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SIFTing and Four-Moving Online: Opportunities and Challenges with Teaching Lateral Reading through an Online Module (conference presentation)

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SIFTing and Four-Moving Online: Opportunities and Challenges with Teaching Lateral Reading through an Online Module

LOEX 2020

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Dan Kipnis, Life Sciences Librarian

Rowan University





SIFTing and Four-Moving Online: Opportunities and Challenges with Teaching Lateral Reading through an Online Module

Welcome! Please go to:

<https://www.menti.com/gytnbbkvz7>

and answer the following question:

Reflect on your experience teaching source evaluation. Share about a related challenge or success.

Session Learning Outcomes



- Reflect on and share experiences with teaching about source evaluation.
- Become more informed about “lateral reading” strategies for source evaluation.
- Reflect on opportunities and challenges with practicing and teaching about lateral reading.

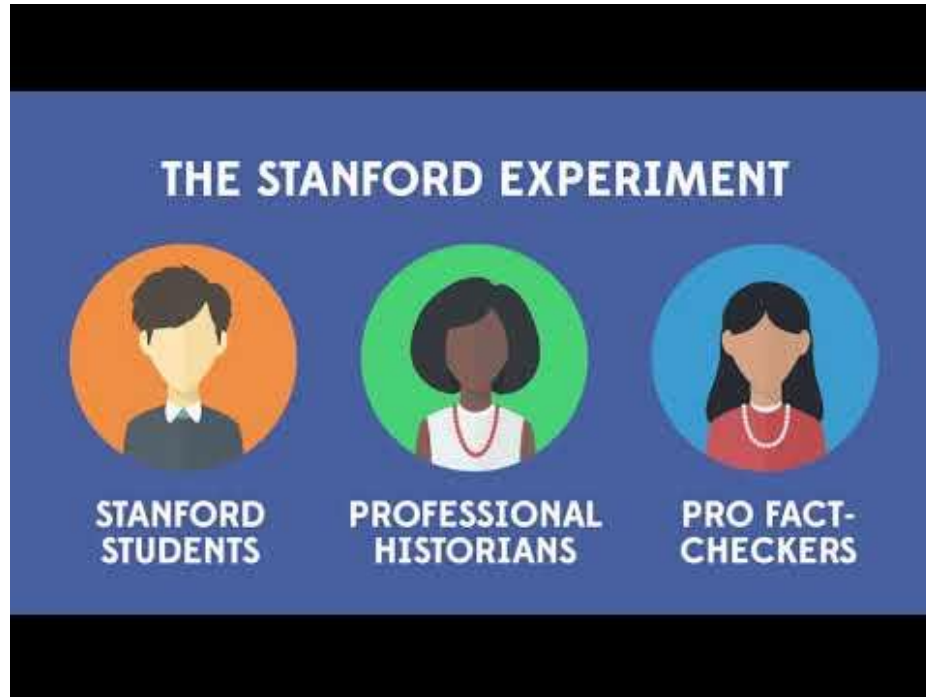
Key Project Considerations

- Identifying stumbling blocks of practicing and teaching about lateral reading
- Developing strategic scaffolding (building on students' prior learning and creating multiple opportunities for modeling lateral reading, for student practice, and for feedback)

Why “Lateral Reading”?

- Reading “across sources” to see what others say about a web source (spending limited time on the web source itself when initially evaluating it)
- The practice of fact-checkers
- Limitations of evaluation checklists like CRAAP and RADCAB ([Caulfield, 2018](#))
- “Civic online reasoning” and “lateral reading” work by the [Stanford History Education Group \(SHEG\)](#) and Mike Caulfield ([Breakstone et al. 2019](#); [McGrew et al. 2019](#); [Caulfield, 2017](#))

Video “Online Verification Skills: Introductory Video” (Newswise - 3:13)



<https://www.youtube.com/watch?v=yBU2sDIUbp8a>



Poll: Have you taught “lateral reading” before?

- Yes
- No, but I am familiar with the concept of lateral reading.
- This is the first time I’ve heard of lateral reading.



Poll: If you have taught “lateral reading,” how satisfied were you with the approach?

Rate on scale of 1-5, 1 being lowest.



Review of First Poll Responses

Reflect on your experience teaching source evaluation. Share about a related challenge or success.

