Media Literacy

This lesson explores the concept of fake news and its impact on everyday life.

Grade Level(s)
9, 10, 11, 12

Materials
None required

Cyber Connections

Information Literacy   Digital Citizenship

This lesson explores the concept of fake news and its impact on every day life. "Fake news" stories, from silly stories about sightings of the Loch Ness Monster to serious allegations of crimes by public officials, have recently made the news. People have even debated how much influence fake news might have had on the 2016 U.S. presidential election. Even the definition of the term "fake news" is open to debate. Later in the lesson we'll look at the role of journalism in a democracy and how we can improve our media literacy habits.

Throughout the lesson, students will have the opportunity to research and answer the following questions:
- What exactly is fake news from a journalistic perspective?
- Does fake news impact our lives?
- How do citizens' skills in using media of all sorts impact the discussion?
- How can media literacy skills make us more informed citizens?
- Does it matter?

Defining Media Literacy

Media literacy is defined as *the ability to evaluate news, regardless of where it comes from, based on evidence presented and the reliability of sources, recognize bias, and distinguish between news, advertisements, and opinion.*

Let's look at some examples of headlines and see if we can tell what's real from what's fake.

CYBER.ORG
THE ACADEMIC INITIATIVE OF THE CYBER INNOVATION CENTER

FBI Agent Suspected in Hillary Email Leaks Found Dead

Reports that an FBI agent investigating Hillary Clinton's use of a private e-mail server killed himself after murdering his wife are just fake news.

Smithsonian Admits to Destruction of Thousands of Giant Human Skeletons in Early 1900's?

Reports that the Smithsonian destroyed skeletons of giant humanoids to preserve the narrative of evolution are fake news.

If you see one of these slugs inside your house, dial 911 immediately!

By Christine 2 days ago

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YES I'm Right
February 19 at 3:00pm

This mainstream media is IGNORING this story because it tells the UGLY TRUTH about Islam! We must NEVER forget what happened to this poor woman!

Will you share this story everywhere to spread the TRUTH?

Woman Hitchhiked Through The Middle East To Prove Muslims Are Peaceful. What They Did Next...OMG!

"Pope Francis shocks world, endorses Donald Trump for president"

Fox News @FoxNews

Iowa students apologize for wearing red, white and blue to basketball game

RED, WHITE AND BANNED?
SCHOOL IN IA APOLOGIZES FOR PATRIOTIC ATTIRE

Iowa Students Apologize for Wearing Red, White and Blue to Basketball Game
Students at an Iowa high school have ... to a neighboring school for wearing

Fact or Fake?

Other considerations to make:

· How true are the articles?

· How can you tell?

· What could the impact be of these stories, especially if someone believes the fake?

· What could be the impact of these stories even if no one believes them?

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The Answers
These are the ratings from common fact-checking website, Snopes.com.

1. **False**
2. **False**
3. **Mostly false** - Since as early as August 2012, increasing numbers of the infamously invasive New Guinea Flatworm have appeared in Florida. These animals can theoretically transmit the rat lungworm parasite to humans. The primary risks posed by the New Guinea flatworm are to the ecosystem it invades and not to human health. As such, the Florida Fish and Wildlife Conservation Commission does not recommend calling 911 to report their sightings. The New Guinea Flatworm does not (and can not) eat rats or mice, despite claims to the contrary.
4. **Mixed** - As the incident occurred eight y ears ago and Turkey is an officially secular country, it's not clear how the source concluded (despite the statements fr om law enforcement and her own family) that Bacca had been killed over religion. While it is tr ue that Pippa Bacca was murdered while hitchhiking in Turkey during a world peace effort known as "Brides on Tour," this incident occurred in 2008 (not 2016), and her death was not tied to any religious motives.
5. **False**
6. **Mixed** - Students at Valley High School issued an apology to North High School of over tense interactions that occurred during a school basketball game. The students opted to issue an apology without being forced or asked to do so, and many attendees said the shouting of racial slurs (and not the wearing of patriotic colors) was what fueled the dispute.

The big question for us to answer is: "How is democracy impacted by the media literacy of its citizens?"

· What does it mean to be media literate?
· How do citizens demonstrate media literacy?
· Does "fake news" have the power to erode our ability to tell the difference between fact and fiction?
· How does the inability to discern truth from fiction impact our choices?

Learning to discern the validity, reliability, and degree of truthfulness of media requires unique sleuthing skills. Over the next few lessons, we are going to examine news media using the CARS checklist and apply analytical questioning strategies to evaluate news media.

CARS checklist

Credibility -	Is this an authoritative source with evidence that allows me to trust it?
Accuracy -	Is this source current and does it tell the full story?
Reasonableness -	Does this source provide thoughtful coverage and is it concerned with the truth?
Support -	Does this source provide convincing evidence that I can "triangulate?"

