



Addressing Unhelpful/Checklist Strategies

Lesson #3 Debunking Unhelpful Strategies



With your group, discuss:

What do you think your students have learned from other classes or past teachers about evaluating online information?

Checklists

CREDIBLE OR INCREDIBLE?

Instructions: Select a website from the provided list and evaluate its credibility.

Name of site: _____

URL: _____

Credibility Criteria

Authorship

Does the site identify the individual or organization responsible for the information?
Is a contact person identified with an email address?
Does the site have a commercial sponsor?

Content

What is the purpose of this site? to inform to persuade to entertain to sell to educate to entertain to sell to educate

Is the information current?
Is the information provided supported by credible sources?
Are the sources of information identified?
Does the site provide resource links to other relevant sites?
Are the links current and reliable, taking into account changes in web addresses?
Is the language unbiased rather than emotional?

Format and Structure

Are the spelling and grammar flawless?
Do the graphics enhance the information on the website?
Is the site easily readable and navigable?
Does the site provide for interactivity and user feedback?

BEYOND THE CREDIBILITY CRITERIA: THE ONLINE NEWS VERIFICATION CHECKLIST

RULES: START WITH 30 POINTS AND SUBTRACT OR ADD POINTS ACCORDING TO THE FOLLOWING CRITERIA.

headlines	<ul style="list-style-type: none"> the headline makes use of ALL CAPS or excessive punctuation!!!!? -1 the headline promises secret information, surprise, happiness, outrage? -2
url	<ul style="list-style-type: none"> the publication does not have its own domain name or uses a free blog platform -1 the domain is counterfeit, eg. bbc.com.co -2
author	<ul style="list-style-type: none"> there are no examples of their work elsewhere online -1 there is no identifiable author or the author is using a pseudonym -2
date	<ul style="list-style-type: none"> there is no date on the article -2 the information in the article is no longer relevant or current -2
BONUS ROUND	<ul style="list-style-type: none"> the content quotes sources and names them +2 the interviewee is qualified to speak with authority on the topic or more than one opinion was represented in the article +3
BONUS QUESTION	Can you find out who owns the publication? <input type="checkbox"/>

Identifying High-Quality Sites

Name of Site _____ URL _____

Website Test

Purpose of the Site	Circle one
1. Can you tell if the site is fact or opinion? (If the information seems one-sided, or biased, you will have to go elsewhere to hear the other side of the issue.)	YES NO
2. Is the site free of advertising?	YES NO
3. If there are ads, is it easy to tell the difference between ads and content?	YES NO
4. Is the site sponsored by any organizations?	YES NO
5. Is it clear who the site is for? (for example, college students or young children)	YES NO
6. Is the tone calm and fair? (Sites that are mean and angry may not be good sources of information.)	YES NO
7. Is the site open to everyone? (no age requirements, fees, passwords, or registration)	YES NO
8. Is the site's domain .edu, .net, .org, or .gov? (If you see a - in the URL, it may be a personal site, not an official site.)	YES NO

Evaluating Sources

by Jeremy M. Brown — last modified 2 years ago

Depending on your field of study and current topic, you may need more reliable and relevant to your current project. What is the best source for your resource list. (download a printable version here)

C.R.A.P. Test

Currency: Is the information recent enough for your topic?

- Was it published in the last __ years or around that time?

Relevancy: Does the information apply to your topic?

- Is it a primary or secondary source?
- How much of the information applies to you?
- Is the information general or detailed, balanced or biased?

Authority: Who authored this information? Are they qualified to write about this topic?

- Was it a single person or several people?
- Was it a corporation or organization?
- Are their credentials provided?
- Are methods/references provided?
- Was it peer-reviewed?

Purpose: Why was this written?

- Who is the intended audience?
- Is the information intended to inform, persuade, or entertain?
- Is this a first-hand account of an event or report?
- Does the author have a vested interest in the information?

How to Evaluate ONLINE CONTENT

On the World Wide Web, straight facts can be hard to find. The Internet is a big space where people can easily get lost. There is too much information, resources, and unreliable authorities. People who are using the Internet must deal with uncertainty. Is the information true, unbiased and free of commercial intent?

