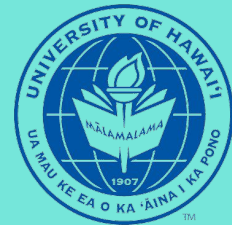


Arming Students Against Misinformation:

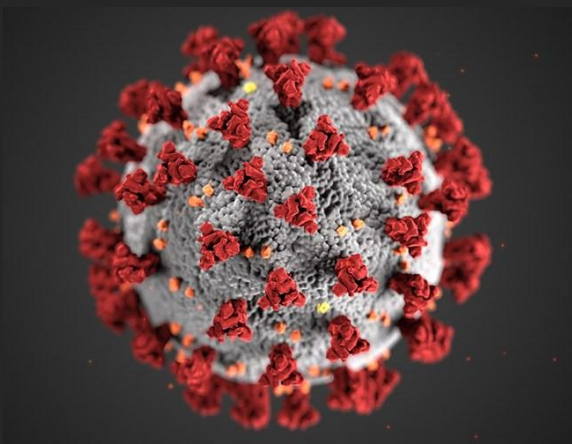
Asynchronous Instruction to Motivate Community
College Students to Practice Information Literacy
Skills

Allyson Ota, MLISc
University of Hawai'i at Mānoa
Learning Design & Technology
April 14, 2022





Infodemic



Misinformation

Information Literacy!

Problem & Target Audience

Students at Kapi'olani Community College have difficulty searching for, locating, and evaluating information resources to complete research assignments.

There are further implications of the importance to develop Information Literacy (IL) skills in order to inform decision-making in students' personal lives when navigating the massive amount of information and misinformation found online.



Target Audience

- Average Age 25*
- May or may not know anything about IL
- May not see the value of Information Literacy instruction
- Motivated to complete assignments to pass classes



**(University of Hawai'i, n.d.)*

image: <https://nlmtotem.wordpress.com/2015/09/02/native-voices-traveling-exhibition-stops-at-kapiolani-community-colleges-lama-library/>

Needs Assessment:

- Typically Face to Face
- After the pandemic: Synchronously online
- No asynchronous IL instruction
- Requested by Director of Radiologic Technology Program
- Support our Distance Education Students



Why do KCC Students have a hard time finding information resources and evaluating them?

- Students entering college seem to lack information literacy skills expected of college faculty (Saunders et al., 2017)
- Younger people struggle to analyze digital information despite being able to access and use online tools (McGrew, 2020).
- Educators perceive students are finding research resources online: Google, YouTube, social media, and Wikipedia; while books, eBooks, databases and librarians are used the least (Purcell et al., 2012).



WIKIPEDIA



You Tube

Instructional Goal

Upon completion of this asynchronous instruction, students will be motivated and feel confident to practice evaluation of information resources, analyzing the creator's authority, and utilizing search strategies.



Very unconfident

Very confident

ON A SCALE OF 1 - 5

HOW **CONFIDENT** ARE YOU IN YOUR ABILITY TO DETECT
MISINFORMATION?

DESIGN:

WHAT DID YOU DESIGN AND

HOW DID YOU DESIGN IT?

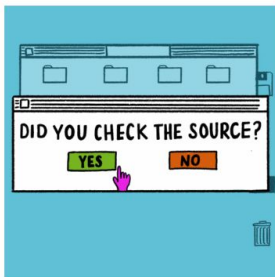
An Introduction to Information Literacy

Welcome to Module 01:

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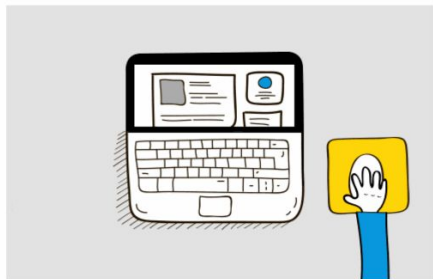
via GIPHY

[Continue to the Module 01 video, "Authority is Constructed and Contextual"](#)

Welcome to Module 02:

ALL The CRAAP! (and More)

In Module 02, we will learn how to evaluate the evidence in **online** resources utilizing the **CRAAP Test**, plus learn the importance of **analyzing the evidence** in claims made through various websites and articles. Additional tools and tips will be shared to help arm you against misinformation, and provide guidance on **lateral reading** and **evaluating information found online**.



via GIPHY

[Continue to watch a video about applying The CRAAP Test](#)

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3. **EBSCO Health Databases**
4. **PubMed Central**

Learn about the **search process** itself, and realize *it's totally fine to ask for help!*



via GIPHY

[Continue to the Module 03 Presentation Part I](#)

Framework for Information Literacy for Higher Education

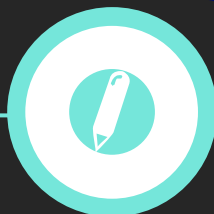
Authority is
Constructed and
Contextual



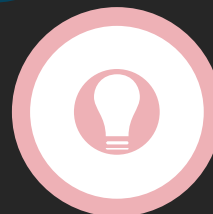
Searching as
Strategic
Exploration



Information
Creation as a
Process



Research as
Inquiry



Information Has
Value



Scholarship as
Conversation



Areas Needing Improvement Selected by Faculty ($n = 10$)

Authority is
Constructed and
Contextual

70%



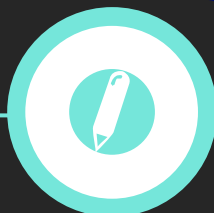
60%

Searching as
Strategic
Exploration



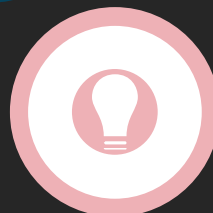
Information
Creation as a
Process

20%



30%

Research as
Inquiry



Information Has
Value

20%



10%

Scholarship as
Conversation



Domains of Learning

Cognitive

-  Pre-test
-  Post-test

Affective

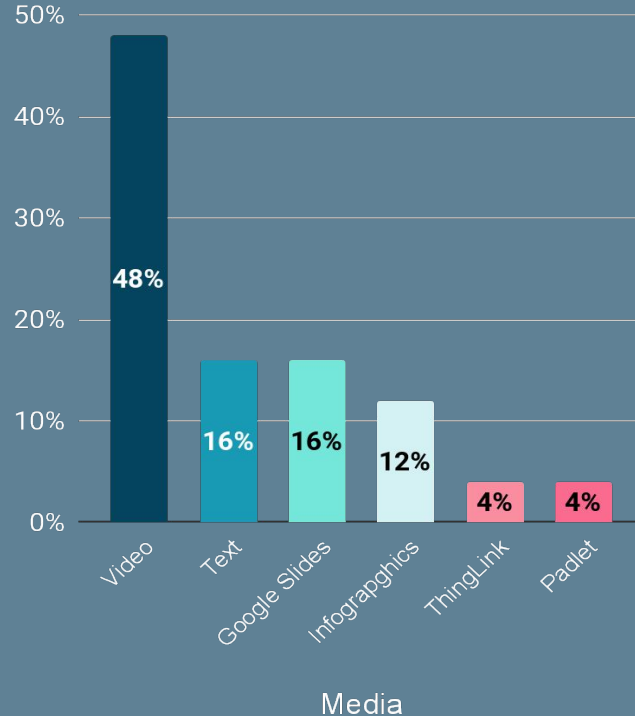
-  Retrospective-survey

Instructional Strategies

- Keller's ARCS Model of Motivation (2010)
 - Attention, Relevance, Confidence, Satisfaction
- Mayer's Cognitive Theory of Multimedia Learning (Mayer, 2014)

Design: Use of Media & Multimedia Throughout the eLearning

Media Types (n = 6) & Elements Used in the eLearning Course (n = 25)



Videos: 12

Text explanation: 4

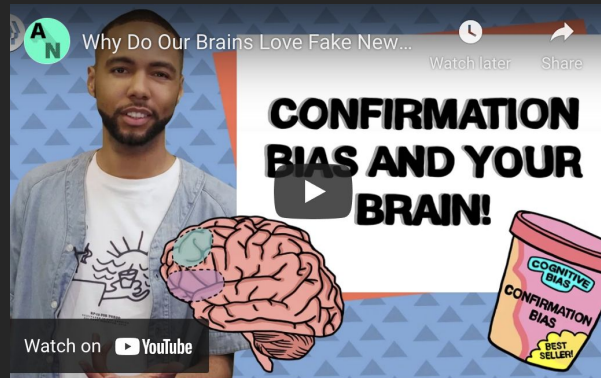
Google Slides: 4

Infographics: 3

ThingLink: 1

Padlet: 1

ARCS Model of Motivation: Attention & Relevance

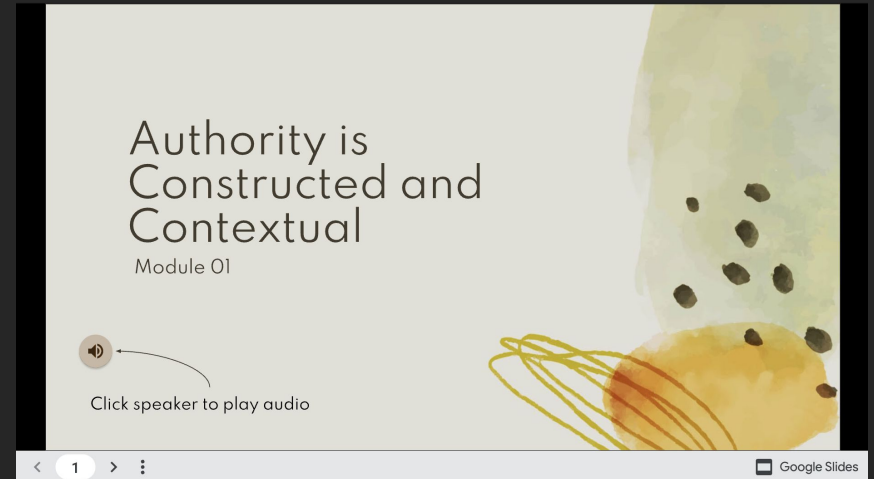
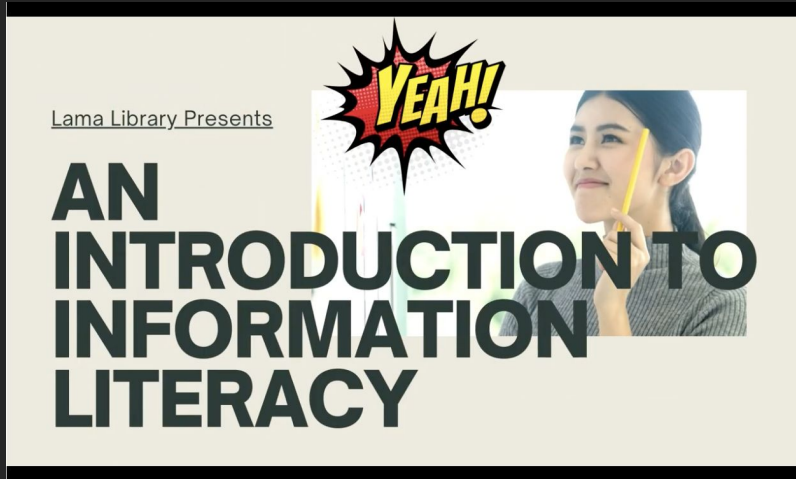


- High Quality audio
- Good production
- Duration 5 mins or less



Cognitive Theory of Multimedia Design (Mayer)

