

TEACHING CRITICAL THINKING SKILLS IN A MISINFORMATION ERA

Oljabekova Indira

A student of the university of science and technology Khalimova Nafisa

Scientific superviser a teacher of university of science and technology https://doi.org/10.5281/zenodo.14699743

Abstract: In an age where misinformation can spread rapidly, teaching critical thinking skills is not just an academic exercise but a vital life skill. By equipping individuals with the tools to analyze information critically, we empower them to make informed decisions, engage in civic discourse, and contribute positively to society.

Key words: Misinformation, critically, critically thinking, education, debate, public opinion, dialogue.

Introduction. In Students now come to college having grown up with social media, and their abilities to distinguish between fact and fiction in politics is very limited. As professors, especially at the lower levels of teaching political science, we have to spend a considerable amount of time helping students understand the links between critical thinking and analyzing information presented in so many formats. Not surprisingly, the spread of misinformation has coincided with the rise in social media. Students now come to college having grown up with social media, and their abilities to distinguish between fact and fiction in politics is very limited. As professors, especially at the lower levels of teaching political science, we have to spend a considerable amount of time helping students understand the links between critical thinking and analyzing information presented in so many formats. Not surprisingly, the spread of misinformation has coincided with the rise in social media.

Teaching critical thinking skills in an era rife with misinformation is essential for empowering individuals to navigate the complexities of information and make informed decisions. Here are some strategies and approaches for effectively teaching these skills:

Understanding Misinformation

- Define Misinformation: Start by explaining what misinformation is, including the differences between misinformation, disinformation, and malinformation. Elder and Paul (2002) believe that asking essential questions is the key to critical thinking. The quality of our lives is determined by the quality of our thinking, and the quality of our thinking is determined by the quality of our questions.
- Discuss the Impact: Highlight real-world examples of how misinformation can affect public opinion, health, and safety.

Encourage Questioning

Building on the research of others (Nold, 2017 and Sahamid, 2019), Erdelez, et al (2019) stress the importance of focusing more on qualitative rather than quantitative assessment, asking questions rather than giving easy answers, and training students to be researchers. If we can provide these skills, students will have the ability to determine parts of the whole, interpret cause and effect, and differentiate between credible and false information

• Foster Curiosity: Encourage students to ask questions about the information they encounter. Teach them to consider the source, purpose, and context of the information. Kletter (2020) gives us four skills that we can teach our students to help them combat false information. First, encourage lateral reading or verifying information as it is being read. This



might involve leaving the site to check other sites to be sure it is authentic. Second, be critical when looking at images and think about where they were taken. Third, find the origin of pictures. The use of TinEye or Yandex, developed by Google can help with such searches. Finally, use Google Street View to confirm the location of the photograph.

Socratic Method: Use open-ended questions to stimulate critical thinking and dialogue. This approach promotes deeper understanding and encourages students to think independently.

Source Evaluation

Teach Source Credibility: Provide criteria for evaluating sources (e.g., authority, accuracy, bias, currency, and relevance).

• Fact-Checking Resources: Introduce students to reputable fact-checking websites (e.g., Snopes, FactCheck.org) and tools (e.g., Google Reverse Image Search) to verify claims.

Analyzing Arguments

- Identify Logical Fallacies: Teach students to recognize common logical fallacies (e.g., ad hominem, straw man, slippery slope) that can undermine arguments.
- Argument Mapping: Use visual tools to help students outline arguments, identify premises and conclusions, and assess the strength of the reasoning.

Media Literacy

- Teach Media Literacy Skills: Help students understand how media works, including the role of algorithms and advertising in shaping information consumption. Other strategies to promote media literacy could include encouraging students to create their own media either through podcasts, blogging, or making videos. This is to teach them to be more critical about the sources they are using. They will have to question different sources when creating their own content. We must have open discussion about the media and current events in our classrooms by analyzing content and understanding different points of view. (Newman 2023)
- Analyze Different Media Formats: Encourage analysis of news articles, social media posts, videos, and advertisements to identify biases and persuasive techniques.

Encourage Diverse Perspectives

Promote Open Dialogue: Create a safe environment for discussing differing viewpoints. Encourage students to engage with perspectives that challenge their own.

Debate and Discussion: Organize structured debates on controversial topics to help students articulate their views while considering opposing arguments.

Practical Applications

Real-World Scenarios: Use case studies or current events to apply critical thinking skills. Ask students to analyze news stories or social media trends critically.

Project-Based Learning: Assign projects that require research, analysis, and presentation of findings on topics related to misinformation.

Reflection and Self-Assessment

Encourage Reflection: Have students reflect on their thought processes when engaging with information. Journaling can be a useful tool for this.

Self-Assessment Tools: Provide rubrics or checklists for evaluating their critical thinking skills and progress over time.

Collaboration and Group Work



Group Discussions: Facilitate group discussions where students can collaborate to evaluate information collectively.

Peer Review: Implement peer review processes for assignments to encourage constructive feedback and critical evaluation of each other's work.

References:

- 1. Goleman D (1995) Emotional intelligence: why it can matter more than IQ. Bantam Books.
- 2. Goleman D (2006) Social intelligence: the new science of social relationships. Bantam Books.
- 3. Acerbo, Alberto, et al., (2022). "Research note: Fighting misinformation or fighting for information?" Harvard Kennedy School (HKS) Misinformation Review, 3(1). https://misinforeview.hks.harvard.edu/article/research-note-fighting-misinformation-or-fighting-for-information/ "Active Learning" (2023). Center for Teaching Innovation.
- 4. Cornell University. https://teaching.cornell.edu/teaching-resources/active-collaborative-learning/active-learning Anderson, Allison. (2023). "Knowledge and Skills for Becoming Global Citizens." Brookings. https://www.oecd.org/education/2030/E2030%20Position%20Paper%20(05.04.2018).pdf 3
- 5. Baldasty, Jerry. (2018). "Fake news and misinformation: Why teaching critical thinking is crucial for democracy." University of Washington. https://www.google.com/search?client=safari&rls=en&q=fake+news+and+misinformation% 3A++why+teaching+critical+thinking+is+crucial+for+democracy&ie=UTF-8&oe=UTF-8
- 6. Boswell, Carol. (2006). "The Arti of Questioning: Improving Critical Thinking." Annual Review of Nursing Education. NY. Vol.4. "Break the Fake: Critical thinking vs. disinformation." (2022). Media Smarts. https://mediasmarts.ca/teacher-resources/break-fake-critical-thinking-vs-disinformation Cuza, Alexandra. (2020). "The Use of Critical Thinking Against Fake News." US Department of Education.