Here are things you need to check:

- AUTHORSHIP - ESTABLISH THE AUTHORITY OF THE SOURCE**
 - THE AUTHOR INFORMATION IS AVAILABLE ON THE CONTENT OR PUBLICATION.
 - THE AUTHOR WAS PREVIOUSLY CITED IN RELATION TO HIS OR HER CONTENT.
 - THE AUTHOR IS AFFILIATED WITH AN ACADEMIC INSTITUTION OR CREDIBLE ORGANIZATION.
- UP-TO-DATENESS AND RELEVANCE**
 - THE CONTENT AND INFORMATION IS UP-TO-DATE AND RELEVANT.
 - THE CONTENT SHOWS "MOST RECENT CHANGES AND UPDATES" ON THE CONTENT TITLE.
- ACCURACY**
 - THE CONTENT IS FREE FROM SPELLING ERRORS.

checkology **FAKE NEWS**

TEN QUESTIONS FOR A NEWS DETECTION

Use the questions below to assess the likelihood that a piece of information is fake news. The more red flags you circle, the more skeptical you should be!

1. Gauge your emotional reaction: Is it strong? Are you angry? Are you intensely hoping that the information turns out to be true? False?
2. Reflect on how you encountered this. Was it promoted on a website? Did it show up in a social media feed? Was it sent to you by someone you know?
3. Consider the headline or main message:
 - a. Does it use excessive punctuation (!) or ALL CAPS for emphasis?
 - b. Does it make a claim about containing a secret or telling you something that "the media" doesn't want you to know?
 - c. Don't stop at the headline! Keep exploring.
 - d. Is this information designed for easy sharing, like a meme?
4. Consider the source of the information:
 - a. Is it a well-known source?
 - b. Is there a byline (an author's name) attached to this piece?
 - c. Go to the website's "About" section: Does the site describe itself as a "fantasy news" or "satirical news" site?
 - d. Does the person or organization that produced the information have any editorial standards?
 - e. Does the "contact us" section include an email address that matches the domain (not a Gmail or Yahoo email address)?
 - f. Does a quick search for the name of the website raise any suspicions?
5. Does the example cite a variety of sources, including official and expert sources? Does the information this example provides appear in reports from [other] news outlets?
6. Does the example hyperlink to other quality sources? In other words, they haven't been altered or taken from another context?
7. Can you confirm, using a reverse image search, that any images in your example are authentic (in other words, sources that haven't been altered or taken from another context)?
8. If you searched for this example on a fact-checking site such as Snopes.com, FactCheck.org or PolitiFact.com, is there a fact-check that labels it as less than true?

Checklist approaches

Evaluation Criteria

Currency: *The timeliness of the information.*

- When was the information published or posted?
- Has the information been revised or updated?
- Does your topic require current information, or will older sources work as well?
- Are the links functional?

Relevance: *The importance of the information for your needs.*

- Does the information relate to your topic or answer your question?
- Who is the intended audience?
- Is the information at an appropriate level (i.e. not too elementary or advanced for your needs)?
- Have you looked at a variety of sources before determining this is one you will use?
- Would you be comfortable citing this source in your research paper?

- Who is the author/publisher/source/sponsor?
- What are the author's credentials or organizational affiliations?
- Is the author qualified to write on the topic?

Accuracy: *The reliability, truthfulness and correctness of the content.*

- Where does the information come from?
- Is the information supported by evidence?
- Has the information been reviewed or refereed?
- Can you verify any of the information in another source or from personal knowledge?
- Does the language or tone seem unbiased and free of emotion?
- Are there spelling, grammar or typographical errors?

- What is the purpose of the information?
- Are there political, ideological, religious, institutional, or personal biases?

Unhelpful Strategies: URL

- Don't draw conclusions from a site's URL
 - There is no difference between .org and .com sites
 - Even .edu or .gov sites might be unreliable

Unhelpful Strategies: Appearance

- Don't draw conclusions from a site's appearance
 - Sites that look professional aren't always credible
 - Some credible sites look unprofessional

Unhelpful Strategies: About Page

- The About page tells you what the author/organization wants you to know about them
 - It doesn't have to be true!

Unhelpful Strategies: Amount of Information

- Sites with more information are not always more credible
- Judging the quality of information is difficult unless we are experts in that area

Spot the Unhelpful Strategies!

1. Read laterally about websites on fertilizers (Eutrophication MEL Evidence #1: *Researchers have found that nutrient levels return to normal when humans stop overusing fertilizers*):

- <https://tinyurl.com/unhelpful1>
- <https://tinyurl.com/unhelpful2>

2. Identify unhelpful strategies students might use to evaluate these sites

- *Remember, even if the “clue” on the site would lead to the “right” credibility judgment, it’s still unhelpful!*

Unhelpful Strategies

- Even after you explicitly address these with students, they are likely to come up (they're sticky!)
- Prepare to respond to these in productive yet clear ways if/when they do

Responding to Unhelpful Strategies

Direct explanation:

Student: On their About page it doesn't say anything about any like bigger companies support them or the government supporting them. It just says non profit, where they can pretty much just say whatever they want to say.

