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IMLS Sparks Ignite IL Framework Cooperative Project Pre-Test

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Identifiers

Please enter your student ID number:

Please enter your first and last name:

Consent

**Information Literacy (IL) Framework Cooperative Project for Student Success in
Smaller Colleges
Consent Question**

You are invited to participate in a research study because you are a First-Year student in college. If you are not a First-Year student or are not over the age of 18, please answer “No”.

This study will explore how information literacy instruction affects college students' research practices, knowledge, and attitudes. You will be asked to complete an online test asking general questions about research practices and online search habits. A librarian will then deliver information literacy instruction to you and your classmates during a scheduled class meeting **or** you will complete an online information literacy module in Blackboard. Afterwards, you will be asked to complete a follow-up test.

The only expected risks for completing this study are those experienced in everyday life. The test is not timed. Completing this study may not benefit you directly, though we hope the instruction will help you develop important skills. **The results will be used to improve our information literacy instruction, which will benefit future First-Year students.**

There is no compensation offered for completing this study and participating in the study is completely voluntary. You can choose to withdraw your results at any time. Your decision whether or not to participate in the study will not affect your current or future relations with the instructor, librarians, or the College. And your test results will not affect your grade in the course.

Your results will be linked to demographic factors but you will not be identified in any presentation or publication of the results of this study. The only individuals who will have access to your results are Jessame Ferguson, the Principal Investigator for this study, and Institutional Research personnel assisting with initial data analysis. Your responses will be kept on a password-protected computer and server.

If you have any questions about this study, we welcome you to contact Jessame Ferguson at jferguson@mcdaniel.edu or at 410-857-2741. If you have any questions about your rights as a subject in this study, please contact McDaniel College's

Pre-Test Question

Before you came to college, how often did you visit these types of libraries, in-person or on their website, in the past four (4) years?

	Never	Sometimes	Often
Public Library	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High School Library	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other type of Library	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What did you do when you visited the library?

Select all that apply.

- Used computers or technology there
- Got books or videos or music for my personal interests
- Got resources for my school work
- Studied by myself or with friends or classmates
- Other:

T.3.1.A

Review the image below and note the four lettered areas of the screen.

The screenshot shows a search results page with four red boxes highlighting specific areas:

- A**: The search input field containing the text "flu vaccination debate" and the "Search" button.
- B**: The "Refine Results" sidebar, specifically the "Current Search" section, which includes filters for "Limit To" (Full Text, Scholarly, Catalog Only), "Publication Date" (1971-2017), "Source Types" (All Results, Academic Journals, News, Magazines, Books, Reviews), and "Subject".
- C**: The main search results area, showing the first two results with their titles, authors, and subjects.
- D**: The "Search Databases Directly" sidebar, which includes a "Choose Database" dropdown and a list of databases like LexisNexis Academic, Proquest Education Journals, ProQuest Historical Newspapers, and WorldCat.

Which of the areas contains the search results?

Select the best answer.

- A
- B
- C
- D

How certain are you about your answer to this question?

- I am pretty sure.
- I am guessing.

Outcome 1 now (similar to 1.1.C)

What is the problem with using a source for an academic paper when you cannot determine who is responsible for it (e.g., there is no author or organization listed)?

Select the best answer.

- You won't know if the creators of the information are a reliable source.
- You won't know who to contact about it if the information is unclear.
- You won't know which citation style you should use without an author.

How confident are you about your answer to this question?

- I am pretty sure.
- I am guessing.

T.2.3.F

Sivonne is doing research about healthcare in the United States for her Sociology class. She starts by finding background information on the history of healthcare in the U.S. Then she explores blog posts to understand the strong feelings on both sides of the issue.

Finally, she searches the library's databases for articles that back up what she has decided to argue in her paper.

Which of Sivonne's strategies shows that she is open to learning from her research and changing her mind?

Select the best answer.

- Reading about the history of healthcare in the U.S.
- Searching for articles that back up her argument.
- Exploring different opinions on blog posts.

How confident are you about your answer to this question?

- I am pretty sure.
- I am guessing.

