



Photo by Amador Loureiro on Unsplash

# Beyond CRAAP: Critical thinking in the age of fake news

Jennifer Thiessen, Colleen MacKinnon, Brock University  
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<http://bit.ly/FakeNewsOLA>

# Who are we?



# About Brock



Who is here?



Photo by [Tom Plouff](#) on [Unsplash](#)

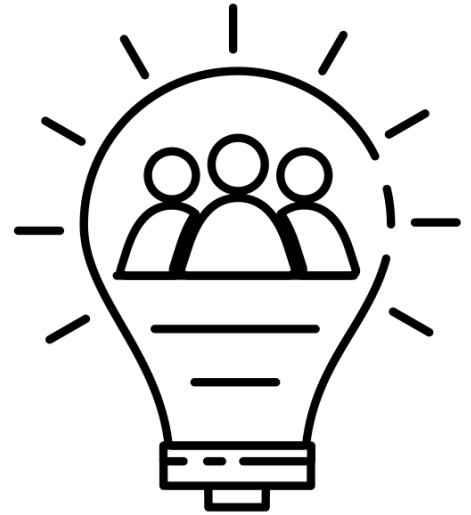
# Learning Outcomes

Recognize the importance of critical thinking

Understand the limitations of traditional checklist tools

Identify strategies to help students evaluate information

Recall Brock Library's online learning content addressing critical thinking



Created by ibrandify  
from Noun Project

# Top 10 reasons you won't believe fake news isn't new

Ubiquity of media culture

Social media

Forms of media



Source: <https://gph.is/2mtjtfB>

<http://bit.ly/FakeNewsOLA>

## Fukushima Nuclear Flowers

by [pleasegoogleShakerAamerpleasegoogleDavidKelly](#) • a month ago



Not much more to say, this is what happens when flowers get nuclear birth defects





Phillip Picardi

@pfpicardi

Follow



At left is [@tyler\\_mitchell](#)'s photo of [@Emma4Change](#) for the cover of [@TeenVogue](#). At right is what so-called "Gun Rights Activists" have photoshopped it into.  
[#MarchForOurLives](#)



10:26 AM - 25 Mar 2018

3,615 Retweets 5,788 Likes



Washington Post (March 26, 2018): [A fake photo of Emma González went viral on the far right, where Parkland teens are villains](#)





**jessamyn west** ✓  
@jessamyn

Follow

This is how you do Information Literacy in 2019. Don't just look at the source. Look at the source's sources. And if it's just a bunch of angry dudes on Twitter with "fewer followers than Agri has toes" consider moving on.



Agri Ismail @a9ri

Oh hi. Let's look at this bullshit article on the BI

s backlash and boycott advert'

First of all it's on the BBC so you're like oh wow deal.

Show this thread



**BBC** News Sport Weather Shop Reel Travel More Search

# NEWS

Home Video World UK Business Tech Science Stories Entertainment & Arts More

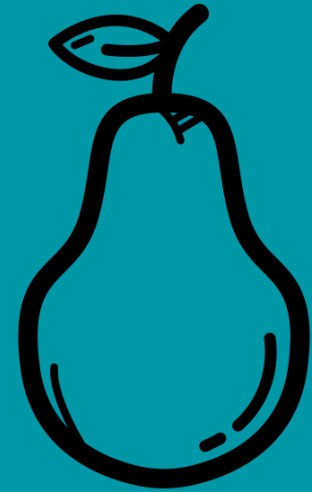
## Newsbeat

### Gillette faces backlash and boycott over '#MeToo advert'

By Michael Baggs  
Newsbeat reporter

Have you ever fallen for  
a fake news story?

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Created by Vladimir Belochkin  
from Noun Project

## Teacher Education: I/S Resources

<a href="#">Home</a>	<a href="#">Books &amp; E-Books</a>	<a href="#">Concepts &amp; Definitions</a>	<a href="#">Finding Articles</a>	<a href="#">K-12 Websites</a>	<a href="#">Children's Literature</a>
<a href="#">Writing &amp; Citing</a>	<a href="#">Courses</a>	<a href="#">I/S Resources</a>			

### Critical Evaluation

- Lesson Plans: Google Search Education
- Digital Literacy & Citizenship Classroom Curriculum (Common Sense Media)
- Critical Evaluation of Information (Kathy Shrock)

### Online Resources (public)

- Ontario Curriculum: Secondary
- Trillium List  
Textbooks approved by the Minister of Education for use in Ontario schools.
- Curriculum Services Canada
- Lesson plans/resources (Brock Library)
- Think Literacy: Grade 7 -12 Subject-Specific Documents (MOE)

### The CRAAP Test

#### Currency

- Is it current? Does it matter?
- Has info been updated/revised?