Teacher: Okay, first thing, good. Yea, the About page it says its a nonprofit, but guys the About page is everybody's ability to write their own kind of review of themselves on these websites. So the About page is a good place to go to to start, but it's one of those things where then you want to get a little more information about them.

Responding to Unhelpful Strategies

Ask follow-up questions:

Student [discussing where to click on search results]: But then I'd probably go to somewhere that's actually important, like a .gov or a .net.

Teacher: Well what have we learned about the .gov and .net stuff? Does that actually mean they're credible sources?

Multiple students: No.

Teacher: No, not so much.

Responding to Unhelpful Strategies

Engage additional students:

Student 1: The person who posted [the tweet] is a verified political news contributor [this is what it says on the person's Twitter bio].

Teacher: Okay, so that might be something to kinda look at, they talk about themselves being a political news contributor, they are considered verified through the blue check mark. What does the blue check mark mean? When you say--

Student 1: It means you're verified.

Teacher: But, and I'd love to hear from additional students, what does being verified mean?

Student 2: Twitter verifies you.

Teacher: Twitter verifies them. Does it verify them as a political news contributor or as a person?

Multiple students: Person

Teacher: So it's a verified person but it doesn't actually tell us if they're actually a reputable news contributor. That's an interesting thing to bring up- what news site are they part of?

Student: [inaudible]

Teacher: So we don't actually know.

Transcript Analysis

With your group:

- Review as many short transcripts as you have time for and:
 - Identify the unhelpful strategies raised by students
 - Discuss the teacher's response and what, if anything, the teacher could have done differently



Resources for Lateral Reading

Lesson #4: Resources for Lateral Reading



AI as a resource for lateral reading?

ChatGPT ▾

which source- climate central or heartland institute- should i trust to learn about wildfires and climate change?

You should trust **Climate Central** over the **Heartland Institute** for accurate, science-based information on wildfires and climate change.

Here's why:

✔ **Climate Central**

- **Scientific credibility:** Climate Central is staffed by scientists and science communicators. It partners with universities and research institutions and bases its reporting on peer-reviewed science.
- **Mission:** It's a nonpartisan, nonprofit organization focused on communicating the science and effects of climate change.
- **Reputation:** Widely regarded as a trustworthy source by scientists, educators, and journalists.

⚠ **Heartland Institute**

- **Anti-science stance:** It is known for denying or downplaying the scientific consensus on climate change, including its links to extreme weather events like wildfires.
- **Funding concerns:** The institute has received funding from fossil fuel interests, which raises questions about bias and motives.
- **Credibility issues:** Fact-checking organizations and scientific watchdogs frequently rate its climate information as misleading or incorrect.

AI as a resource for lateral reading?

The image shows a Google search interface with an AI Overview overlay. The search query is "is the heartland institut". The AI Overview section is titled "Assessing the reliability of Heartland Institute's history, stated goals, and activities." and includes a "Background and Mission" section with bullet points:

- Heartland Institute is a policy think tank for conservative and libertarian groups.
- It states that it is not subject to strict guidelines when it comes to research.
- Its mission is to promote the free market and individual liberty.

The "More options" menu is open, showing a "Feedback" button and an "About the source" section. The "About the source" text reads: "This overview was generated with the help of AI. It's supported by info from across the web and Google's Knowledge Graph, a collection of info about people, places and things. Generative AI is a work in progress and info quality may vary. For help evaluating content, you can visit the links provided. [Learn more](#) about how AI Overviews work and how data helps Google develop AI in Search."

The "Your search and this result" section contains three bullet points:

- This result is in [English](#)
- This result is generated by AI to be relevant to your [search](#)
- This result seems relevant for searches from [Finland](#)

At the bottom of the menu are two links: "How Search works" and "Learn more search tips".

In the background, search results for "Heartland Institute - Wikipedia" and "Heartland Institute - SourceWatch" are visible. A red circle highlights a vertical ellipsis menu icon on the right side of the search results.