T.2.3.E

Maddy runs a search in a library database, but gets only 10 results. Some of them are relevant, but she is sure there has to be more about her topic. What should she try next to get better search results?

Select the best answer.

- Search Google to find more results using the same keywords she tried.
- Read through the relevant results to get ideas for new words to search.
- Talk to her professor about her topic to see if they have suggestions.

How confident are you about your answer to this question?

- I am pretty sure.
- I am guessing.

T.2.3.D

Sam runs a search in a library database. They get thousands of search results. What should they try next?

Select the best answer.

- Use filters that limit by options such as peer reviewed or scholarly or publication date.
- Change the search results by removing one of the keywords and try searching again.
- Choose a few articles from the first page of results and write an outline using those.

How certain are you about your answer to this question?

- I am pretty sure.
- I am guessing.

T.2.1.A

This is the first of two questions that will use the same scenario.

Loni has spent about two weeks on the research for their final paper. Loni has tweaked their topic based on interesting things they found in a source they did not think was relevant at first. Then they hit several dead ends in their research where they thought they would find information but could not find anything. After going back and forth, they tried many different combinations of keywords until they got results that guided the direction of their paper.

What does Loni's process show about research?

Select the best answer.

- Efficiency is the most important part of research, so Loni should have met with their professor to plan a direct research pathway.
- Focus is the most important part of research, so Loni should have been more certain about their topic before they started.
- Trial and error is the most important part of research, so Loni learned from their setbacks as they went along.

How confident are you about your answer to this question?

- I am pretty sure.
- I am guessing.

T.2.3.G

This is the last of two questions that will use the same scenario.

Which of these descriptions best explains why Loni successfully completed their research?

Select the best answer.

- Loni was lucky to find good sources.
- Loni did not stop when they faced dead ends.
- Loni had enough time to work on their paper.

How confident are you about your answer to this question?

- I am pretty sure.
- I am guessing.

T.3.1.B

Who is the author of the article in this search result?

Select the best answer.

Loving Dynamics: Norman O. Brown's Relationship to Myths of Progress.

McFadyen, Jennifer M.; Family Relations: An Interdisciplinary Journal of Applied Family Studies, Vol 54(1), Jan, 2005 pp. 131-144. Publisher: Blackwell Publishing; [Journal Article]

Subjects: Army Personnel; Family Work Relationship; Knowledge Level; Satisfaction; Wives; Adulthood (18 yrs & older)

- Norman O. Brown
- Jennifer M. McFayden
- Jennifer M. Family

How confident are you about your answer to this question?

- I am pretty sure.
- I am guessing.

T.3.2.B

Tony did a search and found this in his list of results. Why would he want to click on the link that will show him the abstract?

[Origin, Growth, and Composition of the Recovering Peregrine Falcon Population in Ontario](#)

Marcel A. Gahbauer, David M. Armstrong

Journal of Raptor Research September 2015 : Vol. 49, Issue 3 (Sep 2015), pg(s) 281-293

[Abstract](#) : [References](#) : [Full Text](#)

Select the best answer.

- The abstract provides a summary of the article, so it will help Tony predict if the article will be relevant to his research.
- The abstract provides a way for researchers to complete difficult and time-sensitive studies without having to read the whole article.
- The abstract will give him a summary of the best quotes from the article to use in his research paper.

How confident are you about your answer to this question?

- I am pretty sure.
- I am guessing.

T.3.3.A

Jim is writing a paper about hydraulic fracturing, also called fracking, for his Introduction to College Writing class. He needs a source he can cite as evidence for his argument that will strengthen his own credibility.

Which of the following results should Jim choose if he wants to be considered credible?

Select the best answer.