A great place to start in determining the validity of a source is the URL itself.

A URL (Uniform Resource Locator) is defined as the complete web address of a site.

Standard form of a URL: protocol://hostname/fileinfo
Example:

$$\underbrace{\text{https://}}_{\text{Protocol}}\underbrace{\text{cyber.org/}}_{\text{Host name}}\underbrace{\text{news/cyber-home}}_{\text{File info}}$$

Protocol: The "rules" that indicate how the computer should handle the incoming data. Http or https indicate a website. FTP indicates a file transfer protocol for uploading or downloading data. There is also a "mailto" protocol for email addresses. A URL that starts with "https://" indicates it is a secure site. If you enter personal information, it will be encrypted before it is transmitted.

Domain or host name: Is analogous to "city" in a physical location. It is typically the name of the site. There can be sub-domains such "support.Microsoft.com." A sub-domain is similar to a zip code that indicates a part of a city.

Top-Level Domain (TLD) or Web extension: The suffix added to the end of the domain name. Examples: .com (business), .net (network ISPs – Internet Service Providers), .gov (US government agency), .org (mostly non-profits, but can be others), .edu (educational related).

Country code: a country code can be a fake news give-away. Caution is advised because some reputable sites use a country code. Investigate further. abcnews.com is a legitimate news site but abcnews.com.co is not.

Webpage or data file path: A directory for locating a specific page through the files and folders of the website storage system. There are several tools that can shorten URLs that obscure the real location, such as Bitly and TinyURL.

File type extension: indicates the type of file being accessed.

A few samples: .html (web page; .jpg, .gif (image); .mov, .swf (video); ,zip (compressed file); .pdf (portable document format).

Fake photos

These can be tough to spot because we want to believe what we see. Definitively identifying fake photos sometimes requires computer analysis, especially if the manipulation has been carefully done. There are some strategies and considerations that can be helpful to the casual user .

Lighting: Composite photos from different photographs can have subtle differences in lighting – direction, intensity, shadows cast.

Eyes and positions: Iris appears round if viewed from the front. The shape changes if viewed from any angle. This can be helpful in determining if the position of the person has been moved within the image.

Specular Highlights: Light around a person reflects in the eyes forming white dots called specular highlights. The location of the dots should be consistent with the light source; dots on the top of the eye indicate the light source was above the person. Compare the location of the specular highlight with the direction of the light source in the rest of the image.

Clones: Copying and pasting one image into another is a common manipulation and sometimes can be spotted. Reverse image searches are helpful with this type of fake images.

Camera fingerprints: This strategy can detect digitally retouched photos and can only be done with a computer program designed to examine the color filter array (CFA) that is part of a camera's digital sensor grid.

Reverse Image Searches

Reverse image search is a process using search engine technology that takes an image file as input and returns details about the original image.

There are a variety of online tools for examining images. The tools can typically indicate:
- Where and when the image has appeared.
- The original image, if it has been altered.
- Similar images.

To practice:
1. Open Google Images
2. Drag any image from another webpage into the search bar and click search
3. Go through the results and see what you can learn

Additional Activity
Locate a "questionable" image from Facebook or other social media and find the truth about it. This should be fairly easy with all of the misinformation being shared about COVID-19.

The Role of Journalism in a Democracy

Technology has enabled everyone to be a "journalist".... However, professional journalism has some defining characteristics. There are dozens of organizations for professional journalists, including professional newsroom specialists, beat reporters, minority and women journalists, management, broadcast journalists, college and high school journalists, and others.

> *"Citizen journalism--the process of members within the public playing an independent role in collecting, reporting, and distributing current and breaking news event--has recently become very popular. New media technology such as social networking like Twitter, Facebook, and blogs, have given everyday citizens the ability to transmit information globally; a power which was once only reserved for large media corporations. In addition, the increasing presence, speed, and accessibility of advanced cellular phones and other media sharing devices has allowed citizen journalists to report on breaking news not only to a larger, global, audience, but also more quickl than traditional news reporters. Many believe this form of news coverage is fundamental to journalism today; citizens' being relatable, unrestricted, and available to capture images and footage of worldwide news as it breaks."*

1. **bias** - the tendency to have unfair prejudice against individuals or ideas.
2. **citizen journalism** - the process of members within the public playing an independent role in collecting, reporting, and distributing current and breaking news events using technology such as social networking such as Twitter, Facebook, and blogs.
3. **clickbait** - eye-catching or sensational web content with the purpose of drawing the viewer's attention and clicking a link.
4. **conspiracy** - content that contradicts the prevailing understanding of history or simple facts; often designed to foster fear and paranoia.
5. **echo chamber** - online sites or social media groups in which people who share similar views tend to congregate.
6. **fake news** - hoaxes, propaganda, and disinformation purporting to be real news.
7. **fake science** - sometimes called pseudoscience; often tries to sell something or promote a conspiracy theory.
8. **op-ed** - opinion or editorial content that expresses an opinion rather than factual news.
9 **parody** - a composition that imitates the style of another composition, normally for comic effect.
10. **propaganda -** extreme bias and opinion distorted as fact.
11. **satire** - a composition that tries to arouse the reader's disapproval of something by ridiculing it.
12. **scam** - a dishonest appeal or deal intended to steal.