<https://www.menti.com/gytnbbkvz7>

Seeming Simplicity



Lateral reading is seemingly simple, but sometimes tricky.

- How widely do you read? How deeply do you go?
(balancing depth of source analysis and time constraints)
- Getting creative when information on a source isn't readily found
- The power of beliefs and confirmation bias (more on this later)

Our Context at Rowan

Rowan University (New Jersey)



- 1923 Glassboro State College (Normal school)
- 1950 Glassboro State University
- 1997 Rowan University
- Established Cooper Medical School of Rowan University (Allopathic, 2012); merged with Rowan School of Osteopathic Medicine (Osteopathic, 2013)

Rowan University Growth



- Carnegie Classifications (R3, 2017; R2, 2018)
- Rapidly growing enrollment (3,550 increase in 3 years)
- FTE Fall 2019 = 17084.38
- 176 new tenure track faculty hired in five years, initiative to hire 100 more in next five
- New PhD programs
- Gradual emphasis to STEM
- Continuing sizable teacher education program

Overview of Our Project



- Interactive tutorial, initially to broaden library's reach to online courses
- Project evolution
 - From a one-off workshop to an online tutorial
 - Relevance to online and face-to-face courses (and to the broader university community)
 - Seeking to expand instruction and outreach beyond the tutorial
- Developed originally in Canvas, then created in LibGuides
 - Accessible to larger audience
 - Allows librarians more control + potential for assessment


Strategic Scaffolding

Scaffolding



- Pre- and post-test
- Modeling>Student practice>Librarian feedback
- “Tips” that address common challenges
- Post-activity reflection
- Final Points to Remember
- Final survey and completion certificate
- Follow-up with faculty

Our LibGuide module: go.rowan.edu/evaluating

 **Rowan University** | CAMPBELL LIBRARY

[Campbell Library](#) / [Research Guides](#) / [Tutorial: Evaluating Online Sources through Lateral Reading \(Part 1/2\)](#) / [About This Tutorial](#)

Tutorial: Evaluating Online Sources through Lateral Reading (Part 1/2)

About This Tutorial

- Evaluating Online Sources: Part 1 Introduction
- Pre-Activity
- An Overview of "Lateral Reading"
- SIFT and Four Moves
- Lateral Reading in Practice
 - Stop/Pause
 - Investigate/Find trusted coverage
 - Trace information back to the original context
- Time to Practice
- Exercise: Evaluate Minimumwage.com

About This Module

Title: Evaluating Online Sources through Lateral Reading: An Introduction

Audience: Rowan students, faculty, and staff interested in strengthening their fact-checking and online source evaluation skills

Purpose: Developing new strategies for evaluating online sources and improving one's ability to investigate source credibility in order to recognize credible sources

Learning outcomes:

- Be familiar with the SIFT and "Four Moves" approaches to evaluating online sources.
- Recognize the importance of pausing when you have a strong emotional reaction to an information source in order to analyze sources more critically.
- Apply the SIFT and "Four Moves" approaches to completing an initial evaluation of a web source's credibility.

Prerequisites: none

Suggested time: 30-40 minutes

Suggestions for proceeding with module: To protect your device from malware, do not click on links that look suspicious, and do not download files that you do not recognize!

Suggested search engine: Google

About the Authors

[Andrea Baer](#) is the History and Political Science Librarian at Rowan University Libraries. She has been an academic librarian for 8 years. Prior to becoming a librarian Andrea taught literature, languages, and writing in various educational settings, including higher education. Her research and writing focuses on information literacy and reflective teaching practice.

[Dan Kipnis](#) is the Life Sciences Librarian at Rowan University Libraries. He has worked as an academic librarian for 19 years and has published on a variety of topics including digital archives and information literacy.

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Pre-Activity

Please complete the short Pre-Activity below. **BE SURE TO WRITE DOWN THE NUMBER YOU ARE GIVEN AT THE BEGINNING OF THE ACTIVITY. YOU WILL NEED IT TO COMPLETE THE OTHER ACTIVITIES.** If you misplace your number, you will need to restart all of the activities.

If you do not see the form below, please complete the exercise through this link.
After you complete the activity, proceed to the next tutorial page.