1. [Fracking Essential to Oil and Gas Production, But Risks Remain](#)

In: *The Daily Record* (Oklahoma City, OK). June 16, 2017; BridgeTower Media Holding Company, LLC Language: English, Database: General OneFile

Subjects: Oklahoma; Oil wells -- **Hydraulic fracturing**; Gas industry; Natural gas



2. [What's Killing the Babies of Vernal, Utah?](#)

By: SOLOTAROFF, PAUL. *Rolling Stone*. 7/2/2017, Issue 1238, p52-59. 8p. 7 Color Photographs. Reading Level (Lexile): 1220. , Database: MasterFILE Premier

Subjects: VERNAL (Utah); **HYDRAULIC fracturing** -- Environmental aspects; INFANT mortality -- Risk factors; **HYDRAULIC fracturing** -- Law & legislation; AIR pollution -- Physiological effect; YOUNG, Donna; AIR pollution – Utah



3. [Can Fracking Be Environmentally Acceptable?](#)

By: Meegoda, Jay N.; Rudy, Samuel; Zhenting Zou; Agbakpe, Michael. *Journal of Hazardous, Toxic & Radioactive Waste*. Apr2017, Vol. 21 Issue 2, p1-11. 11p. DOI: 10.1061/(ASCE)HZ.2153-5515.0000330. , Database: Environment Complete

- Fracking Essential to Oil and Gas Production, But Risks Remain
- What's Killing the Babies of Vernal, Utah?
- Can Fracking be Environmentally Acceptable?

How confident are you about your answer to this question?

- I am pretty sure.
- I am guessing.

T.3.3.C

This is the first of two questions that will use the same scenario.

Rowan needs to do a research project on hydraulic fracturing for a policy sciences class. They don't know much about the topic so they want to find a source that will give them an overview that helps them understand more about the context of their topic. They did a search and found the following results.

Which is the best source for Rowan to select for this stage of their research?

1. Hydraulic Fracturing Operations: Handbook of Environmental Management Practices. By: Nicholas P. Cheremisinoff, Anton Davletshin ; edited by M. Dayal. Hoboken, New Jersey : Scrivener Publishing : Wiley 2015. 1 online resource (794 pages) : illustrations. Subjects: Hydraulic fracturing -- Environmental aspects; Electronic books

2. Best Practice and Transparency are Key to Safe Fracking Operations. In: The Engineer Online, July 15, 2015, Centaur Communications Limited. A new report on the impact of fracking has set out a series of recommendations to ensure best practice and transparency at sites where hydraulic fracturing takes place. Subjects: United Kingdom; Shale oils -- Reports; Oil wells -- Hydraulic fracturing; Oil wells -- Reports

3. Investigation of Possible Wellbore Cement Failures During Hydraulic Fracturing Operations. By: Kim, Jihoon; Moridis, George J.; Martinez, Eduardo R. In Journal of Petroleum Science and Engineering. March 2016, 139: 254-263. DOI: 10.1016/j.petrol.2016.01.035 We model and assess the possibility of shear failure along the vertical well by using the Mohr-Coulomb failure model and employing a rigorous coupled flow-geomechanic analysis. Subjects: CME

- Hydraulic Fracturing Operations: Handbook of Environmental Management Practices
- Best Practice and Transparency are Key to Safe Fracking Operations
- Investigation of Possible Wellbore Cement Failures During Hydraulic Fracturing Operations

How confident are you about your answer to this question?

- I am pretty sure.
- I am guessing.

Part 2 T.3.3.C

This is the last of two questions that will use the same scenario.

Which of the following criteria was the most important to consider when deciding which result was the best for Rowan to use to help them understand their topic?

Select the best answer.

- It was written for a college audience.
- It covers multiple facets of the topic.
- It is peer reviewed.

How confident are you about your answer to this question?

- I am pretty sure.
- I am guessing.

T.1.1.A

This is the first of two questions that will use the same sample article.

The first page of an article from a library database is shown below. What is the purpose of this article?

Select the best answer.