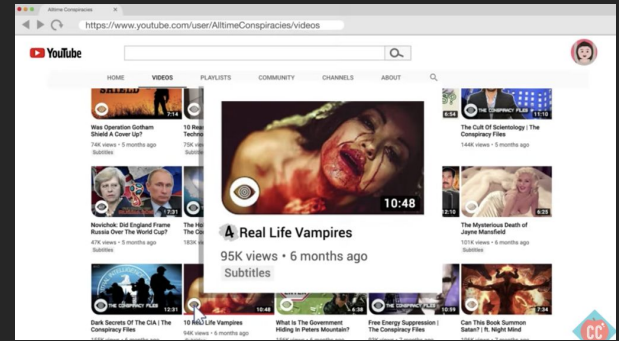
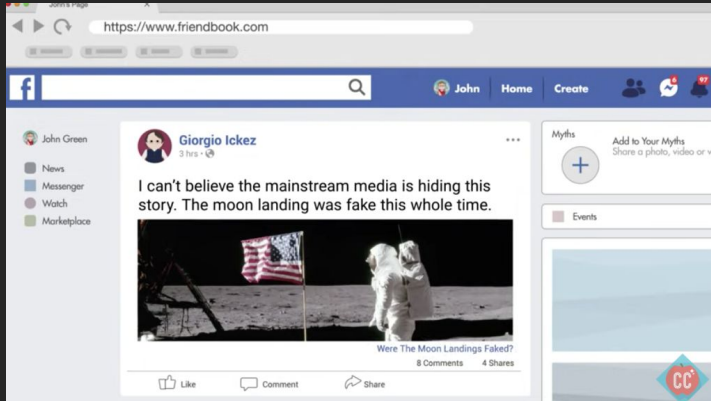
"People learn better from words and pictures than from words alone" (2014, p.43)



Videos & Google Slide presentations with audio:

- Redundancy (graphics & narration)
- Temporal contiguity (narration and graphics simultaneously)

Examples & Non-Examples, Relevance



Help Save The **ENDANGERED**

PACIFIC NORTHWEST TREE OCTOPUS


From **EXTINCTION!**

[About](#)
[HELP!](#)
[FAQs](#)
[Sightings](#)
[Media](#)
[Activities](#)
[Links](#)

THE PACIFIC NORTHWEST TREE OCTOPUS

The Pacific Northwest tree octopus (*Octopus paxarbolis*) can be found in the temperate rainforests of the Olympic Peninsula on the west coast of North America. Their habitat lies on the Eastern side of the Olympic mountain range, adjacent to Hood Canal. These solitary cephalopods reach an average size (measured from arm tip to mantle-tip) of 30-33 cm. Unlike most other cephalopods, tree octopuses are amphibious, spending only their early life and the period of their mating season in their ancestral aquatic environment. Because of the moistness of the rainforests and specialized skin adaptations, they are able to keep from becoming desiccated for prolonged periods of time, but given the chance they would prefer resting in pooled water.

An intelligent and inquisitive being (it has the largest brain-to-body ratio for any mollusk), the tree octopus explores its arboreal world by both touch and sight. Adaptations its ancestors originally evolved in the three dimensional environment of the sea have been put to good use in the spatially complex maze of the coniferous Olympic rainforests. The challenges and richness of this



Rare photo of the elusive tree octopus
(Enhanced from cropped telephoto)

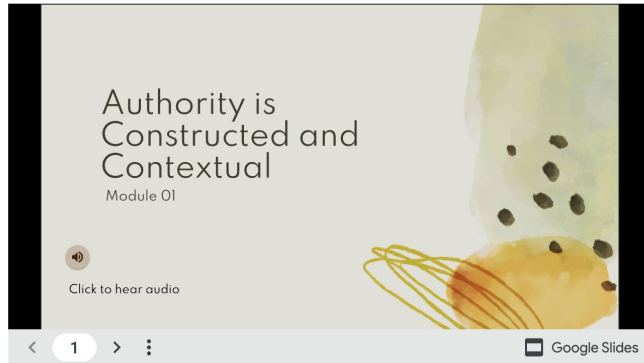
Design: Emphasis

Welcome to Module 01:

Authority is Constructed and Contextual

Overview

Please look through the presentation for Module 01, which will present you with an overview of the main topics included in this module.



[Continue](#)

Very minimalist design on all pages:

- Content is the star of the show
- No navigation menu
- No distractions
- Chunking of information
- Reduce cognitive load

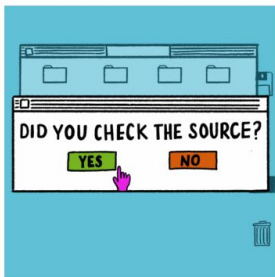
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via GIPHY

[Continue to the Module 01 video, "Authority is Constructed and Contextual"](#)

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via GIPHY

[Continue to watch a video about applying The CRAAP Test](#)

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Learn about the **search process** itself, and realize *it's totally fine to ask for help!*



via GIPHY

[Continue to the Module 03 Presentation Part I](#)

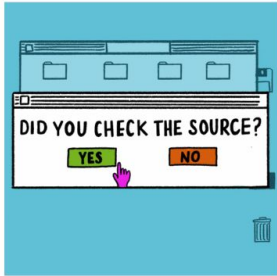
Pre-Training and Signaling

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via GIPHY

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via GIPHY

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via GIPHY

[Continue to the Module 03 Presentation Part I](#)



Design: Personalization Principle



Customization & Personalization



Hi allyson!

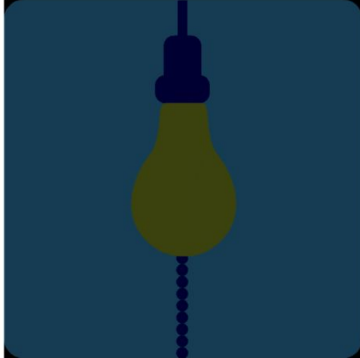


Mahalo for signing in, allyson.

[Continue to select light or dark mode](#)

Choose your experience

Light or Dark Mode?

A stylized illustration of a lightbulb with a yellow glow, set against a dark blue background. The lightbulb is connected to a dark blue cord that ends in a series of small, dark blue circles, resembling a chain or a plug.

via GIPHY

How would you like to proceed?

Click the button below to select **light** or **dark** mode for your user experience. You can always come back to this page later if you change your mind. :)

[Please continue to the next page](#)

Dark or Light mode option

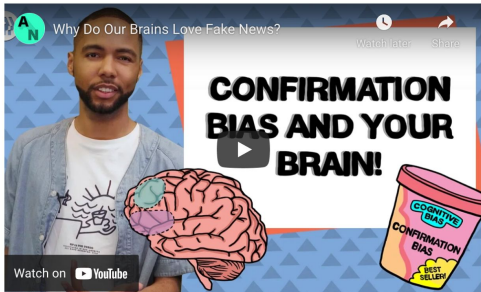
https://laulima.hawaii.edu/access/content/user/allyson/rad230-infolit.html


KapCC Library Alma KCC Primo LibGuides Home ... Eres GDrives LTEC Other Book

Module 01:

Authority is Constructed and Contextual

Do you know what Confirmation bias is?



Watch on  YouTube

Check out this video from the host of Above the Noise, Myles Bess, as he breaks down the research around why our brains love fake news.

[Continue](#)

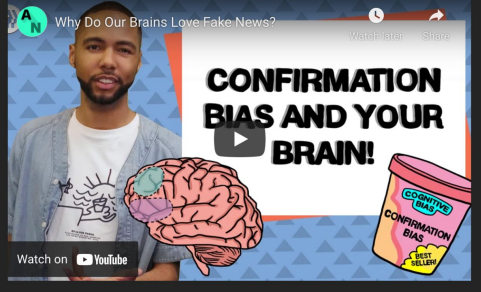
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KapCC Library Alma KCC Primo LibGuides Home ... Eres GDrives LTEC Other Book

Module 01:

Authority is Constructed and Contextual

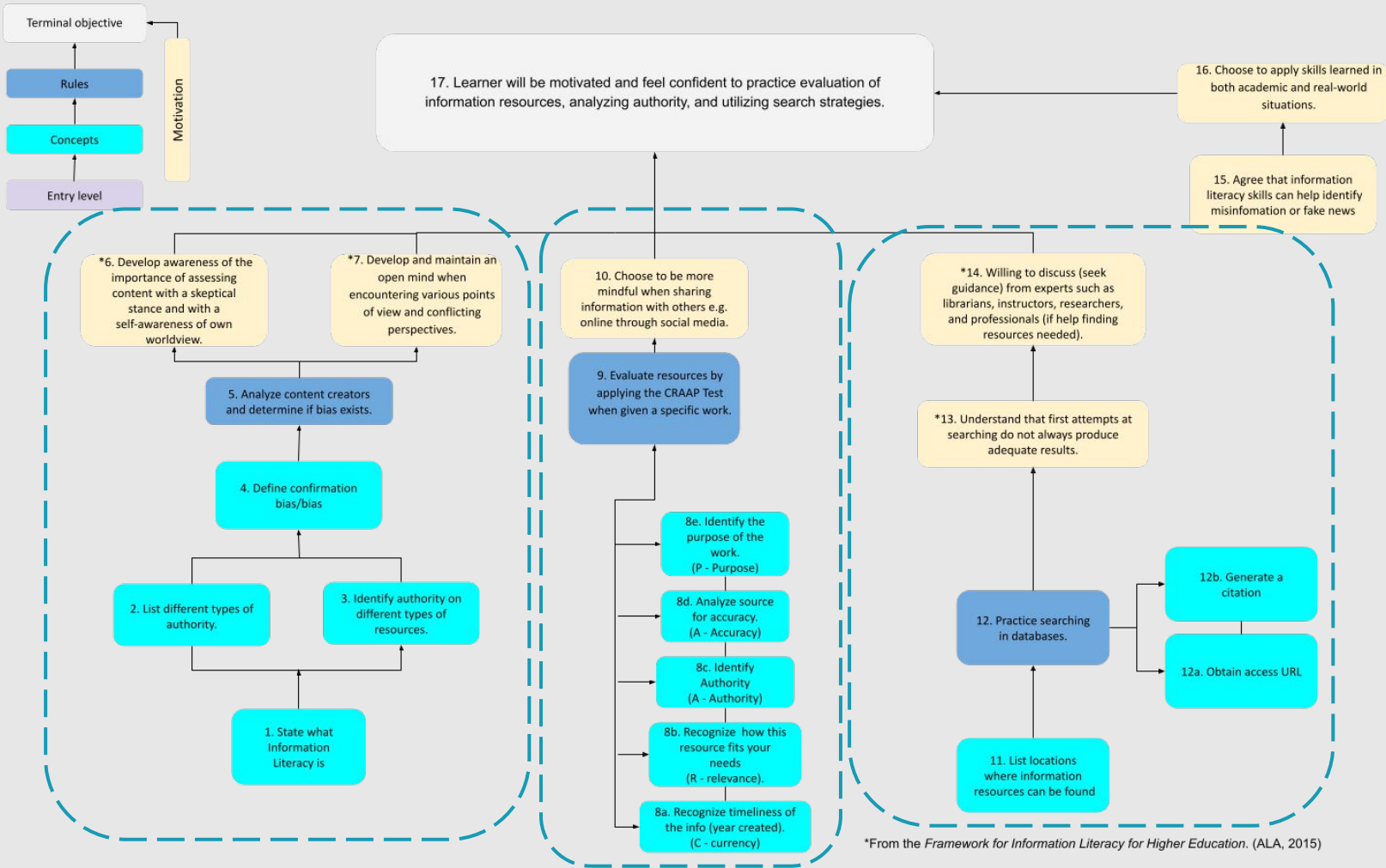
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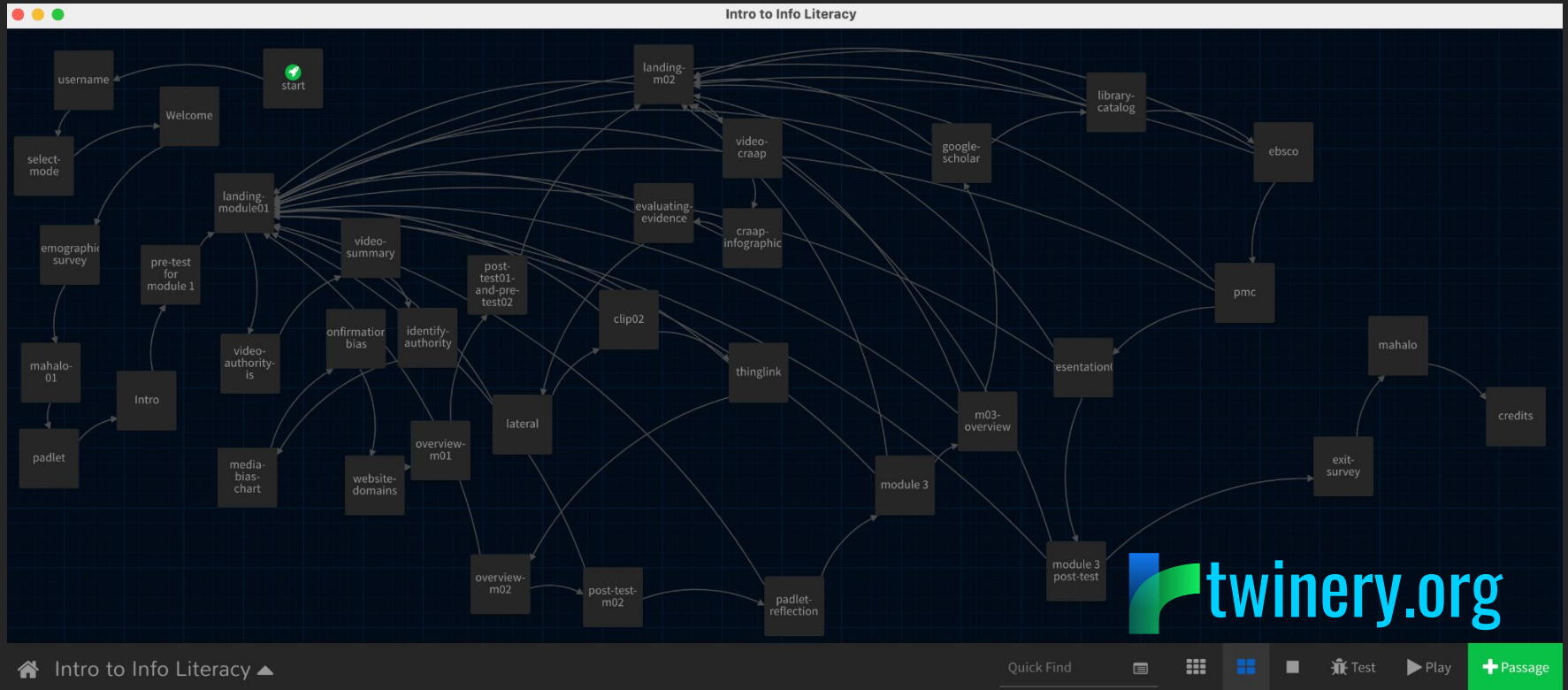
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[Continue](#)



