades. Which field should you search to obtain the best results?

full-text

title

abstract

subject

#### Incorrect Feedback

The abstract field of a scholarly article is a summary of the article, and it contains the most precise and relevant scholarly terminology. By rerunning your search in the abstract field using those scholarly terms, you are likely to find articles that not only use these terms, but articles that are primarily about the topic you are researching. What are some reasons why each of the other fields are unlikely to produce as good of results as a new search of the abstract field using scholarly terminology?

2.2.d Constructs a search strategy using appropriate commands for the information retrieval system: In an article by Bernie Becker in the New York Times, on 7/17/2010, West Virg...

Multiple Choice(QS) 0.32 29.42% 68

2.95

4.6

0.56

In an article by Bernie Becker in the New York Times, on 7/17/2010, West Virginia's governor, Joe Manchin III, announced on Friday that he had chosen.....to temporarily fill the Senate seat long held by Robert C. Byrd. To locate the desired information, go back to EBSCOhost MasterFILE Premier and enter the following search string:

"West Virginia" AND election\* AND governor

Lisa Rickard

**Shelley Moore Capito** 

### Carte P. Goodwin

he did not make an interim appointment

Incorrect Feedback

It is cumbersome to find the correct article, but your task is simplified if you change the "Relevance" ranking to "Date Descending" on the blue bar directly above the first hit, then look for an article written on 7/17/2010. Can you think of a search strategy that includes none of the previously used terms and places the correct article at or near the top of the hits page?

1.1.c Beginning the research process: Your instructor has given you a general topic to research that you know nothi... Multiple Choice(QS) 0.09 68 3.68 4.86 0.59 36.77%

You have been instructed to study the topic and then write a research paper on one aspect of the topic that interests you. Instead of Googling the topic, what is the best first step you should take to begin your research and learn more about your assigned topic?

select one aspect of the topic that you wish to write about

find and read scholarly or professional journal articles about the topic

locate a reference source such as an encyclopedia or dictionary to read a short overview of the topic

find and read a book about the topic

#### Incorrect Feedback

Since you know nothing about the topic, it is very important to find and read a short overview that will provide you with the basics. Why is Wikipedia not the best choice to start your research given that it provides a short overview of your topic?

2.3.a Determines the availability of needed information: You will need to go to the Marshall University webpage and access the Library...Multiple Choice(QS) 0.2 52.95% 68

5.3 5.03 0.61

You will need to go to the Marshall University webpage and access the Library site. (Go to ACADEMICS> LIBRARIES> ALL ARTICLE DATABASES> EBSCOhost> MasterFILE Premier to answer this next question). You are looking for an article called "Economic Lessons from Across the Pond." How can you get a copy of this entire article for free?

Use the EBSCOHost MasterFILE Premier "E-mail" feature to email the article to yourself

3.2.a Articulates and applies initial criteria for evaluating information and its sources: The WND Books press is non-biased. (Go online to help make your selection) True/False(QS)

0.47

**52.95%** 68 5.3 5.03 0.61

The WND Books press is non-biased. (Go online to help make your selection)

#### **False**

#### Incorrect Feedback

Bias does not imply error. However, it does indicate that certain agendas are being pursued and that information will be viewed from a perspective that supports these agendas. When using biased sources, it is a good idea to seek balance by researching information presented by authors with different points of view and different biases. It is easier to find information in the hard sciences that is not biased, but the soft sciences are prone to bias because they deal with social issues. Can you think of ways in which the hard sciences are biased?

1.2.cd Identifies the value and differences of potential resources in a variety of formats: Your professor wants you to find at least one peer-reviewed article. What is ... Multiple Choice(QS)

0.51 60.3% 68 6.03 4.93 0.0

Your professor wants you to find at least one peer-reviewed article. What is a peer-reviewed article?

# an article that was critically assessed by scholars in the field prior to publication

an article that was critically assessed by scholars from a variety of fields prior to publication an article that an editor looked over for grammatical errors prior to publication an article in a non-scholarly newspaper or magazine

#### Incorrect Feedback

The editor removes the name of the author from a manuscript and sends it to three or more scholars in the same field to review and provide feedback prior to publication. This feedback is forwarded on to the author. Peer reviewers do not know the author and the author does not know the identity of the reviewers. Peer reviewers will make a recommendation to the editor whether or not the article is scholarly and ought to be published. This process ensures that a high level of confidence and trust may be placed in articles that are selected for publication. Can you think of an example where the peer review process could break down and not work as it is intended to work?