Appetite 57 (2011) 321–328



Contents lists available at ScienceDirect

Appetite

journal homepage: www.elsevier.com/locate/appet



Research report

Cognitive advantages of chewing gum. Now you see them, now you don't

Serge V. Onyper*, Timothy L. Carr, John S. Farrar, Brittney R. Floyd

Department of Psychology, St. Lawrence University, Canton, NY 13617, USA

<p>ARTICLE INFO</p> <hr/> <p><i>Article history:</i> Received 2 March 2011 Received in revised form 25 April 2011 Accepted 19 May 2011 Available online 27 May 2011</p> <hr/> <p><i>Keywords:</i> Chewing gum Time Cognition Memory Processing speed Executive function</p>	<p>ABSTRACT</p> <hr/> <p>The current series of experiments investigated the effects of the timing of gum chewing on cognitive function, by administering a battery of cognitive tasks to participants who chewed gum either prior to or throughout testing, and comparing their performance to that of controls who did not chew gum. Chewing gum was associated with performance advantages on multiple measures when gum was chewed for 5 min before, but not during, cognitive testing. The benefits, however, persisted only for the first 15–20 min of the testing session, and did not extend to all cognitive domains. To explain this pattern of results, it is proposed that the time-limited nature of performance benefits can be attributed to mastication-induced arousal. Furthermore, the lack of improvement in cognitive function when gum is chewed throughout testing may be because of interference effects due to a sharing of resources by cognitive and masticatory processes. This dual-process mechanism is not only consistent with the outcome of present experiments but can potentially account for a wide range of findings reported in the literature.</p> <p style="text-align: right;">© 2011 Elsevier Ltd. All rights reserved.</p>
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Introduction

The study of the cognitive benefits of chewing gum has received increased attention from researchers in the past few years. In one of the first studies on the subject, Wilkinson, Scholey, and Wesnes (2002) demonstrated that chewing a piece of sugar-free gum improved immediate and delayed recall as well as working memory, compared to sham chewing (i.e., mimicking chewing motions) or quiet control conditions. Similar results were reported by Stephens and Tunney (2004). Furthermore, the chewing of gum was associated with a small overall increase in performance on a battery of cognitive tests (Scholey et al., 2009). In other studies, chewing gum was found to benefit verbal working memory (Hirano et al., 2008; Zoladz & Raudenbush, 2005), free recall (Baker, Bezance, Zellaby, & Aggleton, 2004; Johnson & Miles, 2008), attention (Smith, 2010; Tucha, Mecklinger, Maier, Hammerl, & Lange, 2004; Tucha & Simpson, 2011), as well as performance on reaction time measures (Sakamoto, Nakata, & Kakigi, 2009; Smith, 2010).

Several mechanisms have been proposed to account for the facilitation in performance observed when gum is chewed during (as

1908) to suggest that the facilitative effects of gum chewing on cognitive performance were due to the accompanying increases in alertness and arousal. For instance, numerous studies have shown that gum chewing elevates heart rate and blood pressure (Farella, Bakke, Michelotti, Marotta, & Martina, 1999; Hasegawa et al., 2009; Smith, 2010; Wilkinson et al., 2002), cortisol levels (Smith, 2010) and cerebral blood flow (Hasegawa, Ono, Hori, & Nokubi, 2007; Onozuka et al., 2002; Sesay, Tanaka, Ueno, Lecaroz, & de Beaufort, 2000), as well as EEG and fMRI markers of cortical arousal (Hirano et al., 2008; Morinushi, Masumoto, Kawasaki, & Takigawa, 2000; Takada & Miyamoto, 2004; for a review, see Weijenbergh, Scherder, & Lobbezoo, 2011). Improved cerebral blood flow during mastication in particular is thought to be associated with improved cognitive function (Weijenbergh et al., 2011).

If chewing gum is indeed associated with increases in arousal and a corresponding shift in cognitive function, it is unclear why many studies find little or no performance advantages of chewing. For instance, Tucha et al. (2004) found that chewing gum was associated with improvements on only one measure (sustained attention) out of 25 or so administered as part of their experiment.

- To give the author's opinion about the connection between gum and short and long term

How confident are you about your answer to this question?

- I am pretty sure.
- I am guessing.

T.1.1.C

This is the last of two questions that will use the same sample article.

What evidence is there that the authors of this article are experts?

Select the best answer.