Resources for Lateral Reading

Resource #1: Wikipedia





WIKIPEDIA



Resources for Lateral Reading

Resource #2: News stories



Resources for Lateral Reading

Resource #3: Fact checking organizations (Politifact, Factcheck.org, Snopes)

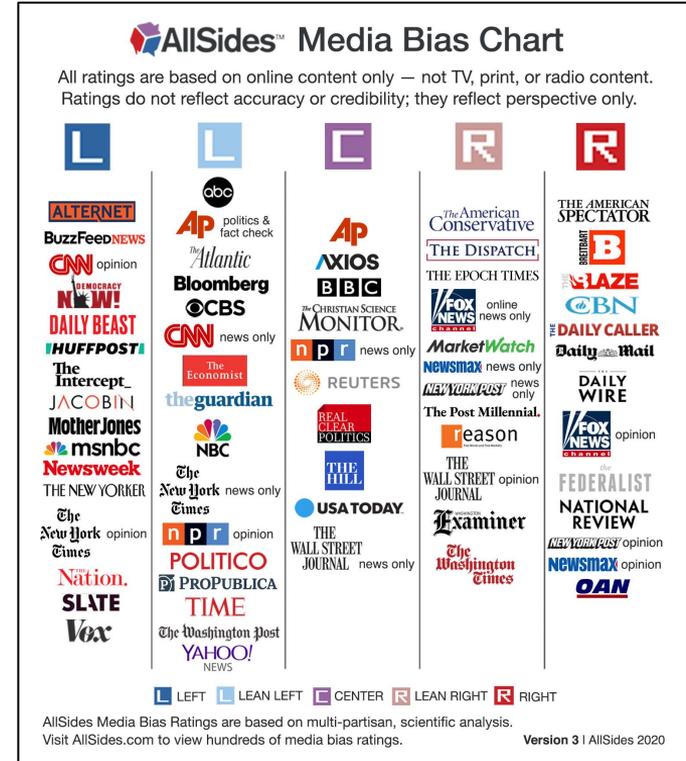
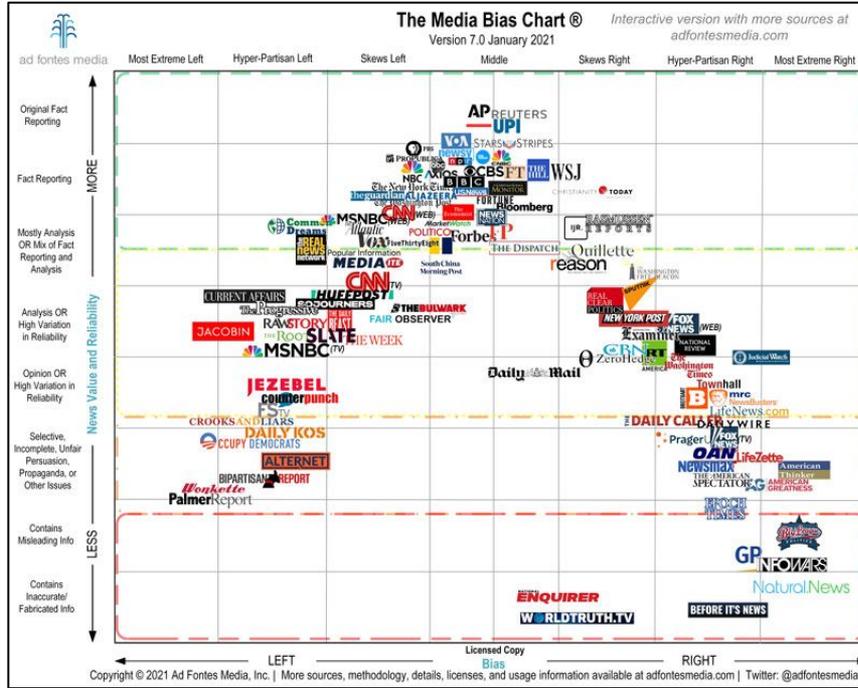


Turn & talk:

Do you think your students will have a hard time accepting any of these as credible sources for lateral reading?

How could you further support them to understand why these specific sources are credible?

Not all lateral sources are created equal





Preparing to Support Students' Lateral Reading: Evidence from Classrooms

Learning Lateral Reading Involves:

- Knowing not to use unhelpful strategies (URL, appearance, etc.)
- Effective search strategies (key words, navigating search results)
- Finding credible lateral sources
- Locating information within those sources that sheds light on the original source's credibility (vocabulary & conceptual knowledge)
- Knowing what adds to and detracts from credibility
- Reasoning about the original source's credibility based on what you learn

Preparing to Support Students' Lateral Reading: Evidence from Classrooms

You are researching global warming and come across this website:
<https://friendsofscience.org>. Please decide if this website is a trustworthy source of information on global warming. You can open a new tab and do an internet search if that helps.