5.2.f Employs laws, regulations, institutional policies and etiquette related to information: What is a citation? Multiple Choice(QS) 0.34 60.3% 68 6.03 4.93 0.6

What is a citation?

a list of keywords

a quotation from a reference to a book, paper, or author, especially in a scholarly work

### the identifying elements of a source

a short summary of a book or article

#### Incorrect Feedback

A citation identifies source materials. If you do not identify the source materials that you use, this is called plagiarism. Plagiarism occurs whenever you misrepresent the work of others as your own. Apart from avoiding plagiarism, what other reasons can you give for why it is important to use citations?

1.1.c Explores general information sources to increase familiarity with the topic: Reference materials are designed to provide users with quick facts, brief ove... Multiple Choice(QS)

0.44 **61.77%** 

68

6.18 4.9

0.6

Reference materials are designed to provide users with quick facts, brief overviews, or intermediate information on a given topic. Libraries use databases to house information. Databases are typically collections of searchable related information. With this in mind, reference books and reference databases typically contain

### authoritative articles on topics (examples include dictionaries and encyclopedias)

articles from websites (examples include WebMD and MayoClinic.com)

non-scholarly information

very lengthy articles that provide in-depth information

#### Incorrect Feedback

Reference resources provide a scholarly overview of a topic. They introduce you to key concepts, dates, individuals and other facts. Unlike Wikipedia, you may cite the reference resources provided by the library because the authors are authoritative and the publishers are reputable. Can you give one or more examples of a reference source?

2.3.b Retrieves information online or in person using a variety of methods.: The majority of books in this and most other academic libraries are arran... Multiple Choice(QS) 0.4

61.77%

68

6.18

4.9

The majority of books in this and most other academic libraries are arranged by what classification system?

**Dewey Decimal System** 

# Library of Congress Classification

**Taxonomic Classification System** 

**Esperanto Classification System** 

none of the above

#### Incorrect Feedback

Most colleges and universities use Library of Congress Classification, so, for the most part, books are arranged the same way in all of them! Even though the LCC system is based upon a taxonomy, this particular one is called Library of Congress Classification. Only a small number

of our books use the Dewey Decimal System, such as the juvenile book collection. When books are arranged in a certain order, they are referred to as a "book collection." Without this special arranging of the books, it would not be a collection, but merely a bunch of books. What reasons can you come up with for why it would be advantageous to arrange books the same way everywhere?

\_\_\_\_\_

3.1.a Briefly describes the main ideas to be extracted from the information gathered: Where is the best place to identify the main ideas of an article? Multiple Choice(QS) 0.42

**61.77%** 

68

6.18

4.9 0.

Where is the best place to identify the main ideas of an article?

article subject terms

title

table of contents

### abstract

Incorrect Feedback

Although the main ideas might be found in any of the choices provided, the abstract is always the best place to look because it is a summary of the contents of an article or book. Abstracts are written to provide the most important information, including main points, scholarly terminology, important people and dates, etc. Do you think the other choices provided as possible correct answers to this question complement the information that is found in an abstract? Why or why not?

### The ten most frequently missed questions on the CAPSTONE ILA are:

2.1.c Investigates the scope, content, and organization of information retrieval systems: You have to find firsthand accounts of the 9/11 attack in New York City. Whic... Multiple Choice 0.13 27.91% 43 2.8 4.54 0.7

You have to find firsthand accounts of the 9/11 attack in New York City. Which of the following sets of sources would give you the best results?

Historical Abstracts, Academic Search Premier, CQ Researcher

America: History and Life, JSTOR, Project MUSE

CQ Researcher, Historical Abstracts, Credo Literati Reference

LexisNexis Academic, Academic Search Premier, Google

#### Incorrect Feedback

LexisNexis includes newspapers from around the world as well as transcripts of broadcast news. Academic Search Premier includes, not only journals, but magazines and newspapers. One newspaper story from 9/17/2001 is called "'Daily News' scribe on the spot tells the story." MU Libraries' online catalog will help you to find books and e-books with eye-witness accounts such as "Until the fires stopped burning: 9/11 and New York City in the words and experiences of survivors and witnesses." Would you prefer to seek eye-witness accounts in the newspaper or in a book? Why?

