Abstract
This study documents the information literacy skills of college freshmen at a mid-size comprehensive university. It also examines the association between students' information literacy skills and their writing abilities as well as their overall performance in a class. A major finding of the study is that information literacy skills were positively correlated with both student writing scores and final course grades. The findings of this study call for well-integrated library instruction programs and services to improve student information literacy skills.

Effects of Information Literacy Skills on Student Writing and Course Performance

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a b s t r a c t

This study documents the information literacy skills of college freshmen at a mid-size comprehensive university. It also examines the association between students' information literacy skills and their writing abilities as well as their overall performance in a class. A major finding of the study is that information literacy skills were positively correlated with both student writing scores and final course grades. The findings of this study call for well-integrated library instruction programs and services to improve student information literacy skills.

INTRODUCTION

Developing student critical thinking skills has become essential to the mission of institutions of higher education as employers look for those skills in their new hires. One of the key findings from a national survey of business and nonprofit leaders by the Association of American Colleges and Universities (AAC&U) was 93% of surveyed employers would like their future employees to demonstrate critical thinking, communication and complex problem solving skills, and the business leaders considered these skills more important than a student’s major (AAC&U, 2013).

Information literacy (IL) and critical thinking are higher-order intellectual skills required for academic, professional and personal development and success. These two sets of skills share common goals and intersect in many areas. Information literacy includes the ability to locate information, evaluate and use it effectively whereas critical thinking involves the process of exploring and evaluating ideas in order to make a decision or form an opinion on a topic or problem (Wertz et al., 2013). Doyle (1994) stated that “while critical thinking skills provide the theoretical basis for the process, information literacy provides the skills for practical, real world application.”

In addition, two similar studies conducted by librarians and faculty members at Oregon State University and Purdue University, suggested the strong connections between information literacy and critical thinking and writing skills (Deitering & Jameson, 2008; Wertz et al., 2013).

In response to a major priority of the University of North Carolina (UNC) System’s five-year strategic plan, “Our Time, Our Future: The UNC Compact with North Carolina,” the UNC General Education Council was formed in 2013 and charged with developing general education goals and assessment tools for system’s 16 higher education institutions. Two core competencies, critical thinking and written communication skills, were recommended as system-wide fundamental requirements for successful mastery in all academic disciplines (Ortega & Stewart, 2014).

To facilitate the implementation of general education goals and the two core competencies, librarians at Appalachian State University (Appalachian) in North Carolina began seeking ways to improve student information literacy skills and started working with teaching faculty members to assess these skills. Examining the relationship between information literacy skills and student academic performance was one of many initiatives librarians undertook.

During the spring and fall semesters in 2014, librarians at Appalachian conducted a study to document freshmen information literacy skills. The premise of this study is that information literacy skills, as part of critical thinking skills, can be learned through library instruction sessions and when students utilize library resources and services. The findings of this study will help librarians better understand the correlation between student information literacy skills, writing abilities and course grades. The ultimate goal of the study was to improve
information literacy instruction and library services in order to align li-
brary teaching and services more closely with the UNC General Educa-
tion goals for developing student critical thinking and written
communication skills.

This information literacy skills study follows new directions of
higher education reforms, which emphasize teaching for understanding
and critical thinking rather than information imparting. Librarians have
been seeking new ways to help their institution strengthen academic
quality, improve access, and increase retention and graduation rates.

LITERATURE REVIEW

In the Framework for Information Literacy for Higher Education by
the Association of College and Research Libraries (ACRL), information
literacy is defined as “the set of integrated abilities encompassing the re-

ductive discovery of information, the understanding of how information is
produced and valued, and the use of information in creating new
knowledge and participating ethically in communities of learning”
(ACRL, 2015). The ACRL Information Literacy Competency Standards for
Higher Education indicated that information literacy competency
expands learning beyond formal classroom settings and provides indi-

iduals with self-directed investigations as they move into internships,
professional positions, and growing responsibilities in all aspects of
life. Information literacy forms the basis for lifelong learning, which is
essential to the mission of higher education institutions (ACRL, 2000).