Is this website a trustworthy source for learning about global warming?

Explain your answer, citing evidence from the webpages you used. Be sure to provide the URLs to the webpages you cite.

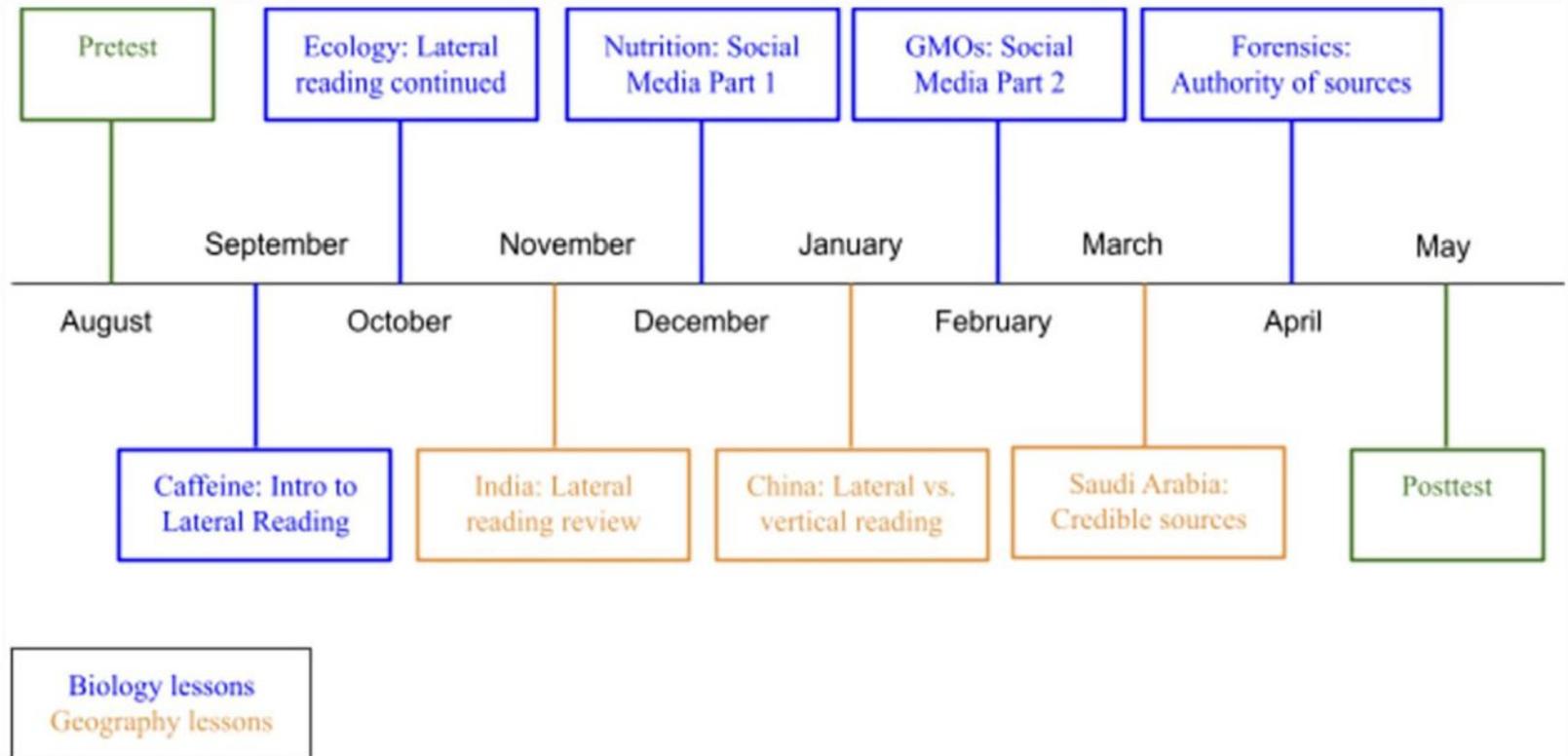
You are researching global warming and come across this website:
<http://www.co2science.org>. Please decide if this website is a trustworthy source of information on global warming. You can open a new tab and do an internet search if that helps.