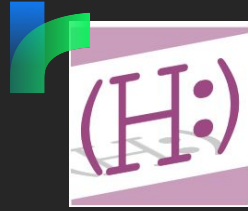
*From the Framework for Information Literacy for Higher Education. (ALA, 2015)

twine IS "AN OPEN-SOURCE TOOL FOR TELLING INTERACTIVE, NONLINEAR STORIES"



Utilized in an *extremely* linear way to allow scaffolding

Technology



Stylesheet

Any CSS entered here will override the default appearance of your story.

```
body {
  background-color: white;
  margin: 60px auto;
  width: 80%;
}
/* this is the test code */
body {
  padding: 25px;
  background-color: white;
  color: black;
  font-size: 25px;
}

.dark-mode {
  background-color: #242424;
  color: white;
}
/* end of test code*/

.explain {
  color: #242424;
  font-family: 'Helvetica', 'Arial', 'Sans-Serif';
  font-size: 19px;
}

tw-story {
```

Twine:

- HTML5, CSS, Harlowe 2.1.0 story format, Javascript to code the website and embed multimedia / learning objects

Media & Multimedia Types + Tools & Technologies Used

*Video



*Infographics



*Google Slides



*Padlet



*ThingLink



**Explanatory Text



**Google Forms (for assessment)



**Media (just Text) | *Multimedia

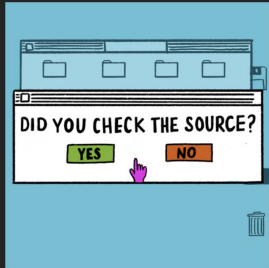
Module 01: Authority is Constructed & Contextual

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via GIPHY

[Continue to the Module 01 video, "Authority is Constructed and Contextual"](#)

Content Covered:

- What is Information Literacy?
- Authority is determined by information need and the context in which information will be used in
- Identifying Authority + Types of Authority
- Confirmation Bias
- Approaching information with skepticism and open-mindedness

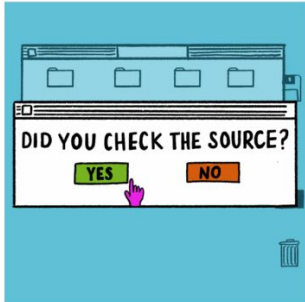
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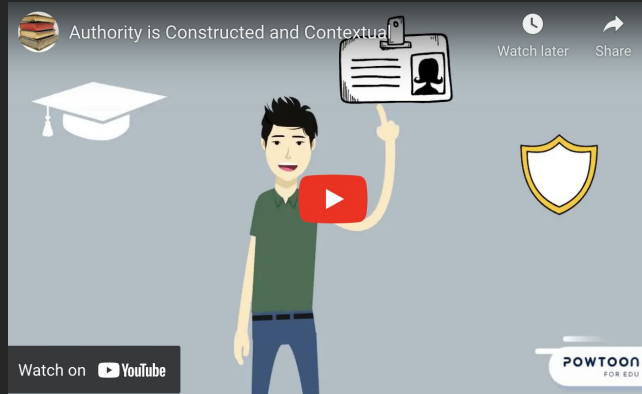
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via GIPHY

[Continue to the Module 01 video, "Authority is Constructed and Contextual"](#)



Module 01: Review

Authority is Constructed and Contextual Video



You just watched a video that explains the concept: **Authority is Constructed and Contextual**. Jared was confused because he sees his pastor as an authority figure, but in the context of his college class assignment, his instructor wanted him to utilize sources considered authoritative in academia. There are different types of authority that exist, but the **context** in which you are performing your research, also matters. When doing personal research, you probably wouldn't need a scholarly, peer-reviewed article to find the answer to all your questions, but it is something your instructor may require for class assignments.

[Continue to learn about identifying the authority on a resource](#)

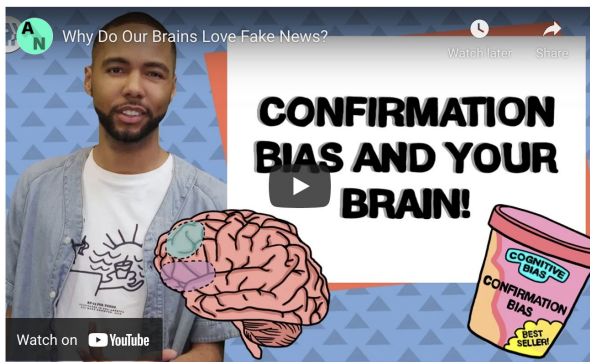
Explanatory Text &
Videos

Module 01: Authority is Constructed and Contextual

Module 01: Authority is Constructed and Contextual

Confirmation Bias

Do you know what **Confirmation bias** is? Check out this video from the host of Above the Noise, Myles Bess, as he breaks down the research around why our brains love fake news.



Why Do Our Brains Love Fake News? (5 min. 20 secs.)

[Continue to learn about website domains and authority](#)

ANALYZING WEBSITES:

Domain

Found in the site's URL, the domain can give some indication of a website's authority.

.com or .net

The least reliable, since anyone can purchase this type of domain. Generally represents a **commercial entity**. **Be cautious!**



.gov or .mil

Indicates U.S. federal **government** sites, or U.S. **military** sites. These can be considered authoritative.

.edu

Reserved for **educational institutions** and generally can be trusted as credible. **However**, students' personal websites can contain information you would not want to cite for research.



.org

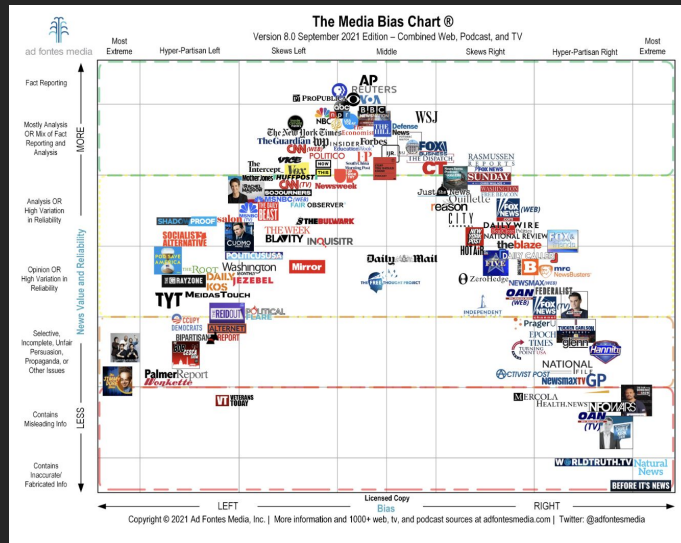
Non-profit organizations use this domain. However, some non-profit organizations have heavy bias and a specific agenda. **Be cautious!**

When in doubt, ask a librarian!



kapcoref@hawaii.edu
808.734.9359
library.kapiolani.hawaii.edu

Lama Library, Kapiolani Community College © 2021



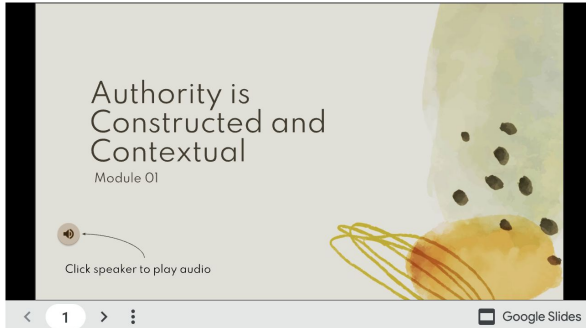
Videos & Infographics

Module 01: Authority is Constructed and Contextual

Module 01: Summary

Authority is Constructed and Contextual

Please look through the following presentation, which provides you with a summary of the main topics that were included in this module, *Authority is Constructed and Contextual*, and some additional, key terminology.



[Continue to the Module 01 Post-test & Module 02 Pre-Test](#)

- Ends with Summative Google Slides Presentation
- Help prepare them for the post-test

Module 02: ALL The CRAAP! (and More): Addresses evaluating resources found online

Welcome to Module 02:

ALL The CRAAP! (and More)

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via GIPHY

[Continue to watch a video about applying The CRAAP Test](#)

Content Covered

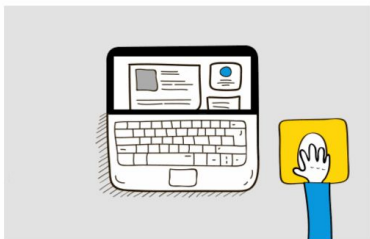
- CRAAP Test (2010)
- Lateral Reading
- Examining the Evidence
- Many real-world examples

Module 02: ALL The CRAAP! (and More)

Welcome to Module 02:

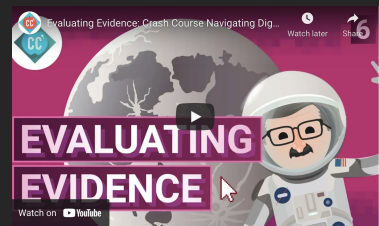
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via GIPHY

[Continue to watch a video about applying The CRAAP Test](#)



THE CRAAP TEST

Evaluating Online Resources

- C CURRENCY**
 - WHEN was this published or updated?
 - Is the information out of date for your topic?
- R RELEVANCE**
 - Is it important, related, & relevant to your topic?
 - WHAT is the connection?
- A AUTHORITY**
 - WHO wrote or published this?
 - What makes them an authority on the topic?
- A ACCURACY**
 - WHERE is the evidence
 - Are facts cited?
- P PURPOSE**
 - WHY does this exist? To inform, sell, entertain, teach, or persuade?
 - Does bias exist?