Information literacy helps develop individuals’ intellectual abilities of
reasoning and critical thinking and enables them to learn how to learn
(ACRL, 2006).

The International Federation of Library Associations and Institutions
(IFLA’s Guidelines on informational literacy for lifelong learning, asserts
that information literacy skills are key competencies in lifelong learning.
They are the first step toward achieving educational goals. The develop-
ment of such skills should take place throughout citizens’ lives, and es-
pecially during their formative years, when librarians, as part of the
learning community and as experts in information management, should
assume the key role of facilitating information literacy (Lau, 2006).

By all accounts, becoming information literate is important for indi-
viduals to succeed both academically and professionally. In a report en-
titled What matters to student success: A review of the literature, Kuh,
Kinzie, Buckley, Bridges, and Kayeck (2006) suggested that information
literacy is one of the emerging indicators for student success.

The major issue for librarians, however, is to empirically assess the
impact of information literacy skills on student success. In this context,
the following literature review looks briefly at the methods of assessing
information literacy skills and their attempts to gauge the impact of in-
formation literacy skills on student academic success in institutions of
higher education.

INFORMATION LITERACY ASSESSMENT

Several studies indicated that writing portfolios and research paper
bibliographies are useful tools to evaluate students’ information literacy
learning outcomes. The bibliographies proved to be a good representa-
tion of student work because they are reliable and understandable to
both librarians and teaching faculty. Knight (2006) and Samson
(2010) from two different academic libraries, used grading rubrics,
which was developed based on the course learning objectives and the
ACRL Information Literacy Competency Standards, to evaluate and
score the research bibliographies to reflect the student’s level of infor-
mation literacy.

Scharf, Elliot, Huey, Briller, and Joshi (2007) found a high correlation
between the writing scores and information literacy scores, resulting
from a writing portfolio study of graduating seniors at the New Jersey
Institute of Technology. In addition, a writing project which incorporat-
ing information literacy components by White-Farnham and Gardner
(2014) at the University of Wisconsin-Superior, showed an improve-
ment in both student writing and information literacy.

EFFECTS OF INFORMATION LITERACY INSTRUCTION ON GPAS AND RETENTION RATES

Several recent studies focusing on the impact of information literacy
on the academic performance of students indicated that information lit-
eracy instruction and student information literacy skills were positively
 correlated with the student grade point averages (GPAs), retention and
graduation rates.

Vance, Kirk, and Gardner (2012) at Middle Tennessee State Univer-
sity examined the relationship between formal library instruction and
student retention rates and grade point average. Two years of student
demographic data and library instruction records were used to correlate
retention rates and grade point averages among first-year students.
Data analysis showed that library instruction had no impact on student
retention. However, a statistically significant result indicated that stu-
dents who had received library instruction had a higher GPA than stu-
dents who did not. The results imply the existence of positive influence
of formal library instruction on student academic achievement.

A similar study took place at the University of Wyoming (Bowles-
Terry, 2012) where librarians used a mixed-method approach to deter-
mine whether a correlation existed between information literacy in-
struction and grade point average at graduation. Academic transcript
analysis showed a significant relationship between upper-level library
instruction and higher GPA at graduation. In a focus group interview,
participants mentioned specific skills or resources learned in library in-
structions sessions were helpful for research assignments throughout
their academic careers, supporting the premise that information literacy
increases student success.

EFFECTS OF LIBRARY USES ON STUDENT PERFORMANCE

Some studies also showed that the number of library services and re-
sources students used was correlated with their GPAs and retention
rates. Researchers at the University of Minnesota (Soria, Fransen,
& Nackerud, 2014) found a positive association between library uses
(such as interlibrary loan service, number of check-outs, database access
logins) and GPAs as well as student retention rate from first to second
semesters. An interesting finding from a study conducted by Kot and
Jones (2014) at Georgia State University Library, suggested that those
who used library study rooms and attended research clinics had the
largest utilization of the library resources, and therefore had a higher
first-term GPA.

