

Module 3 Assignment – Case Studies for Different Student Profiles

Case Study 1: Teacher (Fairly Easy)

Scenario: Identifying Bias in Educational Content

You are a history teacher creating a lesson plan on climate change. You find two online articles:

1. One claims that climate change is a hoax and cites only opinion-based sources.
2. Another claims climate change is the biggest global crisis but uses emotional language and limited data.

Assignment Tasks:

1. Apply the CRAAP Test to both articles. Which one is more credible? Why?
2. Use lateral reading to check other sources. Are these claims supported elsewhere?
3. Analyze bias indicators: Does either article use framing, loaded language, or selective facts?
4. If you had to present one of these articles to your students, which one would you choose? Why?

What students learn: How to evaluate bias in educational sources and choose credible information for teaching.

Case Study 2: Nursing Student (Moderate Difficulty) – Debunking COVID-19 Vaccine Misinformation

Scenario: The Spread of Misinformation About COVID-19 Vaccines

You are a nursing student working on a project about COVID-19 vaccine hesitancy. While researching, you find social media posts and articles making false claims, including:

- "COVID vaccines contain microchips to track people."
- "The vaccine was rushed and alters your DNA."
- "COVID-19 vaccines cause infertility in women."
- "More vaccinated people are dying than unvaccinated people."

Despite overwhelming scientific evidence disproving these claims, millions of people continue to believe them, affecting global vaccination rates and prolonging the pandemic. Your goal is to fact-check and analyze the impact of vaccine misinformation.

Assignment Tasks:

1. Evaluating a Misinformation Claim Using the CRAAP Test

- Find an article or post spreading one of the false claims above.
- Apply the CRAAP Test to assess its credibility, source, and purpose.
- Identify any bias, misleading language, or emotional manipulation.

2. Fact-Check the Claim Using Lateral Reading

- Search for official sources (e.g., WHO, CDC, FDA, Mayo Clinic, medical journals).
- Identify at least two peer-reviewed studies or fact-checking sources debunking the claim.
- Compare how different media outlets and experts report on vaccine safety.

3. Analyze How COVID-19 Vaccine Misinformation Spreads

- How did social media contribute to the spread of vaccine myths?
- How do algorithms create echo chambers for misinformation?
- What role did political figures or celebrities play in fueling vaccine skepticism?

4. Discuss the Consequences of Vaccine Misinformation

- How has vaccine hesitancy impacted public health (e.g., increased hospitalizations, new variants)?
- How can nurses and healthcare professionals combat misinformation?
- What effective communication strategies can be used to educate vaccine-hesitant individuals?

.What Students Learn:

How to fact-check real-world COVID-19 vaccine misinformation.

Using the CRAAP test and lateral reading to debunk false health claims.

Recognizing misinformation techniques (social media echo chambers, emotional manipulation, political influence)

Understanding the long-term consequences of viral medical misinformation

Case Study 3: Cybersecurity Student (Advanced Difficulty)

Scenario: Investigating an AI-Generated Misinformation Campaign

A political deepfake video is spreading online, showing a well-known public figure making false statements.

Many users believe it's real, but cybersecurity experts suspect AI manipulation.

Assignment Tasks:

1. Use forensic tools to analyze the deepfake (suggested tools: Deepware Scanner, InVID, Forensically).
2. Perform lateral reading: Do reliable news sources confirm or debunk the video?
3. Research AI-generated misinformation: How do deepfakes influence public opinion?
4. Discuss fact-checking strategies for combating deepfake-based misinformation.

What students learn: Hands-on deepfake detection, digital forensics, and misinformation analysis.

Final Deliverables & Student Expectations

Students select one case study based on their field of study.

Submit a 1-2 page report including:

- Step-by-step analysis (which tools, searches, or evaluations they performed).
- Screenshots or examples of their verification process.
- A summary of how misinformation spreads and ways to counter it.