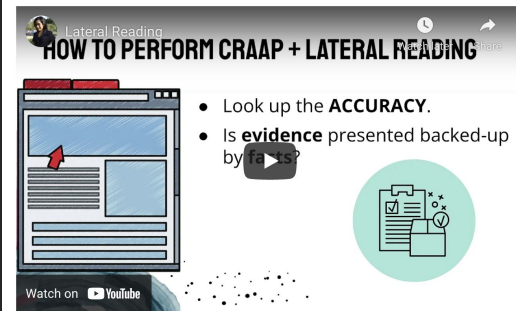
IS IT CRAAP?

Kapi'olani Community College, Lama Library © 2021

Module 02: ALL the CRAAP! (and More)

Lateral Reading

Lateral reading is a recommended technique to use *in addition to the CRAAP Test*. Lateral reading encourages you to **open new tabs**, and start searching for information *outside* of the current site you're evaluating, in order to analyze how credible the original site is. Watch the video below to learn about using lateral reading to evaluate resources.



- Look up the **ACCURACY**.
- Is **evidence** presented backed-up by **FACTS**?

Lateral Reading (3 min. 05 secs.)

[Continue to learn more about analyzing the evidence](#)

Videos, Infographics, & Evaluative Strategies, CRAAP Test, + Use of CRAAP with Lateral Reading

Module 02: ALL The CRAAP! (and More)

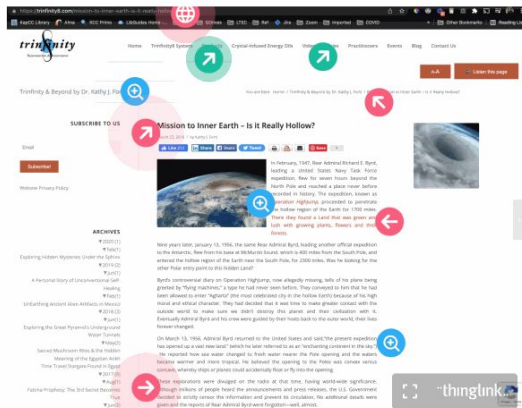
Module 02: ALL the CRAAP! (and More)

Breaking Down a Resource

The image below contains hot spots you can click or mouse-over to interact with analyzing an example resource found online. To view bigger, click the

 fullscreen icon on the bottom-right of the image next to the word

"Thinglink."



The screenshot shows a web browser displaying a ThingLink page titled "Mission to Inner Earth - Is It Really Hollow?". The page features several interactive hotspots (circles with arrows) overlaid on the content. A prominent red circle with a white arrow points to the word "Mission" in the headline. Other hotspots include a green circle pointing to the word "Mission" in the sub-header, a blue circle pointing to the word "Mission" in the main text, a red circle pointing to the word "Mission" in the main text, and a blue circle pointing to the word "Mission" in the main text. The page also includes a sidebar with "ARCHIVES" and a "thinglink" logo in the bottom right corner.

This content was based off a resource found on the [Indiana University East Fake News](#)

[LibGuide](#)

[Continue to Module 02 Summary](#)

ThingLink: Article Exploration

EMBEDDED TEST: Module 02: ALL The CRAAP! (and More)

Padlet

- Interaction
- Analyze resources

padlet

SIGN UP LOG IN SHARE

Allyson Ota • 11d

Real or Fake?

Please choose a resource to examine that no one has commented on yet. Is this a reliable information resource you would recommend to others, or trust yourself? Is it Real or Fake, and Why do you think so?

Stores Refusing To Sell Chicken Noodle Soup After Rumor COVID Patients Are Using It To Feel Better

babylonbee.com

Stores Refusing To Sell Chicken Noodle Soup After Rumor COVID Patients Are Using It To Feel Better

Real or Fake? Why?

0 1

Anonymous 2mo
This is fake. Based on CRAAP, I found this site lacks an authority, accuracy, and the purpose is to humor bias beliefs.

Add comment

Amazon's Alexa told a 10-year old to do a deadly challenge

news.yahoo.com

Why Amazon Alexa told a 10-year-old to do a deadly challenge

Real or Fake? Why?

0 1

Anonymous 2mo
I think this is a Real article because when doing lateral reading I was able to see that the author Adam Smith is a Science & Tech reporter at independent. A pon reading their code of conduct on their website I was able to see that they are against reporting fake news. Seeing that Adam Smith posted on yahoo I would really doubt he would post something fake seeing he is affiliated with that independent company. The article also seems promising because the hypertext links are not broken and the source seems credible seeing that it

Goldfish Can Drive a Vehicle on Land

www.cnn.com

I am excited to share a new study led by Shachar Givon & @MatanSamina w/ Ohad Ben Shahar: Goldfish can learn to navigate a small robotic vehicle on land. We trained goldfish to drive a wheeled platform that reacts to the fish's movement (<https://t.co/ZR59Hu9sib>).

Ronen Segev
January 2, 2022

Look at this Tweet that claims goldfish are able to navigate a vehicle on land.

Real or Fake? Why?

0 1

Anonymous 2mo

Are Feral Cats (indirectly) Killing Hawaiian Monk Seals?

salon.com

Are feral cats (indirectly) killing monk seals?

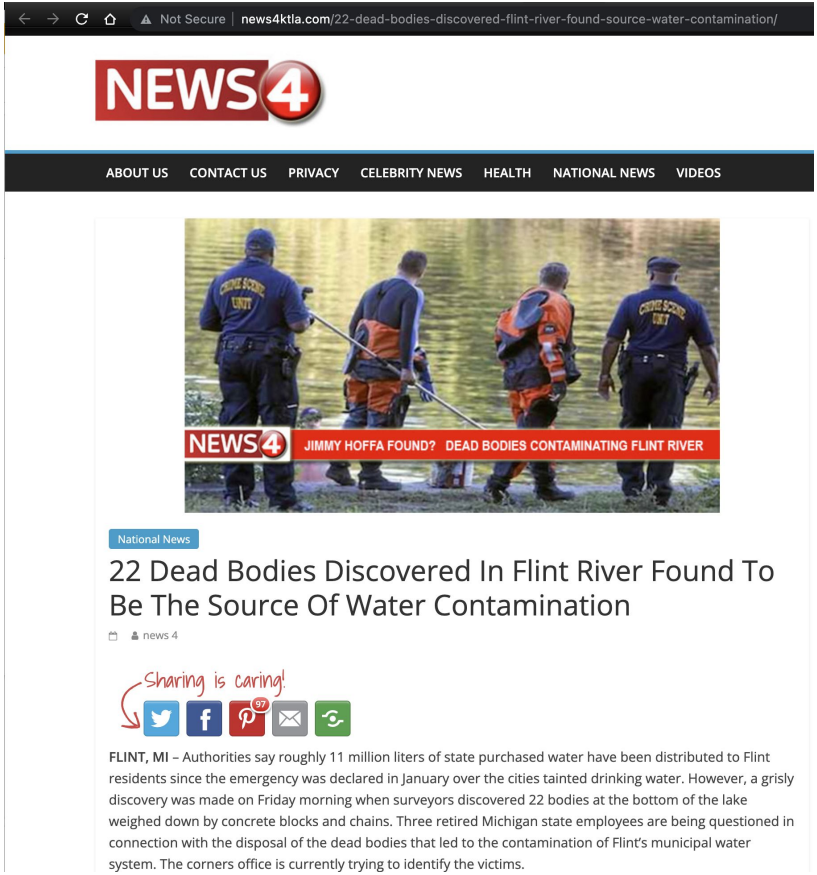
Real or Fake? Why?

0 1

Anonymous 2mo
This is real. The article is current, the context is relevant, the author is an authority, the evidence is accurate, and the purpose of this article is to inform.

Add comment

ASSESSMENT: Module 02: ALL The CRAAP! (and More)



NEWS 4

ABOUT US CONTACT US PRIVACY CELEBRITY NEWS HEALTH NATIONAL NEWS VIDEOS

National News

22 Dead Bodies Discovered In Flint River Found To Be The Source Of Water Contamination

news 4

Sharing is caring!

FLINT, MI – Authorities say roughly 11 million liters of state purchased water have been distributed to Flint residents since the emergency was declared in January over the cities tainted drinking water. However, a grisly discovery was made on Friday morning when surveyors discovered 22 bodies at the bottom of the lake weighed down by concrete blocks and chains. Three retired Michigan state employees are being questioned in connection with the disposal of the dead bodies that led to the contamination of Flint's municipal water system. The corners office is currently trying to identify the victims.

3. Please state your opinion on whether or not this resource would be a credible news item to cite in a research assignment on Flint Michigan's water crisis.

Yes or No?

Please explain your answer.

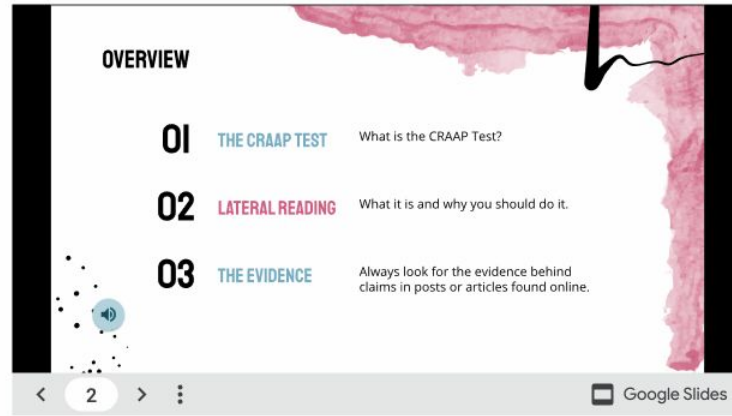
<http://news4ktla.com/22-dead-bodies-discovered-flint-river-found-source-water-contamination/> *

Module 02: ALL The CRAAP! (and More)

Module 02: ALL the CRAAP! (and More)

Summary

Please check out this overview of Module 02 before continuing on to the Post-test for Module 02, and the Pre-test for Module 03.