Zhong and Alexander (2007) and Cherry, Rollins, and Evans (2013)
reported that those who utilized library services and resources
(e.g., reference service, research assistance, database logins) more fre-
quently had a higher GPA.

COLLABORATION AMONG LIBRARIANS AND FACULTY

A recurring theme in the literature regarding successful implemen-
tation of information literacy instruction and assessment is the impor-
tance of librarians and faculty working together. Knight (2006); Samson
(2010), and Scharf et al. (2007) all reported that librarians and faculty jointly developed effective information literacy measure-
ment tools, resulting in significant improvements in the delivery and
systematic integration of information literacy skills into the curriculum.
Other examples include an initiative at Carleton College (Leebaw, Partlo,
& Tompkins, 2013), where librarians solicited the help of faculty in their
information literacy in a student writing project or portfolio assessment
project. Faculty provided input on the grading rubric design and partic-
ipated as writing paper readers and graders. This cooperation resulted
in a much deeper and richer assessment. This was also the case at Mid-
dlessex County College in New Jersey (Thompson, 2013) where
The literature review showed that the majority of the studies examined the relationship between information literacy skills and student academic success, which equates to better student retention rates and higher GPAs (Vance et al., 2012; Bowles-Terry, 2012; Soleman, 2014). Many of the studies highlighted the benefits of using student work, such as annotated bibliographies and writing portfolios in the assessment process (Knight, 2006; Samson, 2010; Scharf et al., 2007; Leebaw et al., 2013). Another factor which emerged was the positive outcome resulting in the collaboration of librarians and faculty on information literacy assessments (White-Farnham & Gardner, 2014; Knight, 2006; Samson, 2010; Scharf et al., 2007; Leebaw et al., 2013). Many of these collaborations between librarians and writing faculty, showed that integrating information literacy skills into writing assignments has proven to be an effective strategy for improving both skill sets. However, only a few studies specifically looked at the statistical correlation between information literacy and writing skills. A study conducted in 2007 by Scharf et al. revealed a major correlation between the writing scores and information literacy scores. Therefore, the need for further research in this area is warranted.

PURPOSES AND OBJECTIVES

The purpose of this study is to examine the association between student information literacy skills and their writing abilities as well as their overall performance in a class. The study's objectives are to:

- analyze the correlation between student information literacy skills and their writing skills;
- describe the association between student information literacy skills and their course grades;
- identify the most important information literacy skills affecting the student writing ability and overall performance;
- and assess the effect of library users on student performance.

PROCEDURES AND METHODS

POPULATION OF THE STUDY

The population for this study included freshman students at Appalachian State University who were taking either basic English writing class (ENG1000) or First Year Seminar course (UCO1200) during spring and fall semesters in 2014. Approximately 3000 freshmen were enrolled at Appalachian in 2014. Library instruction is a required component for all the First Year Seminars courses. Although it is not required, most of ENG1000 course instructors choose to have one-shot library instruction for their classes.

To ensure that UCO1200 classes meet General Education Outcomes, a set of common expectations has been developed which includes "involving students in problem-based learning with a research/library component" (Appalachian State University, 2016). Although a writing assignment is not a requirement for UCO1200 courses, many of the UCO1200 instructors assign a research paper as the final project. The research and writing process is very similar to the ENG1000 classes. All of the UCO1200 classes included in this study required the students to write a research paper and meet the source and page-length criteria.

The UCO1200 and ENG1000 curricular are charged with supporting Appalachian State University's General Education Program Goals, which includes developing critical and analytical thinking skills and cultivating effective communication skills (writing, speaking, and visual). Additionally, information literacy skills are built into the assessment criteria for both of these General Education goals. Each student is required to take three General Education courses (i.e., nine credit hours).