1.3.a Determines the availability of needed information: You will need to go online and access Academic Search Premier to answer this ... Multiple Choice 0.3 30.24% 43 3.03 4.65 0.71

You will need to go online and access Academic Search Premier to answer this next question. You are looking for an article called "Sovereign Debt Threatens the Union: The Genesis of a Federation." How can you get a copy of this article for free?

**EZ** Borrow

### IDS/Interlibrary loan

Academic Search Premier "E-mail" feature, to email the article to yourself

Search MU Summon

Incorrect Feedback

This particular article may be "located" by searching Academic Search Premier (ASP), but it cannot be "accessed." Therefore, ASP's "E-mail" option will not provide access to this article. The only means available to you is to receive it via email by placing an order through IDS/Interlibrary loan. Selecting "Search MU Summon" is also an excellent choice to find the article, but it is not accessible through Summon. What are some advantages to a library using a digitally based product like IDS (Information Delivery Service) rather than traditional interlibrary loan using paper documents?

1.4 The Extent of the Information Need: You have almost completed a research paper for a sociology class. Another stu... Multiple Answer 0.22 32.56% 43 3.26 2.77 0.43

You have almost completed a research paper for a sociology class. Another student just introduced you to a library database that probably would have been much better for you to use because of the number of journals that focus on your topic. You have other classes needing your attention, and you are torn over whether or not you should investigate this new resource and

gather additional information for your research paper. Indicate which of the following would be among your best approaches.

Research is never finished. It is important to know about every good database and to incorporate the information I find into my paper.

It depends. I might if I think it could make a big improvement to my research paper.

The Writing Center tutor told me my paper was not supported by enough evidence because I only cited two sources. I will look for additional articles in the database that I just found out about.

My paper is well documented, so I am not going to look into the new database now. I will look into it when writing my next paper.

Incorrect Feedback

It is okay to draw the line and conclude that your research is complete.

1.4. Information Formats: Information may be found in various formats and media including sound, print ... Multiple Choice 0.33 37.21% 43 3.73 4.9 0.75

Information may be found in various formats and media including sound, print (doc, pdf, Excel, etc.), graphics, journal articles, books, artifacts, photographs, etc. Imagine that you are preparing a research paper about the contributions of women to the war effort in World War I. You found only a few articles for your research, so you are interested in all of the information you can find on the subject, regardless of its format. How can you find every type of material accessible through the library?

### Search Summon

Search Google Scholar

Search the Library Catalog

Search LibGuides

Incorrect Feedback

Summon is known as a web scale discovery system. It searches everything in the library as well as everything that the library has access to in its database holdings on the Internet. Can you think of any library databases that allow you to search for information in a number of formats?

2.3.c Retrieves information online or in person using a variety of methods: You have already setup an IDS (Information Delivery Services) account. True/False 0.26 37.21%

43 3.73 4.9 0.75

You have already setup an IDS (Information Delivery Services) account.

True

False

Incorrect Feedback

In what ways is IDS better than previous inter-library loan systems?

3.4.defg Testing Hypotheses Using Appropriate Techniques: Scarification on the backs of some tribal members in Africa represents owners... Multiple Answer 0.41 39.54%

43 3.96 2.52 0.39

Scarification on the backs of some tribal members in Africa represents ownership and tilling of land. Tattoos on U.S. bikers often indicate membership in a bikers club. You suspect that both of these groups mark their bodies in the way they do in an effort to improve their sense of selfworth. Which of the following techniques might be appropriate for you to use to test your hypothesis?

find scholarly articles about similar studies about why Canadians get tattoos

survey Marshall University students to ask why they decided to get tattooed

survey tattoo artists for their opinions as to why people get tattooed

correlate your hypothesis with the scholarly article "Piercing among adolescents: Body art as risk marker."

correlate your hypothesis with the scholarly article "Native American tattoos: Identity and spirituality in contemporary America."