[Continue to post-test 02 + pre-test 03](#)

Module 03: Searching as Strategic Exploration

Welcome to Module 03:

Searching as Strategic Exploration

In Module 03, we will learn about where you can **locate quality resources** for your research assignments, observe video tutorials showing you **how to search** in the following locations / databases:

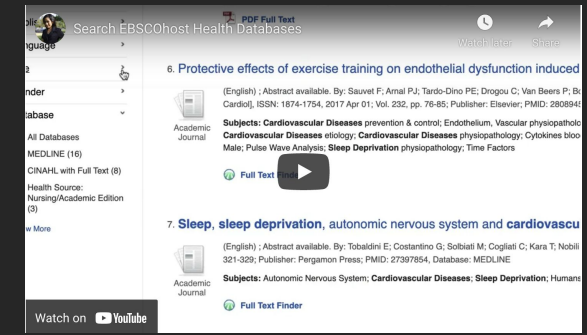
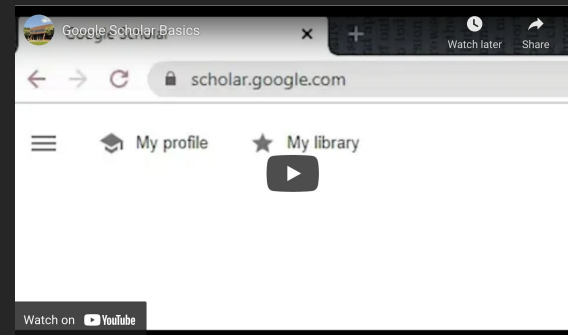
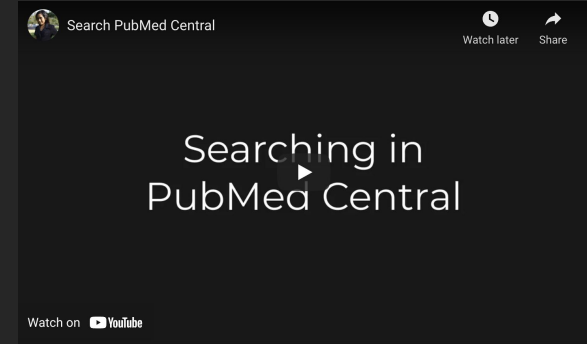
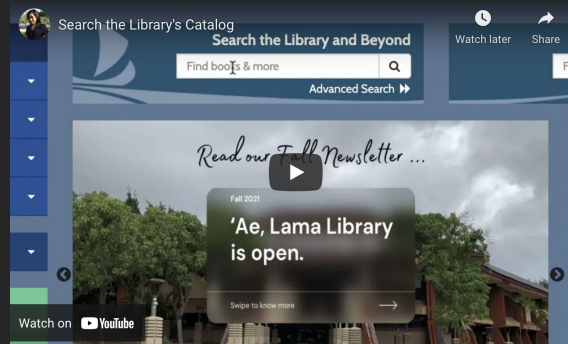
1. **Google Scholar**
2. **Library's Catalog**
3. **EBSCO Health Databases**
4. **PubMed Central**

Learn about the **search process** itself, and realize *it's totally fine to ask for help!*



via GIPHY

[Continue to the Module 03 Presentation Part I](#)



4 Searching Tutorials:
Library's catalog, PubMed Central, Google Scholar, &
EBSCOhost Health

Module 03: Searching as Strategic Exploration

Module 03: Searching as Strategic Exploration

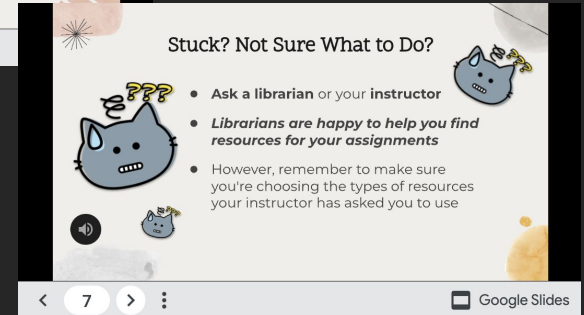
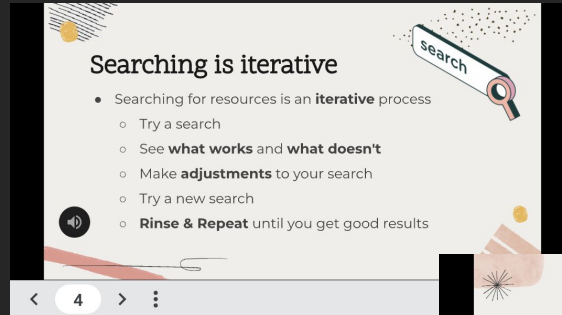
Overview

Please check out Part I of this overview of Module 03 before diving into some video tutorials.



[Continue to the Google Scholar tutorial](#)

Review [Module 01](#) | [Module 02](#)



"Before this module I didn't know how to use databases so module 3 was very helpful to me."

2 Google Slides presentations at the beginning and end of the module

- student participant

EVALUATION

USABILITY STUDY + LEARNING

ASSESSMENT (LA)

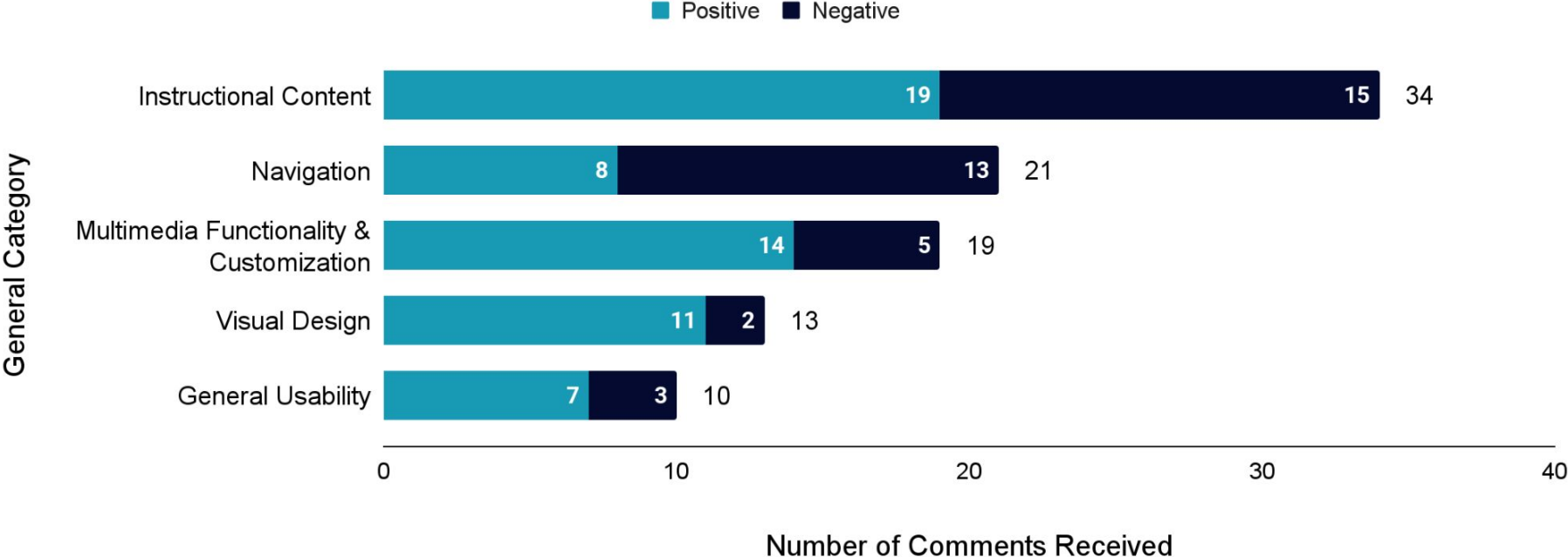
**USABILITY STUDY:
IS THE INSTRUCTION
USABLE?**

PARTICIPANTS: USABILITY STUDY

- Participants ($n = 3$)
- Librarian, Faculty member at KCC, Usability + Content, Subject Matter Expertise (SME): Information Literacy
- Instructor, Faculty at KCC, SME: LTEC M.Ed. (Instructional Design)
- Student, undergraduate, UHM student majoring in Education

USABILITY STUDY RESULTS: FEEDBACK FROM PARTICIPANTS

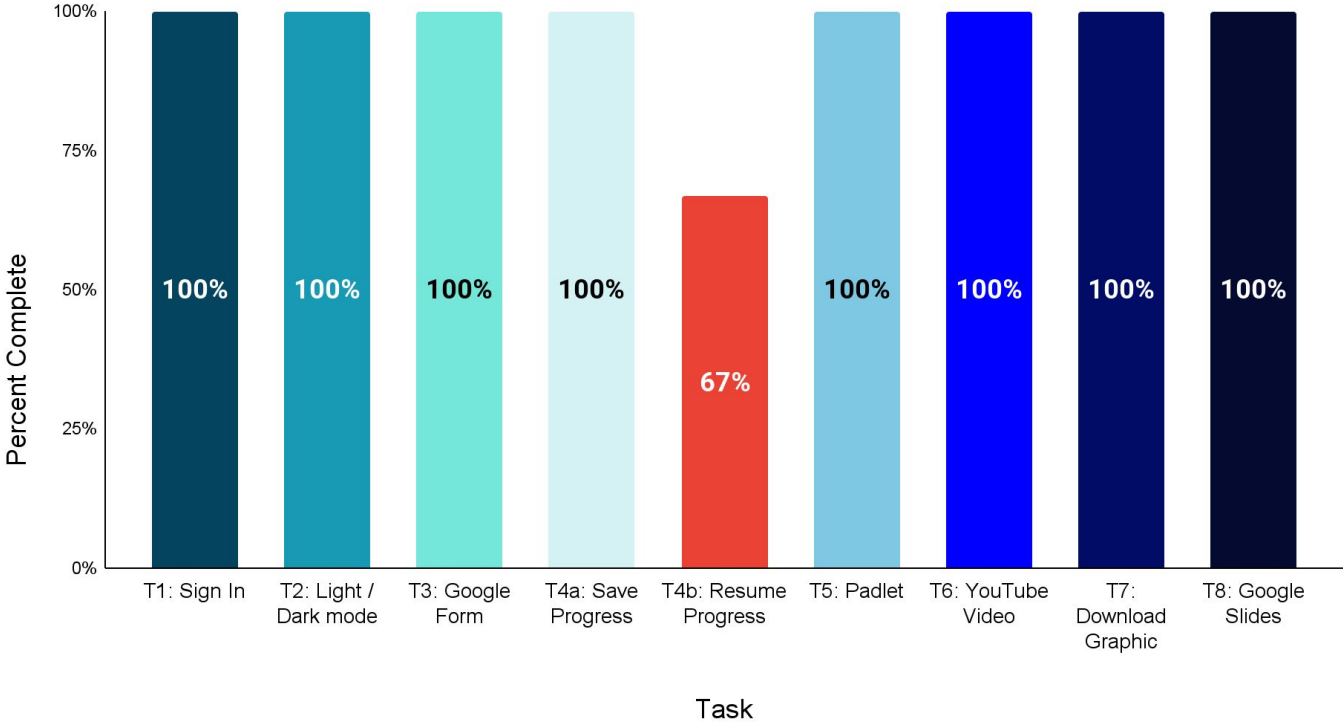
Positive and Negative Feedback Received Across Usability Categories (n = 3)



97 Total Comments Received

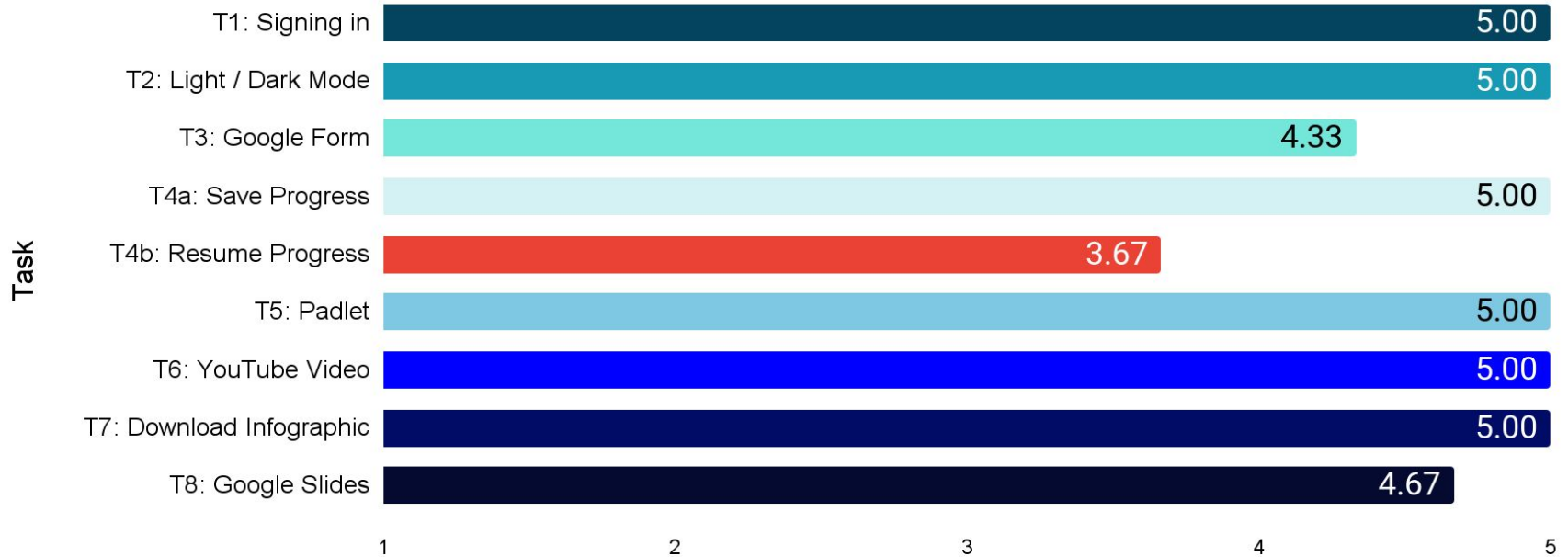
USABILITY STUDY RESULTS: TASK COMPLETION RATE