#### Relevance

- Does info relate to your topic?
- Who is the intended audience? Is it biased?
- Appropriate level?

#### Authority

- Who is the author/publisher/source? What are the author's credentials? Organization affiliations?
- Contact info available? Domain name (.edu, .gov)?

#### Accuracy

- Info supported by evidence? Reviewed/refereed?
- Unbiased?
- Is info reliable? Can it be verified?

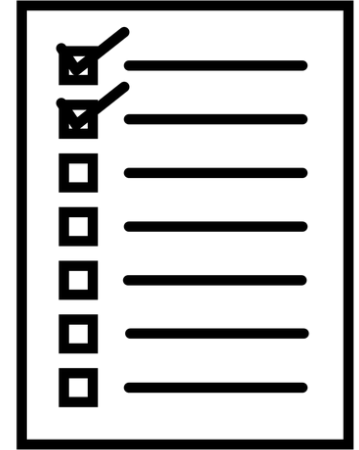
#### Purpose

- What is the purpose? To sell, entertain, inform, persuade...
- Fact, info or propaganda?

# The checklist approach...

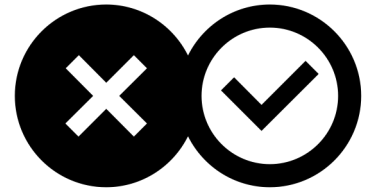
“...promote[s] a mechanical and algorithmic way of evaluation that is at odds with the higher-level judgment and intuition that we presumably seek to cultivate as part of critical thinking.”

Meola, M. (2004). Chucking the checklist: A contextual approach to teaching undergraduates Web-site evaluation. *portal: Libraries and the Academy*, 4(3), 331-344.



Checklist by Ainsley Wagoner  
from the Noun Project

“Determining who’s behind information and whether it’s worthy of our trust is more complex than a true/false dichotomy.”



Created by Vicons Design  
from Noun Project

McGrew, S., Ortega, T., Breakstone, J., & Wineburg, S. (2017). The challenge that's bigger than fake news: Civic reasoning in a social media environment. *American Educator*, (3), 4.

<http://bit.ly/FakeNewsOLA>

A close-up photograph of a hand holding a pen, writing on a checklist on a grid notebook. The checklist has several items with checkboxes, some of which are already marked. The text 'Checklist approach' is overlaid in white on the left side of the image.

# Checklist approach

Impractical

Internal

Resists higher-level  
thinking

Not contextual

# The Information Literacy Framework



# Critical Thinking Strategies





Authority  
is  
Constructed  
and  
Contextual



# Motivations

Is the information meant to evoke an emotional response?

Does it contribute to a particular worldview or ideology?

Was it meant to discredit someone else?