INFORMATION LITERACY SKILLS TEST DEVELOPMENT

The information literacy skills test for this study was developed based on an extensive literature review, study of the 2000 ACRL information literacy standards, and the library research skills assessment surveys used for UCO1200 and ENG1000 during 2009-2013 period. The test included five parts: Research strategies (6 questions); Resource types (5 questions); Scholarly vs. popular (6 questions); Evaluating websites (3 questions); and Demographic information (3 questions). In addition, the test collected information about students' major and class levels during the spring 2014 semester. In fall semester 2014, two questions were added to the test: the number of library instruction sessions received and other library services (e.g. individual consultations, online tutorials, service desks, library research guides) students used in order to complete their writing assignments. All questions were multiple choice questions. See Appendix A for the information literacy skills test.

Thirty undergraduate students took the test in a pilot study early in each semester in 2014. Cronbach's alphas, measuring the internal consistency of the test questions, for four parts (Research strategies, Resource types, Scholarly vs. popular, Evaluating websites) were 0.974, 0.873, 0.814 and 0.871 respectively. Five librarians reviewed the test questions. Minor revisions were made to the questions based on the pilot study and librarians' feedback.

The information literacy skills test was posted online through SelectSurvey. The test was administered by librarians and instructors during regular class meeting times.

SAMPLE OF THE STUDY AND WRITING ASSIGNMENTS

During both spring and fall semesters 2014, librarians contacted the instructors teaching UCO1200 and ENG1000 and explained the purpose of the study. Ten classes met the criteria for the study in spring 2014. Seven classes decided to participate in the study. In fall semester 2014, 12 classes were able to participate in the study.

In this study, each participating class project must contain a minimal 5-page writing assignment that cites at least five sources. The sources cited must include one book, two scholarly articles, and two additional reliable and credible sources chosen by the students. All classes incorporate a variety of writing assignments which are geared toward developing critical thinking, reading, and writing skills, and one of them must focus on information research. Students are usually required to begin the process by finding background information on their topic using encyclopedias. The next step is to develop a thesis statement based on the answer to a question they have posed related to their topic. Students then search for books and media in the library catalog and articles in the library databases to support their thesis statement and arguments. They may also search the Internet for additional sources. In this study, participating classes requested students analyze the sources they found and compile an annotated bibliography. The annotations must include a summary, evaluation, and reflection. The information research parts were 20 to 30% of their final writing scores.

DATA COLLECTION AND ANALYSIS

The librarians involved in the study offered the same information literacy instruction for the participating classes that they do for other classes. The only difference for this study was that the librarians involved in the study administered the online information literacy skills test toward the end of the semester to allow students time to use other library services as they work on their writing assignments.

The information literacy skills test scores were collected from 398 students in 19 classes taught by eight instructors. The participating...
students’ writing scores and their course scores were obtained through the course instructors. The weight of the writing scores in their final course grades ranged from 10% to 75%.

Data were analyzed using the Statistical Package for Social Sciences (SPSS). Both descriptive and inferential statistics were employed to summarize the data.

FINDINGS

DEMOGRAPHIC INFORMATION OF PARTICIPANTS

In this study, 398 students from 19 classes completed the information literacy skills test during two semesters in 2014, of which 386 were freshmen and 12 were sophomores. The average information literacy score was 78.5 out of 100 points. The intended majors of participants were across the board, with 16.3% in social sciences, 13.6% in natural sciences, 10.3% in humanities, 23.6% in business, and 22.4% in health sciences. 13.8% students reported “undecided” on their majors.

ASSOCIATION BETWEEN INFORMATION LITERACY TEST SCORES, WRITING SCORES, AND FINAL GRADES

The Pearson product-moment correlation coefficients were computed to examine the association between information literacy skills scores, writing assignment scores, and final course scores. The results indicated that information literacy scores were positively and strongly correlated with students’ writing scores (n = 344, r = 0.153, p = 0.004). In addition, the information literacy scores were positively related to students’ final course scores (n = 345, r = 0.112, p = 0.037). The findings suggested that those who had higher information literacy scores tended to do better both in writing and their overall performance in a class. Table 1 presents the results of Pearson’s correlation coefficients and descriptive statistics for information literacy scores, writing scores, and final course scores.