At this point in the lesson, write some thoughts on professional v. citizen journalism. Use the following questions as guides:
- Can citizen journalism be a reliable source of news?
- Will citizen journalism ever replace professional journalism?
- Can these two forms of journalism co-exist?
- Is professional journalism always a reliable source?
- How important is a code of ethics to journalism?
- Research who owns the main media outlets, can you see any potential conflict of interest between a free press and this ownership?

Here are some tips for reading deeper into news articles to determine the truth from opinion and/or fake news:

Gut check - Gauge the emotional impact
- Is your reaction strong?
- Does it make you angry?
- Are you hoping it is true (reflecting your own biases)?
- What is the writer trying to do with this story? Inform, convince, sell, or emotionally spur you to action such as a donation?

Examine the writing
- Is the writing amateurish?
- Are there grammar or spelling errors?
- Is there a lot of capitalization?
- Does it use exaggeration like greatest, biggest, best, and only?
- Does it use words associated with violence like annihilate, destroy, eradicate?
- Does it use phrases that play on your emotions like "only you can help" or "don't let us down"?
- Real journalism does not typically play on the emotions of the reader with such words.

Analyze the design - Fake or questionable sites often just look bad. They might be crowded, with poor choices in color and graphics. Sometimes it is easy to spot fake or manipulated images.

Scrutinize the details
- Examine the URL
  - Learn to dissect a URL (protocol, domain, country, file name and type, extensions)
  - Words like "WordPress" or "blogger" in the domain typically mean it is a personal blog and not a news source.
  - Be wary of slight variations of well-known websites such as ".com.co." This can mean that what you are looking at is a fak e version of the real site. But remember that reputable foreign news agencies may also have this country designation in the domain name.
- Find out about the writers
  - Who is providing the information?
  - How would this person know anything about it?
  - Is anyone else telling the same story?
  - Does this person have a reason to mislead?

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- Are these facts or opinions?
- Search for the title, domain name, and individuals listed in the "About Us" section. You might find that they have been reported on the fact-checking websites such as Snopes, Hoaxslayer, Politifact, or Factcheck.org. You can also look for details about its background on Wikipedia. This can be particularly useful in learning more about lesser-known or new websites.
- Check the backgrounds of the writers, editors, publishers, and domain owners. You can find out who owns a domain at Whois (whois.net or godaddy.com). You might also find a "Legal" or "Disclaimer" section on the site that can be useful in assessing reliability.
- If you do not find sections labeled "About us," "Contact us," or other identifying information, it likely means that it is not a reliable source of truthful information.

Locate the news source - If there is a link to another source or a study, look it up.
- Does the article you are reading accurately report the source or study?
- Are officials quoted? Can you find the quotes in other sources?
- Does the website mention/link to a study or source? Look up the source/study.
- Do you think it is being accurately reflected and reported on in the article you are reading?
- Are officials being cited? Can you find the quotes in other sources?
- Did the article correctly and completely quote the person? This strategy is call triangulation - verify the facts and quotes with multiple sources.

Dig deeper on social media - See if you can find the website or organization on Facebook or Twitter.
- Are the posts emotionally charged?
- Do they tempt you to "like" or "share"?
- Are there links that encourage "click throughs"(sometimes called "click bait")?

Visit one of the mainstream news websites listed below and examine a headline using some of the techniques listed above and write down what you find.

CNN.com | ABCnews.com | CBSnews.com | FOXnews.com | NPR.org | NYtimes.com

Even though news outlets have code of ethics and employ professional journalists, they tend to express bias. A media literate reader will take these biases into account when gleaning information from these sources.

Parody and Satire
Has anyone you know ever shared an article or headline on social media from a satirical site like *The Onion?* Another form of online "news" media is parody or satire. Parody and satire are a bit different, but the terms are often used to describe the same online news-like media.