# Searching as Strategic Exploration



# Confirmation Bias

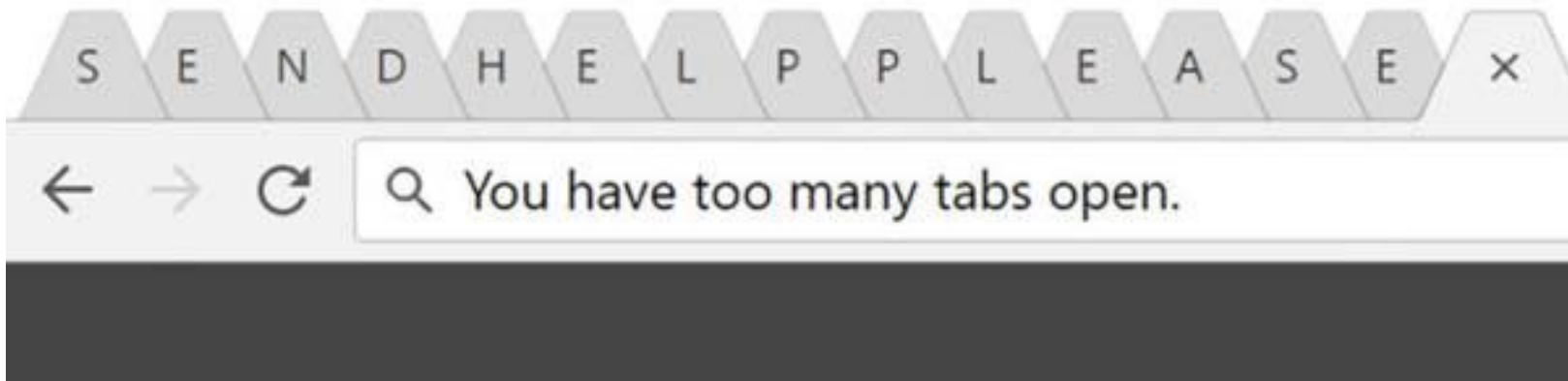


<http://chainsawsuit.com/comic/2014/09/16/on-research/>

<http://bit.ly/FakeNewsOLA>

# Research As Inquiry





Lopez, N (2017) <https://goo.gl/images/RBEBGK>

<http://bit.ly/FakeNewsOLA>

# Lateral Reading

Traditional evaluation methods focus on the source at hand which can lead you to *more* fake and biased information.

## *Instead*

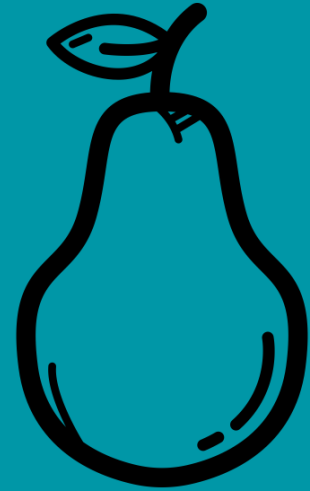
Consult *other* sources and piece together information & commentary from across the web to get a better understanding of the site you're investigating.

M. Caulfield (2017).

<http://bit.ly/FakeNewsOLA>

What useful investigative technique have you used in your classes to help students evaluate news information?

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Created by Vladimir Belochkin  
from Noun Project



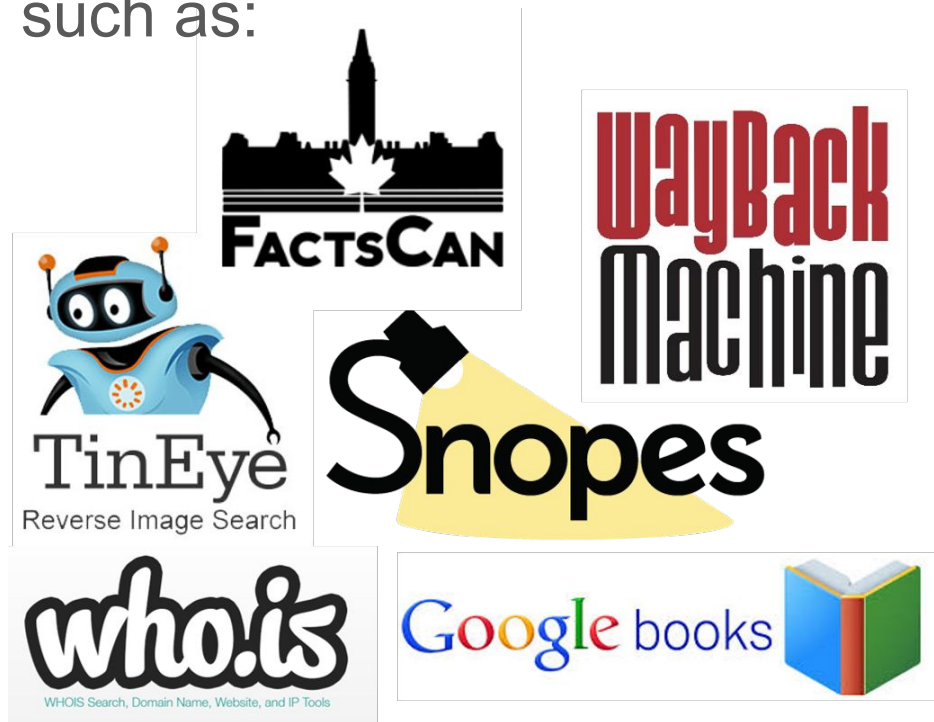
# Investigative Techniques

- Site searches
- Account verification
- Page changes over time
- Identify original publication dates
- Look at # of shares & who's sharing
- Look for cases of “astroturfing”
- Look up direct quotes
- Selective keyword searching

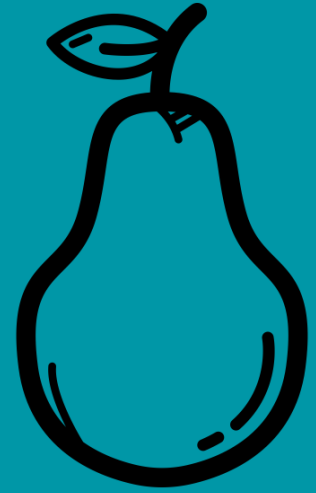
# Online Resources

Using online tools & Websites, such as:

- WHOIS
- Snopes
- Wayback Machine
- FactsCan
- Google Books



What other tools are you aware of that can help readers evaluate the information they find online?