MAKE SURE YOU WRITE DOWN THIS NUMBER.
YOU WILL NEED IT TO COMPLETE THE OTHER ACTIVITIES.
3346

The [tutorial creators](#) are collecting responses to the tutorial activities in order to assess their effectiveness. If you agree to have your responses included in their analysis, your (de-identified) responses may be used in related presentations or publications. All data collected will be de-identified (anonymized).

- Yes, I agree to have my de-identified responses used in assessment of this tutorial.
- No, I do not agree to have my de-identified responses used in assessment of this tutorial.

Please briefly evaluate the credibility of the following two sources. Click the links to view each source. Then decide whether each source is overall credible or overall not credible.

Water Fluoridation Linked to Diabetes and Low IQ

<https://articles.mercola.com/sites/articles/archive/2016/09/06/water-fluoridation-diabetes-low-iq.aspx>

Random number generated for each participant

Consent question for collecting data

Pre-test

Water Fluoridation Linked to Diabetes and Low IQ

<https://articles.mercola.com/sites/articles/archive/2016/09/06/water-fluoridation-diabetes-low-iq.aspx>

- Credible
- Not credible

Japanese Pancake Baths Let You Bathe in Maple Syrup

<https://www.geek.com/culture/japanese-pancake-baths-let-you-bathe-in-maple-syrup-1693158/>

- Credible
- Not credible

Please briefly describe your process of evaluating the sources.

☰ GEEK.COM

CULTURE

Japanese Pancake Baths Let You Bathe in Maple Syrup

BY BRITTANY VINCENT 03.21.2017 :: 6:00AM EDT [MOLOTOVCUPCAKE](#)

[f](#) [t](#) [in](#) [p](#) [e](#) [r](#)



Overview of Lateral Reading

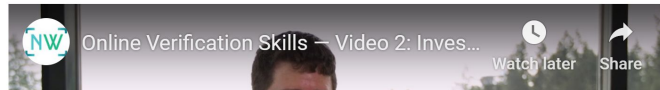
One caveat before watching video 2:

When researching contentious topics, especially topics that are new or about which less research has been done, you'll often need to do more work than this video suggests (for example, current political debates like Medicare for All).

...And a note about Wikipedia:

You may have heard in the past that you should avoid Wikipedia as a source. We (like Caulfield) will instead encourage you to use Wikipedia, but to do so while recognizing both its strengths and its limitations. Most Wikipedia articles are highly accurate, as Wikipedia has editors who work to ensure that Wikipedia content adheres to its [editorial practices](#), including providing evidentiary sources. Wikipedia articles that are longer and that are older tend to be of higher quality because they have been developed and improved over time by individuals who follow Wikipedia's best practices. That said, it's still true that someone can put inaccurate information on Wikipedia that is not immediately corrected. Wikipedia articles that are about contentious topics and that are undeveloped should be evaluated with greater care. You can also use the references at the end of a Wikipedia page to help you determine its level of accuracy.

Online Verification Skills: Investigate the Source (2:44)



Highlighted box to address common questions

SIFT and 4 Moves



SIFT

1. STOP. Pause and ask yourself
2. INVESTIGATE the source.
3. FIND trusted coverage.
4. TRACE claims, quotes, and media back to the original context.

From Mike Caulfield's [SIFT \(Four Moves\)](#)

4 Moves

1. Check for previous work
2. Go upstream to the source
3. Read laterally
4. Circle back.

From Mike Caulfield's "[Four Moves](#),"
Web Literacy for Student Fact-Checkers

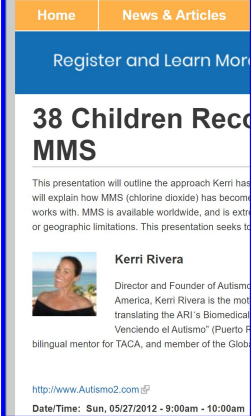
Autism One Conference example walk through



AutismOne 2020 Conference
Loews Chicago O'Hare Hotel
May 20-24, 2020
General registration \$79