Parody is defined as "a composition that imitates the style of another composition, normally for comic effect and often by applying that style to an outlandish or inappropriate subject. Seth Grahame-Smith's Pride and Prejudice and Zombies is a perfect example of parody…"

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Satire is "intended to do more than just entertain; it aims to improve society and its institutions. A satire is a literary work that tries to arouse the reader's disapproval of an object — a vice, an abuse, a faulty belief — by holding it up to ridicule. Satirists use euphemism, ir ony, exaggeration… examples of satire include George Orwell's Animal Farm, which ridicules the Bolshevik Revolution in Russia…"

Some common parody sites are (be warned, parody sites often use more adult language - some content may not be suitable for children):

theonion.com | clickhole.com | thedailyrash.com

True-ish

As we mentioned earlier, even reasonably reputable news sites require readers to be aware of bias and hidden agendas. To overcomplicate things, humans also have biases and since journalists are still human, these biases can sometimes come through in their reporting. We look at the world through these bias and unconsciously select environments that support those biases. Biases are par t of our psychological make up that protects us from confusion and self-doubt. Mental confusion caused when our firmly held beliefs are brought into question by facts and ideas we had not considered is called "cognitive dissonance" – it is an uncomfortable mental state and humans are motivated to avoid it. When we get all of our news from the same site day after day, it is easy to fall into the trap, always confirming what we already believe to be true. And when this is compounded with communications on social media with individuals who share your same values and prejudices, we create "echo chambers."

Bending the truth strategies:

Media Bias: Articles are generally factual but bend the truth in a variety of ways.
  · Reporting only the facts that support a view or stand on an issue
  · Using data that is gathered specifically to support a view
  · Sometimes the information is gathered using unscientific methods, asking questions to a select
     group or the questions are designed to elicit the desired outcome.
  · Selecting and prioritizing the placement of stories or images to fit an agenda

Clickbait: eye-catching or sensational web content with the purpose of drawing the viewer's attention and clicking a link.

Yellow journalism: publications that exploit, distort, or exaggerate to create sensationalism and attract readers.

Best advice: Read multiple news sources to gather varied perspectives.

Visit https://www.minimumwage.com/ and answer the following questions:
- What is this organization?
- What is its position on minimum wage increases?
- What evidence do they cite?

Then find out more about this organization at SourceWatch.org.
- Can you find evidence that supports the claim that this site is biased?

The Research:

Minimumwage.com is a front group for the Employment Policies Institute that opposes government mandates on employers. They work on behalf of the restaurant and retail industries. They campaign against proposals to increase the minimum wage at the federal, state, and local level. Employment Policies Institute also opposes other measures that might hurt industry bottom lines, such as paid sick leave for workers and proposals to require health care for workers.

- Minimumwage.com is against raising the minimum wage.
- They cite studies that support their view:
    - Minimum wage earners are satisfied workers.
    - Studies that show jobs are lost when the minimum wage is raised.
    - Raising the minimum wage does not reduce poverty.
    - Most workers who start at minimum wage move on to higher pay within the first year.

Source: http://www.sourcewatch.org/index.php/Employment_Policies_Institute

Media Bias

Let's examine the table below depicting the degree of conservative or liberal news coverage and overall news quality. This site is allsides.com and was created by John Gable and Scott McDonald, who wanted to compile news from many different sources to cut down on media bias.

What news agencies have you never read, viewed, or listened to?
Select two from the group of Center oriented publications. Open the sites and book mark them to browse later.

What would be the value of reading, viewing, or listening to a news agency that is opposite (in terms of conservative/ liberal views) of what you usually use?
John Gable says, "Remember, there is no such things as unbiased news. The best thing we can do is balance it."

Why do you think they believe that it is important for readers to know where a news source falls on the bias scale?

Do you agree with this statement? Why or why not?

What does this have to do with media literacy?

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AllSides media bias ratings are based on multi-partisan, scientific analysis.
All ratings are based on online content only — not TV, print, or radio content.
Ratings do not reflect accuracy or credibility; they speak to perspective only.
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L	L	C	R	R
ALTERNET	abc	AP	FOX NEWS online news only	THE AMERICAN SPECTATOR
CNN opinion	The Atlantic	BBC		BREITBART B
DEMOCRACY NOW!	BuzzFeedNEWS	Bloomberg	reason Free Minds and Free Markets	THE BLAZE
THE DAILY BEAST	CBS	The CHRISTIAN SCIENCE MONITOR	THE WALL STREET JOURNAL opinion	CBN
THE HUFFINGTON POST	CNN online news only	npr online news only	WASHINGTON Examiner	THE DAILY CALLER
The Intercept_	The Economist	REUTERS	The Washington Times	Daily Mail
JACOBIN	theguardian	THE HILL		THE DAILY WIRE
MotherJones	NBC	USA TODAY		FOX NEWS opinion
msnbc	The New York Times online news only	THE WALL STREET JOURNAL online news only		the FEDERALIST
THE NEW YORKER	npr opinion			NATIONAL REVIEW
The New York Times opinion	POLITICO			NEW YORK POST
The Nation.	TIME			Newsmax
SLATE	The Washington Post			
Vox				

| L LEFT | L LEAN LEFT | C CENTER | R LEAN RIGHT | R RIGHT |