Created by Vladimir Belochkin  
from Noun Project





# Digital and Media Literacy Tutorial

## Welcome!

This is a tutorial that will increase your digital, media, and critical thinking skills. When you have completed the tutorial, you have the option of taking a [quiz](#). Pass the quiz and you can add this workshop to your Experience Plus Co-Curricular Transcript.

(To add this experience to your co-curricular transcript, first take a screenshot (or print and scan) of this page showing your successful completion of the workshop. Next, go to your student portal at [my.brocku.ca](#). Under *Applicant and Student Self Serve* select Plus Programs, then Experience Plus and follow the instructions.)

The tutorial is made up of 3 modules. Use the options on the left to navigate through the tutorial. Questions? Need help? Contact [Jennifer Thiessen](#).

### Module 1: What is digital and media literacy?

What is media literacy? Digital literacy?

How is media consumed?

Key concepts

### Module 2: Media literacy in the classroom

Why do we need media literacy education?

Media literacy education in Ontario

Approaches to teaching digital and media literacy

### Module 3: Finding and evaluating digital and media literacy resources

Search strategies for finding resources

Critically evaluating curriculum resources



# Why digital/media literacy?

Stanford study:

“...students have a lot of trouble discerning the credibility of online information. For example, 82 percent of middle schoolers couldn’t distinguish between an ad labeled “sponsored content” and a real news story on a website.”

Snelling, J. (2017). [What media literacy means in the age of alternative facts](#). International Society for Technology in Education (ISTE).

<http://bit.ly/FakeNewsOLA>

- define digital and media literacy
- describe how young people use media
- recall the key concepts of media and digital literacy

# Module examples

## Media literacy? Digital literacy? 21st century skills? Information

What do all these terms mean? Do they mean the same thing?

While there are many similarities among concepts like media literacy, digital literacy and others

One report uses the terms **digital and media literacy** "to encompass the full range of cognitive competencies that includes the use of texts, tools and technologies; the skills of critical thinking message composition and creativity; the ability to engage in reflection and ethical thinking; as well as teamwork and collaboration" ([Digital and Media Literacy: A Plan of Action](#)).

Both digital and media literacy require the development of our critical thinking skills, but, as most digital media are **networked and interactive** raises additional issues and requires additional **literacy** generally focuses on teaching youth to be critically engaged consumers of media, while enabling youth to participate in digital media in wise, safe and ethical ways ([The Intersection of MediaSmarts](#)).

To review:

**Media Literacy** is the ability to access, analyze, critically evaluate and create messages in a virtual digital.

**Digital Literacy** builds on media literacy to focus on the following principles: developing the sk

<http://bit.ly/FakeNewsOLA>

# Module examples



### Some questions to think about

How does a controversial subject motivate students?

What key concepts of media literacy does Ms. Koch introduce?

How could Ms. Koch expand this lesson to address concepts of digital literacy?



## Life Online

Canadian students are more connected, more mobile and more social than ever.  
www.mediasmarts.ca/YCW

**ONLINE ACCESS**

45% of students use their smart phone at least once a week

60% of students use their smart phone at least once a week

Grade	Female	Male	Female	Male	Female	Male	Female	Male
4	64%	17%	56%	6%	47%	12%	46%	
5	59%	19%	62%	9%	49%	21%	42%	
6	59%	20%	63%	6%	55%	25%	48%	
7	54%	21%	69%	7%	55%	37%	45%	
8	50%	23%	73%	4%	53%	56%	41%	
9	41%	23%	75%	6%	44%	60%	43%	
10	39%	25%	78%	6%	38%	69%	34%	
11	37%	27%	73%	6%	35%	75%	36%	

One quarter of students in Grade 4, half of students in Grade 7, and 85% of students in Grade 11 own their cell phone.

Zzzzz  
39% of students with cell phones sleep with them.

Grade	Female	Male
4	24%	
7	31%	
11	85%	

**PARENTAL INVOLVEMENT**

Are there rules about any of these in your house?