1.4 Identifying Primary and Secondary Sources: Determine which of the following items are primary, secondary, or possibly both. Matching -0.02 43.8% 43 4.38 2.5 0.39

Determine which of the following items are primary, secondary, or possibly both.

letters, interviews and surveys primary

biographies secondary

300 year old book primary or secondary

a photocopy of a primary source document primary

documentaries secondary

journal articles primary or secondary

Incorrect Feedback

Journal articles could be primary or secondary. All research articles are primary, but review articles, which provide a synopsis of the current state of research in a field, are secondary. Can you think of a situation where you would be better off using review articles rather than research articles?

2.1.c Investigates benefits and applicability of various investigative methods: You are looking for credible biographical information for a research paper ab... Multiple Choice 0.03

44.19%

43

4.42

5.03 0.77

You are looking for credible biographical information for a research paper about Eleanor Roosevelt. Which of the following would give you the best results?

Google

Credo Literati

Wikipedia

**ERIC** 

Incorrect Feedback

You can find credible biographical information about Eleanor Roosevelt by using Google, Wikipedia and ERIC. Credo Literati is the best resource to use. Why is this the case?

2.5.b Creates a system for organizing information: Which of the following techniques would be an easy and effective way to organ... Multiple Choice 0.39 44.19% 43 4.42 5.03 0.77

Which of the following techniques would be an easy and effective way to organize information that is in a digital format? (PDF, .doc, .rtf, .xls, mp3, etc.)

create citations for each item

### use a cloud-based information management tool such as Zotero

use the saved items folder in Summon and other databases

use the mindmap in Credo Literati

Incorrect Feedback

Zotero and EndNote may be the most popular tools to organize and store digital information. Folders and subfolders can be created in an outline form for all of the information you find for your research. Zotero is free and stores/organizes all of your information in the cloud so you may access it from any computer that is online. Zotero also allows you to create customized descriptors (tags) for every item saved. Zotero automatically records bibliographic (citation) information for each item saved. Create your own free Zotero account. Go to www.zotero.org and click on "Register" on the top right of the screen. The library search engine, Summon, allows you to save and export the information you wish to use, but unlike a cloud based system, Summon does not save your search results once you exit the system.

1.4. Identification of Primary and Secondary Source Material: You are required to cite five primary and five secondary sources in a paper t... Matching 0.22 44.66% 43 4.47 2.04 0.32

You are required to cite five primary and five secondary sources in a paper that you are writing. Indicate whether the following statements are true or false.

a source cannot simultaneously be primary and secondary false

a primary source cannot turn into a secondary source over time true

a secondary source cannot turn into a primary source over time false

the determination of whether a source is primary or secondary could be influenced by the type of research that I am doing true

an original paper document, such as the Constitution of the United States, becomes secondary source material when it is retrieved online false (a mistake was found in this question when gathering stats. This question shows "true" as the correct answer; however, the correct answer is "false."

#### Incorrect Feedback

Copies of important original documents like the Magna Carta are considered to be primary sources. Scholars researching the restoration or preservation of original documents would consider copies of those documents to be secondary sources in light of the special requirements of their research.

Where do we go from here? Without a doubt, several options will present themselves to improve

Embed librarians in classes wherever possible.

IL concepts and skills learned by Marshall students.

Run the ILA in classes that have students with a diversity of majors, such as English classes.

Pre-test first semester freshmen during week one in the fall to determine the baseline score.

Run only the post-instruction test after the baseline score is determined.

Run ILA post-instruction in the spring to capture more 4<sup>th</sup> and 8<sup>th</sup> semester stats (target 4th semester Gen Ed classes for the post-test).

95% of graduating seniors score 70% or better on the Basic Assessment. Capstone results are dismal, with only 10% of graduating seniors scoring at least 70%. It is important that opportunities arise to teach Capstone skills and concepts in lower division classes in order to improve the Capstone Assessment by graduation day.

Concentrate on inserting instruction that focuses on the 20 most missed questions when possible.

Ask instructors to integrate library resources in student assignments and coursework.

Systematically contact new faculty to interest them in working more closely with the library and integrating library resources into their assignments.

We could try "teaching to the test" to see if this would be beneficial. It may be difficult to find classes where it would be advisable to do this.