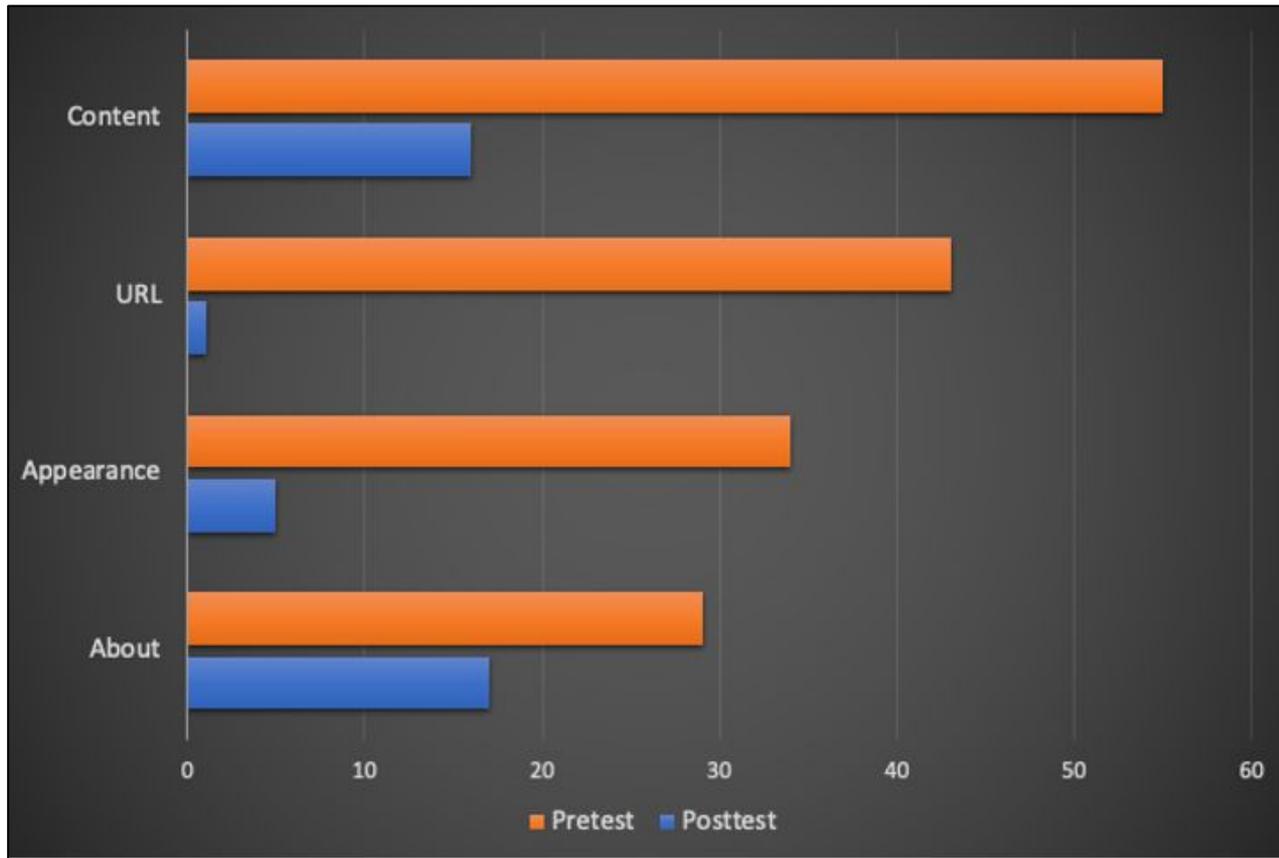
Is this website a trustworthy source for learning about global warming?