Where Science, Hope, and Recovery Meet

More Info



Home News & Articles

Register and Learn More

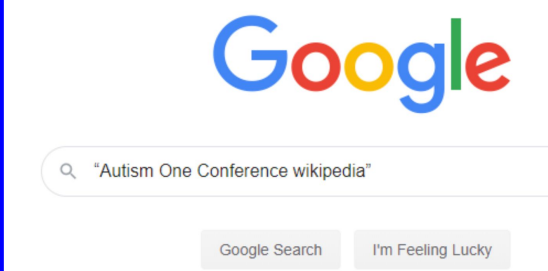
38 Children Rec... MMS

This presentation will outline the approach Kerri has will explain how MMS (chlorine dioxide) has become works with. MMS is available worldwide, and is extr or geographic limitations. This presentation seeks to

Kerri Rivera
Director and Founder of Autism America. Kerri Rivera is the mod translating the ARI's Biomedical Venciendo el Autismo" (Puerto Bilingual mentor for TACA, and member of the Glob

http://www.Autismo2.com/EP/

Date/Time: Sun, 05/27/2012 - 9:00am - 10:00am

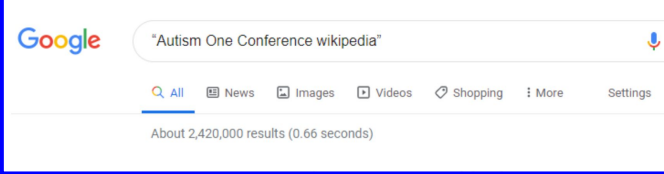


Google

Search: "Autism One Conference wikipedia"

Google Search I'm Feeling Lucky

Here's what we got with our search. (Your results page may look slightly different, since online information is a since your personal browser settings may affect your results.)

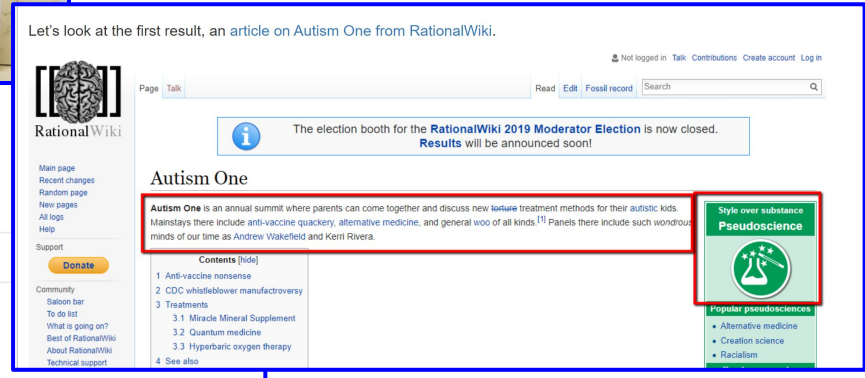


Google

Search: "Autism One Conference wikipedia"

All News Images Videos Shopping More Settings

About 2,420,000 results (0.66 seconds)



Let's look at the first result, an article on Autism One from RationalWiki.

RationalWiki

Page Talk

The election booth for the RationalWiki 2019 Moderator Election is now closed. Results will be announced soon!

Autism One

Autism One is an annual summit where parents can come together and discuss new ~~tailore~~ treatment methods for their autistic kids. Mainstays there include anti-vaccine quackery, alternative medicine, and general woo of all kinds.^[1] Panels there include such wondrous minds of our time as Andrew Wakefield and Kerri Rivera.

Contents [hide]

- Anti-vaccine nonsense
- CDC whistleblower controversy
- Treatments
 - Miracle Mineral Supplement
 - Quantum medicine
 - Hyperbaric oxygen therapy
- See also

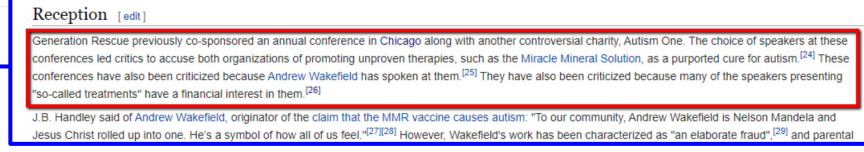
Style over substance Pseudoscience

Popular pseudosciences

- Alternative medicine
- Creation science
- Racism

Consulting a Second Source

The second result on our Google results page was a [Wikipedia article about "Generation Rescue"](#) that mentioned Autism One. As in this situation, often you may not find a Wikipedia article that is exclusively about the source you're interested in, but the source may still be discussed in another Wikipedia article. This can provide important context for understanding the source. Let's look at what it says...