Activity	Female	Male
Getting together with someone you don't know	74%	44%
Going to an event you are not supposed to visit	70%	48%
Talking to strangers online or on your cell phone	69%	52%

22% of Grade 4 students are "never" online at home with an adult.

**RULES ABOUT...**

Grade	Female	Male	Female	Male
4	40%	61%		
7	44%	63%		
11	35%	52%		

89% of students agree with the statement "I know I can protect myself online"

Learning about online issues from parents and teachers **DIFFERS BY GRADE**

Grade	Female	Male
4	48%	40%
7	50%	14%
11	51%	58%

**BOYS AND GIRLS HAVE DIFFERENT EXPERIENCES ONLINE**

Girls are both more likely than boys to agree with the statement that they could be **hurt by online strangers** (82% compared to 62% of boys) and **less likely to see the Internet as a safe place** (51% compared to 61% of boys).

**ONLINE ACTIVITIES**

Among grades 4-6 30% have a Facebook and 16% have a Twitter

In spite of the fact that only 13% of 13 is barred from user

**7 OF THE TOP 10**

FAVOURITE SITES AND ALL ABOUT MOVING AND SHARING INFORMATION (AGE 10-11)

**IMPORTANCE OF WITH DIGITAL MI**

One third of student (35%) worry they spend too much time online.

**METHODOLOGY**

5,436 Canadian students in grades 4-11 in 2010

41% boys

140 schools

# Module examples

## Why do we need media literacy education?

Jean Kilbourne, an author, speaker and filmmaker, speaks about the importance of media literacy education for students who are exposed to and consume a barrage of messages.

The Importance of Teaching Kids Media Literacy - Jean ...

Understanding Media Literacy **kidsinthehouse.ca** 1:31

## Critically Evaluating Online Resources

In addition to using library resources and curated online collections, you and your students will likely be s the library resources and items in the collections above, the stuff you find on the internet has not been ve accuracy or quality. How do you know if you are finding credible, reliable, and unbiased information? It is and skeptical when using information found on the internet. Start with these

# Module examples

### 1. What am I looking at? What is this?

This is your first step. Asking yourself these types of questions will help yo

These days, this is actually pretty tricky. Almost everything is on the internet. You could be looking at a n the New York Times, a report from the United Nations, or an eBook that you got to from the library websi

This lesson is focused on materials found using the 'open web' likely via Google or Yahoo. So, not links t engine like Google Scholar, SuperSearch, or another library tool.

### 2. What is the context of your inquiry?

Is a blog allowed? Is a tweet okay?

An information source's context--where it came from, its audience, format, and how it is used--help deter appropriateness:



<http://bit.ly/FakeNewsOLA>

# What was most helpful?

...definitions of media, and digital literacy

...the information on how to think critically about sources and how to know the validity of what you are reading.

...the video clip that showed real interactions and teaching in the classroom. It was useful to see how the teacher went about media literacy in her classroom and the questions she asked students to check for their understanding...

97% rated their knowledge of media literacy as **average or below average** PRIOR to taking the tutorial.

71% rated their knowledge of media literacy as **above average** AFTER taking this tutorial

# Fake News Workshop



<https://pixabay.com/en/people-man-reading-newspaper-2566677/>

<http://bit.ly/FakeNewsOLA>

# #fakenews

## A Workshop for Critical Thinkers

# Learning Outcomes

*After completing this workshop, you will know how to:*

- Identify characteristics of fake news
- Understand how fake news can spread
- Recognize motivations behind fake news
- Apply critical thinking strategies in order to identify fake news
- Locate tools and resources to help identify fake news



**You deserve  
the truth**

Click 





Phillip Picardi 

@pfpicardi

Follow



At left is [@tyler\\_mitchell](#)'s photo of [@Emma4Change](#) for the cover of [@TeenVogue](#). At right is what so-called "Gun Rights Activists" have photoshopped it into.

[#MarchForOurLives](#) 



10:26 AM - 25 Mar 2018

3,615 Retweets 5,788 Likes



Washington Post (March 26, 2018): [A fake photo of Emma González went viral on the far right, where Parkland teens are villains](#)





Click to start timeline → >

# Reporting Timeline for Private Lynch Story





## Activity: Identify the Motivations (Picture 2)

Hi Colleen, when you submit this form, the owner will be able to see your name and email address.