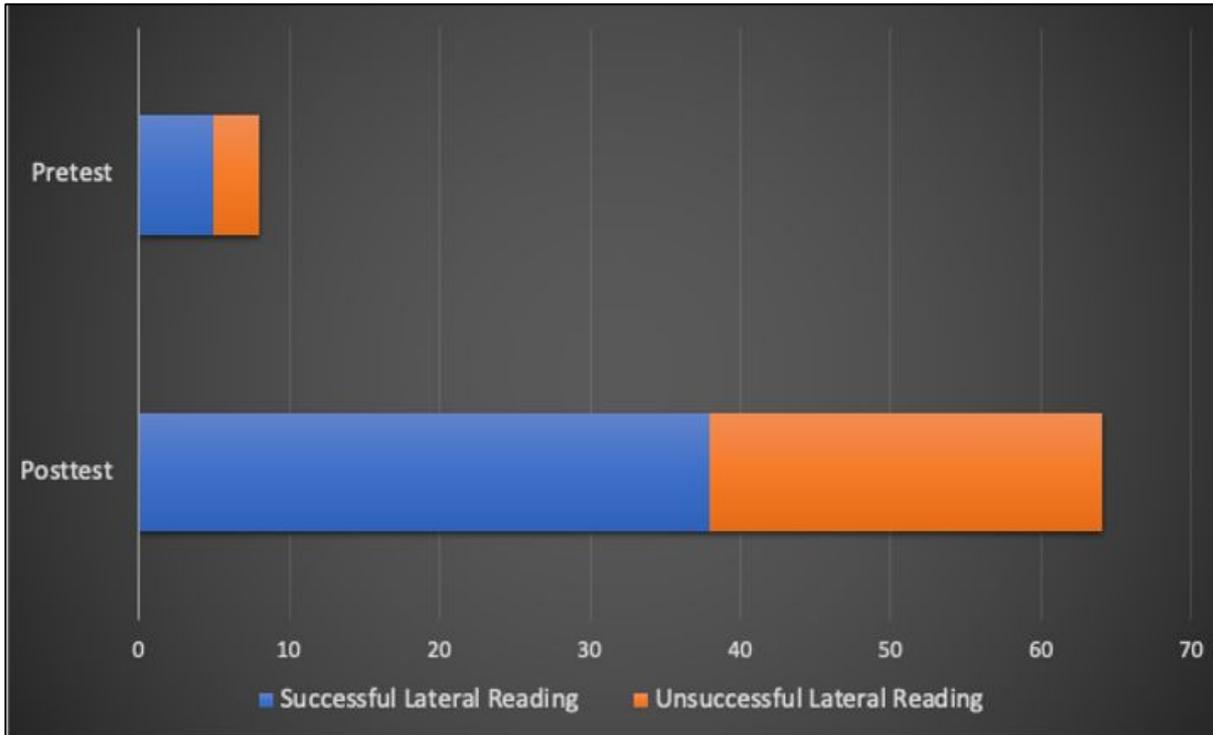
Explain your answer, citing evidence from the webpages you used. Be sure to provide the URLs to the webpages you cite.



Eight lessons in biology & geography (9th grade)







Preparing to Support Students' Lateral Reading

With your group, imagine that you were teaching these 9th grade students. Review the table and discuss:

- What are students doing well?
- What do you need to follow up on?
- What would you do next to support students' continued development with lateral reading?

A few ideas

- [Custom search engines](#)
- Differently scaffolded graphic organizers
- Vocab slide displayed during lateral reading (define key terms on Wikipedia page, etc. to help students comprehend credibility cues)
- Practice just analyzing screenshots of Wikipedia pages
- Google's "About this Result"

Custom Search Engines

programmablesearchengine.google.com

Sites to search Delete Add

URL contains Clear filter Apply filter

<input type="checkbox"/>	Site	Last updated time
<input type="checkbox"/>	www.desmog.com/heartland-institute/	Aug 8, 2023, 10:53 AM
<input type="checkbox"/>	*.heartland.org/	Jun 6, 2023, 6:54 AM
<input type="checkbox"/>	www.sourcewatch.org/index.php/Heartlan	Jun 6, 2023, 6:54 AM
<input type="checkbox"/>	en.wikipedia.org/wiki/Heartland_Institute*	Jun 6, 2023, 6:54 AM

Rows per page 5 1-4 of 4 < >

Differently scaffolded graphic organizers

Source #1: Urban Institute

1. What **credibility clues** about the source do you notice?

Credible sources should be an expert AND likely to tell the truth.	
Clues they are an expert:	Clues they may tell the truth:
Do the people or organization have: <ul style="list-style-type: none"><input type="checkbox"/> Education<input type="checkbox"/> Related experiences<input type="checkbox"/> Skills for producing accurate information (reporting skills, researching skills)<input type="checkbox"/> Processes for reporting accurate information (editing, fact checking, reviews before publishing)	Are the people or organization: <ul style="list-style-type: none"><input type="checkbox"/> Likely to tell the truth even if it goes against what they personally believe<input type="checkbox"/> Likely to tell the truth even if it costs them money<input type="checkbox"/> Likely to tell multiple sides of the story<input type="checkbox"/> Known and used by lots of people because they tell the truth

2. Based on what you learned, is this source credible enough to use to learn about affordable housing?

Yes // No

Key Terms

*Example Vocabulary Slide
to display while students
practice lateral reading*

Conflict: go against

Scientific consensus: when most scientists agree about something

Misinformation: wrong or fake information

NEW:

Journalist : a professional who writes about the news and current events

Vice, Telemundo, and MSNBC are news organizations

From Wikipedia, the free encyclopedia

"WSJ" redirects here. For other uses, see [WSJ \(disambiguation\)](#).