The Pearson product-moment correlation coefficient is a measure of the strength of the linear relationship between two variables. Pearson’s r value can range from −1 to 1. An r of −1 indicates a perfect negative linear relationship between variables, an r of 0 indicates no linear relationship between variables, and an r of 1 indicates a perfect positive linear relationship between variables (Lane, n.d.).

EFFECTS OF DIFFERENT PARTS OF INFORMATION LITERACY SKILLS

The results of the Pearson’s correlation coefficients between different information literacy skills sets and the student writing and final grades showed that the writing scores were strongly associated with the students’ knowledge of “scholarly versus popular sources” (n = 344, r = 0.145, p = 0.007). The final course scores were significantly correlated to two sets of information literacy skills: type of sources (n = 345, r = 0.124, p = 0.021) and website evaluation (n = 345, r = 0.117, p = 0.029).

EFFECTS OF OTHER LIBRARY SERVICES

An independent-samples t-test was conducted to examine whether or not using certain library service by students, such as, library research guides, online tutorials, research advisory program (RAP), library desk service (LDS) would have any effects on their information literacy scores, writing scores and final scores. There were no significant effects found between the variables. However, those who used a research advisory program and library desk service tended to have slightly higher information literacy scores, writing scores and final course scores than those who did not use the two services. See Table 2 for more information.

In addition, a one-way ANOVA was conducted to compare the effect of number of library instruction sessions attended by students on information literacy skills, writing and final course scores. The results indicated that the number of one-shot library instruction sessions was not significantly associated with students’ information literacy skills [F (3, 267) = 0.908, p = 0.437], writing scores [F (3, 232) = 0.706, p = 0.549] and final course grades [F (3, 232) = 1.426, p = 0.236].

It appears that the students who received more than one instruction session may become uninterested. Freshman students at Appalachian usually have two to three library instruction sessions from three required General Education courses they take.

CONCLUSIONS

The findings from this information literacy skills study validate those of previous similar studies and support that information literacy skills, which are part of critical thinking skills, can help improve student writing ability and academic performance. While most previous studies focused the effects of information literacy skills on indicators of student academic success, such as retention rates and GPAs, this study not only examines the association between students’ information literacy skills and their course performance, but also the correlation between information literacy skills and writing abilities.

In addition, this study and other similar studies support that using library services and resources enhances student information literacy skills and thus their overall academic performance (Kot & Jones, 2014; Soria et al., 2014; Zhong & Alexander, 2007). Therefore, it is important for librarians to provide well-integrated library instruction programs and services to improve student information literacy skills.

<table>
<thead>
<tr>
<th>Table 1 Correlations and descriptive statistics of IL skills, writing scores and final grades</th>
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</thead>
<tbody>
<tr>
<td><strong>Information literacy skills scores</strong></td>
</tr>
<tr>
<td>Pearson correlation</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td><strong>Writing assignment scores</strong></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td><strong>Final course scores</strong></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td><strong>Means</strong></td>
</tr>
<tr>
<td><strong>Standard deviation</strong></td>
</tr>
</tbody>
</table>