Average Task Completion Rate Among All Participants (n = 3)



USABILITY STUDY RESULTS: EASE OF USE

Average Ease of Use Rating by Task (n = 3)



1 = Very Difficult, 5 = Very Easy

USABILITY STUDY RESULTS: EASE OF USE (OVERALL)

Follow-up Survey:

"Rate the ease of use of the website"

5

1 = Very Difficult, 5 = Very Easy

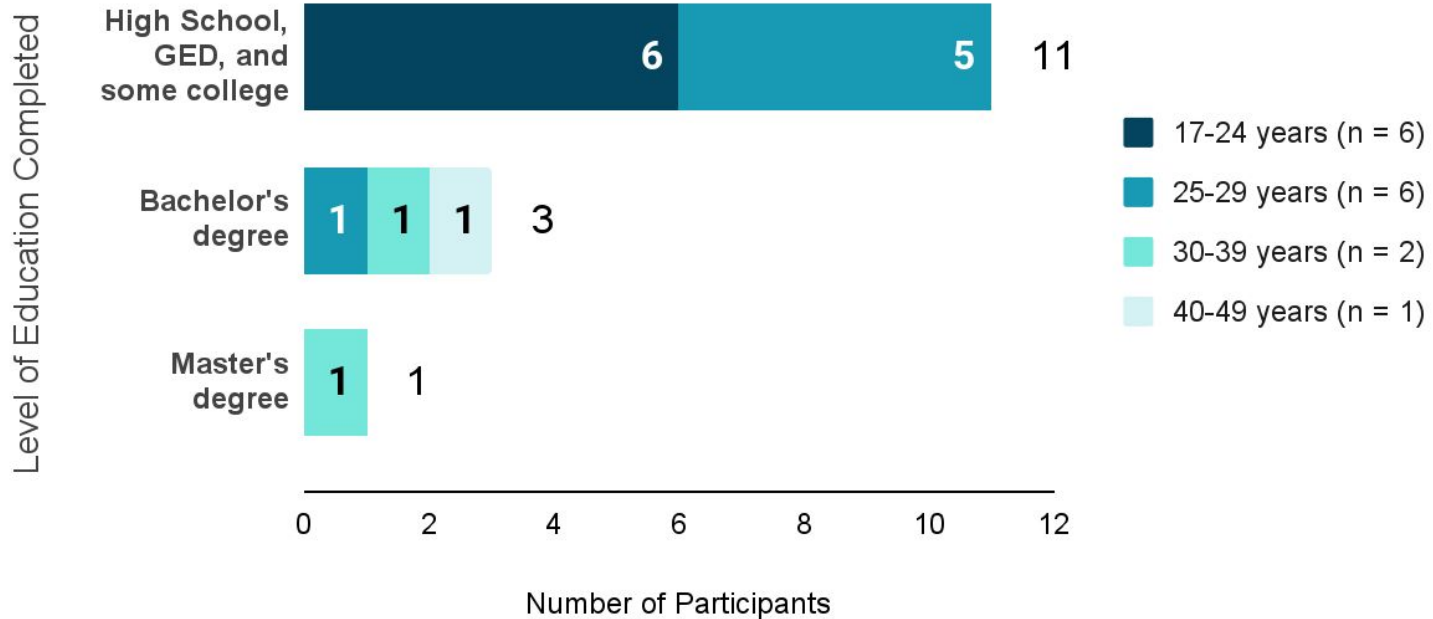
**LEARNING ASSESSMENT:
IS THE INSTRUCTION EFFECTIVE?**

PARTICIPANTS: LEARNING ASSESSMENT (LA)

- RAD 230 students ($n = 14$)
- Student, undergraduate, UHM student majoring in Education ($n = 1$)
- Total participants ($n = 15$)
 - All from target audience

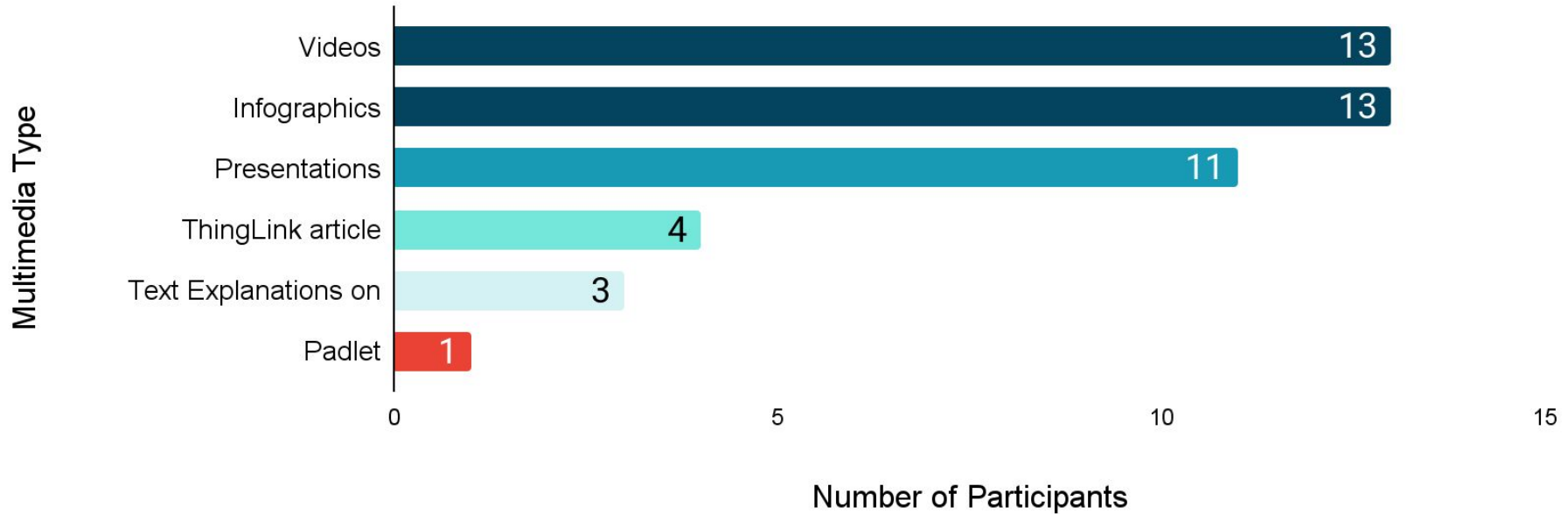
PARTICIPANTS: LEARNING ASSESSMENT (LA)

Participants by Age and Highest Level of Education Completed
(n = 15)



PARTICIPANTS: LEARNING ASSESSMENT (LA)

Participants' Preferred Multimedia / Media Types (n = 15)



WHAT DID YOU LIKE THE MOST ABOUT THE INSTRUCTION?

Eleven (73%) students mentioned video

"I feel **like the choice of videos** were good because of how **to the point** and **short** they were. **I didn't really get bored.**"

"I liked that **videos and pictures** were implemented **vs having to just read a bunch of stuff.**"

"I liked the **videos the most** because I am more of a **visual learner**. Watching videos are [sic] **helpful** and **make learning more fun.**"

FEEDBACK FROM STUDENTS

WHAT DID YOU LIKE THE MOST ABOUT THE INSTRUCTION?

Connection to coursework

"It's a **good reference/tool** for my **upcoming paper / assignments.**"

Asynchronous instruction

"We could **go at our own pace** and **backtrack** to the information if necessary **to help ourselves answer questions.**"

I have **taken this course before** at UH Manoa, so **doing this asynchronously was very [sic] much better** and was a **refresher** for me."

FEEDBACK FROM STUDENTS

WHAT DID YOU LIKE THE LEAST ABOUT THE INSTRUCTION?

4 students (27%) said "n/a" or "nothing"

3 students (20%) mentioned length of the instruction

2 students (17%) mentioned Padlet

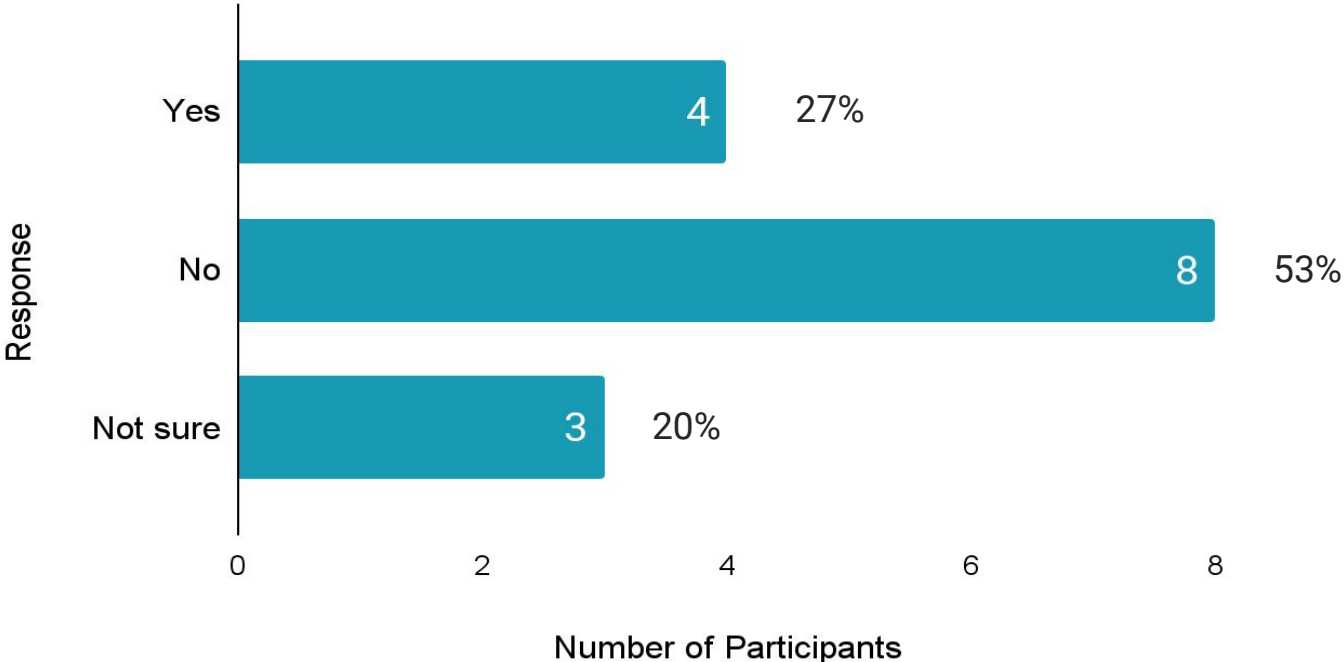
1 Student (7%) mentioned "*I did not like the long videos*"