This article may **require cleanup** to meet Wikipedia's [quality standards](#). The specific problem is: **Promotional additions**. Please help [improve this article](#) if you can. *(March 2023)* ([Learn how and when to remove this template message](#))

The Wall Street Journal is [an American business and economic-focused international daily newspaper](#) based in [New York City](#).^[2] The *Journal* is [published six days a week](#) by [Dow Jones & Company](#), a division of [News Corp](#). The newspaper is published in [broadsheet](#) format and online. The *Journal* [has been printed continuously since its inception on July 8, 1889](#).^[3] The *Journal* is regarded as a [newspaper of record](#), particularly in terms of business and financial news.^{[4][5][6]} The newspaper [has won 39 Pulitzer Prizes](#), the most recent in 2023.^{[7][8][9]}

The Wall Street Journal is the [second-largest newspaper in the United States](#) by circulation, with a [print circulation](#) of around 654,000 and 3 million digital subscribers as of 2022.^[1] The *Journal* publishes the luxury news and [lifestyle magazine](#) *WSJ*, which was originally launched as a quarterly but expanded to 12 [issues](#) in 2014. An online version was launched in 1995, which has been accessible only to subscribers since it began.^[10] The [editorial pages of the *Journal*](#) are typically [conservative](#) in their positions.^{[11][12][13]}

History [[edit](#)]

The Wall Street Journal

THE WALL STREET JOURNAL.

Type	Daily newspaper
Format	Broadsheet
Owner(s)	News Corp (via Dow Jones & Company)
Founder(s)	Charles Dow Edward Jones Charles Bergstresser
Publisher	Almar Latour
Editor-in-chief	Emma Tucker
Deputy editor	Jason Anders Neal Lipschutz
Managing editor	Liz Harris

Google's "About this Result"

The image shows a Google search interface for the query "heartland institute". The search bar at the top contains the text "heartland institute" and includes icons for search, voice search, and image search. Below the search bar, several search results are listed. The first result is from SourceWatch, the second from Heartland Whole Health Institute, the third from Energy and Policy Institute, and the fourth from hife-usa.org. The fifth result is from the National Center for Science Education, which is highlighted with an orange circle around its icon and title. To the right of the search results, a detailed "About this Result" panel is visible for the National Center for Science Education. This panel includes a "Visit >" button, a description of the organization, and options to share, save, or remove the result. Below the "About the source" section, there is a "More about this page >" button. At the bottom of the panel, a "Your search & this result" section provides context for the search terms, noting that "heartland, institute" and "institutes" are related terms and that the result is in English. A "How Search works" link is also present at the bottom right of the panel.

Google heartland institute

SourceWatch
https://www.sourcewatch.org › index.php › Heartland_In...
Heartland Institute
A nonprofit "think tank" that questions the reality and import of climate change, second-hand smoke health hazards, and a host of other issues.

Heartland Whole Health Institute
https://www.heartlandwholehealth.org
Heartland Whole Health Institute | Bentonville, Arkansas
We're dedicated to transforming health care in the Heartland and across the nation through research, advocacy, education, and community engagement.

Energy and Policy Institute -
https://energyandpolicy.org › heartland-institute
Heartland Institute
The Heartland Institute is a Chicago-based free market think tank that attacks the science behind global warming and routinely pushes for legislation ...

hife-usa.org
https://hife-usa.org
Heartland Institute – empowering organizations and their ...
The Heartland Institute provides financial education programs for companies and organizations that want their people to enjoy a more financially secure future.

National Center for Science Education
https://ncse.ngo › files › nipcc PDF
Debunking the Heartland Institute's Efforts to Deny Climate ...
The Heartland Institute has focused on fighting government regulation of tobacco and fossil fuels. It has received funding from a range of organizations and ...

National Center for Science Education
Debunking the Heartland Institute's Efforts to Deny Climate ...
Visit >
The Heartland Institute has focused on fighting government regulation of tobacco and fossil fuels. It has received funding from a range of organizations and ...
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About the source
National Center for Science Education
Not-for-profit organization
The National Center for Science Education is a not-for-profit membership organization in the United States whose stated mission is to educate the press and the public on the scientific and educational ... [Wikipedia](#)
More about this page >

Your search & this result

- These search terms appear in the result: **heartland, institute**
- A term related to your search appears in the result: **institutes**
- The result is in [English](#)
- This result seems relevant for searches from many regions, including: [United States](#)

How Search works >

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