Note:
* p b 0.05.
** p b 0.01.
<table>
<thead>
<tr>
<th>Service</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information literacy skills</td>
<td>LDS</td>
<td>187</td>
<td>78.24</td>
</tr>
<tr>
<td></td>
<td>Used</td>
<td>84</td>
<td>78.43</td>
</tr>
<tr>
<td></td>
<td>RAP</td>
<td>225</td>
<td>78.14</td>
</tr>
<tr>
<td></td>
<td>Did</td>
<td>46</td>
<td>78.95</td>
</tr>
<tr>
<td></td>
<td>Not</td>
<td>140</td>
<td>78.58</td>
</tr>
<tr>
<td></td>
<td>Used</td>
<td>78</td>
<td>78.43</td>
</tr>
<tr>
<td></td>
<td>RAP</td>
<td>147</td>
<td>78.64</td>
</tr>
<tr>
<td></td>
<td>Did</td>
<td>70</td>
<td>78.86</td>
</tr>
<tr>
<td></td>
<td>Not</td>
<td>77</td>
<td>78.64</td>
</tr>
<tr>
<td>Writing assignment scores</td>
<td>LDS</td>
<td>164</td>
<td>85.11</td>
</tr>
<tr>
<td></td>
<td>Used</td>
<td>72</td>
<td>86.60</td>
</tr>
<tr>
<td></td>
<td>RAP</td>
<td>195</td>
<td>85.55</td>
</tr>
<tr>
<td></td>
<td>Did</td>
<td>41</td>
<td>85.68</td>
</tr>
<tr>
<td></td>
<td>Not</td>
<td>154</td>
<td>85.50</td>
</tr>
<tr>
<td></td>
<td>Used</td>
<td>123</td>
<td>86.19</td>
</tr>
<tr>
<td>Final course scores</td>
<td>LDS</td>
<td>164</td>
<td>90.36</td>
</tr>
<tr>
<td></td>
<td>Used</td>
<td>72</td>
<td>91.86</td>
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<td></td>
<td>RAP</td>
<td>195</td>
<td>90.72</td>
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<tr>
<td></td>
<td>Did</td>
<td>41</td>
<td>91.27</td>
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<tr>
<td></td>
<td>Not</td>
<td>153</td>
<td>90.56</td>
</tr>
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</table>

The study also provides an argument for librarians and faculty members to work together to maximize the benefits of teaching students information literacy skills in order to improve their written communication and academic performance. McCracken and Johnson (2015) at St. Edward’s University have offered a good example in their pilot study that librarians and instructors can work collaboratively and successfully on incorporating new information literacy threshold concepts into information literacy sessions focusing on students writing projects. Through partnering with faculty to create curriculum-integrated programs, librarians can actively contribute to students’ learning processes in their quest to enhance the skills, knowledge and attitudes needed to become lifelong learners (Lau, 2006).

Today’s academic library, as a learning center on campus, does not just collect, preserve, and organize information. It also conducts teaching, research, and creates knowledge (ACRL, 2006). Furthermore, the academic library helps students develop transferable skills such as critical thinking and effective communication, which are much needed for their education and career. In this sense, the library has become an integral part of student learning, development, and success.

APPENDIX A

Information Literacy Skills Test

Dear Student,

This test is designed to help us improve our library instruction program and the resources and services we provide. The test only includes 25 questions and it should take less than 15 minutes. You are among 200 students completing the assessment.

If you have any questions, do not hesitate to contact us. Thank you for your participation.

Xiaorong Shao, Ph.D. Information Literacy Librarian/Associate Professor
Email: shaox@appstate.edu Phone: 828-262-7714

Geraldine Purpur, User Services Librarian/Senior Lecturer
Email: purpurgm@appstate.edu Phone: 828-262-6903

1. Please type your name

2. Which of these broad areas contains your major?
   a. Social Sciences
   b. Natural Sciences
   c. Humanities
   d. Business
   e. Health Sciences
   f. Undecided

3. What is your current class level?
   a. Freshman
   b. Sophomore
   c. Junior
   d. Senior

4. How many library instruction sessions have you had?
   a. 1
   b. 2
   c. 3
   d. more than 3
5. Library services you have used in order to complete your writing assignments (choose all that apply):
   a. Individual consultation (e.g. RAP session)
   b. Online tutorials
   c. Library service desks
   d. Others (e.g. library guides, chat, phone, email, texting...)

6. When beginning library research, the FIRST step of creating a search strategy is to:
   a. Locate books using the library's online catalog
   b. Search a library database for journal articles
   c. Analyze your topic to identify keywords or phrases
   d. Locate a newspaper article on your topic

7. You are doing library research for a 10-page argumentative research paper advocating pet therapy for the elderly. Which of the following is the MOST LOGICAL ORDER in the research process?
   a. Locate books, conduct a web search, follow leads from websites, and brainstorm keywords.
   b. Conduct a web search, locate subject encyclopedias, locate magazine articles, and locate books.
   c. Locate scholarly journal articles, locate books, conduct a web search, and follow leads from sources.
   d. Brainstorm keywords, conduct a quick web search, locate books, and locate scholarly journal articles.