Appetite 57 (2011) 321–328



Contents lists available at ScienceDirect

Appetite

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Research report

Cognitive advantages of chewing gum. Now you see them, now you don't

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Department of Psychology, St. Lawrence University, Canton, NY 13617, USA

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Introduction

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If chewing gum is indeed associated with increases in arousal and a corresponding shift in cognitive function, it is unclear why many studies find little or no performance advantages of chewing. For instance, Tucha et al. (2004) found that chewing gum was associated with improvements on only one measure (sustained attention) out of 25 or so administered as part of their experiment.

- The authors provide a summary abstract of the article at the beginning.
- The authors use scientific words and psychology terms in the article.

How confident are you about your answer to this question?

- I am pretty sure.
- I am guessing.

T.4.E

You have been assigned a research paper on a topic of your choice. You have already spoken with your professor and you still need help finding information.

Select each person listed below and then use the arrows to put them in the order in which you would most likely contact them for additional assistance.

	Roommate	
	Classmate	
	Parent	
	Librarian	
	Writing tutor	

T.1.2.A

What is the most likely reason that a psychology professor would consider a peer-reviewed journal article to be the most credible source for a student's research paper?

Select the best answer.

- Peer-reviewed journal articles go through a process to make sure of the article's quality.
- Psychology professors have high expectations for the sources their students should read.
- Peer-reviewed journal articles are written by professors to explain the results of their studies.

How confident are you about your answer to this question?

- I am pretty sure.
- I am guessing.

T.4.G & T.4.D

Think about your time here at college, which statement below is most accurate?

Select the answer that best describes you.

- I have contacted a librarian for research help.
- I have not contacted a librarian for research help.

Since you have not yet contacted a librarian here for research help, select the answer that best describes what you think you will do.

- I plan to contact a librarian for research help when I need it in the future.
- I do not plan to contact a librarian for research help and will seek help elsewhere if I need it.

Which statement below most accurately describes the role of librarians at your college?

Select the best answer.

- Librarians are a source who answer basic questions about anything I need to know.
- Librarians are teachers or coaches who can guide me through the research process.
- Librarians are there to check out books and make sure they are returned on time.

T.1.3.A

Here is a list of sources that have been published about Hurricane Sandy, which happened in 2012.

What is the most likely order in which these sources were published?

Select the best choice for each of the four sources.

	First	Second	Third	Fourth
A book examining the challenges that Hurricane Sandy posed and how experts in different fields changed their long-term planning as a result of lessons learned.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A newspaper article about where to get help if you were affected by the storm.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A tweet by a New Jersey resident with a photo taken during the storm.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An article in the journal Electoral Studies that examined the relationship between the storm and voter turnout in the election after the storm.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How confident are you about your answer to this question?

- I am pretty sure.
- I am guessing.

T.3.1.C

What is the title of the article in the search result below?

Select the best answer.

Teaching engineering design through Lego Mindstorms.

By: Ringwood, J. V.; Monaghan, K.; Maloco, J. European Journal of Engineering Education. Mar2005, Vol. 30 Issue 1, p91-104. 14p. DOI: 10.1080/03043790310001658587.

Subjects: ENGINEERING education; ENGINEERING design; ENGINEERING students; INDUSTRIAL design; COLLEGE students; TEAMS; Engineering Services

- European Journal of Engineering Education
- Engineering education; Engineering design
- Teaching engineering design through Lego Mindstorms

How confident are you about your answer to this question?

- I am pretty sure.
- I am guessing.

T.3.1.D

What is the name of the journal where the article in this search result was published?

Select the best answer.

Cognitive behavioral treatment for depressed adolescents.

By: Lewisohn, Peter M.; Clarke, Gregory M.; Hops, Hyman; Andrews, Judy. In Behavior Therapy. 1990, Vol. 21 Issue 4, p385-401. 17p. DOI: 10.1016/S00005-7894(05)80353-3. Database: ScienceDirect

- Behavior Therapy
- Cognitive behavioral treatment for depressed adolescents
- ScienceDirect

How confident are you about your answer to this question?

- I am pretty sure.
- I am guessing.

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