Reception [edit]

Generation Rescue previously co-sponsored an annual conference in Chicago along with another controversial charity, Autism One. The choice of speakers at these conferences led critics to accuse both organizations of promoting unproven therapies, such as the Miracle Mineral Solution, as a purported cure for autism.^[24] These conferences have also been criticized because Andrew Wakefield has spoken at them.^[25] They have also been criticized because many of the speakers presenting "so-called treatments" have a financial interest in them.^[26]

J.B. Handley said of Andrew Wakefield, originator of the claim that the MMR vaccine causes autism: "To our community, Andrew Wakefield is Nelson Mandela and Jesus Christ rolled up into one. He's a symbol of how all of us feel."^{[27][28]} However, Wakefield's work has been characterized as "an elaborate fraud"^[29] and parental

Tutorial: Evaluating Online Sources through Lateral Reading (Part 1/2)

Search this Guide

Search

About This Tutorial

Evaluating Online Sources:
Part 1 Introduction

Pre-Activity

An Overview of "Lateral Reading"

SIFT and Four Moves

Lateral Reading in Practice

Stop/Pause

Investigate/Find trusted
coverage

Trace information back to the
original context

Time to Practice

Exercise:
Evaluate Minimumwage.com

Exercise: Evaluate Minimumwage.com

If you do not see the form below, please complete the [exercise through this link](#).

After you complete the exercise, you'll get instructions on how to proceed to Part 2.



Please log in.

Random number for
student



Evaluation activity (Minimumwage.com)

Is Minimumwage.com a trustworthy source?

- Yes
- No

Explain your reasoning. How did the evidence support your assessment?

Thank you for submitting your response. When you are ready continue with **Part 2**.

Copy and paste the link below into your browser
password: readingacrosssources
libguides.rowan.edu/tutorial-evaluatingonlinesources

Tutorial: Evaluating Online Sources through Lateral Reading (Part 2/2)

Please enter the password provided by your instructor or the library to access this content.

Need the password? Contact the library or your instructor.

Have the password but are having trouble? Please see the password FAQ.

Revisiting minimumwage.com: Post-activity reflection


Part 2 Introduction +
Exercise Feedback

Post-Activity Reflection

Points to Remember

Post-Activity Reflection

If the questions do not appear below, [click here](#) to access the post-activity reflection. After submitting your exercise you'll be directed to the last part of this tutorial (Points to Remember).



Did you arrive at a similar conclusion about MinimumWage.com as we did?

Yes

No

How was your evaluation process similar to or different from ours? Would you suggest any strategies that we had not already presented?

Now that you've compared your and our source evaluations, would you change anything about your evaluation process?

Certificate of completion

Tutorial: Evaluating Online Sources through Lateral Reading (Part 2/2)

Part 2 Introduction +
Exercise Feedback

Post-Activity Reflection

Points to Remember

Points to Remember

Final Exercise (Needed for Confirmation of Completion)

Please take a moment to reflect on your learning with the short survey below. If the survey does not appear please [complete it through this link](#). Thank you!

Feel free to review and bookmark the [Evaluating Online Sources tutorial](#) anytime. We welcome your questions, comments or requests.

Our goal in creating this module was to introduce new and essential strategies for evaluating online sources. These are lifelong skills that you can apply to your daily life and to both academic and non-academic activities (for example, evaluating a presidential candidate, researching to buy a car, buying a house, student loans, writing a research paper). As you continue to practice the skills we've introduced here, they'll become easier and more automatic, and you'll be able to evaluate online sources more easily and quickly.

If you have any future research questions, please do not hesitate to ask:

- Andrea Baer, PhD, History and Political Science Librarian (baera@rowan.edu)
- Dan Kipnis, MSI, Life Sciences Librarian (kipnisd@rowan.edu)
- [All Campbell Library subject librarians](#)

Rowan University
Glassboro, New Jersey

Other Considerations

The Power of Beliefs



Confirmation bias: tendency to more readily believe information that fit one's preexisting views and to discount information that challenges those views

Backfire effect: upon having one's strongly held views are challenged, those views often become stronger ([Cook & Lewandowsky, 2011](#))

- The backfire effect and other forms of “motivated reasoning” are especially salient when engaging with social and political issues that elicit strong emotions ([Kahne & Bowyer, 2017](#); [Lodge & Taber, 2005](#); [Taber & Lodge, 2016](#); [Weeks, 2015](#))

The Power of Beliefs: Pedagogical Implications



- Sources that require more careful evaluation are often on topics about which people may have strong pre-existing views. (e.g., vaccines, traditional/alternative medicine, government/economic policies).
- Importance of raising awareness that our beliefs influence how readily we accept/dismiss claims and evidence that affirm or challenge those beliefs

The Power of Pausing



Step 1 of SIFT: Stop/Pause - allows time for people to move past initial reflexes and to a more critical mindframe.