8. Which of the following keyword examples may yield the best results for the statement below in a library database search?

   Statement: "Describe the effects of automobile emissions on air quality."
   a. Automobile and effects
   b. Automobile and emission and air quality
   c. Effects and emission and quality
   d. Emission and air quality

9. Which source would most likely provide you with objective and non-biased information for the main concepts in the following statement?

   Statement: "Describe the effects of automobile emissions on air quality"
   a. The latest annual report from a major automobile manufacturer
   b. A study featured in a peer-reviewed journal
   c. A personal interview with an influential lobbyist
   d. A website that advocates clean air

10. You searched for information using the terms world population AND growth. If you add the term China to your search, (world population AND growth AND China) your search will yield:
    a. Same results
    b. More results
    c. Less results
    d. None of the above

11. Go to the library homepage to find the BOOK Men in Black by John Harvey. Which of the following is the correct call number for the book?
    a. PN1997 ENGL C87 1998
    b. BF789.C7 H37 2013
    c. PR149.C67 H37 1996
    d. PN1997 ENGL M457 2008

Which of the following best describes the above citation?

a. Journal article  
b. Book  
c. Chapter in a book  
d. Web document


Which of the following best describes the above citation?

a. Journal article  
b. Book  
c. Chapter in a book  
d. Web document


Which of the following best describes the above citation?

a. Journal article  
b. Book  
c. Chapter in a book  
d. Web document


Which of the following best describes the above citation?

a. Journal article  
b. Book  
c. Book chapter  
d. Web document

16. Which of the following best describes an academic book?

a. Book does not include bibliographic references  
b. Publisher is often a university press/publisher  
c. Book is written for the general public  
d. Author is a lay person, rather than a subject expert

17. Which of the following best describes a popular article?

a. Article is written by journalists  
b. Article is written by a subject specialist or expert in the field  
c. Article is peer-reviewed  
d. Article is written for professors and students

18. Which of the following best describes a scholarly article?

a. Article is written in non-technical language  
b. Article includes a bibliography or list of sources  
c. Article is written for a general audience  
d. Article often reports on current topics or events

19. Is this article scholarly or popular? Click on the citation below to view the article in a new window:


a. Scholarly  
b. Popular
20. Is this article scholarly or popular? Click on the citation below to view the article in a new window:

a. Scholarly
b. Popular

21. Is this article scholarly or popular? Click on the citation to view the article in a new window:

a. Scholarly
b. Popular

22. Which of the following types of information does NOT need to be cited?

a. A quotation from the New York Times online
b. A photograph of Rosa Parks that you found from a Biography Dictionary
c. A paragraph you wrote summarizing information from a journal article
   A summary of your ideas on a research topic

23. Who is the publisher of this site?

Click on the following URL and view the website to answer questions #23 and #24:
http://www.healthmetricsandevaluation.org/

a. Department of Health and Human Services
b. Institute for Health Metrics and Evaluation
c. World Health Organization
d. Institute for Human Development

24. Which of the following suggests that this is a reliable website?

a. The site contains data, statistics or other facts that you can check
b. The author or publisher is indicated
c. Sources of the research are given
d. Links are current
   All of the above
f. b and d only

25. Which of the following would you use to evaluate a webpage?

a. Accuracy. If a webpage is free of errors and provides reliable information...
b. Authority. If a webpage lists the author credentials, qualifications and contact information...
c. Objectivity. If a webpage is objective in presenting the information with limited advertising...
d. Currency. If a webpage is current and updated regularly...
e. All of the above

Note: Embedded links in Questions #19, #20, and #21 are no longer showing in this Word document.

REFERENCES