1 participant (7%) felt it could have been longer with more info

FEEDBACK FROM STUDENTS

PARTICIPANTS: DEMOGRAPHICS

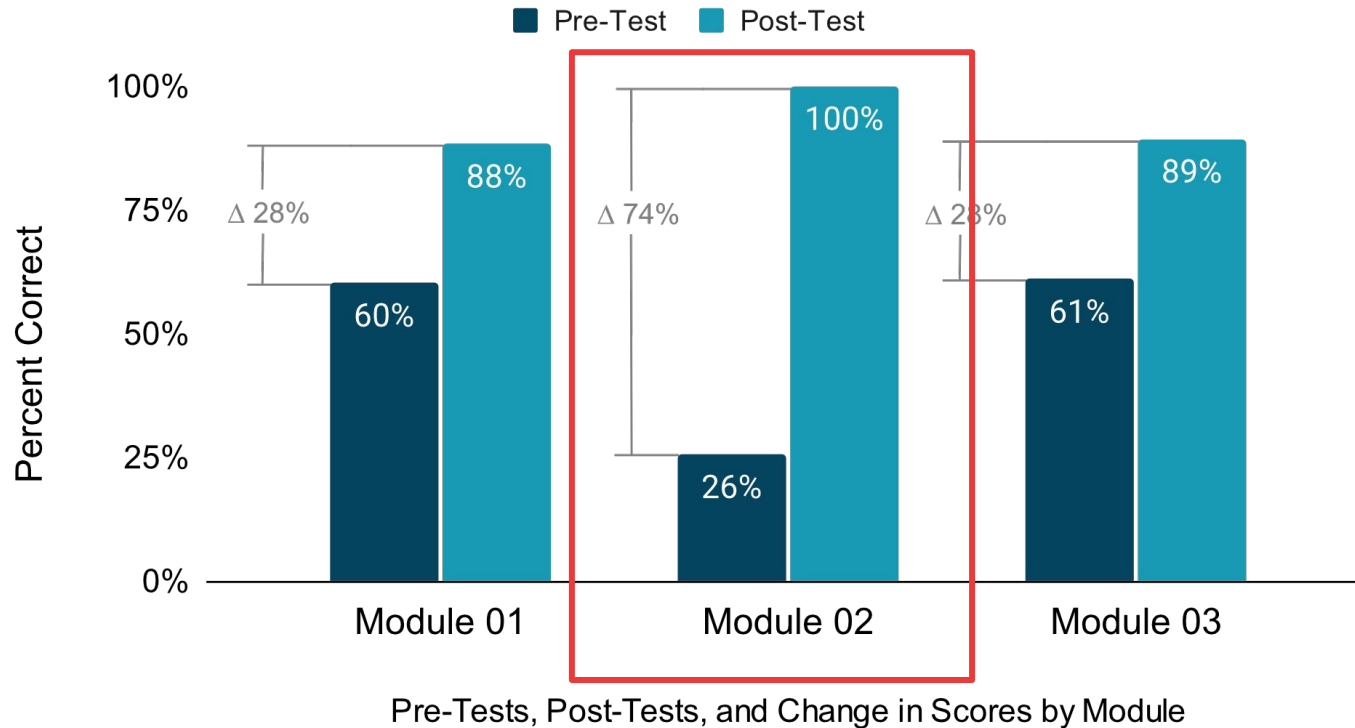
Have you ever attended a library orientation or library instructional session with any of your college classes at any of the UH system libraries? (n = 15)



COGNITIVE OBJECTIVES

LA AVERAGE SCORES BETWEEN PRE AND POST-TESTS

Average Participant Pre and Post-Test Scores by Module (n = 15)



PARTICIPANTS: DEMOGRAPHICS

Do you think misinformation is a problem?

- *Yes*
- *No*
- *Not Sure*

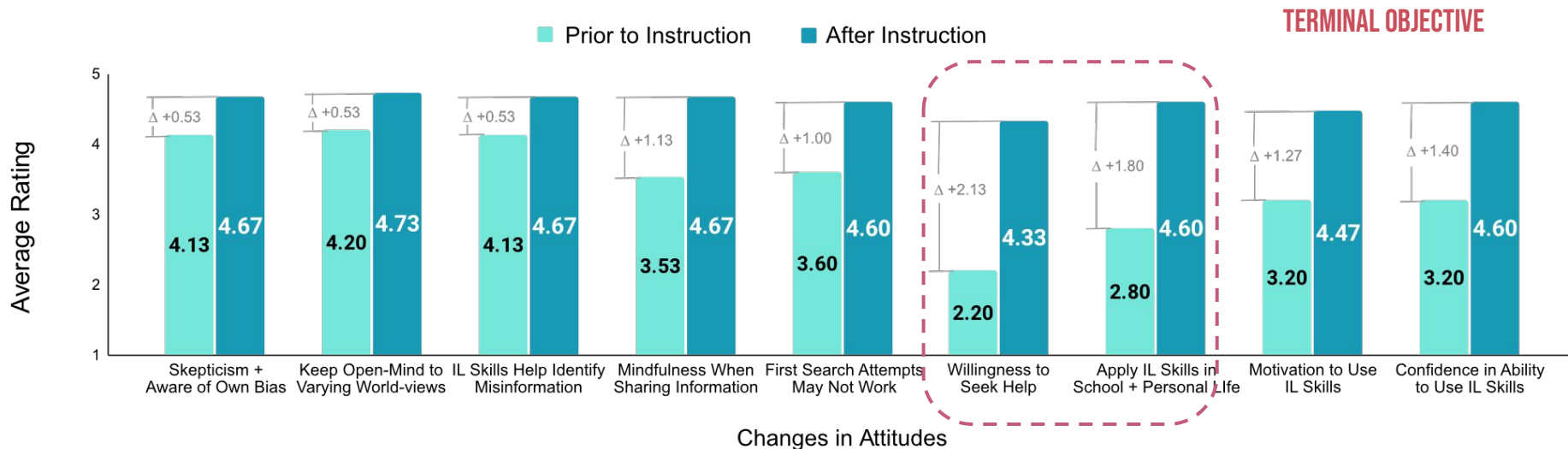
YES

100%

n = 15

AFFECTIVE OBJECTIVES

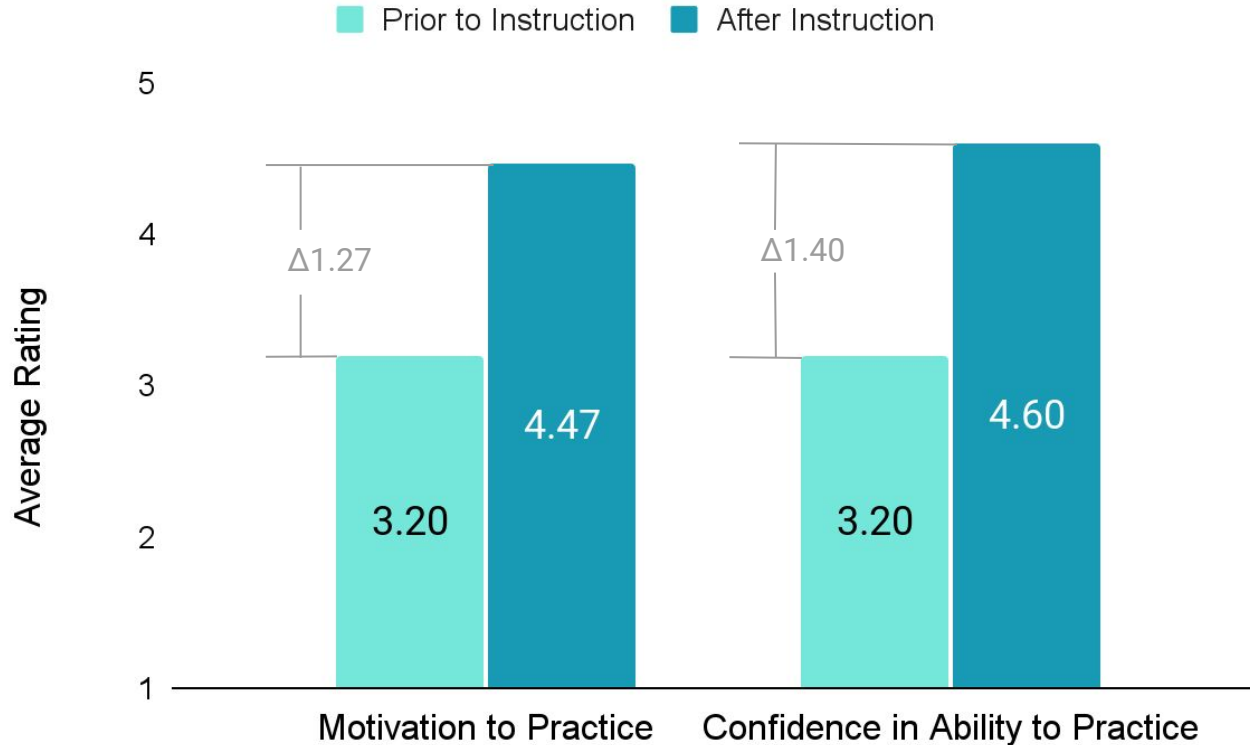
CHANGES IN ATTITUDES ABOUT INFORMATION LITERACY ($n = 15$)



1 = Strongly Disagree; 5 = Strongly Agree

TERMINAL OBJECTIVE / INSTRUCTIONAL GOAL:

MOTIVATION AND CONFIDENCE IN ABILITY TO PRACTICE IL SKILLS ($n = 15$)

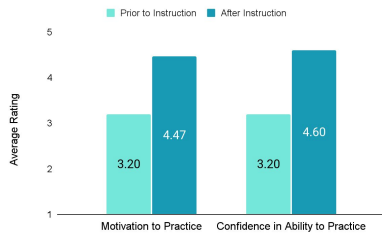


1 = Strongly Disagree; 5 = Strongly Agree

WERE GOALS MET?

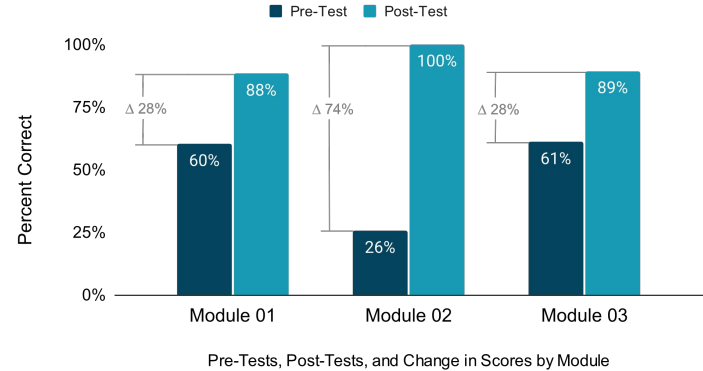


TERMINAL OBJECTIVE

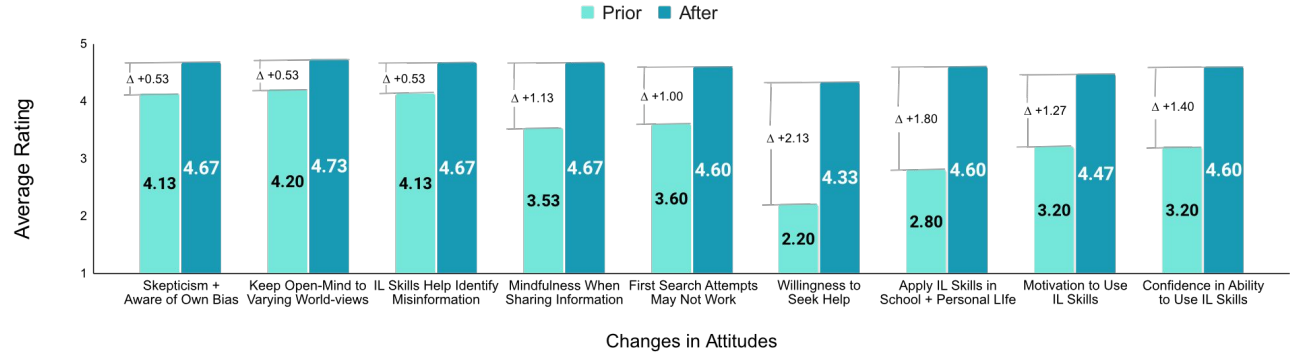


COGNITIVE

Average Participant Pre and Post-Test Scores by Module (n = 15)



AFFECTIVE



FEEDBACK FROM STUDENTS

"I would of [sic] **preferred knowing this in the beginning of the program** or even **before** the program"

"The **modules felt long**. I think if there was like a **progress bar** on the top it would **help me gauge how much further I need to go.**"

FEEDBACK FROM STUDENTS

MOTIVATION TO PRACTICE INFORMATION LITERACY SKILLS

"I feel like **before this course, it wasn't a thought in my mind to check** how credible a source is. **Now, I feel that I will be more aware of where I am getting my information from.**"

FEEDBACK FROM STUDENTS

CONFIDENCE IN PRACTICING INFORMATION LITERACY SKILLS

"I had no idea prior to this course how many factors I could have checked to see if the article could be reliable. Now, I feel confident in my ability in evaluating information."