\* Required

1. What was the motivation? \*

- Evoke emotion
- Political polarization
- Contribute to conspiracy
- Discredit others
- Contribute to a particular world view

Submit



## Activity: Identify the Motivations (Picture 2)

1. What was the motivation? \*

- Evoke emotion
- Political polarization
- Contribute to conspiracy
- Discredit others
- Contribute to a particular world view ✓

That's right! The paper says it removed all women from the original photograph due to "reasons of modesty" and so that the highly devout Orthodox readers of the paper would not be offended. The paper has since been criticized for disrespecting the unity of the march.

[Go back to thank you page](#)

This content is created by the owner of the form. The data you submit will be sent to the form owner. Never give out your password.

Powered by Microsoft Forms [Privacy and Cookies](#)

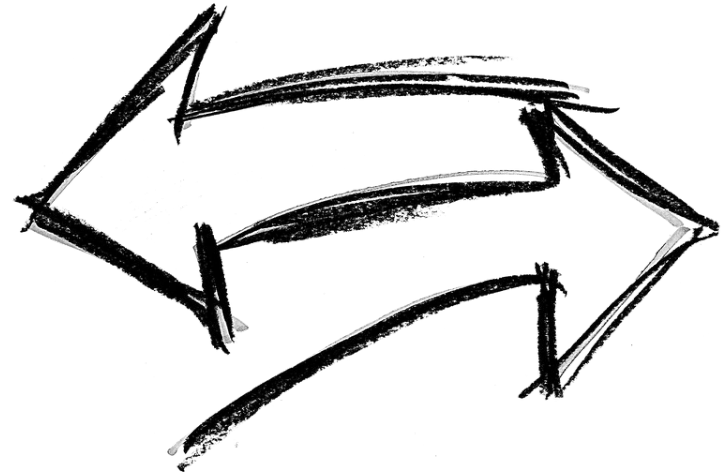
# Successes

- Positive feedback
- Meeting an expressed need from faculty
- Being used in courses



# Future Directions

- Loss of content
- Ownership
- Currency
- Open access
- Making content appropriate for elementary/secondary students





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**Amanda**

[pembertona@hcdsb.org](mailto:pembertona@hcdsb.org)



Photo by [Evan Dennis](#) on [Unsplash](#)

# Select Resources

Caufield, M. (2017). Web Literacy for Student Fact-Checkers (<https://webliteracy.pressbooks.com/>)

Couros, A., & Hildebrandt, K. (2018). Developing Critical Literacies: What We Need to Know in a "Fake News" World. Retrieved January 01, 2019, from <http://journal.canadianschoollibraries.ca/developing-critical-literacies-what-we-need-to-know-in-a-fake-news-world/>

"Framework for Information Literacy for Higher Education", American Library Association, February 9, 2015. <http://www.ala.org/acrl/standards/ilframework> (Accessed January 28, 2019) Document ID: b910a6c4-6c8a-0d44-7dbc-a5dcbd509e3f

Horton, A. (2018). A fake photo of Emma González went viral on the far right, where parkland teens are villains. The Washington Post. Retrieved from [https://www.washingtonpost.com/news/the-intersect/wp/2018/03/25/a-fake-photo-of-emma-gonzalez-went-viral-on-the-far-right-where-parkland-teens-are-villains/?utm\\_term=.7475a49ad763](https://www.washingtonpost.com/news/the-intersect/wp/2018/03/25/a-fake-photo-of-emma-gonzalez-went-viral-on-the-far-right-where-parkland-teens-are-villains/?utm_term=.7475a49ad763)

# Select Resources, cont'd

McGrew, S., Ortega, T., Breakstone, J., & Wineburg, S. (2017). The challenge that's bigger than fake news: Civic reasoning in a social media environment. *American Educator*, (3), 4.

Meola, M. (2004). Chucking the checklist: A Contextual approach to teaching undergraduates web-site evaluation. *Portal: Libraries and the Academy*, 4(3), 331-344. doi:10.1353/pla.2004.0055

Snelling, J. (2017). [What media literacy means in the age of alternative facts](#). International Society for Technology in Education (ISTE).

Warner, J. (2017, October 5). Teaching Without Learning: The Limits of Checklists | Inside Higher Ed. Retrieved from <https://www.insidehighered.com/blogs/just-visiting/teaching-without-learning-limits-checklists>

Wineburg, Sam and McGrew, Sarah and Breakstone, Joel and Ortega, Teresa. (2016). Evaluating Information: The Cornerstone of Civic Online Reasoning. Stanford Digital Repository. Available at: <http://purl.stanford.edu/fv751yt5934>