# DLFteach Volume 3: Lesson Plans for Literacy and Competency Driven Digital Scholarship Instruction
Exploring the Causes of Scientific Misinformation
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Understanding Misinformation
UCLA Library Research Workshop

Presented by Alex Solodkaya & Ashley Peterson
Over the next hour we will

Consider the causes of misinformation (we’ve seen its effects...)

Explore the misinformation ecosystem
So tell us:

What examples of misinformation did you find?

(speak up or use the chat!)
Defining terms

**Information**
Accurate to the best of our current knowledge

**Misinformation**
False information, created and shared in good faith

**Disinformation**
False information, created and shared with an agenda (e.g. profit, sowing confusion)
So: Why does misinformation exist? Why do we believe it?

**Educational**: Outdated internet literacy learning models

**Psychological**: Information overload, confirmation bias

**Economic**: Social media company business models
Educational: Outdated internet literacy learning models
Reflection Questions

What are some ways you’ve been taught to assess the validity of online information?

Can you recall the last time you used these methods?

Do you feel these methods are useful in all situations?

Where and how might these methods fall short?
Information Overload Helps Fake News Spread, and Social Media Knows It

Understanding how algorithm manipulators exploit our cognitive vulnerabilities empowers us to fight back

Source: Scientific American
Reflection Questions

When is the last time you felt overwhelmed by information? Describe the circumstance.

Are there strategies you use when faced with information overload? If you don’t have any conscious strategies, reflect on how you might unconsciously react to these situations.

When did you last encounter an opinion you strongly disagreed with? What was your reaction?
Economic: Social media company business models

Facebook Business Model In Action

Facebook is an attention-based business model. As such, its algorithms condense the attention of over 2.4 billion users as of June 2019. Facebook advertising revenues accounted for $31.9 billion or 98.66% of its total revenues. Facebook Inc. has a product portfolio made of Instagram, Messenger, WhatsApp, and Oculus.

This also applies to Twitter, Instagram, TikTok, Google products (including YouTube)...
Consider a social media platform or internet search engine you use frequently. What kinds of information does this resource “know” about you?

Consider that what you see in social media feeds, in search results, or in recommendations (from YouTube, Netflix, Spotify, etc.) is algorithmically determined according to your behavior on a given platform. What are some positive and negative implications of this?

You may have heard statements like, “If something is free, you are the product.” What does this mean, and how might it apply to things like social media platforms and Google products? Do you agree or disagree?
Misinformation👏 is👏 systemic👏
Individual agency in the information ecosystem

First: Understand the system

And then, when we encounter something that seems off:

- Check emotions
- Read laterally
- Follow the evidence
- Triangulate & synthesize
- If it’s false, don’t share (or offer a corrective)

Again: this issue is bigger than any one of us, but we can still play an important role at the individual level.
What about our role as academics?
Group activity: Exploring the misinformation ecosystem
Exploring the misinformation ecosystem: example
Exploring the misinformation ecosystem: example
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