FEEDBACK FROM STUDENTS

**SUGGESTIONS &
RECOMMENDATIONS FOR
FUTURE WORK**

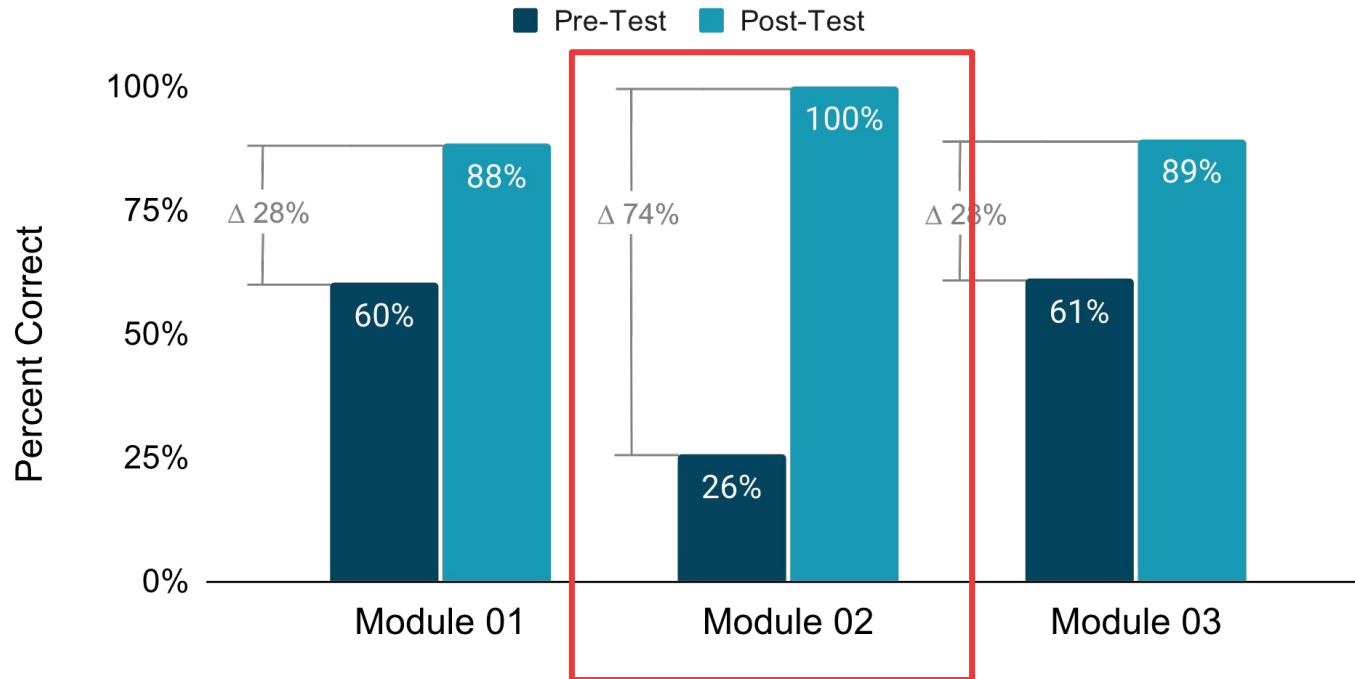
TAKEAWAYS

- I learned a TON but just scratched the surface
- Still more work to do: Revise and Refine
- Progress bar

TAKEAWAYS: LA AVERAGE SCORES BETWEEN PRE AND POST-TESTS

*COGNITIVE OBJECTIVES

Average Participant Pre and Post-Test Scores by Module (n = 15)



Pre-Tests, Post-Tests, and Change in Scores by Module

TAKEAWAYS: TEST QUESTIONS FOR ASSESSMENT

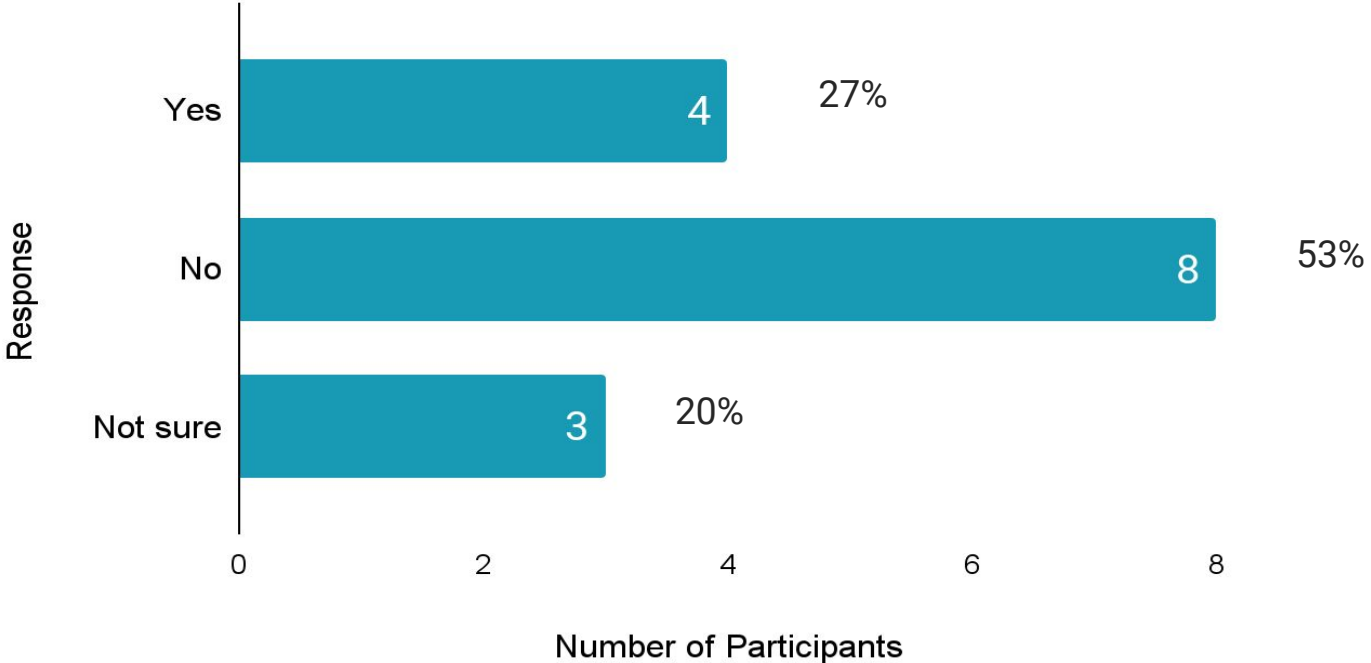
"The pre and post-questions are the same and also **idk if my answers are correct or not.**" – student feedback

Open-ended questions in the pre and post-tests were difficult and time-consuming to grade

- Would be hard to scale up
- No instantaneous feedback

PARTICIPANTS: DEMOGRAPHICS

Have you ever attended a library orientation or library instructional session with any of your college classes at any of the UH system libraries? (n = 15)



REFERENCES

- American Library Association. (2015, February 9). *Framework for information literacy for higher education*. Association of College and Research Libraries. <http://www.ala.org/acrl/standards/ilframework>.
- Ghebreyesus, T. A. (2020, February 15). Munich Security Conference. *World Health Organization, Director-General, Speeches*. <https://www.who.int/director-general/speeches/detail/munich-security-conference>.
- Keller, J.M., (2010). The ARCS model of motivational design. In *Motivational design for learning and performance: The ARCS model approach* (pp. 43-74). Springer.
- Mayer, R.E. (2014). Cognitive theory of multimedia learning. In R. E. Mayer (Ed.), *The Cambridge Handbook of Multimedia Learning* (2nd ed., pp. 43-71). Cambridge University Press.
- McGrew, S. (2020). Learning to evaluate: An intervention in civic online reasoning. *Computers & Education* 145, 103711. <https://doi.org/10.1016/j.compedu.2019.103711>.
- Murthy, V. H. (2021). Confronting health misinformation: The U.S. Surgeon General's advisory on building a healthy information environment. <https://www.hhs.gov/sites/default/files/surgeon-general-misinformation-advisory.pdf>.
- Purcell, K., Raine, L., Buchanan, J., Friedrich, L., Jacklin, A., Chen, C., & Zickuhr, K. (2012, November 1). *How teens do research in the digital world*. Pew Research Center. <https://www.pewresearch.org/internet/2012/11/01/how-teens-do-research-in-the-digital-world>.
- Saunders, L., Severyn, J., & Caron J. (2017). Don't they teach that in high school? Examining the high school to college information literacy gap. *Library & Information Science Research*, 39(4), 276-283. <https://doi.org/10.1016/j.lisr.2017.11.006>.
- University of Hawai'i. (n.d.) *Kapi'olani Community College: At a glance*. Accessed August 27, 2021. <https://web.archive.org/web/20210812002708/https://www.hawaii.edu/campuses/kapiolani>.

REFERENCES: GIFS

(n.d.). (2016, March 12). Cat typing a document on a laptop. Imgur. <https://imgur.com/1SGYcMM>

Abitan. (n.d.). Cartoon hello GIF by Abitan. Giphy. <https://media.giphy.com/media/Rjub7AIEIbXT0tzbr3/giphy.gif>.

Abitan. (n.d.). Abitan GIF ... Giphy. <https://media.giphy.com/media/ovHIQnHMZgVu9XRJfX/giphy.gif>.

GIPHY Studios Originals. (n.d.). Thanks thank you GIF by GIPHY Studios Originals. Giphy. <https://media.giphy.com/media/xUPGcxcv81ebKh7Vu/giphy.gif>.

GOOD PUPPY. (n.d.). Black out animation. Giphy. <https://media.giphy.com/media/je0LISqM3E7Q4z0Fvw/giphy.gif>.

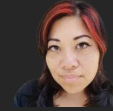
INTO ACTION. (n.d.). Election 2020 Facebook GIF by INTO ACTION. Giphy. <https://media.giphy.com/media/qg7QE182TLxRHERdcJ/giphy.gif>.

Silgoweb. (n.d.). Sligoweb GIF ... Giphy. <https://giphy.com/gifs/website-SpopD7IQN2gK3qN4jS>.

All gifs accessed November 2021.

Mahalo:

Director of Radiologic Technology at KCC: Kimberly Suwa



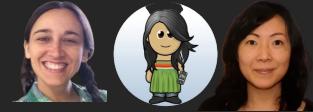
Critical Friends: Kelly Asato + Tyler Lum



Dr. Catherine Fulford + Dr. Daniel Hoffman + TA: Patrick Agullana
Dr. Peter Leong + Dr. Seungoh Paek



KCC Lama Library: Erica Dias + Jessica Lum +
Joyce Tokuda



SMEs and O.G. Friends: Rich Suematsu + Justin Quezon



Extended Critical Friends: Chelby Onaga + Judy Kakazu + Byron Pulu + Kawika
Gonzales + Jesse Joseph + Barth "JR" Baron



'Ohana: Karma Murayama + Roxanne Ota





MAHALO!

QUESTIONS?

allyson@hawaii.edu