**Fact versus Fiction**

A 50-minute high school or introductory college-level teaching module  
Version 1.0

A project by the Intergalactic Defenders of the Digital Universe

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This is intended to be a living document. Feedback, suggestions, and reports of your experience using these materials are welcome and encouraged. Please contact us at

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## **Desired Learning Outcomes**

What is real on the Internet, what is fake, what is true, what is exaggerated?

At the end of this modules, students should:

* Be aware of the problems associated with misinformation online.
* Identify ways in which pictures or videos can be altered to change their meaning.
* Define confirmation bias.
* Define “filter bubble”, and be aware of their own filter bubble.
* Understand that some information sources are credible, while others are unreliable.

## **Lesson Materials**

### **Introduction**

Misinformation online has become a significant problem. Rumors, outright lies, misinformation, altered photographs, “deep fake” videos, and false identities abound. Learning to judge the quality of information is an important skill.

Social Media sources (YouTube, Instagram, Tik Tok, Facebook, Twitter, etc) provide powerful (free) platforms for both reliable and unreliable information. However, studies show that unreliable (or outright false) information often spreads much further and much faster than reliable information.

Learning to think critically and make informed decisions about media sources is a vital skill.

### **Discussion led by instructor**

Have you ever encountered a story online that looked real, but seemed “too good to be true?”

Thinking of your own experiences, have you had stories shared with you online that were false? Have you shared stories that later turned out to be false?

What types of topics do you think are most likely to have false information shared?

What is a meme? What type of story does a meme tell? Are memes focused on facts or entertainment? What are some examples of memes?

Show an example of a deep-fake video (as this technology is advancing quite rapidly, finding a good one is left to the instructor).

Why would someone make a deep-fake video?

### **Small Group Discussion**

In groups of 3-5 discuss the following:

**Scenario 1:**

A student is running for student government, and one of their rivals creates a fake identity and posts a story about them on social media claiming that they stole a bicycle from the school.

Suppose that the student who is running is a friend of yours? Would you believe the story?

Suppose that the student who is running is someone you really don’t like? Would you be more likely to believe the story?

Why? Are the facts any different or is it just your perception?

**Scenario 2:**

You see a video on YouTube from someone you’ve never heard of, that claims that your city plans to close your school. They claim that it’s a secret and that no matter who you ask, they’ll lie to you and claim it’s not true.

Would you believe them? What might be their reason for posting something like this if it isn’t true?

### **Wrap Up Discussion**

When you are searching for information online, do you think that you tend to look for things that confirm what you already believe, or do you look to be challenged?

Is it more comfortable to read memes or news that makes you feel that you’re right? Do you avoid or ignore information that says you’re wrong? That’s a “filter bubble”, when you’re only looking for information that confirms what you already think is right.

How can you break your filter bubble?

### **[Optional] Assignment**

Go to your school library and ask your librarian for several national news sources. Examples could include The Economist, The Wall Street Journal, The New York Times, The Washington Post, The Week. Read several stories in two or more of these and compare the stories with social media memes that you may have seen on the same topic.

Research the cost of the news sources that you use.

Write a short essay describing the difference in coverage and depth between the two. Which tells a more complete story? Does one or the other appear to be written to persuade you to believe something? Which do you believe? Is reliable news more expensive? Do you think it’s worth the cost?

## **Resources (popular):**

“How to deal with a crisis of misinformation”

<https://www.nytimes.com/2020/10/14/technology/personaltech/how-to-deal-with-a-crisis-of-misinformation.html>

“How Finland starts its fight against fake news in primary schools”

<https://www.theguardian.com/world/2020/jan/28/fact-from-fiction-finlands-new-lessons-in-combating-fake-news>

“On the Internet, nobody knows you’re a dog” (New Yorker Cartoon from 1993)

<https://en.wikipedia.org/wiki/On_the_Internet,_nobody_knows_you're_a_dog>

“It’s Getting Harder to Spot a Deep Fake Video”  
<https://www.youtube.com/watch?v=gLoI9hAX9dw>

## **Resources (Academic and NGO):**

“From Critical Thinking to Argument”, Hugo Bedau and Sylvan Barnet, Bedford/St. Martin

“COUNTERING ONLINE MISINFORMATION RESOURCE PACK”  
<https://www.unicef.org/eca/media/13636/file>

“How To Spot Fake News”

<https://guides.library.cornell.edu/evaluate_news/infographic>