“STOP. Pause. Ask yourself if you recognize the information source and if you know anything about the website or the claim's reputation. ...Also take note if you have a strong reaction to the information you see (e.g., joy, pride, anger). If so, slow down before you share or use that information. We tend to react quickly and with less thought to things that evoke strong feelings. ...

Stop/Pause in Action

(Evaluating an [Autism One Conference presentation](#))

Contextualization of a source as one part of pausing (e.g., Where is this from? Who created it? What is it about? What do I know about this topic or issue?)

- Modeling an observational and fact-based analysis of source
- Acknowledging what we do and do not know about the source
- Reserving initial value judgements

A work in progress: Hopes to expand nudges to “pause” and reflect

Initial Assessment

Initial Assessment (n=17)



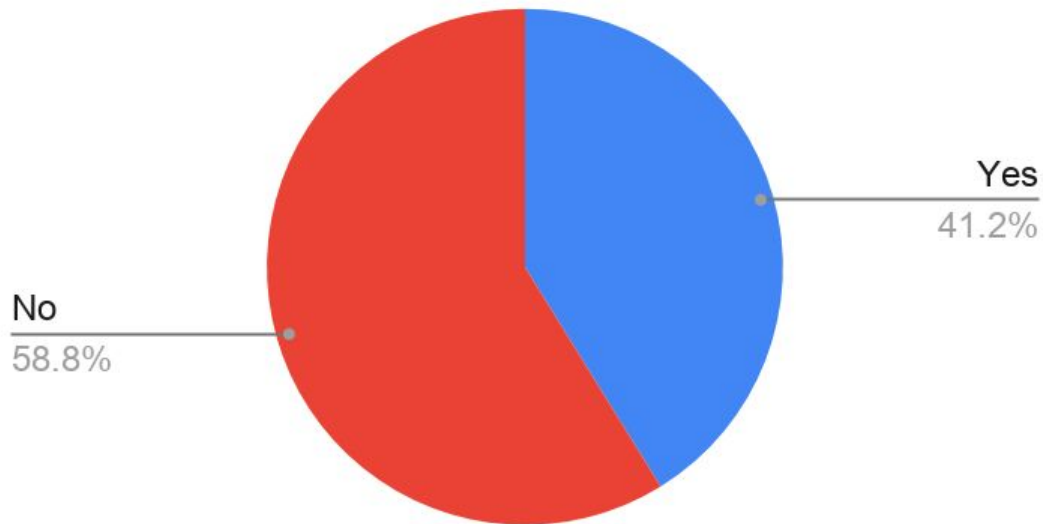
(Prior to adding pre-test)

17 undergraduates enrolled in a humanities course

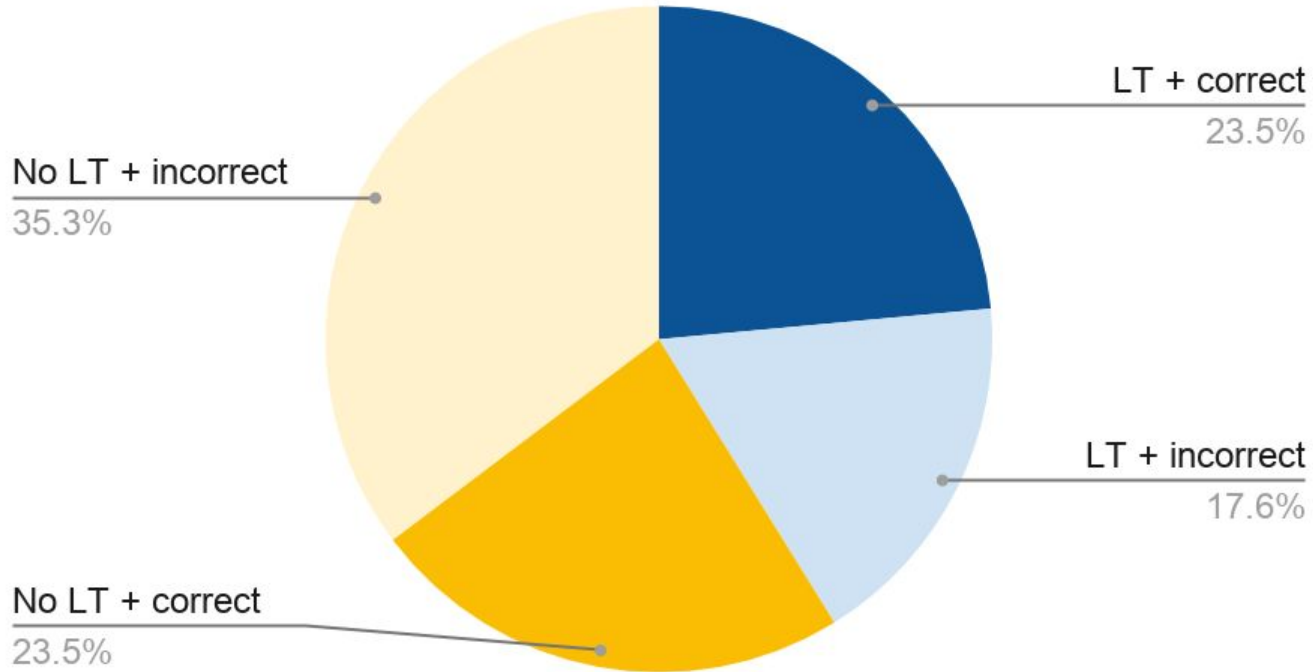
- Mostly juniors and seniors (2 2nd-year, 6 3rd-year, 3 4th-year)
- 7/12 respondent early education students



Is MinimumWage.com trustworthy?



Evidence of Lateral Reading + Final Evaluation



Our Next Steps



- Getting more participants in and outside of Rowan
- Integrating Grounding Questions from SHEG's Civic Online Reasoning
 - Who is behind this information?
 - What is the evidence?
 - What do other sources say?
(McGrew et al., 2018)

Closing Discussion & Feedback

Poll:



Please share one takeaway for your teaching practice from today's session.


Final Reflection & Feedback



<https://bit.ly/2R5gFUh>

- What did you find most useful about this session?
- What would you like to have seen or experienced differently?
- Is there anything else you would like to share with us, including feedback or suggestions for our tutorial?

Our LibGuide module: go.rowan.edu/evaluating

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Tutorial: Evaluating Online Sources through Lateral Reading (Part 1/2)

About This Tutorial	About This Module
Evaluating Online Sources: Part 1 Introduction	Title: Evaluating Online Sources through Lateral Reading: An Introduction
Pre-Activity	Audience: Rowan students, faculty, and staff interested in strengthening their fact-checking and online source evaluation skills
An Overview of "Lateral Reading"	Purpose: Developing new strategies for evaluating online sources and improving one's ability to investigate source credibility in order to recognize credible sources
SIFT and Four Moves	Learning outcomes:
Lateral Reading in Practice	<ul style="list-style-type: none">• Be familiar with the SIFT and "Four Moves" approaches to evaluating online sources.• Recognize the importance of pausing when you have a strong emotional reaction to an information source in order to analyze sources more critically.• Apply the SIFT and "Four Moves" approaches to completing an initial evaluation of a web source's credibility.
Stop/Pause	Prerequisites: none
Investigate/Find trusted coverage	Suggested time: 30-40 minutes
Trace information back to the original context	Suggestions for proceeding with module: To protect your device from malware, do not click on links that look suspicious, and do not download files that you do not recognize!
Time to Practice	Suggested search engine: Google
Exercise: Evaluate Minimumwage.com	

About the Authors

[Andrea Baer](#) is the History and Political Science Librarian at Rowan University Libraries. She has been an academic librarian for 8 years. Prior to becoming a librarian Andrea taught literature, languages, and writing in various educational settings, including higher education. Her research and writing focuses on information literacy and reflective teaching practice.

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<https://doi.org/10.1111/pops.12321>.

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